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Graduate Studies

AN ASSESSMENT OF PERCEIVED STRESS, STRESSORS, COPING STRATEGIES, AND STRESS MINDSETS AMONG LA CROSSE COUNTY, WISCONSIN EMPLOYEES

A Chapter Style Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of Master of Public Health in Community Health Education

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AN ASSESSMENT OF PERCEIVED STRESS, STRESSORS, COPING STRATEGIES, AND STRESS MINDSETS AMONG LA CROSSE COUNTY, WISCONISN EMPLOYEES

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We recommend acceptance of this thesis in partial fulfillment of the candidate's requirements for the degree of Master of Public Health in Community Health Education

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ABSTRACT

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With the average American working full-time and spending more than one-third of their day, five days per week, at the workplace, employers have a professional responsibility to improve the health and well-being of their employees. This can include offering worksite wellness stress management programs. The purpose of this cross-sectional descriptive study was to assess perceived stress, stressors, coping strategies, and stress mindsets among La Crosse County, Wisconsin employees. An electronic survey was issued to La Crosse County employees who had access to a work email account. The survey yielded a 29.5% (n = 335) response rate. Results revealed a mean perceived stress score of 16.17 out of 40, indicating a moderate level of perceived stress and a mean stress mindset score of 1.59 out of 4, indicating a debilitating stress mindset. The most prevalent stressors were work and poor communication in the organization. The most prevalent coping strategy utilized to manage stress during the last month was watching television or movies. No statistically significant differences existed in perceived stress scores between different demographic groups. Results from this study may be utilized to guide the development and implementation of interventions to address workplace stress of La Crosse County employees.

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CHAPTER I

INTRODUCTION

Background

Stress is “a condition or feeling experienced when a person perceives the demands [of a situation] exceed the personal and social resources the individual is able to mobilize” (The American Institute of Stress [AIS], 2018, para. 4). Stress also has been referred to as a "health epidemic of the 21st century" by the World Health Organization (WHO). However, Americans (i.e., adults 18 years and older who reside in the United States) perceive stress in different ways and therefore, the term stress is difficult to define and measure (AIS, n.d.; AIS, 2018a; AIS, 2018b).

Over the past century, influential leaders in the medical world, such as Walter Cannon, Dr. Hans Hugo Bruno Selye, and Lenard Levi worked to advance the knowledge and understanding of what stress is and how it affects the human body. Walter Cannon is known for coining the term “fight-or-flight response” in 1914. The fight-or-flight response assisted Dr. Hans Hugo Bruno Selye in his research on the effects of stress on the human body. In fact, Dr. Selye was the one to coin the term “stress” in 1936. However, Dr. Selye’s definition resulted in viewing stress only through a negative lens. As such, Lenard Levi distinguished for the public audience the difference between positive and negative stress in 1971. Expanding on Levi’s discovery, Dr. Selye responded with the terms “distress” and “eustress” in 1974 (Selye, 1974).

Distress is negative emotions resulting from stressors (Selye, 1974). Examples of what causes distress include relationships and financial or work-related problems (AIS, 2018c). Conversely, eustress refers to experiencing positive emotions from stressors (Selye, 1974). Examples of what causes eustress include marriage, a job promotion, or developing new friendships (AIS, 2018c). Stress can be positive and even helpful, enhancing, and motivating for individuals in certain circumstances such as preparing to take an exam or having a job interview (National Institute for Mental Health [NIMH], n.d.). Hence, definitions of stress should include both distress and eustress in order to fully convey the concept (AIS, 2018b; AIS, 2018c).

During both distress and eustress, the body reacts to stimuli. This process is illustrated in the General Adaptation Syndrome (GAS) stress model, also known as General Stress Syndrome, created by Dr. Selye (Syndrome, 2016). The GAS stress model is made up of three stages: the alarm stage, the stage of resistance, and the exhaustion stage (Selye, 1950). The alarm stage is when the body prepares for a fight-or-flight response. The second stage is the stage of resistance, in which the body begins to react to or resist the stressor. The final stage is exhaustion, when the body has depleted all of its resources and becomes exhausted and fatigued.

Physical and psychological symptoms often occur as a result of stress. Physical symptoms of stress include fatigue, headache, upset stomach, and muscle tension, while psychological symptoms include irritability or anger, nervousness, and lack of energy (AIS, 2018c). Stress affects nearly every body system in some way or another, acting in the central nervous, endocrine, respiratory, cardiovascular, digestive, muscular, reproductive, and immune systems (AIS, 2018c). Additionally, stress can give rise to

coronary heart disease, hypertension, back and upper-extremity musculoskeletal disorders, and mental disorders like depression and suicide (Rosch, 2001b).

Stress in America™, an annual survey from the American Psychological Association (APA), assesses perceived stress, stressors, and coping strategies among Americans. In 2014, the average American's stress level was 4.9 on a 10-point scale (APA, 2015). In comparison to 2007 data, the average stress level of Americans had declined. However, one-half of Americans felt their stress has increased over the past five years. Based on the 2015 report, approximately one in three Americans live with extreme stress. Extreme stress, the highest category, is defined as respondents indicating an 8, 9, or 10 on the 10-point scale (Ripley, Bethune, & Rozenwasser, n.d.). There also are segments of the population living with disproportionately high stress levels. For example, women, younger generations, parents, and those living in lower-income households report higher stress levels than the rest of Americans (APA, 2015). A commonly reported burden for these populations is money, which can be a barrier to living a healthy lifestyle.

Stressors vary for each individual. The top four reported stressors for Americans in 2014 were money, work, family responsibilities, and health concerns (APA, 2015). In 2017, common stressors for Americans included the future of our nation, money, work, the current political climate, and violence and crime (APA, 2017b). An additional prominent stressor was personal health concerns or health problems affecting their family.

According to the AIS (2018c) in 2014, the most common stressors reported by 76% of Americans were money and work. Nearly one in three employees reported being "always" or "often" under stress at work. According to the National Institute for

Occupational Safety and Health (NIOSH, 1999), workplace stress is "when the requirements of the job do not match the capabilities, resources, or needs of the work" (p. 6). Workplace stress is on the rise, with the potential to cause devastating health and fiscal costs to employees and their organizations (Rosch, 2001b). An alarming amount of research reports work is causing significant amounts of stress for Americans. In fact, between 26% and 40% of employees report experiencing substantial stress at work (AIS, 2018c; Barsade, Wiesenfeld, & The Marlin Company, 1997; Bond, Galinsky, & Swanberg, 1998; Northwestern National Life Insurance Company, 1992).

Just like stress in general, workplace stress can contribute to poor physical and mental well-being. One study found 35% of employees said their jobs negatively affected their physical and mental well-being (AIS, n.d.). Those who deal with workplace stress also have a difficult time establishing a work-life balance (NIOSH, 1999). Additional effects of workplace stress on an employee may include headache, sleep disturbances, difficultly in concentrating, short temper, upset stomach, job dissatisfaction, and low morale. There also are significant employer costs associated with high levels of employee stress. For the United States overall, workplace stress can cost up to $300 billion a year due to absenteeism, staff turnover, low productivity, workers' compensation claims, and direct medical costs (AIS, 2018c; Rosch, 2001a; Rosch, 2001b).

According to the APA (2018), a nationally representative sample of 1,512 adults age 18 and older who resided in the United States and were either employed full-time, part-time, or self-employed rated their workplace stressors. Common workplace stressors included low salaries, lack of opportunity for growth or advancement, too heavy of a workload, unrealistic job expectations, and long work hours. Other workplace stressors

identified by the NIOSH (1999) included poor communication in the organization, lack of support or help from coworkers or supervisors, too many hats to wear, job insecurity, and even a poor physical environment. Murphy (1995) organized workplace stressors into five categories including factors intrinsic to one's job, roles in the organization, career development, relationships at work, and organizational structure and climate.

To reduce, manage, or eliminate one's stress, coping strategies can be utilized. The three most popular ways Americans managed their stress in 2014 were listening to music, exercising or walking, and watching television or movies for more than two hours per day (APA, 2015). Additional coping strategies included surfing the internet or going online, reading, spending time with friends or family, praying, napping or sleeping, spending time doing a hobby, and eating.

Although stress is a part of life, almost one-half of Americans do not do enough or are not sure whether they are doing enough to manage their stress. On a short-term basis, coping strategies are techniques used to reduce the impact of stress. Some coping strategies are healthy, while others are not. Healthy coping strategies "help reduce anxiety in a way that does not harm you" (Palo Alto Medical Foundation [PAMF], 2015, para. 4). Such coping strategies include exercising, eating healthy, talking to a counselor or support group, hanging out with friends, and doing art or other relaxing hobbies. In contrast, unhealthy coping strategies "increase your stress because they lead to other problems" (PAMF, 2015, para. 5). Examples of unhealthy coping strategies include: using illegal drugs, alcohol, and tobacco; overeating; and engaging in unprotected or impulsive sexual behavior. Coping strategies also are not a one-size-fits-all approach and

not all coping strategies work for everyone. Therefore, it is important for individuals to choose coping strategies that work for them (AIS, n.d.).

Statement of the Problem

Healthy People 2020 is the federal government's prevention agenda for building a healthier nation. Its goal is to "promote the health and safety of people at work through prevention and early intervention" (United States Department of Health and Human Services [USDHHS], 2019, para. 1). One of the Healthy People 2020 topic areas is Occupational Safety and Health. More specifically, one of the objectives listed under this topic is to increase the proportion of employees who have access to workplace programs that prevent or reduce employee stress. Compared to the 36% reported by Healthy People 2010, the target for Healthy People 2020 is 40%.

Research at workplaces has indicated that focused attention on employees' levels of stress, stressors, and coping strategies can improve the overall health and well-being of employees, as well as improve rates of organizational absenteeism, staff turnover, accidents, health insurance claims, depression, and short- and long-term disability (Industrial Accident and Prevention Association [IAPA], 2007; WHO, n.d.). Increases in healthcare expenditures, partly through increased visits to the doctor's office, also are a reflection of workplace stress for an organization. Healthcare expenditures are nearly 50% greater for employees who report high levels of stress. Moreover, between 75% and 90% of all visits to primary care physicians are for stress-related problems (AIS, 2018a; Goetzel et al., 1998). The workplace continues to be a common stressor for many Americans, which causes significant problems for employees and organizations.

Purpose of the Study

The purpose of this study was to assess perceived stress, stressors, coping strategies, and stress mindsets among La Crosse County, Wisconsin employees. La Crosse County employees who had access to a work email account served as the study population for this research. According to the La Crosse County Employee Wellness Committee (n.d.), "La Crosse County is committed to creating a *Culture of Wellness* within the county to help staff be and stay healthy" (p. 1). This committee is focused on physical activity, healthy eating/body weight, stress management, preventative exams and screenings, and tobacco cessation and alcohol and other drug misuse as five key areas of wellness for staff and their families.

Limited research regarding stress management has been conducted by the La Crosse County Employee Wellness Committee. The only data collected regarding stress management were for the purposes of the Wellness Council of America's (WELCOA) employee needs and interest survey and a health culture audit (T. Lein, personal communication, October 26, 2018). To gather additional data regarding health needs of employees, including stress management, the La Crosse County Employee Wellness Committee conducted a 2018 employee wellness feedback survey. La Crosse County employees were asked to indicate which of the following health areas needed to be addressed in 2019 on a scale, where the possible responses were: 1 = "not needed," 2 = "might be needed," or 3 = "absolutely needed." Twenty-nine health areas were evaluated across the five areas of wellness by 375 survey respondents. The top three stress management areas that employees reported as "absolutely needed" to be addressed in 2019 were job stress (40.05%, n = 149), work/life balance (28.76%, n = 107) and

massage therapy (27.76%, *n* = 103). Across the 29 health areas, job stress was indicated as the fifth "absolutely needed" area to be addressed in 2019. In order of one to four, the top health areas "absolutely needed" to be addressed were on-site fitness equipment/fitness rooms, ergonomics, tobacco-free campus, and blood draw.

Currently, a chair massage pilot program is one of the few stress management activities offered at work to La Crosse County employees. The chair massage pilot program is only offered to downtown campus La Crosse County employees (T. Lein, personal communication, December 21, 2018). Other stress management wellness activities offered at work to La Crosse County employees in the past included an "It's raining relaxation" stress-related wellness challenge, as well as articles in the monthly newsletter related to stress management.

During the 2017 chair massage pilot program evaluation, respondents were asked if their stress levels decreased after participating in the chair massage. Results from 52 respondents revealed that 82.69% (*n* = 43) of employees either "strongly agreed" or "agreed" that their stress level decreased after participating in the chair massage. Employees also were asked if their productivity at work increased after participating in the chair massage. Almost 70% (*n* = 36) of employees either "strongly agreed" or "agreed" that after participating in the chair massage, their productivity at work increased. In the 2018 employee wellness feedback survey, the chair massage pilot program was re-evaluated based on employee satisfaction. Results from 391 respondents indicated that 76.98% (*n* = 301) of employees "did not utilize the service." Of those who utilized the chair massage program, 78.89% (*n* = 71) were "satisfied" with the service.

Additionally, La Crosse County employees were asked in the WELCOA health culture audit if the use of stress reduction and stress management techniques are encouraged by their employer. In 2018, results from 371 respondents revealed that 29.38% (*n* =109) of employees either "strongly agreed" or "agreed" that the use of stress reduction and stress management techniques are encouraged by La Crosse County, 44.20% (*n* = 164) of employees held a "neutral opinion," and 26.42% (*n* = 98) of employees either "disagreed" or "strongly disagreed." These results can be compared to 2017 data. That year, out of 303 respondents, results revealed that 36.96% (*n* = 112) of employees either "strongly agreed" or "agreed" that the use of stress reduction and stress management techniques are encouraged by La Crosse County, 42.57% (*n* = 129) of employees held a "neutral opinion," and 20.46% (*n* = 62) of employees either "disagreed" or "strongly disagreed" (La Crosse County, 2018).

Employees also had the opportunity to provide comments regarding whether the use of stress reduction and stress management techniques are encouraged by their employer. Some of the feedback provided included: "We are not good at supporting stress management and mental health;" "Stress level is high, little consideration given to the effect it is having on employees' health/family/stress levels;" and "If there are stress reduction techniques, I don't know about them." Lastly, employees were asked if there was anything else they would like to tell the La Crosse County Employee Wellness Committee about employee wellness. Regarding stress management, comments included: "I have never seen any encouragement of stress reduction techniques" and "We could do better with stress management/reduction programs" (La Crosse County, 2018).

The present study represented a follow-up investigation regarding the aforementioned results. Results from this study were presented to the La Crosse County Employee Wellness Committee to assist with designing employee wellness programming.

Need for the Study

La Crosse County employees were selected as the study population for this research. This was partly because of interest by the organization in completing a workplace stress assessment. The La Crosse County Employee Wellness Committee had not assessed perceived stress, stressors, coping strategies, and stress mindsets among La Crosse County employees in the past. As such, the La Crosse County Employee Wellness Committee supported this research.

Data from this study provided insights into how La Crosse County employees perceive stress, as well as awareness of prevalent stressors and coping strategies. Data from this study also revealed the stress mindsets of La Crosse County employees. Results may be utilized to guide the development and implementation of interventions through the La Crosse County Employee Wellness Committee to address workplace stress-related needs of La Crosse County employees. If a proposed intervention is executed and successful, it could serve as a model for other local governmental institutions.

Research Questions

1. What are demographic characteristics of La Crosse County employees?
2. What are the perceived stress levels of La Crosse County employees?
3. What are the most prevalent stressors of La Crosse County employees?
4. What are the most prevalent workplace stressors of La Crosse County employees?

5. What are the most prevalent coping strategies utilized among La Crosse County employees?
6. What are the stress mindsets of La Crosse County employees?
7. Do differences in perceived stress exist by gender among La Crosse County employees?
8. Do differences in perceived stress exist by age among La Crosse County employees?
9. Do differences in perceived stress exit by annual household income among La Crosse County employees?
10. Do differences in perceived stress exist by parental status among La Crosse County employees?

Limitations

- Some La Crosse County employees may not have responded honestly to the electronic survey.
- Some La Crosse County employees may not have accurately reported their own experiences on the electronic survey.
- Some La Crosse County employees may not have understood the electronic survey items.
- Some La Crosse County employees may have completed multiple electronic surveys.

Delimitations

- Data were only collected via an electronic survey.
- The survey administered electronically was only sent to La Crosse County employees who had a work email account.

- Some La Crosse County employees may have been on vacation or sick leave during the data collection phase of this study.

Assumptions

- Each La Crosse County employee who participated in this study answered the electronic survey honestly.
- Each La Crosse County employee who participated in this study accurately reported their own experiences on the electronic survey.
- Each La Crosse County employee who participated in this study understood the electronic survey items.
- Each La Crosse County employee who participated in this study completed only one electronic survey.

Definition of Terms

- Coping strategy: For this study, coping strategy was defined as "a behavior, sequence of behaviors, or mental process employed to satisfy a taxing or unfavorable scenario or in changing one's response to such a scenario" (Nugent, 2013a, para. 1). Coping strategies were operationalized through one item including an "Other (please specify)" option on a survey administered electronically.
- Perceived stress: For this study, perceived stress was defined as "a condition subjectively experienced by respondents who identify an imbalance between the demands addressed and resources available to them to counter these demands" (Bowen, Edwards, Lingard, & Cattell, 2014, p. 1). Perceived stress was operationalized through ten 5-point Likert scale items (Perceived Stress Scale-10) on a survey administered electronically (Cohen & Williamson, 1988).

- Stress mindset: For this study, stress mindset was defined as

  > the extent to which an individual holds the mindset that stress has enhancing consequences for various stress-related outcomes (referred to as a 'stress-is-enhancing mindset') or holds the mindset that stress has debilitating consequences for outcomes such as performance and productivity, health and well-being, and learning and growth (referred to as a 'stress-is-debilitating mindset'). (Crum, Salovey, & Achor, 2013, p. 716)

  Stress mindset was operationalized through eight 5-point Likert scale items (Stress Mindset Measure) on a survey administered electronically (Crum, Salovey, & Achor, 2013).
- Stressor: For this study, stressor was defined as "any situation, circumstance, or stimulus that is perceived to be a threat, or that which causes or promotes stress" (Seaward, 2011, p. 9). Stressors were operationalized through one 4-point Likert scale item including an "Other (please specify)" option on a survey administered electronically.
- Workplace stressor: For this study, workplace stressor was defined as "primary causes of job stress," such as worker characteristics and working conditions (NIOSH, 1999, p. 7). Workplace stressors were operationalized through one 4-point Likert scale item including an "Other (please specify)" option on a survey administered electronically.

CHAPTER II

REVIEW OF RELATED LITERATURE

History of Stress

The term "stress" is borrowed from physics, and refers to a tension or force exerted on the body. In 1914, Harvard physiologist Walter Cannon coined the term "fight-or-flight response." The fight-or-flight response is a physiological reaction of the body that occurs in response to a perceived harmful event, attack, or threat to survival (Cannon, 1932). Dr. Hans Hugo Bruno Selye introduced the term "stress" in 1936. Dr. Selye was an influential Canadian endocrinologist known for his research on the effects of stress on the human body. He coined the term stress to be "the non-specific response of the body to any demand placed on it to adapt, whether that demand produces pleasure or gain" (The American Institute of Stress [AIS], 2018, para. 1; Seward, 2011, p. 6). Dr. Selye's definition made most people view stress in a negative light. It was not until almost four decades later when Dr. Selye recognized that "not all stress reactions are equal, due to differences in the subject's perception and emotional reaction" (Szabo, Tache, & Somogyi, 2012, p. 477). A key moment in shifting Dr. Selye's mindset regarding stress came in 1971 when Lenard Levi from Sweden distinguished the difference between positive and negative stress (Levi, 1971; Szabo et al, 2012).

As a result of Levi's findings, Dr. Selye introduced the terms "distress" and "eustress" in 1974 to differentiate between an initiated stress response as either negative,

unpleasant stressors, or positive emotions (Selye, 1974). The AIS (2018) defines eustress as stress that has positive connotations such as marriage, promotion, and new friends. On the contrary, distress is defined as stress that has negative connotations like divorce, financial problems, and work difficulties (AIS, 2018c). To illustrate his new definitions to others, Selye wrote two books: *Stress Without Distress* (Selye, 1974) and *Stress of My Life: A Scientist's Memoir* (Selye, 1977). In his books, he began to emphasize that "stress is not what happens to you, but how you react to it" (Selye, 1974; Selye, 1977; Szabo et al., 2012, p. 477).

General Adaptation Syndrome

During both distress and eustress, one's body experiences nearly the same non-specific responses to stimuli. As the AIS (2018) explains, "it is how an individual accepts stress that determines ultimately whether the person can adapt successfully to change" (para. 8). Thus, in 1936, Selye hypothesized and created the General Adaptation Syndrome (GAS) stress model, also known as General Stress Syndrome. Dr. Selye described the GAS as "a person's short- and long-term reaction to stress (response to the demands that the environment requires of us)" (Syndrome, 2016, para. 2). There are three stages to the GAS, which are the alarm stage, stage of resistance, and the exhaustion stage (Selye, 1950).

The first stage, the alarm stage, is the body's immediate response to a stressor. In other words, the body is preparing for a fight-or-flight response. Signs and symptoms of this phase include increases in one's heart rate, blood pressure, perspiration, and respiration rates (AIS, 2018c; Syndrome, 2016). Next comes the stage of resistance, also known as the adaptation stage. In this stage, the body starts to react to or resist the

stressor. In other words, the individual copes with the stressor encountered, whether it be exercising or drinking alcohol. The length of the resistance stage depends heavily on the intensity of the stressor (AIS, 2018c). The third and final stage is the exhaustion stage. This stage is when the body has depleted all of its resources and is burned out. Additionally, this stage is most harmful to one's health, establishing a base for chronic stress.

Effects of Stress on the Human Body

Stress affects almost all body systems including the central nervous and endocrine systems, respiratory and cardiovascular systems, digestive system, muscular system, reproductive system, and even the immune system (AIS, 2018c). Research shows adverse health effects of workplace stress may include coronary heart disease and hypertension, back and upper-extremity musculoskeletal disorders, and even mental disorders like depression and suicide (Rosch, 2001b).

Many people experience physical and/or psychological symptoms as a result of stress. Seventy-seven percent of adults in the United States regularly experience physical symptoms of stress, while 73% of people regularly experience psychological symptoms caused by stress (AIS, 2018c). Common physical symptoms of stress include fatigue (51%), headache (44%), upset stomach (34%), muscle tension (30%), change in appetite (23%), teeth grinding (17%), change in sex drive (15%), and feeling dizzy (13%) (AIS, 2018c). Psychological symptoms of stress include irritability or anger (50%), feeling nervous (45%), lack of energy (45%), and feeling as though you could cry (35%) (AIS, 2018c).

Yerkes-Dodson Law

In 1908, Robert Yerkes and John Dodson, psychologists from Harvard University, created the Yerkes-Dodson Law (Figure 1). The Yerkes-Dodson Law, also known as the Inverted-U Model (curve), illustrates the relationship between stress (or arousal) and performance. The curve illustrates increased stress actually can increase performance, but only to a certain point. Stress to the left of the midpoint is considered to be good stress, or eustress. Once a person's state reaches beyond the midpoint, it is believed that stress reduces their performance and health status (Seaward, 2011). Therefore, stress to the right of the midpoint is referred to as bad stress or distress.

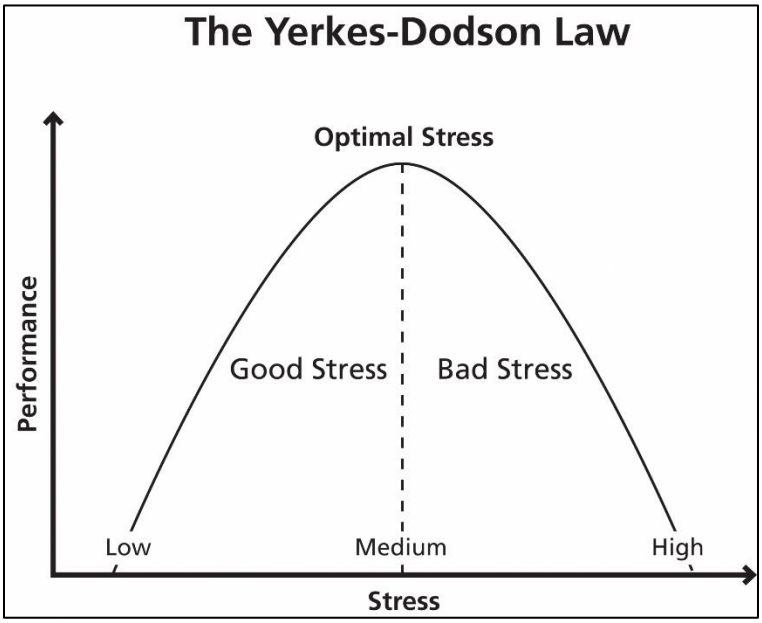


Figure 1. Yerkes-Dodson Law.

As Figure 1 portrays, not all stress is bad or unhealthy. Stress often is considered to be synonymous with distress, while the positive effects of stress often are disregarded. However, stress in small amounts can be helpful and health enhancing, such as motivating people to prepare or perform well. For example, stress can help an individual

prepare for taking a test or interview for a job (National Institute for Mental Health [NIMH], n.d.) Therefore, as illustrated above, stress not always is harmful and thus, all definitions of stress should include eustress and distress. Interestingly, in Dr. Selye's later years, when reporters asked him to define stress, he would say, "everyone knows what stress is, but nobody really knows" (AIS, 2018b).

As noted by the AIS (2018), "stress is difficult to define because it is different for each of us" (para. 8). Not only is stress difficult to define, but it also is difficult to measure (AIS, 2018b; AIS, 2018c). Perhaps, the most commonly accepted definition of stress is "a condition or feeling experienced when a person perceives the demands [of a situation] exceed the personal and social resources the individual is able to mobilize" (AIS, 2018b, para. 4).

Stress in America

Since 2007, the American Psychological Association (APA), in collaboration with the Harris Poll, has conducted an online, annual *Stress in America*™ survey within the United States. The *Stress in America*™ survey "measures attitudes and perceptions of stress among the general public and identifies leading sources of stress, common behaviors used to manage stress, and the impact of stress on our lives" (APA, 2019, para. 1).

According to the *Stress in America*™ survey of 2018, on a 10-point scale, where 1 was "little or no stress" and 10 was "a great deal of stress," Americans (i.e., adults 18 years and older who reside in the United States), on average, rated their stress level at 4.9 (APA, 2018b). For ease of reporting, the 10-point scale is often collapsed into three categories: little or no stress (1, 2, or 3), moderate stress (4, 5, 6, and 7), and extreme

stress (8, 9, and 10) (Ripley, Bethune, & Rozenwasser, n.d.). The positive news is that the average stress level of Americans is declining. In fact, in 2007, average stress levels were reported at 6.2 (APA, 2015). However, the reported stress levels still are higher than what Americans consider to be a healthy level of stress. For example, in 2018, Americans reported a healthy level of stress was 3.9 (APA, 2018b). This has significantly risen over the past year, as Americans considered a healthy level of stress to be 3.7 in 2017 (APA, 2018b).

Although, the average stress of Americans is declining, extreme stress was reported by one in three Americans in 2014 (APA, 2015). Furthermore, 48% of Americans felt their stress had increased over the past five years (AIS, 2018c). Also, we see specific populations including women, younger generations, parents, and those living in lower-income households struggle with high stress levels (APA, 2015).

Perceived Stress

Perceived stress is defined as "a condition subjectively experienced by respondents who identify an imbalance between the demands addressed and resources available to them to counter these demands" (Bowen, Edwards, Lingard, & Cattell, 2014, p. 1). Gender differences regarding perceived stress repeatedly have been documented in the literature. For example, Cohen and Janicki-Deverts (2012) found differences between the mean perceived stress scores of males and females in 1983, 2006, and 2009 (Table 1). These results align with the APA's (2015) *Stress in America*™ survey showing that women report more stress than men. In addition to gender differences, differences in perceived stress based on age, income, and household composition has been noted.

Table 1. Mean Perceived Stress Scores by Gender

Mean Perceived Stress Scores by Gender	1983	2006	2009
Males and Female Combined	13.02	15.31	15.84
Males	12.07	14.46	15.52
Females	13.68	16.10	16.14

Moreover, across all three national surveys administered in 1983, 2006, and 2009 "stress increased in a graded fashion with decreasing education and income" on the PSS10 (Cohen & Janicki-Deverts 2012, p. 1329). Furthermore, stress "decrease[d] in a graded fashion with increasing age" on the PSS10 (Cohen & Janicki-Deverts, 2012, p. 1329). As stated by Cohen and Janicki-Deverts (2012), "a possible explanation for the lower reports of stress with increasing age is that as we grow older, we both interpret events as less stressful and develop better coping strategies" (p. 1329). This explanation by Cohen and Janicki-Deverts (2012) is supported by research showing that as people age, they concentrate less on negative emotions and cherish positive aspects of their life (Carstensen, Pasupathi, Mayr, & Nesselroade, 2000; Lockenhoof, Costa, & Lane, 2008; Mroczek, 2001).

Perceived stress scores also have been shown to differ among income and household composition (i.e., number of people in the household and number of children in the household). Individuals with an annual household income of <$50,000 have consistently had higher mean perceived stress scores than those with an annual household income of ≥$50,000 (Table 2) (Cohen & Janicki-Deverts, 2012). According to Cohen and

Williamson (1988), “the number of people in one’s household and the number of them who are children were also associated with perceptions of stress” (p. 51).

Table 2. Mean Perceived Stress Scores by Annual Household Income

Mean Perceived Stress Scores by Annual Household Income	1983	2006	2009
<$50,000	13.98	16.11	17.01
≥$50,000	11.84	14.32	14.93

Stressors

Sources of stress also are commonly referred to as stressors. According to Seaward (2011), a stressor is defined as “any situation, circumstance, or stimulus that is perceived to be a threat, or that which causes or promotes stress” (p. 9). Furthermore, as identified by the National Institute of Mental Health (n.d.), “a stressor may be a one time or a short-term occurrence, or it can be an occurrence that keeps happening over a long period of time” (p. 1). Sources of stress also vary for everyone. Some people may feel stressed about work, while others may feel pressure from school or relationships, or may even experience financial or health-related stress.

Results from the 2014 *Stress in America*™ survey revealed the top four sources of stress in the lives of Americans that year included money (64%), work (60%), family responsibilities (47%), and health concerns (46%) (APA, 2015). These four sources of stress have topped the list of stressors experienced by Americans, and remained in that order, since the second annual *Stress in America*™ survey in 2008. The only exception

was in 2007 with work reported as the number one stressor (74%) and money as the number two stressor (73%).

As seen above, the top four sources of stress in the United States are money, work (i.e., job pressure), family responsibilities (i.e., relationships), and health concerns. The most prevalent stressors related to money include loss of job, reduced retirement, and medical expenses. People commonly run into work and job pressure through co-worker tension, conflicts with one's boss, and work overload. Relationship stressors often are caused by divorce, death of a spouse, arguments with friends, and loneliness. Stressors related to health concerns manifest themselves through all sorts of health abnormalities, escalating to terminal or chronic illnesses (AIS, 2018c).

Money and health concerns serve as two prevalent stressors, thus creating multiple obstacles for many Americans. In fact, almost three out of four Americans (72%) report feeling stressed about money at least some of the time (APA, 2015). Approximately one in three Americans (32%) report that their finances or lack of money prevents them from living a healthy lifestyle (APA, 2015). Some Americans even are "putting their health care needs on hold because of financial concerns" (APA, 2015, p. 2). As data from the 2014 *Stress in America*™ survey indicates, a little over one in five Americans have considered either skipping (9%) or actually have skipped (12%) going to the doctor's office because of financial concerns (APA, 2015).

In the August 2017 *Stress in America*™ survey, common stressors for Americans reportedly included the future of our nation (63%), money (62%), work (61%), the current political climate (57%), and violence and crime (51%) (APA, 2017b). As mentioned previously, money and work were among the top stressors for Americans in

2014. Furthermore, in 2017, when participants were asked what issues specifically in our nation caused them stress, results showed that healthcare (43%), the economy (35%), and trust in the government (32%) were the top three stressors (APA, 2017b). Additional causes of stress pertaining to the nation included hate crimes (31%), crime (31%), wars/conflicts with other countries (30%), terrorist attacks in the United States (30%), high taxes (28%), social security (26%), and government controversies and scandals (25%) (APA, 2018b). An additional stressor for three out of five Americans (60%) was personal health concerns or health problems affecting their family (APA, 2017b).

According to the APA's (2017b) *The State of Our Nation* news release, "looking at Americans' news consumption and social media habits can provide some insight into why the state of our nation and its uncertain direction have become such significant sources of stress" (p. 4). In 2017, the majority of Americans (95%) reported they followed the news regularly, with four out of five Americans (82%) reporting they checked the news at least once per day. In addition, nearly one in 10 Americans (9%) reported checking in with the news at least every hour and one in five Americans (20%) reported checking their social media for news constantly. Being engaged with the news either through television or social media also has a downside. While Americans want to stay informed, approximately one-half of respondents (56%) reported it caused them stress. Additionally, 72% of Americans reported the media blows things out of proportion (APA, 2017b).

Coping with Stress

A coping strategy is defined as "a behavior, sequence of behaviors, or mental process employed to satisfy a taxing or unfavorable scenario or in changing one's

response to such a scenario" (Nugent, 2013a, para. 1). Coping strategies also can be referred to as coping mechanisms or stress management techniques. As stress trends of Americans continues to rise, so does the use of various coping strategies. In 2014, the three most popular ways Americans managed their stress consisted of listening to music (44%), exercising or walking (43%), and watching television or movies for more than two hours per day (40%) (APA, 2015). Additionally, approximately two out of five adults (38%) surfed the internet or went online to help manage their stress (APA, 2015). Reading (36%), spending time with friends or family (35%), praying (29%), napping or sleeping (27%), spending time doing a hobby (24%), and eating (23%) were other coping strategies utilized by Americans (APA, 2015).

Unfortunately, many Americans still assert they do not know or do not engage in any coping strategies to manage their stress levels. In fact, two in five Americans (42%) report they do not do enough or are not sure whether they are doing enough to manage their stress (APA, 2015). Additionally, "one in five Americans (20 percent) say they never engage in an activity to help relieve or manage their stress" (APA, 2015, p. 9).

The Palo Alto Medical Foundation (PAMF) (2015) further explains coping strategies as "techniques you develop to reduce the impact of the stress on a short-term basis" (para. 3). Coping strategies can be healthy or unhealthy. As mentioned by the PAMF (2015), "healthy coping strategies are techniques that help reduce anxiety in a way that does not harm you" (para. 4). Examples of healthy coping strategies include exercising, eating healthy, talking to a counselor or support group, hanging out with friends, and doing art or other relaxing hobbies. On the other hand, "unhealthy coping strategies actually increase your stress because they lead to other problems" (PAMF,

2015, para. 5). Examples of unhealthy coping strategies include: use of illegal drugs, alcohol, and tobacco; overeating; and unprotected or impulsive sexual behavior.

When Americans do engage in coping strategies to manage their stress, they may unhealthy. For example, in the past months, 33% of Americans reported eating too much food or eating unhealthy foods (APA, 2015). In 2017, the *Stress in America*™ survey found smoking was reported by 14% of adults as one unhealthy coping strategy. These statistics are quite alarming and need to be reversed. On the other hand, many Americans are engaging in healthier coping strategies including listening to music (47%), exercising or walking (46%), praying (29%), and practicing mediation or yoga (12%) (APA, 2017b). Therefore, it is essential to focus on educating Americans on engaging in healthy, positive coping strategies to manage their stress. Focusing on coping strategies is an important area to concentrate on, as overall stress levels still are above the healthy limit.

An additional coping strategy is emotional support. Emotional support is defined as the "reassurance, encouragement, and understanding we give or receive to a person" (Nugent, 2013b, para. 1). Engaging in emotional support when dealing with stress can be crucial. According to the AIS (n.d.), "a strong social support system is a powerful stress buffer" (para. 1). The 2017 *Stress in America*™ survey asked participants if they felt they had someone they could rely on for emotional support and nearly three in four Americans (74%) said they did. However, results also showed one-half of Americans (56%) still felt they could have used more emotional support during the previous year (APA, 2017b).

It is important to keep in mind that all coping strategies do not work for everyone. Therefore, it is important to identify what works best for a given person. As the AIS (n.d.) stated, "just as stress is different for each of us, no technique works for everyone.

Experiment and find out which is best for you, and then practice it on a regular basis" (para. 1).

Differences Across Demographics

Unfortunately, some segments of our population disproportionally suffer from higher stress levels than the rest. These groups of individuals can be categorized based on gender, age, parental status, and annual household income, among other indicators. Women, younger generations, parents, and those living in lower-income households feel a greater burden of stress than the rest of American adults (APA, 2015).

Gender

Since the APA began conducting its *Stress in America*™ survey in 2007, women, on average, consistently have reported higher stress levels than men (APA, 2015; APA, 2017b). In 2014, women's average stress level was 5.2, while men's average stress level was 4.5 on a 10-point scale. These average stress scores can be compared with the average stress scores of women and men in 2007 which were 6.3 and 6.0, respectively (APA, 2015). In 2017, results revealed that women's stress level was 5.1, in comparison with 5.0 in 2016. In comparison, men's stress level dropped from 4.6 in 2016 to 4.4 in 2017. Overall, the gap in stress level between men and women has continued to widen (APA, 2015).

Not only do stress levels differ between men and women, but coping strategies also differ between the two groups. Survey results show women are more likely than men to report that their stress prevented them from making a lifestyle change (14% versus 9% for men) (APA, 2015). Additionally, women often report engaging in unhealthy and sedentary behaviors to manage their stress (APA, 2015). Table 3 illustrates coping

strategies across demographics from the August 2016 *Stress in America™* survey (APA, 2017c).

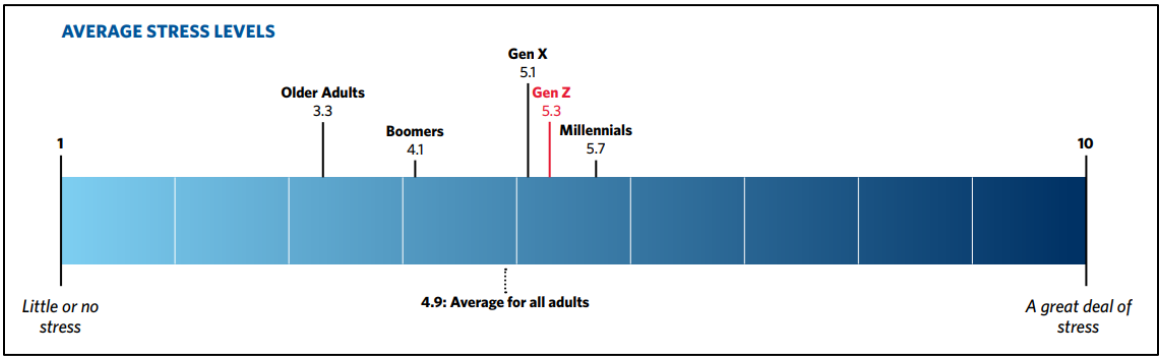
Table 3. Differences Among Men and Women's Coping Strategies in America (APA, 2017c)

Coping Strategies	Men	Women
	%	
Exercising or walking	46	48
Going online	31	32
Watching television or movies for 2 hours or more per day	33	39
Spending time with friends or family	30	44
Reading	31	44
Praying	23	40
Eating	18	26

Age

For the purpose of the *Stress in America™* survey, participants' ages were categorized by generations of adults including Millennials, Generation X (i.e., Gen Xers), Baby Boomers, and Matures (i.e., older adults). In 2019, Generation Z (i.e., Gen Zs) will be added (S. Bethune, personal communication, October 11, 2018). In 2019, Gen Zs includes individuals aged 18 to 22 years old, Millennials includes individuals aged 23 to 40 years old, Gen Xers includes individuals aged 41 to 54 years old, Baby Boomers includes individuals aged 55 to 73 years old, and Matures includes individuals aged 74 years old and older. In 2018, Gen Zs (i.e., 15-21 years old) and Millennials (i.e., 22-39

years old) reported the highest average stress levels at 5.7 and 5.3 respectively on a scale of 1 (i.e., little or no stress) to 10 (i.e., a great deal of stress) (APA, 2018b). It is important to note, the *Stress in America*™ survey conducts its survey among respondents 18 years of age and older living in the United States. Therefore, questions were not asked of the 15-17 age group and no comparative data for that age group exists (APA, 218). Gen Xers (i.e., 40-53 year olds) average stress levels were 5.1, Baby Boomers (i.e., 54-72 years old) average stress levels were 4.1, and older adults (i.e., age 73 or older) average stress levels were 3.3 in 2018 (APA, 2018b). Generation differences by average stress



levels are illustrated in Figure 2. Since the survey began in 2007, older adults, on average, have had the lowest stress levels across all generations (APA, 2017b).

Figure 2. Americans Average Stress Levels (APA, 2018b).

In 2017, younger generations were more likely to report experiencing stress during the workday than other generations. Fifty percent of Millennials (i.e., 18-36 years old) reported they typically felt tense or stressed out during the workday. This was compared to 32% Gen Xers (i.e., 37-52 years old) and 27% Baby Boomers (i.e., 53-71 years old) who reported they typically felt tense or stressed out during the workday (APA, 2017b).

One reason Millennials (i.e., 18-35 years old) and Gen Xers (i.e., 36 to 49 years old) were more stressed than the rest of Americans was due to financial concerns (APA, 2015). As reported in the survey, money was a "somewhat" or "very significant" source of stress for 75% of Millennials and 76% of Gen Xers (APA, 2015). In addition, approximately, 43% of Millennials and 41% of Gen Xers reported that a financial situation or lack of money prevented them from living a healthy lifestyle. This was compared to 32% of all other Americans (APA, 2015).

Millennials (i.e., 18-35 years old) in particular have a difficult time coping with stress. As highlighted in the 2014 *Stress in America*™ survey, Millennials engaged the most in sedentary coping strategies like listening to music (57% versus 42% of Gen Xers [36-49 years old], 39% of Baby Boomers [50-68 years old], and 29% of Matures [69 years or older]), watching television or movies for more than two hours per day (44% versus 37% of Gen Xers, 42% of Baby Boomers, and 35% of Matures), and surfing the internet or going online (46% versus 33% of Gen Xers, 37% of Baby Boomers, and 31% of Matures) (APA, 2015). Furthermore, in 2014, two out of five Americans (41%) reported that in the past month, they had eaten too much food or eaten unhealthy foods because of their stress (APA, 2015). This was compared to 35% of Gen Xers, 29% of Baby Boomers, and 21% of Matures (APA, 2015).

Annual Household Income

As illustrated by the APA (2015), "the United States is the world's richest country, with a gross domestic product nearly double that of the runner-up, yet our economic inequality is among the highest in the world" (p. 3). However, we still continue to see a gap between the "haves" and "have nots." Unfortunately, this gap continues to

widen. When the *Stress in America*™ survey began in 2007, Americans, on average, reported stress levels were the same regardless of annual household income. However, in 2014, Americans living in lower-income households reported a higher overall level of stress than those living in higher-income households (5.2 vs. 4.7 on a 10-point scale) (APA, 2015).

Factors of stress also differ by level of annual household income. A common stressor that may seem obvious for adults living in lower-income households is financial concerns (APA, 2015). Americans living in lower-income households reported feeling stressed about money all or most of the time (36%). This was compared to those living in higher-income households with less than a quarter (18%) of Americans reportedly feeling stressed about money all or most of the time (APA, 2015). Also we can see variations in coping strategies among this population. In fact, survey results indicate Americans living in lower-income households are nearly twice as likely (45%) as those living in higher-income households (24%) to report that their financial situation or lack of money prevented them from living a healthy lifestyle (APA, 2015). In addition, nearly three in 10 Americans living in lower-income households had considered skipping (9%) or actually had skipped (20%) necessary doctor's visits due to their finances (APA, 2015).

Parental Status

According to the APA (2015), "survey findings suggest that parents – defined as those with children under the age of 18 living at home – have a more challenging relationship with stress than Americans overall. They report higher average stress levels than their counterparts" (p. 13). In 2014, parents' average stress level was 5.7 compared to non-parents' average stress level of 4.7 on a 10-point scale (APA, 2015).

Variation in stressors can be seen as dependent on parental status. In fact, results revealed that a "somewhat" or "very significant" source of stress for parents is money. Specifically, 77% of parents reported money as a source of stress compared to 64% of Americans in general (APA, 2015). Additionally, for nearly one-half of parents (45%), financial stress or lack of money reportedly served as a barrier to living a healthy lifestyle (APA, 2015). Unhealthy coping strategies were more prevalent among parents. Parents versus non-parents were more likely to engage in unhealthy coping strategies, including drinking alcohol (18% versus 12%) and smoking (17% versus 10%) (APA, 2015). Additionally, in relation to parents versus non-parents, parents reported eating too much food or eating unhealthy foods because of stress (43% versus 30% of non-parents), as well as skipped a meal in the past month (37% versus 22% of non-parents) (APA, 2015). As a result of all the unhealthy coping strategies, parents were more likely (16%) than non-parents (11%) to report that stress has prevented them from making a lifestyle change (APA, 2015).

Stress in the Workplace

Workplace stress also can be referred to as work-related stress, job stress, or even occupational stress. According to the World Health Organization (WHO, 2019), work-related stress is defined as "the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability to cope" (para. 3). An additional definition of job stress is "the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the work" (National Institute for Occupational Safety and Health [NIOSH], 1999, p. 6).

Congress directs a federal agency by the name of the NIOSH. As part of the United States Department of Health and Human Services, the NIOSH is responsible for conducting research regarding the effects of stress on worker safety and health. Additionally, the NIOSH is responsible for making recommendations for the prevention of work-related illness and injury, which includes strategies to reduce workplace stress. As stated by the NIOSH (1999), "the nature of work is changing at whirlwind speed. Perhaps now more than ever before, job stress poses a threat to the health of workers and, in turn, to the health of organizations" (p. 1).

As mentioned by Dr. Paul Rosch (2001b), former president of the AIS, workplace stress will "continue to escalate at an alarming rate that could have disastrous fiscal as well as health consequences" (p. 1). An abundance of research has revealed work is very stressful for many Americans. In fact, 30% of Americans say they are "always" or "often" under stress at work (AIS, 2018c). In a national survey of workers in the United States by Northwestern National Life, two out of five workers (40%) reported their job as being "very" or "extremely" stressful (Northwestern National Life Insurance Company, 1992). Furthermore, in a study by the Families and Work Institute, 26% of workers reported they "often" or "very often" were burned out or stressed by their work (Bond, Galinsky, & Swanberg, 1998). A study by Yale University indicated that 29% of workers reported they felt "quite a bit" or "extremely" stressed at work (Barsade, Wiesenfeld, & The Marlin Company, 1997).

All these figures are consistent with the 2017 Work and Well-Being survey of more than one in three employees (37%) reported feeling tense or stressed out during the workday (APA, 2017a). According to the NIOSH's director, Dr. Linda Rosenstock,

stress, regardless of the cause, imposes enormous and far reaching costs on employees' health and well-being, as well as the profitability of the organizations (Minter, 1999).

Impacts of Workplace Stress

The impacts of workplace stress affect both the health and wellness of the individual, as well as the productivity and overall cost to an organization. The effects of workplace stress on individuals can contribute to poor physical and mental health. In 2001, the Marlin Company, in collaboration with Harris Interactive conducted a Labor Day telephone survey of 751 American full-time or part-time workers. In the seventh annual Labor Day survey, approximately one-third of workers (35%) said their jobs were negatively affecting their physical or emotional well-being (AIS, n.d.). It is also common for individuals experiencing stress to report poor work-life balance, which affects their family interactions and relationships. In fact, 31% of employed adults reported they had difficulty managing work and family responsibilities (AIS, 2018c). Thirty-five percent of individuals cited their jobs were interfering with their family or personal time and were a significant source of stress (AIS, 2018c). Moreover, 42% of workers reported that their job pressures interfered with their family or personal life (AIS, n.d.). As illustrated, stress can affect one's physical and emotional health, as well as conflict with various relationships.

Experiencing stress in the workplace also can cause negative effects towards employees' health and well-being. The WHO (n.d.), explains that workplace stress may cause employees to:

- Become increasingly distressed and irritable.
- Become unable to relax or concentrate.

- Have difficulty thinking logically and making decisions.
- Enjoy their work less and feel less committed to it.
- Feel tired, depressed, and/or anxious.
- Have difficulty sleeping.
- Experience serious physical problems, such as:
    - heart disease,
    - disorders of the digestive system,
    - increases in blood pressure, headaches, etc.,
    - and musculoskeletal disorders (such as low back pain and upper limb disorders).

The aforementioned determinants represent early warning signs of stress, in particular workplace stress. Additional warning signs of workplace stress include headache, short temper, upset stomach, job dissatisfaction, and low morale (NIOSH, 1999). Not only does workplace stress have negative effects on an individual, but it also has negative effects on organizations. When organizations fail to address the stress of their employees, a cyclical effect occurs. In Figure 3, the Industrial Accident Prevention Association (IAPA, 2007) illustrates just that.

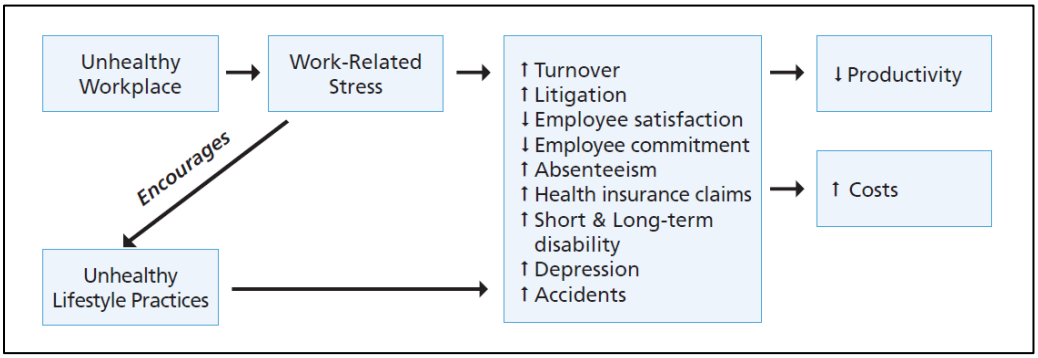


Figure 3. Relationship Between Workplace Stress and Organizational Outcomes (IAPA, 2007).

When an organization's workplace is unhealthy, workplace stress ensues amongst its employees. As a result of employees' increased stress, a variety of consequences may occur, such as unhealthy lifestyle choices, absenteeism, staff turnover, accidents, health insurance claims, depression, and even short- and long-term disability (IAPA, 2007; WHO, n.d.). These factors can precipitate poor productivity (i.e., presenteeism), thus resulting in a significant financial burden to the organization. The term presenteeism crops up "when an employee is physically present at work, but is less productive because he/she is sick, injured, stressed or burned-out" (IAPA, 2007, p. 3). Unfortunately, stress-related presenteeism can lead to turnover. In fact, according to the International Labour Organization (ILO, 2001), 40% of job turnover is due to stress.

As mentioned previously, the effects of workplace stress pose a significant financial burden to many organizations. According to Dr. Rosch (2001a), "job stress is estimated to cost American industry $300 billion a year from absenteeism, employee turnover, diminished productivity, workers compensation awards and other legal expenses, direct medical and insurance costs, etc." (p. 7). In fact, "one of the first signs of stress at the workplace is burnout, followed by absenteeism" (Seaward, 2011, p. 17).

Research shows stressed out employees give rise to increased absenteeism. As noted by Webster and Bergman (1999), "although many employees experience stress as a normal part of their jobs, some employees experience stress more severely than others, to an extent that they become ill and need time away from work" (p. 1). Moreover, according to the latest data from the Bureau of Labor Statistics (BLS, 2017a) in 2017, workers who took time off work because of anxiety or stress were away approximately 29 days per year in the United States. However, for the local government industry across

the United States, the median absence from work due to anxiety or stress was approximately 38 days per year (BLS, 2017b). In Wisconsin alone, across all industries, approximately 24 days per year were taken off of work because of anxiety or stress (BLS, 2017c). It should be noted there is no data available from the BLS for days taken off of work because of anxiety or stress among the local government industry in Wisconsin. With absenteeism comes a significant cost to the organization. As stated by Dr. Rosch (2001b), "unanticipated absenteeism is estimated to cost companies an average of more than $600/worker/year, and expenses for large employers could run as high as $3.4 million annually" (p. 3). As illustrated, workplace stress-related absenteeism is a serious and growing problem across the United States.

Another impact of workplace stress on an organization is increased healthcare expenditures, as well as more visits to the doctor's office. According to a study conducted by Goetzel et al. (1998), healthcare expenditures are nearly 50% greater for employees who report high levels of stress. Additionally, "it has been estimated that 75 - 90 percent of all visits to primary care physicians are for stress-related problems" (AIS, 2018a, para. 1).

In April of 1996, the NIOSH and its partners unveiled the National Occupational Research Agenda™ (NORA), as a framework to guide occupational safety and health research. NORA arose due to the need to address the continuously changing workplace in the United States (NIOSH, 2014). Therefore, it is essential to continuously assess workplace stressors in order to obtain a safe and healthy workforce free from injuries and increased healthcare costs.

Workplace Stressors

According to the WHO (2017), work-related stress can be caused by "poor work organization (the way we design jobs and work systems, and the way we manage them), poor work design (for example, lack of control over work processes), poor management, unsatisfactory working conditions, and lack of support from colleagues and supervisors" (para. 5). In the words of the NIOSH (1999), workplace stress "results when the requirements of the job do not match the capabilities, resources, or needs of the worker" (p. 6).

Workplace stressors include worker characteristics and working conditions. Worker characteristics include individuals' perceived stress levels and their coping strategies. It is essential to identify individual characteristics related to workplace stress in order to focus prevention strategies and help employees cope with their workplace stress (NIOSH, 1999). Additionally, it is important to assess working conditions that may result in stress. The NIOSH, in particular, focuses on the view that working conditions play a primary role in causing workplace stress. However, the worker characteristics of individuals should not be ignored, as they are an adjuvant when designing and implementing interventions.

The NIOSH has provided the following list of working conditions that may cause workplace stress. These conditions include:

1. The design of tasks
    - Heavy workload
    - Infrequent rest breaks
    - Long work hours and shiftwork

- Hectic and routine tasks that have little inherent meaning
- Failure to utilize workers' skills
- Failure to provide a sense of control

2. Management style
    - Lack of participation of workers in decision making
    - Poor communication in the organization
    - Lack of family-friendly policies
3. Interpersonal relationships
    - Poor social environment
    - Lack of support or help from coworkers
    - Lack of support or help from supervisors
4. Work roles
    - Conflicting or uncertain job expectations
    - Too much responsibility
    - Too many "hats to wear"
5. Career concerns
    - Job insecurity
    - Lack of opportunity for growth, advancement, or promotion
    - Rapid changes for which workers are unprepared
6. Environmental conditions
    - Unpleasant or dangerous physical conditions such as crowding, noise, air pollution, or ergonomic problems (NIOSH, 1999).

Exposure to any of the above workplace stressors can have a direct influence on the health and safety of employees. As displayed in Figure 4, individual or situational factors also strengthen or weaken the stress of employees. For example, an individual or situational factor that may strengthen the effects of a stressful working condition includes having a fight with a friend or a loved one or even dealing with a health issue. On the other hand, an example of an individual and situational factor that can weaken the effects of stressful working conditions includes having a well-established work-life balance or even having social support from friends and co-workers (NIOSH, 1999).

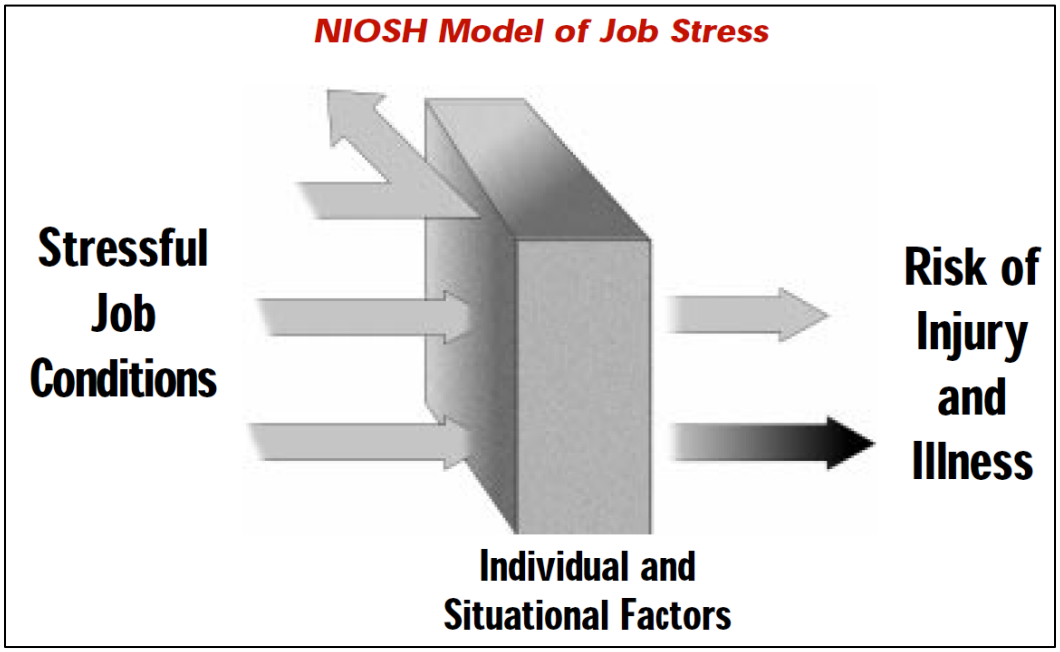


Figure 4. National Institute for Occupational Safety and Health (NIOSH) Model of Job Stress.

In addition to the aforementioned sources of occupational stress, Cooper and Marshall (1976) and Hurrell and Murphy (1992) identified workplace stressors prior to the NIOSH in 1999. In 1995, Lawrence Murphy, an employee of the NIOSH, grouped workplace stressors into five broad categories, which included factors intrinsic to the job,

role in the organization, career development, relationships at work, and organizational structure and climate. As shown, these categories developed by Murphy in 1995 provided a framework for the workplace stressors and categories presented by the NIOSH in 1999. Workplace stressors organized by categories illustrated by Murphy (1995) included:

1. Factors intrinsic to the job
    - Workload (overload and underload)
    - Workplace
    - Autonomy
    - Shiftwork
    - Physical environment characteristics
2. Role in the organization
    - Role conflict
    - Role ambiguity
    - Level of responsibility
3. Career development
    - Over/under-promotion
    - Job security
    - Career development opportunities
4. Relationships at work
    - Supervisors
    - Coworkers
    - Subordinates
5. Organizational structure and climate

- Participation in decision-making
- Management style
- Communication patterns

The workplace stressors identified by Murphy (1995) also are similar to the workplace stressors reported by the Workplace Health and Safety Queensland (WHSQ). The WHSQ (2017) determined that organizational, environmental, and individual characteristics may all play a role in the effects of work-related stress. They also highlighted a category of workplace stressors that often is overlooked, which is environmental stressors. Environmental stressors, as defined by the WHSQ (2017), are "physical, chemical or biological agents [that] can influence the worker's comfort and performance in his or her work environment, and might contribute to a stress response" (p. 2).

The WHSQ (2017) further provided examples of environmental stressors including noise, temperature and humidity, lighting, vibration, air quality, and unguarded plants and equipment. Other types of workplace stressors revealed by the WHSQ (2017) encompass work demands (i.e., emotional, mental, and physical), low control, poor support, lack of role clarity, poorly managed change, poorly managed relationships, low levels of recognition and reward, and organizational injustice.

In 2018, the Work and Well-Being survey was conducted online within the United States by Harris Poll on behalf of the APA. A nationally representative sample of 1,512 adults age 18 and older who resided in the United States and were either employed full-time, part-time, or self-employed rated their workplace stressors. Forty-nine percent of respondents indicated low salaries was a "somewhat" or "very significant" source of

work stress. The remaining top five "somewhat" or "very significant" sources of work stress in order of two through five included lack of opportunity for growth or advancement (46%), too heavy a workload (42%), unrealistic job expectations (39%), and long hours (39%) (APA, 2018a). Other sources of work stress assessed in the 2018 survey included uncertain or undefined job expectations, work interfering during personal or family time, job insecurity, lack of participation in decision making, inflexible hours, commuting, problems with supervisors, problems with co-workers, physical illnesses and ailments, personal life interfering with work hours, and unpleasant or dangerous physical conditions. Dr. Rosch (2001b) identified additional workplace stressors to include

> job insecurity, widespread violence in the workplace, increased rudeness on the part of co-workers and clients, more time and costs for commuting, technostress, the persistence of discrimination because of race, religion or gender, constant and unreasonable deadlines and other time pressures…[that have] contributed to the current job stress crisis. (pp. 1-2)

The Work and Well-Being survey in 2018 also asked employees about their overall satisfaction with workplace practices. Table 4 illustrates the percent of employees who reported satisfaction with various workplace practices.

Table 4. Overall Satisfaction with Workplace Practices from the Work and Well-Being Survey (APA, 2018a)

Factors Workers Reported Satisfaction With	%
Health and safety practices of my employer	73
Amount of control and involvement I have at work	68
Work-life balance practices offered by my employer	67
Employer's communication practices	60
Employee recognition practices of my employer	57
Growth and development opportunities offered by my employer	55

In addition to the aforementioned workplace practices, workplace stress continues to be a common factor and even a costly problem for employees and their organizations. As stated by Murphy (1995), "without an accurate assessment of the stressors at work, one has no real sense of the scope of the problem, or the most important work stressors, and thus are poorly equipped to design comprehensive, stress-management interventions" (p. 2). In one survey, a quarter of employees viewed their jobs as the number one stressor in their lives (Northwestern National Life Insurance Company, 1991). In an additional study, three out of four employees believed that workers had more workplace stress than the generation before (Princeton Survey Research Associates, 1997). Furthermore, a study by the St. Paul Fire and Marine Insurance Company (1992) identified that workplace stress was more strongly associated with health complaints than any other stressor including either financial or family problems. Research on workplace stress has

increased over the past decade, but confusion still exists about the causes, effects, and prevention of workplace stress.

Coping with Stress in the Workplace

A limited quantity of research within the United States was available regarding specific occupation coping strategies. Overall, regardless of occupation, 35% of working Americans reported experiencing chronic work stress, and just 41% said their employer provided sufficient resources to help employees manage their stress (APA, 2018a). To reduce the impact of stress, coping strategies are utilized. Limited research was available regarding local governmental employees as a whole. However, an abundance of articles were available regarding coping strategies utilized among employees in Canada, Italy, Jordan, Malaysia, Slovenia, Sweden, and Uganda. Workplace stress continues to be a major threat to the health and well-being of individuals, as well as the financial profitability of organizations.

CHAPTER III

METHODS

Introduction

This study utilized a cross-sectional, descriptive design. In alignment with best practices for descriptive studies in social and behavioral sciences, research questions were developed in lieu of hypotheses. This chapter will explain the processes of subject selection, instrumentation, data collection, and statistical analyses used to conduct this study.

The purpose of this study was to assess perceived stress, stressors, coping strategies, and stress mindsets among La Crosse County, Wisconsin employees. Data from this study provided insights into how La Crosse County employees perceive stress, as well as insights on stressors, coping strategies, and stress mindsets. Results may be used to guide the development and implementation of interventions to address workplace stress-related needs of La Crosse County employees.

Subject Selection

This study involved a convenience sample of 1,305 employees from 30 different departments at La Crosse County on January 7, 2019 (L. Kloet, personal communication, January 7, 2019). On January 14, 2019, this number had changed to 1,291 employees. All La Crosse County employees were not included in this study as a small number of employees (n = 175) did not have access to a work email account and assuring anonymity

of these employees was not possible. Participants for this study consisted of La Crosse County employees who had access to a work email account (88%, N = 1,136). This group is hereafter referred to as La Crosse County employee, the delimited study population. This study population was utilized because of interest in completing a workplace stress assessment of La Crosse County employees. Specifically, the La Crosse County Employee Wellness Committee supported the exigency of this assessment.

Instrumentation

The survey administered electronically for this study consisted of 31-items measuring perceived stress, stressors, coping strategies, stress mindsets, and demographics among La Crosse County employees. The electronic survey consisted of two pre-existing scales – a 10-item Perceived Stress Scale (PSS10) and an 8-item Stress Mindset Measure (SMM). Additionally, three items were created by the researcher to assess stressors, workplace stressors, and coping strategies. Demographic questions also were used to summarize characteristics of study participants. Please see Appendix A for a copy of the complete electronic survey.

Perceived Stress

Following a review of the literature, the 10-item Perceived Stress Scale (PSS10) was identified and deemed appropriate for use in this study to measure perceived stress. The PSS10 measures "the degree to which situations in one's life are appraised as stressful" (Cohen, Kamarck, & Mermelstein, 1983, p. 385). The PSS10 is from 1983, however, the 10-items involve general stress-related questions and therefore, the date was not a concern for the current study. Cohen and colleagues (1983) initially developed the 14-item Perceived Stress Scale (PSS14) and the 4-item Perceived Stress Scale (PSS4), a

shortened version of the PSS14, with the PSS14 "designed for use with community samples with at least a junior high school education" (pp. 387-388).

In 1983, a telephone interview was conducted by the Harris Poll among 2,387 individuals 18 years of age and older. According to Cohen and Williamson (1988),

> The data were analyzed to provide information about the psychometric properties of the Perceived Stress Scale [PSS14], the distribution of perceived stress across demographic factors, and the relation between perceived stress and a series of measures of health and health behavior. (p. 44)

After conducting a factor analysis to assess construct validity of the PSS14, the authors eliminated items with relatively low factor loadings. The resulting scale (i.e., the PSS10) consisted of items 1-3, 6-11, and 14 from the PSS14. The mean perceived stress score for the PSS10 for the entire sample was 13.02, with scores ranging from 0 to 34.

In addition to being validated, the PSS10 has been deemed reliable with a Cronbach's alpha coefficient of .78 (Cohen & Williamson, 1988). More recent research revealed a Cronbach's alpha coefficient of .91 for the PSS10 (Cohen & Janicki-Deverts, 2012). Cronbach's alpha coefficients greater than or equal to .7 are considered acceptable (Adams & Lawrence, 2015). Due to better reliability and validity of the PSS10 over the PSS14 and the PSS4, Cohen and Williamson (1988) "recommend the use of the PSS10 in future research" (p. 61).

The PSS "is the most widely used psychological instrument for measuring the perception of stress" (Mind Garden, n.d., p. 4). "The questions in the PSS ask about [respondents'] feelings and thoughts during the last month [regarding various situations]. In each case, respondents are asked how often they felt or thought a certain way" (Cohen

& Williamson, 1988, p. 34). Each question can be answered using a 5-point Likert scale, where the possible responses are: 0 = "Never," 1 = "Almost Never," 2 = "Sometimes," 3 = "Fairly Often," or 4 = "Very Often."

Stressors

Following a review of the literature, an existing item in the American Psychological Association's (APA) *Stress in America*™ survey was identified and deemed appropriate for use in this study to measure stressors. The researcher received permission by the APA to use and adapt this item (S. Bethune, personal communication, October 11, 2018). The item was modified to include the following stressors from the APA's (2015) *Stress in America*™ survey: money, work, personal health concerns, relationships, health problems affecting one's family, family responsibilities, personal safety, and discrimination. The wording of selected stressors was adapted by the researcher to best fit the study population. Also, "Technology use" was added to the item due to research by the APA indicating that news consumption and social media habits are becoming a significant source of stress for Americans (APA, 2015; APA, 2017b). The researcher also included an "Other (please specify)" option for study participants to write in stressors not presented in the list.

Workplace Stressors

No existing instrument or item to measure workplace stressors of study participants was identified or deemed appropriate for use in this study. Therefore, an item was developed by the researcher using the following resources: the APA (2018a), Cooper and Marshall (1976), Hurrell and Murphy (1992), Murphy (1995), the National Institute for Occupational Safety and Health (NIOSH, 1999), Rosch (2001b), the Workplace

Health and Safety Queensland (WHSQ, 2017), and the World Health Organization (WHO, 2019; WHO, n.d.). Workplace stressors which emerged throughout these resources were selected by the researcher to be included in this item. Workplace stressors were divided into the three categories of organizational culture, work roles, and career concerns. The wording of selected workplace stressors was adapted by the researcher to best fit the study population. The researcher also included an "Other (please specify)" option for study participants to write in workplace stressors not presented in the list.

Coping Strategies

Following a review of the literature, an existing item in the APA's *Stress in America*™ survey was identified and deemed appropriate for use in this study to measure coping strategies. The researcher received permission by the APA to use and adapt this item (S. Bethune, personal communication, October 11, 2018). The item was modified to include the following coping strategies from the APA's (2015) *Stress in America*™ survey: exercise or walk, pray, play video games, read, listen to music, meditate or practice yoga, go to church or religious services, watch television or movies for more than 2 hours per day, nap, spend time with friends or family, play sports, gamble, spend time doing a hobby, shop, get a massage/go to a spa, smoke, drink alcohol, eat, see a mental health professional (such as a psychologist, social worker, or psychiatrist), surf the internet/go online, and sound off on social media.

Two other response options were added to the list of aforementioned coping strategies: "I do not take any action to help manage stress" and "Do nothing: unable or unwilling to do any activity." The wording of selected coping strategies was adapted by the researcher to best fit the study population. "Utilize emotional support" also was

included due to research by the APA (2015) indicating that "Americans who say they have emotional support…report lower stress levels and better related outcomes than those without emotional support" (p. 7). The researcher also included an "Other (please specify)" option for study participants to write in coping strategies not presented in the list.

Stress Mindset

Following a review of the literature, the Stress Mindset Measure (SMM) was identified and deemed appropriate for use in this study to measure stress mindsets. Crum, Salovey, and Achor (2013) developed the eight-item SMM to assess "the extent to which an individual believes that the effects of stress are either enhancing or debilitating" (p. 716). The SMM

> evaluate[s] a participant's general stress mindset (e.g., 'The effects of stress are negative and should be avoided'), as well as signs and symptoms related to the enhancing and debilitating consequences of stress in the realms of health and vitality, learning and growth, and performance and productivity (e.g., 'Experiencing stress improves health and vitality'). (Crum, n.d., para. 1)

Respondents are asked to rate the extent to which they agree or disagree with the eight items. Questions can be answered using a 5-point Likert scale, where the possible responses are: 0 = "Strongly Disagree," 1 = "Disagree," 2 = "Neither Agree nor Disagree," 3 = "Agree," or 4 = "Strongly Agree."

The SMM has been shown to be a reliable and valid scale. In a sample of 355 employees from a large international financial institution in the northeast region of the United States, the mean stress mindset scores was 1.62 (Crum et al., 2013). The

reliability of the SMM was calculated resulting in a Cronbach's alpha coefficient of .86. Crum and colleagues (2013) also assessed discriminant (i.e., degree to which two measures do not measure dissimilar constructs), convergent (i.e., degree to which two measures measure the same constructs), and criterion (i.e., degree to which a measure correlates with another measure) validity and determined that "one's stress mindset is a distinct variable from traditional stress-influencing variables…[and] that stress mindset is meaningfully related to stress relevant outcomes" (p. 721).

Demographics

Demographic questions were developed by the researcher or adapted from existing surveys or resources for use in this study to summarize characteristics of study participants. Demographic questions included gender, race, ethnicity, age, current employment status, years of employment with La Crosse County, annual household income, number of children under the age of 18 living at home, and department within La Crosse County. The gender demographic question was developed by the researcher and included the following response options: "Male," "Female," "Other (please specify)," or "Prefer not to answer."

The race and ethnicity demographic questions were developed by using existing categories provided by the United States Census Bureau (n.d.). Possible responses for race were "White," "Black or African American," "American Indian or Alaska Native," "Asian," "Native Hawaiian or Other Pacific Islander," or "Other (please specify)." Study participants were given the opportunity to report multiple races.

According to the United States Census Bureau (n.d.), "ethnicity determines whether a person is of Hispanic origin or not. For this reason, ethnicity is broken out in

two categories, Hispanic or Latino and Not Hispanic or Latino" (p. 1). Possible responses for ethnicity were "Yes" or "No."

The age demographic question was developed using existing categories provided by the APA's (2015) *Stress in America*™ survey. The researcher included "17 years or less" as an age category to make certain study participants were 18 years of age or older. Respondents that were less than 18 years of age were not eligible for participation in this study. Possible responses for age were "17 years or less," "18-22 years," "23-40 years," "41-54 years," "55-73 years," or "74 years or more."

The current employment status demographic question was developed using existing categories provided by La Crosse County (L. Kloet, personal communication, August 12, 2018). Possible responses for current employment status were "Part-time," "Full-time," or "Limited Term Employee (LTE)."

The years worked for La Crosse County demographic question also was developed using existing categories provided by La Crosse County (T. Lein, personal communication, August 12, 2018). Possible responses for years worked for La Crosse County were "1 year or less," "2-5 years," "6-10 years," "11-15 years," "16-20 years," or "21 years or more."

The annual household income demographic question was developed using existing categories provided by the APA's (2015) *Stress in America*™ survey. Upon request of the La Crosse County Employee Wellness Committee, the researcher included additional annual household income categories in order to better capture specific characteristics of La Crosse County employees. Possible responses for annual household

income were “$24,999 or less,” “$25,000-$49,999,” “$50,000-$74,999,” “$75,000-$99,999,” “$100,000 or more,” or “Prefer not to answer.”

The demographic question for children under the age of 18 living at home also was developed using information provided by the APA’s (2015) *Stress in America*™ survey. The original question by the APA asked respondents if they were parents or non-parents, defined as those with children under the age of 18 living at home (APA, 2015). The original question did not ask how many children were living at home. Upon request of the La Crosse County Employee Wellness Committee, the researcher asked study participants to report the number of children under the age of 18 living in their home to better capture specific characteristics of La Crosse County employees. Possible responses for number of children under the age of 18 living at home were “0,” “1,” “2,” “3,” “4,” or “5+.”

The demographic question regarding the department within La Crosse County one worked in was developed using existing categories provided by La Crosse County (T. Lein, personal communication, August 12, 2018). Possible responses for departments were as follows: “Board Chair/County Board,” “Clerk of Courts,” “Corp Counsel,” “County Administrator,” “County Clerk,” “County Surveyor,” “District Attorney,” “Emergency Services,” “Facilities,” “Family Court Commissioner,” “Finance,” “Health,” “Highway,” “Hillview (including Carrol Heights and Terrace),” “Human Resources,” “Human Services,” “Information Technology,” “Lakeview,” “Land Conservation,” “Library,” “Medical Examiner,” “Metropolitan Planning Organization,” “Register of Deeds,” “Sheriff,” “Solid Waste,” “Treasurer,” “UW Extension,” “Veteran,” “Zoning,” “Other (please specify),” or “Prefer not to answer.”

Open-Ended Question

Lastly, upon request of the La Crosse County Employee Wellness Committee, an open-ended question was developed by the researcher to measure how La Crosse County as an employer could help employees manage their stress. This question was included in this survey to gain additional insights regarding stress among La Crosse County employees.

Validity

All questions not previously validated (stressors, workplace stressors, coping strategies, demographics, and open-ended question) underwent a content validation process. Content validity is "the assessment of the correspondence between the items composing the instrument and the content domain for which the items were selected" (DiIorio, 2005, p. 213). This process was started by identifying five experts working in the fields of public health, employee wellness, and/or stress management to serve on the jury of experts. Please see Appendix B for a complete list of the content validation jury panel. Experts were invited to serve on the jury in an email sent by the researcher. The email consisted of directions explaining their tasks, thanking them for their participation, and a draft of the instrument with a list of questions to answer. The experts were given two weeks to complete the content validity process and send their results to the researcher via email. No additional reviewers were invited to serve on the jury as all five experts agreed to participate.

Experts rated each survey item's acceptability, based upon the degree to which the item assessed what it was intended to measure on a 5-point Likert scale, where the possible responses were: 1 = Not Acceptable, 2 = Somewhat Acceptable, 3 = Acceptable,

4 = Very Acceptable, or 5 = Indispensable. Survey items which were included in the content validity process included one stressor item, one workplace stressor item, one coping strategies item, eight demographic items, and one open-ended question. Experts also were encouraged to provide qualitative feedback in terms of how they would suggest editing each question if necessary. Once experts completed the ratings, scores for each question were averaged and feedback was reviewed. As recommended by Gilmore (1974), if a question did not receive an average rating of three or higher, the question was removed or re-formulated based on the provided qualitative feedback. All survey items received an average rating of 3.6 to 4.3. Please see Appendix C for a summary of the content validation jury results.

Based on the qualitative feedback from the jury of experts, race and ethnicity were separated into two items. Additionally, the neutral midpoint "neither agree nor disagree" was removed from the stressors and workplace stressors items to reduce the likelihood of a convenience response, also called a pile effect at the midpoint (Chyung, Roberts, Swanson, & Hankinson, 2017; G. Gilmore, personal communication, December 21, 2018). Response options for stressors and workplace stressors also were added, such as "Finance" and "Insufficient benefits (FMLA, retirement, health and dental insurance, etc.)." "Smoke" was added based on qualitative feedback provided by the content validity jury and split into the two coping strategies of "Smoke tobacco products" and "Vape e-cigarettes." Other coping strategies added based on feedback provided by the content validity jury included "Use substances (other than alcohol or tobacco)" and "Utilize the La Crosse County Employee Assistance Program (EAP)." Other minor changes were made to additional items as well.

Reliability

Cronbach's alpha coefficients were calculated for the PSS10 and the SMM to determine the internal consistency reliability of each scale. Internal consistency reliability "refers to the intercorrelations among individual items on the instrument, that is, whether all items on the instrument are measuring part of the total area" (McKenzie, Neiger, & Thackeray, 2009, pp. 116-117). As Cottrell and McKenzie (2011) stated, "internal consistency reliability is calculated by determining the statistical relationship between the individual instrument items and the total score. The greater the consistency, the higher the reliability" (pp. 152-153).

Data Collection

The researcher completed the necessary human subjects training to conduct this research and approval was obtained from the University of Wisconsin - La Crosse Institutional Review Board. Please see Appendix D for a copy of the Protecting Human Research Participants certificate of completion and Appendix E for a copy of the Institutional Review Board approval letter. Organizational support and approval to conduct this study also were obtained from the La Crosse County Health Department Health Officer/Director and Associate La Crosse County Administrator, as well as the La Crosse County Employee Wellness Committee.

Data were collected through the use of a survey administered electronically to La Crosse County employees. The email employees received included information about the study, an attached informed consent form, and a link to the electronic survey administered through the Qualtrics platform. Please see Appendix F for a copy of the informed consent form. The use of Qualtrics allowed the data to be collected through a

secure database while assuring anonymity of the study participants. The data collected from this study were aggregated and no personally identifiable information was collected. No signed informed consent form was collected from La Crosse County employees, as that would have been the only identifying record tying them to the study. Completion of the electronic survey indicated consent to take part in this study. Study participants were informed that they had to be 18 years of age or older to take part in this study. Completion of the survey was voluntary and thus, study participants were able to decline to take part in the study or decide to discontinue participation at any time. It was made clear to employees that should they choose not to participate in the study or decide to discontinue participation, their employment or status at La Crosse County would not be affected in any way. No compensation was given for their involvement, and study participants were permitted as much time as needed to complete the survey.

The electronic survey was sent to all La Crosse County employees who had access to a work email account by Employee Wellness Committee Member, Tiffany Lein, on January 7, 2019. Please see Appendix G for a copy of the initial survey email. A reminder email was sent one week following the initial request for study participation on January 14, 2019. Please see Appendix H for a copy of the reminder survey email. The reminder email instructed La Crosse County employees who already had completed the survey to please disregard the reminder, and to not complete the survey again. The survey window closed on January 18, 2019, 11 days after the initial survey invitation.

Statistical Analyses

Table 5 depicts the 10 research questions (RQs), corresponding survey item(s), and corresponding statistical analyses for this study. Data from the online survey were

collected through Qualtrics and downloaded into the Statistical Package for the Social Sciences (SPSS), Version 23 for analysis. Descriptive and inferential statistical analyses were performed.

Table 5. Research Question Alignment with Corresponding Survey Item(s) and Statistical Analyses

Research Question (RQ)	Survey Item(s)	Statistical Analyses
RQ1: What are the demographic characteristics of La Crosse County employees?	Item 22: What is your gender? Item 23: What is your race? Please select all that apply. Item 24: Are you of Hispanic or Latino origin? Item 25: What is your age? Item 26: What is your current employment status? Item 27: How many years have you worked for La Crosse County? Item 28: What is your annual household income? Item 29: How many children under the age of 18 are living in your home? Item 30: Which La Crosse County department do you work in?	Frequencies and percentages
RQ2: What are the perceived stress levels of La Crosse County employees?	Items 1-10: Perceived Stress Scale (PSS10)	Frequencies, percentages, and indicators of central tendency

Table 5 Continued. Research Question Alignment with Corresponding Survey Item(s) and Statistical Analyses

Research Question (RQ)	Survey Item(s)	Statistical Analyses
RQ3: What are the most prevalent stressors of La Crosse County employees?	Item 11: Below is a list of things people say cause stress in their lives. Please rate the extent to which you agree or disagree that each of the following stressors impacted your life during the last month.	Frequencies and percentages
RQ4: What are the most prevalent workplace stressors of La Crosse County employees?	Item 12: Below is a list of things people say cause workplace stress in their lives. Please rate the extent to which you agree or disagree that each of the following workplace stressors impacted your life during the last month.	Frequencies and percentages
RQ5: What are the most prevalent coping strategies utilized among La Crosse County employees?	Item 13: Which of the following coping strategies have you used during the last month to manage your stress? Please select all that apply.	Frequencies and percentages
RQ6: What are the stress mindsets of La Crosse County employees?	Items 14-21: Stress Mindset Measure (SMM)	Frequencies, percentages, and indicators of central tendency
RQ7: Do differences in perceived stress exist by gender among La Crosse County employees?	Items 1-10: PSS10 Item 22: What is your gender?	Independent samples t-test
RQ8: Do differences in perceived stress exist by age among La Crosse County employees?	Items 1-10: PSS10 Item 25: What is your age?	One-way analysis of variance (ANOVA)

Table 5 Continued. Research Question Alignment with Corresponding Survey Item(s) and Statistical Analyses

Research Question (RQ)	Survey Item(s)	Statistical Analyses
RQ9: Do differences in perceived stress exist by annual household income among La Crosse County employees?	Items 1-10: PSS10 Item 28: What is your annual household income?	Independent samples t-test
RQ10: Do differences in perceived stress exist by parental status among La Crosse County employees?	Items 1-10: PSS10 Item 29: How many children under the age of 18 are living in your home?	Independent samples t-test

Descriptive statistical analyses were calculated to summarize demographic characteristics of study participants. Descriptive statistical analyses also were calculated to identify perceived stress levels of La Crosse County employees. The Cronbach's alpha coefficient also was calculated for the PSS10 to determine the internal consistency reliability. Perceived stress scores were calculated by assigning the following scores: 0 = "Never," 1 = "Almost Never," 2 = "Sometimes," 3 = "Fairly Often," and 4 = "Very Often." Responses were reverse coded (i.e., 0 = 4, 1 = 3, 2 = 2, 3 = 1, and 4 = 0) for the four positively stated items (items 4, 5, 7, and 8). Please see Appendix A for a copy of the complete electronic survey. The final mean perceived stress score was obtained by summing all 10 items for each participant and then dividing the total score by the number of survey respondents. According to the New Hampshire Department of Administrative Services (n.d.), "individual scores on the PSS10 can range from 0 to 40, with higher scores indicating higher perceived stress. Scores ranging from 0-13 would be considered

low stress. Scores ranging from 14-26 would be considered moderate stress. Scores ranging from 27-40 would be considered high perceived stress" (p. 2).

Descriptive statistical analyses were calculated to identify prevalent stressors, workplace stressors, and coping strategies among La Crosse County employees. Descriptive statistical analyses also were calculated to identify stress mindsets of La Crosse County employees. The Cronbach's alpha coefficient also was measured for the SMM to determine the internal consistency reliability. Stress mindset scores were calculated by assigning the following scores: 0 = "Strongly Disagree," 1= "Disagree," 2 = "Neither Agree nor Disagree," 3 = "Agree," and 4 = "Strongly Agree." Responses were reverse coded (i.e., 0 = 4, 1 = 3, 2 = 2, 3 = 1, and 4 = 0) for the four negatively stated items (items 1, 3, 5, and 7). The mean SMM score was obtained by summing the eight item scores for each participant, dividing by the number of survey respondents, and then dividing by eight. Individual scores on the SMM can range from 0 to 4, with higher scores indicating study participants' mindset of stress as enhancing. Scores below 2 are indicative of a debilitating stress mindset (i.e., believe that experiencing stress will result in negative outcomes). Scores above 2 are indicative of an enhancing stress mindset (i.e., believe that experiencing stress will result in positive outcomes), while scores of 2 are indicative of a neutral stress mindset.

Inferential statistical analyses, specifically three independent samples t-tests and one one-way analysis of variance (ANOVA), were conducted to determine if differences existed in perceived stress based on select demographics. Even though the perceived stress scale contains a Likert scale and technically generates ordinal level data, parametric tests were conducted. The professional literature presents plenty of support for

performing parametric analysis on scale scores generated by Likert scales (Sullivan & Artino, 2013; Adams & Lawrence, 2015). The risk of these tests lacking the power to detect a difference when such a difference truly exists repeatedly has been questioned in social and behavioral research. Independent samples t-tests were used to assess whether differences in perceived stress existed by gender, annual household income, and parental status among La Crosse County employees. For the purpose of this research, annual household income was separated into two categories (<$50,000 or ≥$50,000), as was parental status (parent or non-parent). A one-way ANOVA was used to assess if differences existed by age among La Crosse County employees. For the purpose of this research, age was separated into five categories (18-22 years, 23-40 years, 41-54 years, 55-73 years, or 74 years or more). All four assumptions were assessed and met prior to analysis including normality, homogeneity of variance, independent subjects, and large sample size.

Initially, a p-value (*p*) of less than .05 determined statistical significance for all inferential tests performed as part of this research. A Bonferroni correction was then utilized to account for possible Type I error. Type I error may occur due to running multiple statistical analyses on the same data and may increase the likelihood of finding a statistically significant result by chance. Therefore, the researcher made a conservative adjustment to lower the acceptable p-value to reduce the risk of a Type I error as recommended by Pallant (2007). The researcher divided the initial p-value of .05 by four, as four inferential statistical analyses were conducted on the same data set, resulting in a new p-value of .0125. Effect size also was measured to determine the "magnitude or strength of the effect of a variable" (Adams & Lawrence, 2015, p. 208). Cohen's *d* (*d*)

was computed for the independent samples t-tests and eta-squared (η^2) for the one-way ANOVA (Pallant, 2007). Effect size was only calculated for statistically significant results.

Lastly, the researcher used an open coding in grounded theory thematic analysis method to identify emerging themes and subthemes of the open-ended question (Merriam, 2009; Ryan, & Bernard, 2003). The researcher analyzed the textual content by identifying themes based on their properties and dimensions. The open-ended question asked study participants, "What could La Crosse as an employer do to help you manage your stress?"

CHAPTER IV

RESULTS

Introduction

Stress management at La Crosse County has been identified as a workplace wellness program area needing more attention. A workplace stress assessment was identified as the appropriate first step to gather information about stress for the employee study population. The purpose of this study was to assess perceived stress, stressors, coping strategies, and stress mindsets among La Crosse County, Wisconsin employees.

Data for this study were collected through a survey that was administered electronically. Employees at La Crosse County were asked to complete a 31-item survey. The survey consisted of items from two pre-existing scales, a 10-item Perceived Stress Scale and an 8-item Stress Mindset Measure, and three items created by the researcher to assess stressors, workplace stressors, and coping strategies. Demographic questions were also used to summarize characteristics of study participants. An open-ended question was also used to assess how La Crosse County as an employer could help employees manage their stress. In addition to overall describing characteristics of survey respondents, demographics were used in inferential statistical analyses to identify whether differences in perceived stress existed between groups.

Survey Response Rate

Data were collected through a survey that was administered electronically to La Crosse County employees. The electronic survey was sent to La Crosse County employees who had access to a work email account by Employee Wellness Committee Member, Tiffany Lein, on January 7, 2019. One hundred seventy-five employees did not have access to a work email account. On January 7, 2019, a total of 1,130 emails were sent successfully (two emails were undeliverable) from a total La Crosse County population of 1,305, meaning 86.6% of the total employee population was sent the email (L. Kloet, personal communication, January 7, 2019). A reminder email was sent on January 14, 2019 to La Crosse County employees one week following the initial email survey request by Tiffany Lein. On January 14, 2019, a total of 1,136 reminder emails were sent successfully (two emails were undeliverable) from a total La Crosse County population of 1,291, meaning 88.0% of the total employee population was sent the reminder email (L. Kloet, personal communication, February 28, 2019). As seen above, the total La Crosse County employee study population decreased from the initial contact to the reminder email date, as changes within the organization were made, such as employment status. In fact, the total number of employees could be higher because the researcher was unable to verify if the employees were on both email listings.

With a study population size of 1,136 employees, excluding those without a work email address, the recommended minimum study population size was 288 (Raosoft, 2004). This was calculated at a 95% confidence interval, a 5% margin of error, and a 50% response distribution. Three hundred thirty-five responses were received, resulting in a 29.5% response rate. Results from this study should only be generalized to

respondents to the survey, hereafter referred to as survey respondents. This study involved a convenience sample and thus, the use of the Raosoft calculator for random sampling, also illustrates why results could not be generalized. Results should not be generalized to the entire study population as demographics and stress characteristics of non-respondents are unknown (Radhakrishna & Doamekpor, 2008). The researcher handled missing data by using a pairwise deletion method, also called available case analysis, to preserve more of the original data (D. Reineke, personal communication, March 4, 2019). In other words, incomplete cases were deleted on an analysis-by-analysis basis (Peugh & Enders, 2004).

Research Questions with Accompanying Results

Research Question #1: What are demographic characteristics of La Crosse County employees?

The majority of survey respondents identified as female (78.3%, *n* = 238). Almost all of survey respondents identified as white (96.0%, *n* = 288) and non-Hispanic or Latino (99.3%, *n* = 297). Almost 80% of survey respondents were between the ages of 23-40 years old (39.5%, *n* = 118) or 41-54 years old (40.5%, *n* = 121). Most survey respondents' current employment status was full-time (92.1%, *n* = 279). Approximately two-thirds of survey respondents had worked for La Crosse County for 2-5 years (34.2%, *n* = 102) or 6-15 years (32.5%, *n* = 97). A wide range of annual household incomes was reported. Approximately one-fourth of survey respondents fell into each of the following annual household income categories: $25,000-$49,999 (22.2%, *n* = 67), $50,000-$74,999 (24.5%, *n* = 74), or $75,000-$99,999 (23.2%, *n* = 70). Approximately one-half of survey respondents did not have any children under the age of 18 living at home (51.2%, *n* =

152). The second most common number of children under the age of 18 living at home was 2 (23.2%, *n* = 69). Additionally, one-third of survey respondents worked in the Human Services department (34.3%, *n* = 103). Additional demographic characteristics of survey respondents are presented in Table 6. Please see Appendix A for a copy of the complete electronic survey.

Table 6. Demographic Characteristics

Demographic Characteristics	*n*	%
Gender		
Male	60	19.7
Female	238	78.3
Other (please specify):	-	-
Prefer not to answer	6	2.0
Race		
White	288	96.0
Black or African American	1	.3
Asian	4	1.3
American Indian or Alaska Native	-	-
Native American or Other Pacific Islander	-	-
White and American Indian or Alaska Native	1	.3
White and Native Hawaiian or Other Pacific Islander	1	.3
White and Asian	2	.7
Other (please specify):		
American Hispanic	1	.3
Did not specify	1	.3
Prefer not to say	1	.3
Ethnicity - Hispanic or Latino Origin		
Yes	2	.7
No	297	99.3

Table 6 Continued. Demographic Characteristics

Demographic Characteristics	*n*	%
Age		
17 years or less	-	-
18-22 years	5	1.7
23-40 years	118	39.5
41-54 years	121	40.5
55-73 years	54	18.1
74 years or more	1	.3
Current Employment Status		
Part-time	22	7.3
Full-time	279	92.1
Limited Term Employee (LTE)	2	.7
Years of Employment with La Crosse County		
1 year or less	35	11.7
2-5 years	102	34.2
6-10 years	48	16.1
11-15 years	49	16.4
16-20 years	29	9.7
21 years or more	35	11.7
Annual Household Income		
$24,999 or less	10	3.3
$25,000-$49,999	67	22.2
$50,000-$74,999	74	24.5
$75,000-$99,999	70	23.2
$100,000 or more	54	17.9
Prefer not to answer	27	8.9
Number of Children Under the Age of 18 Living at Home		
0	152	51.2
1	52	17.5
2	69	23.2
3	18	6.1
4	6	2.0
5+	-	-

Table 6 Continued. Demographic Characteristics

Demographic Characteristics	*n*	%
Department Within La Crosse County		
Board Chair/County Board	2	.7
Clerk of Courts	6	2.0
Corp Counsel	8	2.7
County Administrator	2	.7
County Clerk	2	.7
County Surveyor	-	-
District Attorney	3	1.0
Emergency Services	6	2.0
Facilities	8	2.7
Family Court Commissioner	-	-
Finance	-	-
Health	30	10.0
Highway	5	1.7
Hillview (including Carrol Heights and Terrace)	8	2.7
Human Resources	5	1.7
Human Services	103	34.3
Information Technology	5	1.7
Lakeview	29	9.7
Land Conservation	-	-
Library	7	2.3
Medical Examiner	-	-
Metropolitan Planning Organization	-	-
Register of Deeds	-	-
Sheriff	18	6.0
Solid Waste	1	.3
Treasurer	1	.3
UW Extension	4	1.3
Veterans	4	1.3
Zoning	4	1.3
Other (please specify):		
Justice Support Services	1	.3
Prefer not to answer	38	12.7

Research Question #2: What are the perceived stress levels of La Crosse County employees?

Survey respondents' perceived stress scores ranged from 1 to 38, with a mean score of 16.17 out of 40, indicating a moderate level of perceived stress. Approximately one-half of survey respondents reported moderate perceived stress (i.e., scores of 14-26) (53.1%, *n* = 173). Additionally, more than one-third of survey respondents reported low perceived stress (i.e., scores of 0-13) (39.9%, *n* = 130), and only 7.1% (*n* = 23) of survey respondents reported high perceived stress (i.e., scores of 27-40). Based on scoring of individual survey items, areas of high perceived stress for survey respondents included feeling upset about unexpected happenings, being unable to control important things in life, feeling nervous and stressed, and feeling angered about things outside of one's control. The highest scored item was feeling nervous or stressed, while the lowest scored item was feeling confident about one's ability to handle personal problems. Additional findings are presented in Table 7. Internal consistency estimates of reliability were computed for the Perceived Stress Scale. The Cronbach's alpha coefficient for the 10 items was .90, suggesting that the items had excellent internal consistency reliability.

Table 7. Perceived Stress Scale Items

Perceived Stress Scale Items (range for each item: 0-4)	Mean (*M*)	Standard Deviation (*SD*)
In the last month, how often have you been upset because of something that happened unexpectedly?	1.89	.87
In the last month, how often have you felt that you were unable to control the important things in your life?	1.65	1.03
In the last month, how often have you felt nervous and "stressed?"	2.45	.98
In the last month, how often have you felt confident about your ability to handle your personal problems?*	1.04	.84
In the last month, how often have you felt that things were going your way?*	1.52	.85
In the last month, how often have you found that you could not cope with all of the things that you had to do?	1.47	1.08
In the last month, how often have you been able to control irritations in your life?*	1.40	.86
In the last month, how often have you felt that you were on top of things?*	1.53	.87
In the last month, how often have you been angered because of things that were outside of your control?	1.76	1.01
In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	1.45	1.09

Note: *reversed-scored items

Research Question #3: What are the most prevalent stressors of La Crosse County employees?

The two most prevalent stressors indicated by survey respondents were work and finances. Specifically, 77.8% (*n* = 256) of survey respondents "agreed" or "strongly agreed" that work was a stressor which impacted their life during the last month. Additionally, 71.6% (*n* = 237) of survey respondents "agreed" or "strongly agreed" that finances was a stressor which impacted their life during the last month. One-half (51.8%, *n* = 171) of survey respondents "agreed" or "strongly agreed" that relationships (e.g., spouse, kids, friends, significant other) impacted their life during the last month. Approximately one-half of survey respondents "agreed" or "strongly agreed" that personal health concerns (48.2%, *n* = 158), family responsibilities (e.g., caregiving) (47.2%, *n* = 155), and health problems that affect their family (45.0%, *n* = 149) were stressors which impacted their life during the last month. Additional stressors of survey respondents are presented in Table 8.

Table 8. Stressors

Stressors	Strongly Disagree	Disagree	Agree	Strongly Agree
				% (*n*)
Work	4.0 (13)	18.2 (60)	48.0 (158)	29.8 (98)
Finances	8.5 (28)	19.9 (66)	42.6 (141)	29.0 (96)
Personal health concerns	15.2 (50)	36.6 (120)	38.1 (125)	10.1 (33)
Relationships (e.g., spouse, kids, friends, significant other)	13.0 (43)	35.2 (116)	37.3 (123)	14.5 (48)
Health problems affecting my family	19.6 (65)	35.3 (117)	32.9 (109)	12.1 (40)
Family responsibilities (e.g., caregiving)	19.1 (63)	33.7 (111)	35.0 (115)	12.2 (40)
Personal safety	43.0 (142)	44.5 (147)	11.5 (38)	.9 (3)
Discrimination	54.3 (178)	37.8 (124)	6.7 (22)	1.2 (4)
Technology use (e.g., cell phone, computers)	29.0 (95)	43.9 (144)	24.7 (81)	2.4 (8)

Study participants were given an opportunity to report other stressors that impact their lives. Such stressors included, but were not limited to, death of spouse and time management between personal and professional life. Additional stressors reported by survey respondents are presented in Table 9.

Table 9. Other Stressors

Other Stressors	*n*
Bullying by co-workers	1
Car accident	1
Colleagues at work and poor communication skills or tactics	1
Concerns at work about fair treatment	1
Co-workers not doing their job and others having to pick up the slack after them	1
Currently pregnant	1
Death of friends	1
Death of spouse	2
Faith	1
Having to be accountable for things we do not have control over	1
Health problems of friends	1
Holidays/family expectations	2
Immoral behavior at the workplace	1
Kid's drug addiction and resulting death	1
Liberalism	1
Loss of a pet	1
New home construction	1
Pet's health	1
School	2
Taking care of two babies	1
Time management between personal and professional life	4
Weather	1
Workplace harassment	1
Working with consortiums	1

Research Question #4: What are the most prevalent workplace stressors of La Crosse County employees?

Overall, the most prevalent workplace stressor of survey respondents across the three categories of organizational culture, work roles, and career concerns, was poor communication in the organization. Specifically, 66.7% (n = 204) of survey respondents "agreed" or "strongly agreed" that poor communication in the organization was a workplace stressor which impacted their life during the last month. Additionally, many

survey respondents “agreed” or “strongly agreed” that the following organizational culture workplace stressors impacted their life during the last month: lack of participation in decision making (47.9%, *n* = 147), lack of clarity about organizational objectives and structure (43.1%, *n* = 131), and poor leadership (41.1%, *n* = 125). Moreover, approximately one-third of survey respondents “agreed” or “strongly agreed” that insufficient vacation time (35.9%, *n* = 110) and lack of support from supervisors (33.0%, *n* = 101) impacted their life during the last month.

For workplace stressors related to work roles, approximately two-fifths (40.9%, *n* = 125) of survey respondents “agreed” or “strongly agreed” that working under time constraints impacted their life during the last month. Additionally, approximately one-third of survey respondents “agreed” or “strongly agreed” that unrealistic job demands (31.8%, *n* = 97), uncertain job expectations (30.9%, *n* = 94), and failure to utilize workers’ skills (30.8%, *n* = 94) were workplace stressors which impacted their life during the last month.

For workplace stressors related to career concerns, approximately two-fifths of survey respondents “agreed” or “strongly agreed” that low levels of recognition and reward (42.2%, *n* = 129) and low salaries (40.3%, *n* = 123) impacted their life during the last month. Additionally, approximately one-third of survey respondents “agreed” or “strongly agreed” that lack of opportunity for growth, advancement, and promotion (34.9%, *n* = 107) was a workplace stressor which impacted their life during the last month. Additional workplace stressors of survey respondents are presented in Table 10.

Table 10. Workplace Stressors

Workplace Stressors	Strongly Disagree	Disagree	Agree	Strongly Agree
				% (*n*)
Organizational Culture				
Lack of participation in decision making	13.0 (40)	39.1 (120)	36.5 (112)	11.4 (35)
Poor communication in the organization	8.2 (25)	25.2 (77)	42.8 (131)	23.9 (73)
Lack of family-friendly policies	19.7 (60)	55.9 (170)	19.4 (59)	4.9 (15)
Insufficient vacation time	16.6 (51)	47.6 (146)	23.8 (73)	12.1 (37)
Insufficient benefits (e.g., FMLA, retirement, health, and dental insurance	20.2 (62)	56.7 (174)	17.3 (53)	5.9 (18)
Poor leadership	16.1 (49)	42.8 (130)	27.0 (82)	14.1 (43)
Lack of clarity about organizational objectives and structure	13.8 (42)	43.1 (131)	32.2 (98)	10.9 (33)
Lack of support from my co-workers	27.8 (85)	50.0 (153)	17.3 (53)	4.9 (15)
Lack of support from my supervisors	23.5 (72)	43.5 (133)	22.5 (69)	10.5 (32)
Conflicts with my co-workers	31.4 (96)	44.8 (137)	17.0 (52)	6.9 (21)
Conflicts with my supervisors	30.8 (94)	47.9 (146)	13.1 (40)	8.2 (25)
Bullying, harassment, and violence	49.7 (151)	35.5 (108)	9.2 (28)	5.6 (17)
Feeling isolated at work	35.3 (108)	38.6 (118)	19.9 (61)	6.2 (19)

Table 10 Continued. Workplace Stressors

Workplace Stressors	Strongly Disagree	Disagree	Agree	Strongly Agree
				% (*n*)
Work Roles				
Uncertain job expectations	24.3 (74)	44.7 (136)	25.0 (76)	5.9 (18)
Unrealistic job demands	21.0 (64)	47.2 (144)	22.3 (68)	9.5 (29)
Inflexible work hours	32.1 (98)	47.2 (144)	16.1 (49)	4.6 (14)
Working under time constraints	20.6 (63)	38.6 (118)	29.1 (89)	11.8 (36)
Failure to utilize workers' skills	22.0 (67)	47.2 (144)	23.3 (71)	7.5 (23)
Meaningless tasks	20.6 (63)	52.3 (160)	21.2 (65)	5.9 (18)
Lack of variety	29.7 (91)	57.5 (176)	10.1 (31)	2.6 (8)
Career Concerns				
Job insecurity	34.0 (104)	51.6 (158)	12.1 (37)	2.3 (7)
Lack of opportunity for growth, advancement, and promotion	20.9 (64)	44.1 (135)	22.2 (68)	12.7 (39)
Rapid changes for which workers are unprepared	18.6 (57)	52.3 (160)	20.6 (63)	8.5 (26)
Low levels of recognition and reward	15.7 (48)	42.2 (129)	26.5 (81)	15.7 (48)
Low salaries	13.4 (41)	46.2 (141)	27.2 (83)	13.1 (40)

Study participants were given an opportunity to report other workplace stressors that impact their lives. Such workplace stressors included, but were not limited to, no opportunity for vacation buy-up and poor leadership. Additional workplace stressors reported by survey respondents are presented in Table 11.

Table 11. Other Workplace Stressors

Other Workplace Stressors	*n*
Combative customers	1
Constant modifications to policies or reversal of staff decisions	1
Environment when nursing homes are surveyed, regulated, and are under extreme stress	1
Frustration with co-workers who do not pull their weight and get away with it	1
Government shutdown uncertainty	1
Job is too much (actively searching for a job that will be healthier, even if it pays less)	1
Kronos	1
Lack of supervisory understanding of the ramifications of cutting staff/adding responsibilities (expectations to do more with less)	1
Lazy, incompetent co-workers	1
No opportunity for vacation buy-up	2
No paid maternity leave	1
No paid recognition for hard workers who care about details	1
Poor leadership	1
Staff turnover	1
Telecommute opportunities	1
Too many surveys	1
Unfair treatment of employees	1

Research Question #5: What are the most prevalent coping strategies utilized among La Crosse County employees?

The most prevalent coping strategies utilized to manage survey respondents' stress during the last month were watching television or movies, spending time with friends or family, exercising or walking, and listening to music. Specifically, 82.5% (*n* = 255) of survey respondents reported they had utilized watching television or movies as a coping strategy during the last month to manage their stress. Additionally, 76.4% (*n* = 236) of survey respondents reported spending time with friends or family, 76.1% (*n* = 235) of survey respondents reported exercising or walking, and 75.1% (*n* = 232) of survey respondents reported listening to music as coping strategies utilized to manage their stress during the last month. Other prevalent coping strategies included sleeping or napping (61.2%, *n* = 186), eating (54.0%, *n* = 167), reading (50.5%, *n* = 156), surfing the internet (47.6%, *n* = 147), utilizing emotional support (e.g., talk with a family member, friend, clergy person) (45.3%, *n* = 140), praying (43.0%, *n* = 133), shopping (40.5%, *n* = 125), spending time doing a hobby (38.8%, *n* = 120), and drinking alcohol (35.3%, *n* = 109). Additional coping strategies of survey respondents are presented in Table 12.

Table 12. Coping Strategies

Coping Strategies	*n*	%
Exercise or walk	235	76.1
Pray	133	43.0
Play video games	47	15.2
Read	156	50.5
Listen to music	232	75.1
Meditate or practice yoga	64	20.7
Go to church or religion services	82	26.5
Watch television or movies	255	82.5
Sleep or nap	186	61.2
Spend time with friends or family	236	76.4
Play sports	29	9.4
Gamble	14	4.5
Spend time doing a hobby	120	38.8
Shop	125	40.5
Go to a spa (e.g., massage, manicure, facial)	48	15.5
Smoke tobacco products	31	10.0
Vape e-cigarettes	4	1.3
Drink alcohol	109	35.3
Use substances (other than alcohol or tobacco)	3	1.0
Eat	167	54.0
See a mental health professional (e.g., psychologist, social worker, psychiatrist)	25	8.1
Utilize emotional support (e.g., talk with a family member, friend, clergy person)	140	45.3
Utilize the La Crosse County Employee Assistance Program (EAP)	6	1.9
Surf the internet	147	47.6
Sound off on social media	16	5.2
I do not take any action to help manage stress	2	.6
Do nothing: unable or unwilling to do anything	2	.6

N = 309

Study participants were given an opportunity to report other coping strategies utilized. Such coping strategies included, but were not limited to, medication and spending time with pet(s). Additional coping strategies reported by survey respondents are presented in Table 13.

Table 13. Other Coping Strategies

Other Coping Strategies	*n*
Bake	1
Baths	1
Clean	1
Essential oils	1
Journal	1
Learn something new	1
Medication	3
Spend time alone	1
Spend time with my children	2
Spend time with my pet(s)	6
Take a deep breath	1
Take a vacation	1
Vent about the stressors to others in the industry	1

Research Question #6: What are the stress mindsets of La Crosse County employees?

Survey respondents' stress mindset scores ranged from 0 to 3.50, with a mean score of 1.59 out of 4, indicating a debilitating stress mindset. Approximately two-thirds of survey respondents had a debilitating stress mindset (i.e., scores below 2) (67.0%, n = 205). One-fifth of survey respondents had an enhancing stress mindset (i.e., scores above 2) (21.9%, n = 67), and only 11.1% (n = 34) of survey respondents reported a neutral stress mindset (i.e., scores of 2). Internal consistency estimates of reliability were computed for the Stress Mindset Measure. The Cronbach's alpha coefficient for the eight items was .84, suggesting that the items had good internal consistency reliability.

Research Question #7: Do differences in perceived stress exist by gender among La Crosse County employees?

An independent samples t-test was conducted to assess if perceived stress differed by gender among survey respondents. All assumptions were assessed and deemed acceptable for the independent samples t-test. Results from the independent samples t-test revealed no statistically significant difference in perceived stress between male (M = 15.45, SD = 8.15) and female (M = 16.68, SD = 6.51) survey respondents, $t(290) = 1.24$, $p = .22$.

Research Question #8: **Do differences in perceived stress exist by age among La Crosse County employees?**

A one-way analysis of variance (ANOVA) was conducted to assess if perceived stress differed by age among survey respondents. All assumptions were assessed and deemed acceptable for the one-way ANOVA. Results from a one-way ANOVA revealed no statistically significant differences in perceived stress among survey respondents who were 23-40 years old (M = 16.78, SD = 6.34), 41-54 years old (M = 16.02, SD = 6.79), and 55-73 years old (M = 16.17, SD = 7.20) ($F(2, 284) = .409$, $p = .665$).

Research Question #9: Do differences in perceived stress exist by annual household income among La Crosse County employees?

An independent samples t-test was conducted to assess if perceived stress differed by annual household income among survey respondents. All assumptions were assessed and deemed acceptable for the independent samples t-test. Results from the independent samples t-test revealed no statistically significant difference in perceived stress between survey respondents with an annual household income of <$50,000 ($M$ = 17.62, SD =

7.32) and those with an annual household income of ≥$50,000 ($M$ = 16.20, SD = 6.73), $t(266) = 1.51$, $p = .13$.

Research Question #10: Do differences in perceived stress exist by parental status among La Crosse County employees?

An independent samples t-test was conducted to assess if differences in perceived stress existed by parental status among survey respondents. All assumptions were assessed and deemed acceptable for the independent samples t-test. Results from the independent samples t-test revealed no statistically significant difference in perceived stress between survey respondents who were parents (M = 16.59, SD = 6.41) and those who were non-parents (M = 16.23, SD = 7.20), $t(288) = -.45$, $p = .66$.

Suggestions for Employer-Provided Stress Management

The final item on the survey asked, "What could La Crosse County as an employer do to help you manage your stress?" One hundred and twenty-eight survey respondents provided feedback. The researcher used an open coding in grounded theory thematic analysis method to identify emerging themes and subthemes (Merriam, 2009; Ryan & Bernard, 2003). After coding the data, two overall themes were noted – issues related to management and issues related to work benefits. Though the open-ended question was positively phrased, some of the responses were negatively phrased by the survey respondents.

Issues related to management. Survey respondents mentioned a variety of issues they would like addressed from management in order to help manage their stress. The most common issue reported involved management style (n = 21). In regard to management style, one survey respondent shared that they "expect leadership from

supervisors." Another survey respondent commented that they would like to see management "manage with more transparency."

Communication (n = 13) represented another issue expressed by survey respondents related to management. In regard to communication, one survey respondent noted a need for "better communication and clear direction." Similarly, another survey respondent stated, "I think as a whole there are many options, but as a single department, I think supervisors/department heads need to do better communicating amongst their employees."

Too heavy of a workload (n = 8) was an additional issue attributed to management. One survey respondent noted a need to "hire more workers as the amount of work expected does seem unobtainable at times." Another survey respondent shared they would like "manageable caseloads." Please see Appendix I for a complete list of direct quotes related to the open-ended question.

Issues related to work benefits. Survey respondents mentioned a variety of issues related to work benefits they would like in order to help manage their stress. The most common work benefit reported involved vacation (e.g., bringing back vacation buy-up and more vacation days) (n = 31). In regard to bringing back vacation buy-up (n = 20), one survey respondent noted a need to "bring back vacation buy-up. It was my number one way to relieve stress!!" Similarly, another survey respondent stated,

> Give back the vacation buy-up so I feel that I can take more time off of work to be able to get my kids from school, etc. I felt when I had it, I was able to take more time off to spend with them and now I can't seem to accrue time and I feel like that working mom who can't take time off with her kids.

In regard to more vacation days (*n* = 11), one survey respondent noted a need for "more vacation time to manage personal life issues." Similarly, another survey respondent stated, "provide more vacation time each year, to allow time off to prevent burnout."

Flexible working opportunities (e.g., work from home and work schedule) (*n* = 27) represented another working benefit expressed by survey respondents. In regard to work from home (*n* = 13), one survey respondent noted a need to "allow us to occasionally work from home (fewer distractions, easer to focus)." Another survey respondent stated, "my stress has come from having to resolve conflicts, for which I have training. La Crosse County could allow and welcome (culture shift) working from home without negative stigma." In regard to work schedule (*n* = 14), one survey respondent noted a need to "offer flexible work schedules, i.e., 4-10 schedules for hourly staff." Similarly, another survey respondent stated, "I really appreciate some flexibility. I don't mind working hard or extra, but do enjoy being able to take part in my family activities."

Compensation (*n* = 14) was an additional work benefit reported by survey respondents. In regard to compensation, one survey respondent shared they would like "a larger pay raise than the 'cost of living' increase." Another survey respondent noted a need for "better pay, or at least offer benefit options that don't take away 50% of my gross pay." Please see Appendix I for a complete list of direct quotes related to the open-ended question.

Other workplace stress management issues. Other workplace stress management issues, although small, regarding what La Crosse County as an employer could do to help manage the stress of their employees were noted. Other workplace stress management issues included combining vacation/sick time into PTO (*n* = 3), offering

employee recognition (*n* = 4), providing equal services at remote sites (*n* = 2), incentivizing programs (*n* = 2), keeping massages or offering them free of charge (*n* = 4), offering wellness activities outside of normal business hours (*n* = 5), offering onsite childcare (*n* = 2), providing opportunities for professional growth/advancement in one's career (*n* = 3), being payed to work out (*n* = 3), and promoting a culture of wellness (*n* = 2). Please see Appendix I for a complete list of direct quotes related to the open-ended question.

Summary

The response rate for this study was 29.5% (*n* = 335). The majority of survey respondents identified as female (78.3%, *n* = 238), white (96.0%, *n* = 288), and non-Hispanic or Latino (99.3%, *n* = 297). The most common ages of survey respondents were 23-40 years old (39.5%, *n* = 118) and 41-54 years old (40.5%, *n* = 121). Most survey respondents' current employment status was full-time (92.1%, *n* = 279), and approximately one-third of survey respondents had worked for La Crosse County for 2-5 years (34.2%, *n* = 102). A wide range of annual household incomes was reported. Approximately one-fourth of survey respondents fell into each of the following annual household income categories: $25,000-$49,999 (22.2%, *n* = 67), $50,000-$74,999 (24.5%, *n* = 74), and $75,000-$99,999 (23.2%, *n* = 70). Approximately one-half of survey respondents did not have any children under the age of 18 living at home (51.2%, *n* = 151). Additionally, approximately one-third of survey respondents worked in the Human Services department (34.3%, *n* = 103).

Survey respondents' perceived stress scores ranged from 1 to 38, with a mean score of 16.17 out of 40, indicating a moderate level of perceived stress. Approximately

one-half of survey respondents reported moderate perceived stress (53.1% *n* = 173). Areas of high perceived stress for survey respondents included feeling upset about unexpected happenings, being unable to control important things in life, feeling nervous and stressed, and feeling angered about things outside of one's control. The highest scored item was feeling nervous or stressed, while the lowest scored item was feeling confident about one's ability to handle personal problems.

An independent samples t-test indicated there was no statistically significant difference in perceived stress between male (*M* = 15.45, *SD* = 8.15) and female (*M* = 16.68, *SD* = 6.51) survey respondents. A one-way ANOVA indicated there were no statistically significant differences in perceived stress among survey respondents who were 23-40 years old (*M* = 16.78, *SD* = 6.34), 41-54 years old (*M* = 16.02, *SD* = 6.79), and 55-73 years old (*M* = 16.17, *SD* = 7.20). An independent samples t-test indicated there was no statistically significant difference in perceived stress between survey respondents with an annual household income of <$50,000 (*M* = 17.62, *SD* = 7.32) and those with an annual household income of ≥$50,000 (*M* = 16.20, *SD* = 6.73). Finally, an independent samples t-test indicated there was no statistically significant difference in perceived stress between survey respondents who were parents (*M* = 16.59, *SD* = 6.41) and those who were non-parents (*M* = 16.23, *SD* = 7.20).

The two most prevalent stressors indicated by survey respondents were work (77.8% *n* = 256) and finances (71.6%, *n* = 237). Overall, the most prevalent workplace stressor of survey respondents was poor communication in the organization (66.7%, *n* = 204). The most prevalent coping strategies utilized to manage survey respondents stress during the last month were watching television or movies (82.5%, *n* = 255), spending

time with friends or family (76.4%, *n* = 236), exercising or walking (76.1%, *n* = 235), and listening to music (75.1%, *n* = 232). Survey respondents' stress mindset scores ranged from 0 to 3.50, with a mean score of 1.59 out of 4, indicating a debilitating stress mindset. Approximately two-thirds of survey respondents had a debilitating stress mindset (67.0%, *n* = 205).

The final item on the survey asked survey respondents, "What could La Crosse County as an employer do to help you manage your stress?" One hundred and twenty-eight survey respondents provided feedback. After open coding the data, two overall themes emerged. Issues related to management and issues related to work benefits were suggested by survey respondents as ways to help them manage their stress.

CHAPTER V

CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

Introduction

With the average American working full-time and spending more than one-third of their day, five days per week, at the workplace, employers have a professional obligation to improve the health and well-being of their employees (Centers for Disease Control and Prevention [CDC], 2016). Employers can improve the health and well-being of their employees by fostering a workplace culture of wellness and providing opportunities for employees to engage in a variety of worksite wellness programs. Examples of worksite wellness programs an organization can implement for their employees include, but are not limited to, on-site fitness centers, smoking cessation programs, employee assistance programs (EAP), meditation classes, and various challenges to improve employees' health behaviors. Workplaces that offer worksite wellness programs to their employees have the "potential to impact areas such as health care costs, absenteeism, productivity, recruitment/retention, culture and employee morale" (CDC, 2016, para. 3). According to the World Health Organization Regional Office for Europe (WHO/Europe, 2019), primary prevention, such as worksite wellness programs, "tend to be cheaper and more efficient" than secondary and tertiary prevention (para. 3). Dr. David Posen, leading expert on stress mastery, agrees with WHO/Europe. In Posen's book, *Is Work Killing You?: A Doctor's Prescription for Treating Workplace*

Stress, he stated "prevention is always a better option than treatment. It's more efficient. It's more humane. And it's a heck of a lot cheaper!" (Posen, 2013, p. 294).

A common source of stress for many Americans is work. As the Wellness Council of America (WELCOA, 2019a) states, "while some workplace stress is normal, continued and excessive stress interferes with productivity and negatively impacts the well-being of employees" (para. 1). Therefore, stress management activities often are incorporated in many organizations' worksite wellness programming. However, before an organization can plan a stress management activity for employees, information about the study population is required in order to successfully plan an activity. As indicated by the WELCOA (2019a), "by understanding what causes stress, how it impacts our health, and understanding the basic characteristics we behold that might help us cope with stress, we can begin to develop resiliency [ability to cope with change] and beat burnout" (para. 5). Therefore, it is important to capture factors that influence employees' stress in order to plan and implement successful stress-related worksite wellness programs.

Hence, the purpose of this study was to assess perceived stress, stressors, coping strategies, and stress mindsets among La Crosse County, Wisconsin employees. Data for this study were collected through a survey that was administered electronically. Employees at La Crosse County were asked to complete a 31-item survey. The survey consisted of items from two pre-existing scales, a 10-item Perceived Stress Scale and an 8-item Stress Mindset Measure, and three items created by the researcher to assess stressors, workplace stressors, and coping strategies. Demographic questions also were used to summarize characteristics of study participants. An open-ended question also was used to assess how La Crosse County as an employer could help employees manage their

stress. In addition to overall describing characteristics of survey respondents, demographics were used in inferential statistical analyses to identify whether differences in perceived stress existed between groups.

Conclusions and Discussion

Perceived Stress

Survey respondents' mean perceived stress score was 16.17 out of 40, indicating a moderate level of perceived stress. In fact, approximately one-half of survey respondents reported moderate perceived stress (i.e., scores of 14-26). This was not surprising as these findings are consistent with results from Cohen and Janicki-Deverts (2012) and Cohen and Williamson (1988), which identified mean perceived stress scores of males and females of 13.02 in 1988, 15.31 in 2006, and 15.84 in 2009. Surprisingly, an additional one-third of survey respondents in this study reported low perceived stress (i.e., scores of 0-13), and less than 10% reported high perceived stress (i.e., scores of 27-40). Areas of high perceived stress for survey respondents included feeling upset about unexpected happenings, being unable to control important things in life, feeling nervous and stressed, and feeling angered about things outside of one's control. The highest scored item was feeling nervous or stressed, while the lowest scored item was feeling confident about one's ability to handle personal problems.

Gender. No statistically significant difference in perceived stress existed between male and female survey respondents. Although not statistically significant, trends indicated females (M = 16.68) had a higher mean perceived stress score than males (M = 15.45). This was not surprising as these findings are consistent with results from Cohen and Janicki-Deverts (2012) and Cohen and Williamson (1988), which identified female

mean perceived stress scores of 13.68 in 1988, 16.10 in 2006, and 16.14 in 2009. The mean perceived stress scores of males were 12.07 in 1988, 14.46 in 2006, and 15.52 in 2009. Results from this study also are consistent with the American Psychological Association's (APA) annual *Stress in America*™ survey. Since the APA began conducting this survey in 2007, women, on average, have consistently reported higher stress levels than men (APA, 2015; APA, 2017b).

Age. No statistically significant differences existed in perceived stress between survey respondents who were 23-40 years old, 41-54 years old, and 55-73 years old. Although not statistically significant, trends indicated individuals 23-40 years old (i.e., Millennials) (M = 16.78) had a higher mean perceived stress score than individuals 41-54 years old (i.e., Gen Xers) (M = 16.02) and individuals 55-73 years old (i.e., Baby Boomers) (M = 16.17). This was not surprising as these findings are consistent with results from the annual *Stress in America*™ survey, which revealed that Millennials had the highest average stress level in 2018 (APA, 2018b). Results from this study also indicated that individuals 55-73 years old had the second highest mean perceived stress score. These results are contrary to results from the annual *Stress in America*™ survey, which revealed that Gen Xers had a higher mean perceived stress than Baby Boomers in 2018 (APA, 2018b).

Annual household income. No statistically significant difference in perceived stress existed between survey respondents with an annual household income of <$50,000 and those with an annual household income of ≥$50,000. Although not statistically significant, trends indicated individuals with an annual household income of <$50,000 ($M$ = 17.62) had a higher mean perceived stress score than those with an annual

household income of ≥$50,000 ($M$ = 16.20). This was not surprising as these findings are consistent with results from Cohen and Janicki-Deverts (2012) and Cohen and Williamson (1988), which identified mean perceived stress scores of individuals with an annual household income of <$50,000 as 13.98 in 1988, 16.11 in 2006, and 17.01 in 2009. The mean perceived stress scores of individuals with an annual household income of ≥$50,000 were 11.84 in 1988, 14.32 in 2006, and 14.93 in 2009. Results from this study also are consistent with the APA's annual *Stress in America*™ survey, which revealed that individuals with an annual household income of <$50,000 report higher stress levels than those with an annual household income ≥$50,000 (APA, 2015).

Parental status. No statistically significant difference in perceived stress existed between survey respondents who were parents and who were non-parents. Although not statistically significant, trends indicated parents (M = 16.59) had a higher mean perceived stress score than non-parents (M = 16.23). This was not surprising as these findings are consistent with results from the APA's annual *Stress in America*™ survey, which revealed that parents report higher stress levels than non-parents (APA, 2015).

Stressors

The two most prevalent stressors of survey respondents were work and finances. These findings are consistent with results from the annual *Stress in America*™ survey, which consistently has revealed work and finances as the top two stressors for Americans. Relationships (e.g., spouse, kids, friends, and significant other), personal health concerns, family responsibilities, and health problems affecting their family were additional stressors which impacted survey respondent's life during the last month. This was not surprising as these findings also are consistent with results from the annual *Stress*

in America™ survey, which revealed family responsibilities and health concerns as top stressors for Americans. Additionally, personal health concerns and health problems affecting their family are results that align with previous *Stress in America*™ survey findings (APA, 2015; APA, 2017b).

Workplace Stressors

Overall, the most prevalent workplace stressor of survey respondents across the three categories of organizational culture, work roles, and career concerns, was poor communication in the organization. Workplace stressors specific to organizational culture included lack of participation in decision making, poor leadership, lack of clarity about organizational objectives and structure, insufficient vacation time, and lack of support from supervisors. For workplace stressors related to work roles, working under time constraints, uncertain job expectations, unrealistic job demands, and failure to utilize workers' skills were reported by survey respondents. For workplace stressors related to career concerns, low levels of recognition and reward, low salaries, and lack of opportunity for growth, advancement, and promotion were indicated. This was not surprising as these findings are consistent with results from the 2018 Work and Well-Being survey, which revealed low salaries and lack of opportunity for growth or advancement were the top two workplace stressors for Americans (APA, 2018a).

The majority of the aforementioned workplace stressors can be categorized under issues related to management. Issues related to management was an emerging theme identified in the final item of the survey, which asked survey respondents, "What could La Crosse County as an employer do to help you manage your stress?" Responses to the closed-ended question regarding prevalent workplace stressors complimented responses

to the open-ended question regarding how La Crosse County could help employees manage their stress. When asked about prevalent workplace stressors, survey respondents reported poor communication in the organization and poor leadership. Similarly, when asked about how La Crosse County could help employees manage their stress, survey respondents commented on communication and management style. This is one example of how the quantitative data complimented the qualitative data for this study.

Coping Strategies

The most prevalent coping strategies utilized to manage survey respondents' stress during the last month were watching television or movies, spending time with friends or family, exercising or walking, and listening to music. This was not surprising as these findings are consistent with results from the 2014 *Stress in America*™ survey, which revealed exercising or walking, listening to music, and watching television or movies as the top three most popular ways Americans managed their stress (APA, 2015).

Other prevalent coping strategies utilized to manage survey respondents' stress during the last month were sleeping or napping, eating, reading, surfing the internet, utilizing emotional support (e.g., talk with a family member, friend, clergy person), praying, shopping, spending time doing a hobby, and drinking alcohol. This was not surprising as these coping strategies also are consistent with results from the annual *Stress in America*™ survey over the course of the past few years (APA, 2015; APA, 2017c).

Stress Mindset

Survey respondents' mean stress mindset score was 1.59 out of 4, indicating a debilitating stress mindset. According to Crum, Salovey, & Anchor (2013), a debilitating

stress mindset is when individuals believe that experiencing stress will result in negative outcomes. Approximately two-thirds of survey respondents had a debilitating stress mindset (i.e., scores below 2). This was not surprising as these findings unfortunately are consistent with results from Crum and colleagues (2013), which identified a mean stress mindset score of 1.62 for 355 employees from a large international financial institution.

Survey respondents' stress mindsets are similar to those of a majority of Americans. Most people view stress in a negative light. It was not until the 1970's when Lenard Levi and Dr. Hans Hugo Bruno Selye introduced the term "eustress" (i.e., positive stress) and began to emphasize that "stress is not what happens to you, but how you react to it," as the connotation began shifting toward a positive one (Selye, 1974; Selye, 1977; Szabo et al., 2012, p. 477). In addition, as far as thinking about stress as a reaction, not all stress is unhealthy. As the Yerkes-Dodson Law illustrates, stress can be beneficial, at least up to a certain point. Once one's stress hits the midpoint, however, it becomes debilitating (i.e., distress) (Seaward, 2011). Surprisingly, results from this study revealed that one-fifth of La Crosse County employees had an enhancing stress mindset (i.e., scores above 2). According to Crum and colleagues (2013), an enhancing stress mindset is when individuals believe that experiencing stress will result in positive outcomes.

Suggestions for Employer-Provided Stress Management

The final item on the survey asked survey respondents, "What could La Crosse County as an employer do to help you manage your stress?" After open coding the data, issues related to management and work benefits were noted as two overall themes. The most common issues related to management reported by survey respondents involved

communication, too heavy of a workload, and management style. The most common issues related to work benefits reported by survey respondents involved compensation, flexible working opportunities, and vacation.

The most prevalent workplace stressors which impacted survey respondents life during the last month were as follows: poor communication in the organization, lack of participation in decision making, poor leadership, lack of clarity about organizational objectives and structure, insufficient vacation time, lack of support from supervisors, working under time constraints, uncertain job expectations, unrealistic job demands, failure to utilize workers' skills, low levels of recognition and reward, low salaries, and lack of opportunity for growth, advancement, and promotion. Responses to the open-ended question regarding how La Crosse County could help employees manage their stress complimented responses to the closed-ended question regarding prevalent workplace stressors. When asked about how La Crosse County could help employees manage their stress, survey respondents commented on compensation and vacation. Similarly, when asked about prevalent workplace stressors, survey respondents reported low salaries and insufficient vacation time. This is one example of how the qualitative data complimented the quantitative data for this study.

Summary of Results

The main takeaway results from this study were as follows:

- One-half of survey respondents reported moderate levels of perceived stress.
- The two most prevalent stressors of survey respondents were work and finances.

- Overall, the most prevalent workplace stressor of survey respondents across the three categories of organizational culture, work roles, and career concerns, was poor communication in the organization.
- The most prevalent coping strategies utilized to manage survey respondents' stress during the last month were watching television or movies, spending time with friends or family, exercising or walking, and listening to music.
- Approximately two-thirds of survey respondents had a debilitating stress mindset.
- No statistically significant difference existed in perceived stress between male and female survey respondents.
- No statistically significant differences existed in perceived stress among survey respondents who were 23-40 years old, 41-54 years old, and 55-73 years old.
- No statistically significant difference existed in perceived stress between survey respondents with an annual household income of <$50,000 and those with an annual household income of ≥$50,000.
- No statistically significant difference existed in perceived stress between survey respondents who were parents and those who were non-parents.
- Issues related to management and issues related to work benefits were emerging themes regarding what La Crosse County as an employer could do to help manage the stress of their employees.

Limitations

This study had a few limitations. First of all, this research utilized self-report data. Though an assumption of the study was that all study participants responded honestly to the electronic survey that may not have been the case (i.e., response bias). A second

limitation of this study was the time frame in which study participants had to recall information. Study participants were asked to recall information during the past month and may not have accurately remembered the information (i.e., recall bias). A third limitation of this study was that 70.5% (n = 801) of employees eligible to participate in this study did not take the survey. Therefore, results could not be generalized to all La Crosse County employees with a work email address, as non-respondents may have had different perceived stress scores, stressors, workplace stressors, coping strategies, and/or stress mindset scores than respondents (i.e., nonresponse error). A fourth limitation of this study was that study participants may have answered survey questions in a manner that was deemed favorable by the researcher, such as over-reporting healthy coping strategies or under-reporting unhealthy coping strategies (i.e., social desirability bias).

Recommendations for Future Research

This study can inform future research in several ways. First, study participants were asked to indicate which stressors impacted their life during the last month and which coping strategies they had used during the last month to manage their stress. The survey was conducted in January 2019 and study participants were asked to reflect back to their experiences during December 2018. It is important to note that study participants' perceived stress, stressors, and coping strategies may have been affected by time of the year (e.g., holiday season). Therefore, it is recommended for future researchers to conduct this assessment at different times of the year to determine if differences exist.

Second, an existing survey instrument was used in this study. The PSS10 was "designed to measure the degree to which situations in one's life are appraised as stressful" in the last month (Cohen, Kamarck, & Mermelstein, 1983, p. 385). Moreover,

the PSS10 focused on study participants' perception of global life stress rather than specific life events or daily hassles (Cohen et al., 1983). If La Crosse County or another organization would like to assess which life events cause stress amongst employees, the Social Readjustment Rating Scale (SRRS) by Holmes and Rahe (1967) may be appropriate. It is important to note that the SRRS measures life events that happened during the previous year. A downside to the SRRS is that most of the 43 life events are not everyday events. Kanner, Coyne, Schaefer, and Lazarus (1980) designed a Daily Hassles Scale which consists of 117 items, including concerns about losing things, traffic jams, arguments, disappointments, weight, and physical appearance. If La Crosse County or another organization would like to assess which daily hassles cause stress amongst employees, the Daily Hassles Scale may be appropriate. It is important to note that the Daily Hassles Scale measures daily hassles that happened during the past month. Therefore, it is recommended for future researchers to identify the type of stress to assess amongst employees.

Third, it is recommended for future researchers to collect other types of demographic information such as marital status, number of people living in a household, highest level of education obtained, and job title. Inquiring about family status, such as marital status and number of people living in a household, would be beneficial in discussing implications of work-life balance and its association with perceived stress, stressors, coping strategies, and stress mindsets. Asking study participants about their highest level of education obtained also could be beneficial in identifying high-risk employees. As far as job titles are concerned, it cannot be assumed that secretaries think of stress the same way as police officers or social workers. Inquiring about these

demographic items would future delineate variables that may influence perceived stress, stressors, coping strategies, and stress mindsets of La Crosse County employees or for employees in other organizations. However, just as anonymity was an important aspect of this study, future researchers should be careful not to collect more information than necessary, as the combination of several demographic items may indirectly point to specific study participants.

Fourth, it is recommended that future researchers focus on assessing whether demographic differences exist in relation to stressors, coping strategies, and stress mindsets. The current study only examined differences in perceived stress based on gender, age, annual household income, and parental status as driven by the current literature. Only a limited amount of literature has looked at demographic differences in relation to stressors, coping strategies, and stress mindsets.

Fifth, it is recommended that future researchers focus on assessing uncommon stressors and coping strategies. The current study only examined prevalent stressors and coping strategies. However, as far as the data for this study, it was noteworthy that only 1.9% (n = 6) of survey respondents reported utilizing the La Crosse County Employee Assistance Program (EAP) as a coping strategy to manage their stress during the last month. Identifying uncommon stressors and coping strategies can be helpful in tailoring stress management programming to employees' needs. Additionally, this information can be useful in identifying poorly utilized resources such as the La Crosse County EAP.

Sixth, it is recommended that future researchers add a "Not applicable" option to the stressors and workplace stressors items (Chyung, Roberts, Swanson, & Hankinson, 2017). Based on feedback from the jury of experts who established content validity for

the survey questions not previously validated, the neutral midpoint "neither agree nor disagree" was removed from the stressors and workplace stressors items. As Chyung and colleagues (2017) suggest omitting the midpoint "eliminates the possibility that respondents will misuse the midpoint" (p. 19). However, this forces respondents to take a side, which may produce biased results. Furthermore, the authors state that including a midpoint "allows respondents to express their true neutral or indifferent opinion; respondents are not forced to agree or disagree" (p. 19). Although, it is important to note that including a midpoint may enable it to be used as a "dumping ground" (i.e., pile effect at the midpoint) for respondents. Therefore, as Chyung and colleagues (2017) recommend, a strategy future researchers should use when omitting the midpoint on the Likert scale is to offer a "Not applicable" option instead of forcing respondents to choose an option.

Seventh, it is recommended that future researchers focus on assessing whether stressors and workplace stressors are positive (i.e., eustress) or negative (i.e., distress) for La Crosse County employees or for employees in other organizations. This can be carried out by the researcher asking about stressors and workplace stressors in two separate items. For example, the researcher could investigate stressors by asking: (a) "Below is a list of things people say cause stress in their lives. Please rate the extent to which you agree or disagree that each of the following stressors negatively impacted your life during the last month" and (b) "Below is a list of things people say cause stress in their lives. Please rate the extent to which you agree or disagree that each of the following stressors positively impacted your life during the last month." The same format of the above two stressor items can be done with the workplace stressor item as well. Asking study

participants about their positive and negative stressors and workplace stressors could be helpful in tailoring stress management programming to employees' needs.

Eighth, it is recommended that future researchers use a qualitative methodology to supplement quantitative data. The current study mainly applied a quantitative approach, with the exception of the final open-ended question and the "Other (please specify)" options in the stressors and coping strategies items. While an electronic survey was the most appropriate and feasible methodology to answer the exact questions that drove this study, primarily using quantitative measures can lessen the depth of results. Using a qualitative approach allows study participants to share their attitudes and beliefs through the use of focus groups, individual interviews, group discussions, or other procedures. A mixed methodology utilizing both qualitative and quantitative data allows the researcher to gain a more comprehensive understanding of the phenomenon of interest.

Lastly, it is recommended that future researchers conduct regression analyses to determine predictive relationships between multiple demographic characteristics and perceived stress. This would allow the researcher to simultaneously study multiple demographic characteristics in relation to perceived stress, such as the perceived stress of females with an annual household income of <$50,000, instead of analyzing perceived stress among females and perceived stress among La Crosse County employees with an annual household income of <$50,000 separately. Some demographic characteristics could be intertwined and therefore, multiple independent variables should be tested in the same statistical model to identify unique relationships with a dependent variable like perceived stress.

Recommendations for Public Health Practice

Results of this study were disseminated to the La Crosse County Employee Wellness Committee. The researcher provided an overview of the methodology, results, and recommendations through a PowerPoint presentation presented to the committee on March 13, 2019.

Implementation of stress management interventions has been shown to benefit workplaces. Advantages of stress management in the workplace identified by WELCOA (2019b) include strong company culture, less sick days taken, employee retention, and employee morale. Although, no universal approach or "how to" manual exists for developing stress prevention programming at work. All stress prevention programs should involve three simple steps: problem identification (i.e., needs assessment), intervention (i.e., program), and evaluation. The first step is to identify perceived stress, stressors, coping strategies, and stress mindsets of employees. Often times in larger organizations, surveys are used to gather this information. Once the information has been identified, it is time to design and implement a stress management program. Some programs might be implemented rapidly, such as stress management training and improvement in organizational communication, but others may require additional resources to be put into place, such as implementing a work from home policy. The final step is evaluation. Evaluation is necessary to determine the effectiveness of programs and whether changes are needed. It is important for evaluations to focus on the same type of information collected during the needs assessment, including information from employees about perceived stress levels, stressors, coping strategies, and coping strategies, to be able to compare results. Previous literature has identified approaches to

dealing with workplace stress (National Institute for Occupational Safety and Health [NIOSH], 1999; Posen, 2013). Methods to improve the overall stress and well-being of employees includes, but are not limited to, stress management and organizational change.

The first approach to reduce workplace stress as recommended by the NIOSH (1999) is to provide stress management training to employees. Stress management training programs are designed to educate employees about the nature of stress, effects of stress on health, stressors, and coping strategies to reduce, manage, or eliminate stress (e.g., meditation, time management, and exercise). Approximately one-half of large companies in the United States provide some type of stress management training for their employees (NIOSH, 1999). The advantage of stress management training is that it usually is inexpensive and easy to implement. However, stress management training also comes with a disadvantage. Stress management training often ignores the root causes of workplace stress, as the primary focus is on the employee and not on the organizational environment (NIOSH, 1999; Posen, 2013).

Employee assistance programs (EAPs) also are utilized by organizations to reduce workplace stress. An EAP is an employee benefit program that provides individual counseling to its employees who are dealing with work and personal problems. Furthermore, EAPs "can provide employees with the skills needed to understand and cope with problems or situations before they develop into more serious concerns" (Gundersen Health System [GHS], 2019, para. 1).

In addition to stress management training and EAPs, the second approach to reduce workplace stress as recommended by the NIOSH (1999) and Posen (2013) is organizational change. Organizational change is the most direct way to reduce workplace

stress as it involves the identification of workplace stressors and the coping strategies utilized to reduce, manage, or eliminate employees' stress. The advantage of organizational change is that it deals directly with the root causes of workplace stress, as the primary focus is on the organizational environment and not the employee. However, organizational change also comes with a disadvantage. Organizational change deals with persons in leadership (i.e., managers, supervisors, and bosses), who sometimes feel hesitant to change the organizational structure (e.g., changes in schedules and communication) (NIOSH, 1999). According to the NIOSH (1999),

> As a general rule, actions to reduce job stress should give top priority to organizational change to improve working conditions. But even the most conscientious efforts to improve working conditions are unlikely to eliminate stress completely for all workers. For this reason, a combination of organizational change and stress management is often the most useful approach for preventing stress at work. (p. 14)

Preventing workplace stress is a comprehensive approach. As illustrated in Figure 5, organizational change and stress management combined result in a healthy workplace. Ultimately, organizations are striving towards "changes that will produce a happier, healthier, more engaged, more energized, creative, innovative, and productive workplace" (Posen, 2013, p. 325). To begin preventing workplace stress, an overall recommendation by the NIOSH (1999) is to form a committee of employees and leadership (i.e., managers, supervisors, and bosses) to plan, implement, and evaluate programs focused on workplace stress. Specific recommendations for La Crosse County follow.

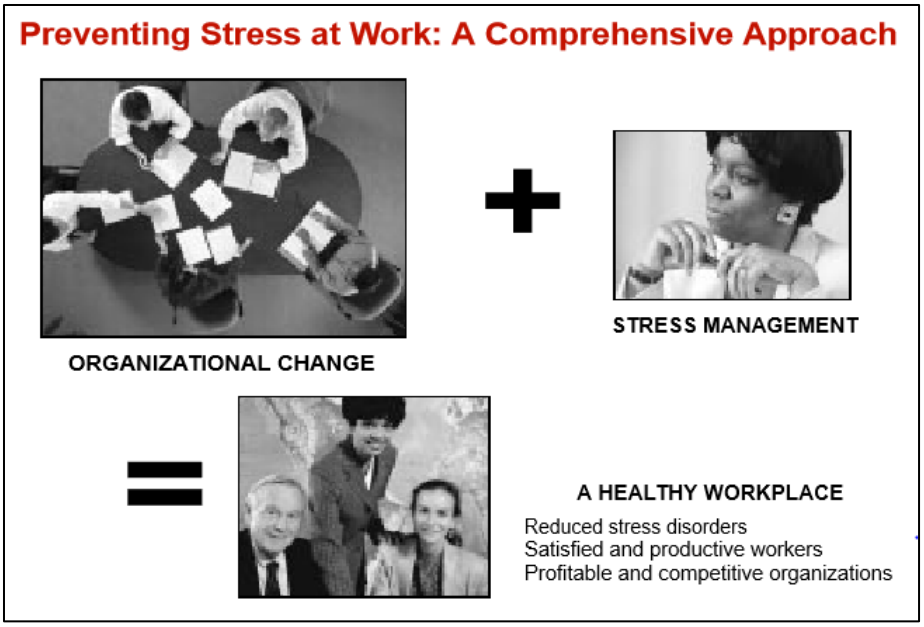


Figure 5. Comprehensive Approach to Prevent Workplace Stress (NIOSH, 1999).

Based on literature and findings from this study, the following are recommendations offered by the researcher. As data for this study revealed, stress management and organizational change in La Crosse County are needed. Recommendations to improve stress management among La Crosse County employees include, but are not limited to:

- Educate employees on the nature of stress, such as distress and eustress.
- Educate employees on the effects of stress on the body, such as headache, sleep disturbances, difficultly in concentrating, short temper, and upset stomach.
- Educate employees on common life and workplace stressors, such as work, finances, low salaries, and lack of opportunity for growth or advancement.
- Teach employees effective coping strategies to reduce, manage, or eliminate their stress, such as mindfulness-based practices and pet therapy.

Recommendations to improve the organizational culture at La Crosse County include, but are not limited to:

- Encourage more organizational communication with employees so there is no uncertainty about job expectations or demands.
- Encourage employees' participation in decision-making.
- Encourage leadership staff to receive management training to supervise in a manner that is equitable and aligns with the values of servant leadership.

  According to Greenleaf Center for Servant Leadership (2016),

  > A servant-leader focuses primarily on the growth and well-being of people and the communities to which they belong. While traditional leadership generally involves the accumulation and exercise of power by one at the 'top of the pyramid,' servant leadership is different. The servant-leader shares power, puts the needs of others first and helps people develop and perform as highly as possible. (para. 2)

  Values of servant leadership include: (a) honor others (before yourself), (b) inspire vision (before setting the course), (c) choose ethics (before profit), (d) empower others (before personal gain), (e) privilege people (before tasks), (f) balance focus with flexibility (before making decisions), and (g) serve with humility (before all else) (Point Loma Nazarene University, 2018).
- Provide employees with opportunities for professional development and growth, such as trainings, certifications, and education.
- Provide employees with flexible work opportunities, such as work from home and flexible work hours.

- Evaluate the feasibility of bringing back the vacation buy-up program.
- Evaluate compensation packages, including salary and vacation in relation to those of other organizations.

Another practical recommendation borne of this study is the need to focus on financial wellness through programming. According to the National Financial Educators Council (NFEC, 2018), “personal finance issues increase your employees’ stress levels, impact their productivity and contribute [to] the overall work environment. This is costing your company money” (para. 1). Like many Americans, finances were reported as a prevalent stressor for La Crosse County employees in the past month. According to Kent State University (2019), “financial wellness is about much more than being able to balance your checkbook, compare prices, or get a job. It is about gaining the knowledge and skills necessary to manage and make sound financial decisions in your everyday life” (para. 2). Financial wellness programs are designed to educate employees about overcoming personal finance challenges (Society for Human Resource Management [SHRM], 2019, para. 2). Topics workplaces can incorporate into their worksite wellness programming include, but are not limited to, debt reduction, asset management, and saving for current and future needs – such as purchasing a home, financing children's education or preparing for retirement (SHRM, 2019). An effectively designed employee financial wellness program can help employees reduce their financial stress.

Summary

This chapter presented the conclusions of this study and discussed why certain findings were present and of specific importance. Recommendations for future research were provided, as well as for public health practice. Limitations of the study also were

identified. Overall, implementation of evidence-based stress management interventions and organizational changes at La Crosse County are recommended to reduce workplace stress. As part of this, it is vital to form a committee of both La Crosse County employees and individuals in leadership roles to design, implement, and evaluate stress management programs.

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APPENDIX A

Electronic Survey

ELECTRONIC SURVEY

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate *how often* you felt or thought a certain way.

	Never	Almost Never	Sometimes	Fairly Often	Very Often
In the last month, how often have you been upset because of something that happened unexpectedly?	○	○	○	○	○
In the last month, how often have you felt that you were unable to control the important things in your life?	○	○	○	○	○
In the last month, how often have you felt nervous and "stressed"?	○	○	○	○	○
In the last month, how often have you felt confident about your ability to handle your personal problems?	○	○	○	○	○
In the last month, how often have you felt that things were going your way?	○	○	○	○	○
In the last month, how often have you found that you could not cope with all of the things that you had to do?	○	○	○	○	○
In the last month, how often have you been able to control irritations in your life?	○	○	○	○	○
In the last month, how often have you felt that you were on top of things?	○	○	○	○	○
In the last month, how often have you been angered because of things that were outside of your control?	○	○	○	○	○
In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	○	○	○	○	○

Below is a list of things people say cause stress in their lives. Please rate the extent to which you agree or disagree that each of the following stressors impacted your life during the last month.

	Strongly Disagree	Disagree	Agree	Strongly Agree
Work	○	○	○	○
Finances	○	○	○	○
Personal health concerns	○	○	○	○
Relationships (e.g., spouse, kids, friends, significant other)	○	○	○	○
Health problems affecting my family	○	○	○	○
Family responsibilities (e.g., caregiving)	○	○	○	○
Personal safety	○	○	○	○
Discrimination	○	○	○	○
Technology use (e.g., cell phone, computers)	○	○	○	○
Other (please specify):	○	○	○	○

Below is a list of things people say cause workplace stress in their lives. Please rate the extent to which you agree or disagree that each of the following workplace stressors impacted your life during the last month.

	Strongly Disagree	Disagree	Agree	Strongly Agree
Lack of participation in decision making	○	○	○	○
Poor communication in the organization	○	○	○	○
Lack of family-friendly policies	○	○	○	○
Insufficient vacation time	○	○	○	○
Insufficient benefits (e.g., FMLA, retirement, health and dental insurance)	○	○	○	○
Poor leadership	○	○	○	○
Lack of clarity about organizational objectives and structure	○	○	○	○
Lack of support from my co-workers	○	○	○	○
Lack of support from my supervisors	○	○	○	○
Conflicts with my co-workers	○	○	○	○
Conflicts with my supervisors	○	○	○	○
Bullying, harassment, and violence	○	○	○	○
Feeling isolated at work	○	○	○	○
Uncertain job expectations	○	○	○	○
Unrealistic job demands	○	○	○	○
Inflexible work hours	○	○	○	○
Working under time constraints	○	○	○	○
Failure to utilize workers' skills	○	○	○	○
Meaningless tasks	○	○	○	○
Lack of variety	○	○	○	○
Job insecurity	○	○	○	○
Lack of opportunity for growth, advancement, and promotion	○	○	○	○
Rapid changes for which workers are unprepared	○	○	○	○
Low levels of recognition and reward	○	○	○	○
Low salaries	○	○	○	○
Other (please specify):	○	○	○	○

Which of the following coping strategies have you used during the last month to manage your stress? Please select all that apply.

- ☐ Exercise or walk
- ☐ Pray
- ☐ Play video games
- ☐ Read
- ☐ Listen to music
- ☐ Meditate or practice yoga
- ☐ Go to church or religious services
- ☐ Watch television or movies
- ☐ Sleep or nap
- ☐ Spend time with friends or family
- ☐ Play sports
- ☐ Gamble
- ☐ Spend time doing a hobby
- ☐ Shop
- ☐ Go to a spa (e.g., massage, manicure, facial)
- ☐ Smoke tobacco products
- ☐ Vape e-cigarettes
- ☐ Drink alcohol
- ☐ Use substances (other than alcohol or tobacco)
- ☐ Eat
- ☐ See a mental health professional (e.g., psychologist, social worker, psychiatrist)
- ☐ Utilize emotional support (e.g., talk with a family member, friend, clergy person)
- ☐ Utilize the La Crosse County Employee Assistance Program (EAP)
- ☐ Surf the internet
- ☐ Sound off on social media
- ☐ Other (please specify): _____
- ☐ I do not take any action to help manage stress
- ☐ Do nothing: unable or unwilling to do anything

Rate the extent to which you agree or disagree with the following questions.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
The effects of stress are negative and should be avoided.	○	○	○	○	○
Experiencing stress facilitates my learning and growth.	○	○	○	○	○
Experiencing stress depletes my health and vitality.	○	○	○	○	○
Experiencing stress enhances my performance and productivity.	○	○	○	○	○
Experiencing stress inhibits my learning and growth.	○	○	○	○	○
Experiencing stress improves my health and vitality.	○	○	○	○	○
Experiencing stress debilitates my performance and productivity.	○	○	○	○	○
The effects of stress are positive and should be utilized.	○	○	○	○	○

What is your gender?

- ○ Male
- ○ Female
- ○ Other (please specify):
  [ ]
- ○ Prefer not to answer

What is your race? Please select all that apply.

- ☐ White
- ☐ Black or African American
- ☐ Asian
- ☐ American Indian or Alaska Native
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ Other (please specify):
  [ ]

Are you of Hispanic or Latino origin?

- ○ Yes
- ○ No

What is your age?

- ○ 17 years or less
- ○ 18-22 years
- ○ 23-40 years
- ○ 41-54 years
- ○ 55-73 years
- ○ 74 years or more

What is your current employment status?

- ○ Part-time
- ○ Full-time
- ○ Limited Term Employee (LTE)

How many years have you worked for La Crosse County?

- ○ 1 year or less
- ○ 2-5 years
- ○ 6-10 years
- ○ 11-15 years
- ○ 16-20 years
- ○ 21 years or more

What is your annual household income?

- ○ $24,999 or less
- ○ $25,000-$49,999
- ○ $50,000-$74,999
- ○ $75,000-$99,999
- ○ $100,000 or more
- ○ Prefer not to answer

How many children under the age of 18 are living in your home?

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5+

Which La Crosse County department do you work in?

- ○ Board Chair/County Board
- ○ Clerk of Courts
- ○ Corp Counsel
- ○ County Adminstrator
- ○ County Clerk
- ○ County Surveyor
- ○ District Attorney
- ○ Emergency Services
- ○ Facilities
- ○ Family Court Commissioner
- ○ Finance
- ○ Health
- ○ Highway
- ○ Hillview (including Carrol Heights and Terrace)
- ○ Human Resources
- ○ Human Services
- ○ Information Technology
- ○ Lakeview
- ○ Land Conservation
- ○ Library
- ○ Medical Examiner
- ○ Metropolitan Planning Organization
- ○ Register of Deeds
- ○ Sheriff
- ○ Solid Waste
- ○ Treasurer
- ○ UW Extension
- ○ Veterans
- ○ Zoning
- ○ Other (please specify): [ ]
- ○ Prefer not to answer

What could La Crosse County as an employer do to help you manage your stress?

[ ]

APPENDIX B

Content Validation Jury Panel

CONTENT VALIDATION JURY PANEL

Gary D. Gilmore, MPH, Ph.D., MCHES, Professor and Director of the Graduate Community Health/Public Health Programs (MPH and MS-CHE) in the Department of Health Education and Health Promotion, University of Wisconsin - La Crosse

Robert Jecklin, MPH, Ph.D., Assistant Professor in the Department of Health Education and Health Promotion, University of Wisconsin - La Crosse

Ryan McKelley, Ph.D., LP, HSP, Professor and Associate Chair in the Department of Psychology, University of Wisconsin - La Crosse

Katie Wagoner, MPH, Associate Lecturer in the Health Education and Health Promotion Department, University of Wisconsin - La Crosse

Sue Karpinski, BS, Health Promotion Coordinator in the Department of Health Promotion, Mayo Clinic Health System - Franciscan Healthcare

APPENDIX C

Content Validation Jury Results Summary

CONTENT VALIDATION JURY RESULTS SUMMARY

Content Validation Scale Values

1. NOT ACCEPTABLE: The item has no value as a statement for measuring what it is intended to measure.

2. SOMEWHAT ACCEPTABLE: The item has some value as a statement for measuring what it is intended to measure.

3. ACCEPTABLE: The item is valuable as a statement for measuring what it is intended to measure.

4. VERY ACCEPTABLE: The item is very valuable as a statement for measuring what it is intended to measure.

5. INDISPENSABLE: The item is absolutely necessary as a statement for measuring what it is intended to measure.

(Excerpted from: Gilmore, G.D. The Development, Implementation, and Evaluation of a Family Education Program Incorporating the Concept of Prevention. Knoxville: The University of Tennessee. 1974, 232pp. Dissertation Abstracts International, 35: 2864-B, 1974.)

Survey Questions	Range	Average Rating
Below is a list of things people say cause stress in their lives. Please rate the extent to which you agree or disagree that each of the following stressors impact your life. **Revised:** Below is a list of things people say cause stress in their lives. Please rate the extent to which you agree or disagree that each of the following stressors impacted your life during the last month.	3-5	4
Below is a list of things people say cause workplace stress in their lives. Please rate the extent to which you agree or disagree that each of the following workplace stressors impact your life. **Revised:** Below is a list of things people say cause workplace stress in their lives. Please rate the extent to which you agree or disagree that each of the following workplace stressors impacted your life during the last month.	3-5	4.3
Which of the following do you use to manage your stress? Pleas select all that apply. **Revised:** Which of the following coping strategies have you used during the last month to manage your stress? Please select all that apply.	3-5	4.2
What is your gender?	2-5	3.8
What is your race/ethnicity? **Revised:** What is your race? Please select all that apply. Are you of Hispanic or Latino origin?	2-5	3.6
What is your age?	2-5	3.6
What is your employment status? **Revised:** What is your current employment status?	2-5	3.6
How many years have you worked for La Crosse County?	2-5	4
What is your annual household income?	2-5	3.6
How many children under the age of 18 are living at home? **Revised:** How many children under the age of 18 are living in your home?	2-5	3.6
Which La Crosse County department do you work in?	3-5	4.2
What could La Crosse County do to help you manage your stress? **Revised:** What could La Crosse County as an employer do to help you manage your stress?	2-5	3.8

APPENDIX D

Protecting Human Research Participants Certificate of Completion

PROTECTING HUMAN RESEARCH PARTICIPANTS

CERTIFICATE OF COMPLETION

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Janessa VandenBerge** successfully completed the NIH Web-based training course "Protecting Human Research Participants."

Date of Completion: 09/24/2015

Certification Number: 2502948

NIH National Institutes of Health
Office of Extramural Research

APPENDIX E

Institutional Review Board Approval Letter

INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

UNIVERSITY of WISCONSIN
LA CROSSE

To: Janessa VandenBerge

From: Bart Van Voorhis, Coordinator
Institutional Review Board (IRB) for the
Protection of Human Subjects
bvanvoorhis@uwlax.edu
608.785.6892

Date November 21, 2018

Re: **RESEARCH PROTOCOL SUBMITTED TO IRB**

The IRB Committee has reviewed your proposed research project entitled: ***"As Assessment of Perceived Stress, Stressors, Coping Strategies, and Stress Mindsets among La Crosse County Employees in La Crosse, Wisconsin".***

The Committee has determined that your research protocol will not place human subjects at risk. **The attached protocol has been approved and is exempt from further review per 45CFR46, 46.101(b)(2).**

However, it is strongly suggested that Informed Consent always be used. Remember to provide participants a copy of the consent form and to keep a copy for your records. Consent documentation and IRB records should be retained for at least 3 years after completion of the project.

Since you are not seeking federal funding for this research, the review process is complete and you may proceed with your project.

Good luck with your project.

cc: IRB File

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APPENDIX F

Informed Consent Form

INFORMED CONSENT FORM

Protocol Title:
An Assessment of Perceived Stress, Stressors, Coping Strategies, and Stress Mindsets Among La Crosse County, Wisconsin Employees

Principal Investigator:
Janessa VandenBerge, BS
715.307.7922
vandenbe.jane@uwlax.edu

Faculty Advisor & Emergency Contact:
Dr. Michele Pettit, MPH, PhD, MCHES
University of Wisconsin - La Crosse
1725 State Street
La Crosse, WI 54601
608.785.6789
mpettit@uwlax.edu

Purpose and Procedure:
The purpose of this study is to assess perceived stress, stressors, coping strategies, and stress mindsets among La Crosse County, Wisconsin employees. The study will consist of a survey made available to all La Crosse County employees. All participants must be 18 years or older and be an employee at La Crosse County. The survey will be conducted and is expected to take less than 15 minutes to complete.

Potential Risks:
No more than minimal risks are anticipated in this study.

Rights & Confidentiality:
Participation in this study is completely voluntary. Participants may discontinue participation at any time without penalty. Employment will in no way be affected by choice to participate. Results from this study may be professionally disseminated and presented as de-identified grouped data only. All information collected for the purpose of this study will be anonymous and kept private.

Possible Benefits:
Data from this study will provide insights into how La Crosse County employees perceive stress, as well as insights on stressors, coping strategies, and stress mindsets. Results may be used to guide the development and implementation of interventions to address the workplace stress-related needs of the participants.

Questions:
Questions regarding study procedures may be directed to the principal investigator, Janessa VandenBerge (715.307.7922 or vandenbe.jane@uwlax.edu) or her emergency contact faculty advisor, Dr. Michele Pettit (608.785.6789 or mpettit@uwlax.edu). Questions regarding the protection of human subjects may be addressed to the University of Wisconsin - La Crosse Institutional Review Board for the Protection of Human Subjects (608.785.8124 or irb@uwlax.edu).

Completion of the survey indicates informed consent to participate in this study.

APPENDIX G

Initial Survey Email

INITIAL SURVEY EMAIL

Dear La Crosse County Employees,

The La Crosse County Employee Wellness Committee is partnering with Janessa VandenBerge, a University of Wisconsin - La Crosse Master of Public Health student to assess perceived stress, stressors, coping strategies, and stress mindsets among employees. Information gathered in this assessment will be used to inform future educational or administrative interventions to improve your health.

We value your input and are asking for your participation in an electronic survey. The survey should take less than 15 minutes to complete. Completion of the survey linked below constitutes informed consent to participate in this study. Please click on the link below to complete the survey. The survey will remain open until Friday, January 18th, 2019.

This survey is completely voluntary, and you may withdraw at any time. All information collected for the purpose of this study will be anonymous and kept private. **Please review the attached Informed Consent document for more information.**

https://uwlax.ca1.qualtrics.com/jfe/form/SV_0BPgwZ5Parmb7ox

Thank you for your time.

Sincerely,

Janessa VandenBerge, BS
University of Wisconsin - La Crosse Master of Public Health Graduate Candidate
vandenbe.jane@uwlax.edu
715.307.7922

APPENDIX H

Reminder Survey Email

REMINDER SURVEY EMAIL

Dear La Crosse County Employees,

This is a reminder email regarding your invitation to participate in an electronic survey assessing perceived stress, stressors, coping strategies, and stress mindsets among employees. Information gathered in this assessment will be used to inform future educational or administrative interventions to improve your health.

If you have already completed the survey, thank you for your valuable input. Please do not repeat the survey. If you have yet to complete the survey, we are asking for your participation. Completion of the survey linked below constitutes informed consent to participate in this study. Please click on the link below to complete the survey. The survey will remain open until Friday, January 18th, 2019.

This survey is completely voluntary, and you may withdraw at any time. All information collected for the purpose of this study will be anonymous and kept private. **Please review the attached Informed Consent document for more information.**

https://uwlax.ca1.qualtrics.com/jfe/form/SV_0BPgwZ5Parmb7ox

Thank you for your time.

Sincerely,

Janessa VandenBerge, BS
University of Wisconsin - La Crosse Master of Public Health Graduate Candidate
vandenbe.jane@uwlax.edu
715.307.7922

APPENDIX I

Direct Quotes Related to the Open-Ended Question

DIRECT QUOTES RELATED TO THE OPEN-ENDED QUESTION

Note: The selected quotes were adapted to assure anonymity of survey respondents. Specific and sensitive information was omitted and replaced with an [X].

Issues Related to Management

1. Communication (*n* = 13)
    - "Classes or emails teaching staff the importance of communication in the workplace."
    - "Encourage and facilitate important/crucial conversations. Be willing to fix problems by breaking them first."
    - "Better communication re: potential 40 hour work week."
    - "Better communication and clearer direction."
    - "Better communication with department management."
    - "Communication."
    - "Communicate changes better. Learn new tasks/rules before I do not follow them correctly."
    - "Promote kindness, listening, and understanding across the organization. La Crosse County is a wonderful place to work but we can improve with more effort in these areas."
    - "Improve communication and delivery."
    - "Have clear outlines given of what is expected in each position."
    - "Improve communication between department head and employees."
    - "I think as a whole there are many options, but as a single department, I think supervisors/department heads need to do better communicating amongst their employees."
    - "Better understanding of the workload and high expectations."
2. Too Heavy of a Workload (*n* = 8)
    - "Hire someone to assist in providing [X] to [X]. Job responsibilities keep growing, unable to do it all."
    - "Realize that staff cannot continue to take on more and more duties and extra shifts without sacrificing quality of work and potentially safety."
    - "Give us back some of the staff that were cut, we had [X] staff and went to [X] staff in 1 1/2 years. The workload and expectations did not decrease. My supervisor is so supportive. Without her, I would be sunk."
    - "Lower workload, more realistic expectations."
    - "Manageable caseloads."
    - "Appropriate workload for those that take on additional tasks and responsibilities."
    - "Hire another person to help with the [X] in our office - this has caused so much stress on the staff here."
    - "Hire more workers as the amount of work expected does seem unobtainable at time."

3. Management Style (n = 21)
    - "Recognize and stop the culture of non-inclusion and bullying type behaviors starting at the administrative level and tricking down to hourly staff. Remember that we are here to not only serve the [X] and their [X] but have a duty to each other as co-workers to treat all equally, with respect, and with a human touch and caring attitude - this has been lost as administration does not know their staff personally."
    - "Better servant leadership and communication with department management."
    - "More support and equal treatment amongst staff."
    - "Better management."
    - "Our job is stressful, I think supervisors help as much as possible. At times, it feels like supervisors don't take the time to hear us when we are expressing ideas or stress about a situation. This is sometimes, but at those moments is when I feel the most disgruntled with my job."
    - "Fire my supervisor."
    - "Manage with more transparency."
    - "Stop making our job more difficult by making everyone else's easier. Have our supervisors stop playing favorites and make lazy and manipulative coworkers accountable."
    - "Hire direct management that are team players instead of dictators, managers/supervisors should know their employees jobs."
    - "Improvement with management."
    - "Relieve those in positions of authority who are incompetent, unkind, lack compassion, lack true understanding of various roles in the facility, demanding more of an individual time with no regards or caring how it may affect that person or their personal life, provide poor solutions to problems with no thought or real knowledge, and stop treating people differently - different rules for different people!!"
    - "Require new supervisors to get training. Don't "go out" or "party with" subordinates. Don't lie to employees."
    - "Have supervisors work when we are short staff. Have supervisors work each shift once a quarter to experience the environment."
    - "Provide more training for supervisors to help with day to day staff issues and staff supervision."
    - "Don't make false accusations. If they believe a wrong doing has taken place ask about it with an open mind and consider that not everything is as it appears. Give the benefit of doubt based on that employees past performance and use logic when making accusations. Listen to ideas presented by employees the same way. Don't give more credibility to an idea coming from someone based on their popularity. Treat everyone the same. Again, an employee's value should be based on their past and present performance and not how well liked they are on a personal level. This is one of the main differences between what makes a supervisor good or bad at their job. These are but a few points out of many that could make La Crosse County a better place to work."

- "Actually, listen to an employee when they have an issue with something and truly try to resolve or address it with true intent on trying to come up with a resolution. Many times, employees are told 'what they want to hear,' something to appease them, and that's as far as it goes. Things don't get resolved that way."
- "Managers that manage and not just oversee."
- "Check in every once in a while, be willing to completely listen to workers, and if there is anything that can be done to help, try to come to a solution on it."
- "Start doing hands on management of the [X] by the [X] and [X]. Send [X] to management & supervisory classes. Too many other things too list!"
- "Expect leadership from supervisors."
- "Hold people accountable for their actions."

Issues Related to Work Benefits

1. Compensation (*n* = 14)
    - "Identify that you cannot expect exempt/salaried staff to consistently work 50+ hours per week without compensation and do not marginalize them when they bring the problem up to management."
    - "Decrease health insurance costs."
    - "Stop cutting health benefits. Give decent raises."
    - "Pay more."
    - "Working 40 hours without compensation."
    - "Increase pay."
    - "Give us a better pay raise."
    - "Pay raises larger than the annual cost of living adjustment, which doesn't even cover the cost of inflation expected for the coming year."
    - "Remove stressors like medical insurance that is deficient."
    - "Increase compensation."
    - "Give us a larger pay raise than the 'cost of living' increase."
    - "Increase the salary I receive since they reduced it and we moved to 40 hours."
    - "Better pay, or at least offer benefit options that don't take away 50% of my gross pay."
    - "Lower health insurance deductible."
2. Flexible Working Opportunities: Work from Home (*n* = 13)
    - "Work from home support."
    - "Allow for work from home."
    - "Consider allowing a work from home/remote policy when applicable/appropriate."
    - "Work from home policies."
    - "My stress has come from having to resolve conflicts, for which I have training. La Crosse County could allow and welcome (culture shift) working from home without negative stigma."
    - "Continue to look at ways to improve efficiency and streamline county, department, and division decision making. Our department is a business within the county as a large business, but decisions that need high level county approval occur very slowly (i.e., budget, personnel issues, and work from home)."

- "Be more flexible, as in having days that you can work from home."
- "Offer work from home!"
- "Allow us to occasionally work from home (fewer distractions and easier to focus)."
- "Ability to work out of office to improve productivity (to reduce distractions, interruptions, and staff conflict)."
- "More flexibility, for example being able to work from home or flex hours easier."
- "Telecommute opportunities 1-2 days a week."
- "Work from home opportunities."

3. Flexible Working Opportunities: Work Schedule (*n* = 14)
    - "Job hour flexibility."
    - "Continue flexibility for family or mental health when possible."
    - "Continue to encourage flexible hours to allow for work/life balance."
    - "Provide the opportunity to flex your schedule to start earlier and be done earlier in the day."
    - "Flexibility."
    - "Continue to allow flexible work schedules."
    - "I really appreciate some flexibility. I don't mind working hard or extra, but do enjoy being able to take part in my family activities."
    - "More flexibility."
    - "Work 4 day work weeks instead."
    - "More flexibility."
    - "Flexibility with hours throughout the whole week including weekends to accommodate working parents and children."
    - "Offer flexible work schedules (i.e., 4-10 schedules for hourly staff)."
    - "Offer more flexibility with time off and hours worked."
    - "Flexible schedule."
4. Vacation: Bringing Back Vacation Buy-Up (*n* = 20)
    - "Reinstate the vacation buy-up."
    - "Give staff more vacation time away from work. Go back to allowing staff to buy time if they so choose to do so."
    - "Bring back vacation buy-up."
    - "Bring back vacation buy-up. It was my number one way to relieve stress!!"
    - "Bring back the vacation buy-up program so that we can 'bank' vacation hours if needed."
    - "Bring vacation buy-up back."
    - "Allow vacation buy-up to resume; this is so important to me due to health issues and not having enough sick time. This has been a big loss for me and source of stress."
    - "Vacation buy-up."
    - "Vacation buy-up."
    - "Offer more vacation through vacation buy-up. It would be nice to take some 'me time.'"

- "Bring back vacation buy-up."
- "Bring back the option of vacation buy-up please!!!"
- "Continue to allow the vacation buy-up program to all staff to have time to take off for themselves to decrease burnout."
- "Bring back vacation buy-up."
- "Vacation buy-up for staff who are employed less than 5 years."
- "Bringing back vacation buy-up option/benefit."
- "Vacation buy-up would allow for me to have time outside the workplace to destress after traumatic incidents due to the job."
- "I think it would be wonderful and helpful if we could have the vacation buy-up back."
- "Give back the vacation buy-up so I feel that I can take more time off of work to be able to get my kids from school, etc. I felt when I had it, I was able to take more time off to spend with them and now I can't seem to accrue time and I feel like that working mom who can't take time off with her kids."
- "Re-evaluate the vacation earing schedule to allow for increased vacation time. Bring back vacation buy-up not because we don't have enough work to do but to alleviate stress and burnout from the high level/fast paced work we do."

5. Vacation: More Vacation Days (n = 11)
    - "Increase vacation time."
    - "More vacation time to manage personal life issues."
    - "Offer more vacation."
    - "Give years of experience in [X] related fields when hiring to adjust for appropriate amounts of vacation time. This was non-negotiable even though leaving a position with 5 weeks' vacation."
    - "More vacation time."
    - Give us back the week of vacation that you took from us after Act 10."
    - "More vacation time."
    - "Additional time off always works for me!"
    - "More vacation time."
    - "Provide more vacation time each year, to allow time off to prevent burnout."
    - "Give more paid time off."

Other Workplace Stress Management Issues

1. Combining Vacation/Sick Time into PTO (n = 3)
    - "Rather than offering sick time and vacation time, offer PTO that can be used for sick and/or days off, and is accrued at a faster rate than current vacation."
    - "Go from vacation/sick time to straight PTO."
    - "Combine sick and vacation time in one spot to be used as needed."
2. Offering Employee Recognition (n = 4)
    - "Recognize the effort being put in by staff taking on additional responsibilities and extra shifts by providing a sincere face-to-face thank you."
    - "Recognize people for their hard work."
    - "Be more appreciative of the workers that are pulling more of the weight than others."

- "Positive feedback/reward."

3. Providing Equal Services at Remote Sites (*n* = 2)
   - "Services at remote sites like the [X]."
   - "Have the accommodations and extra time to exercise on equipment as the [X] has."
4. Incentivizing Programs (*n* = 2)
   - "Wellness incentive (e.g., health premium help or money stipend for taking care of yourself)."
   - "Further incentivize programs that improve health, or prevent negative health outcomes. This could be things such as physical activity (e.g., paid physical activity time and better discounts at health facilities), healthy eating (e.g., discounts on CSAs), and facilitated mental health or relaxation activities."
5. Keeping Massages or Offering them Free of Charge (*n* = 4)
   - "Continue massage program."
   - "Keep massages."
   - "Free massages."
   - "Free massage."
6. Offering Wellness Activities Outside of Normal Business Hours (i.e., expand fitness center hours and classes) (*n* = 5)
   - "Provide the 2nd and 3rd shift workers access to fitness room for breaks."
   - "Make the fitness center 24 hours."
   - "Group fitness class Monday through Thursday starting at 4:45PM."
   - "Offer classes outside of business hours."
   - "Continue to offer wellness programs and possibly expand things in the fitness center to offer things (i.e., classes) before or after hours, not just at lunch time."
7. Offering Onsite Childcare (*n* = 2)
   - "Onsite childcare."
   - "Have options for reliable childcare when needed."
8. Providing Opportunities for Professional Growth/Advancement in One's Career (*n* = 3)
   - "Encourage and offer more opportunities for personal/professional growth."
   - "Have more opportunities to advance in one's career."
   - Personal growth training/seminars with guest speakers."
9. Being Payed to Work Out (*n* = 3)
   - "Paid time to exercise, up to 2 hours a week like other employers."
   - "Allow me to work out on paid time."
   - "Paid for workers to work out (i.e., fitness classes)."
10. Promoting a Culture of Wellness (*n* = 2)
    - "Promote well-being in policies, practices, and day-to-day activities."
    - "Promote culture of conducting wellness activities throughout day (more than wellness center, walking, etc.)."