

IDENTIFICATION OF PERCIEVED STRESSORS WITHIN  
RECREATIONAL LIFEGUARDS

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IDENTIFICATION OF PERCIEVED STRESSORS WITHIN  
RECREATIONAL LIFEGUARDS

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Abstract: Utilization of recreational aquatic facilities has become increasingly popular. With many recreational aquatic facilities maintaining operation year around, the increase usage of recreational aquatic facilities may give rise to more safety concerns. To aid in the prevention of drownings, many recreational aquatic faculties have created aquatic safety teams, which include recreational lifeguards. Recreational lifeguards are responsible for recognizing emergencies, making decisions during emergencies and providing effective care during emergencies. Depending on the recreational facility, lifeguards may have additional responsibilities. Some if not all, of these responsibilities may create stressors within recreational lifeguards. This study surveyed recreational lifeguards from different recreational aquatic facilities to identify possible stressor(s) associated with recreational lifeguards. Using the National Institute of Occupational Safety and Health (NIOSH) Generic Job Stress Questionnaire (NIOSH, n.d) this research evaluated if there are stressors related to the job of being a recreation lifeguards and if there are any differences in recreational lifeguards stressors related to gender and years of experience.

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## **CHAPTER I**

### **INTRODUCTION**

#### **Introduction**

Utilization of recreational aquatic facilities has become increasingly popular, specifically in the United States, having estimated 80 million Americans participate in recreational aquatic activities (Erdtmann, Bonifer, Deibert, Espino, Fanelli, et.al, 2009). With numerous recreational aquatic facilities maintaining operation year around, swimming has been identified as the second most popular recreational activity specifically among children (Otto, 2006). The increased usage of recreational aquatic facilities may give rise to more safety concerns (Branche & Stewart. 2001). According to the National Vital Statistics Report Death: Final Data for 2017 (2019) a total of 3,709 accidental drownings occurred in 2017. To aid in the prevention of drownings, many recreational aquatic facilities have created aquatic safety teams. The focus of aquatic safety teams is to prevent drownings and increase safety. The responsibilities of these teams generally include posting signs, encouraging individuals to swim in protected areas, informing the patrons about facility features like water depth, and creating an effective risk management plan which often include, lifeguard surveillance (Branche & Stewart 2001).

Lifeguards play a vital role in supervising the safety of patrons in recreational aquatic facilities. Lifeguards are educated through a training program which includes how to recognize emergencies, how to make decisions on what actions to take in emergencies and effective care to give during emergencies which is generally their primary responsibilities. Depending on the recreational aquatic facility, lifeguards may have additional responsibilities like communicating facility policies, cleaning of the facility, completing transactions, and participating in training. Some, if not all, of these responsibilities may create stressors within recreational lifeguards. A stressor is defined as a “physical or psychological stimulus” to an experience, which triggers unpleasant or pleasant emotions (Hart & Cooper, 2001, pg. 94; Quick, Thomas, Wright, Adkins, Nelson, Quick, 2013, p.13).

If responsibilities like surveillance, responding to emergencies, giving effective care, and other duties are creating stressors in recreational lifeguards, their quality of work may be impacted. Stressors can impact the quality of work both negatively and positively. A few of the responsibilities which could be negatively impacted could be surveillance, responding to emergencies, or giving effective care. If the lack of quality of work impacts these responsibilities, there may come an increase in recreational aquatic facility accidents or emergencies, including drownings. This research surveyed recreational lifeguards to help identify common stressors which, in turn may aid in organizational stress management and prevention of future drownings.

### **Purpose of the Study**

The purpose of this study was to identify possible common stressor(s) associated with recreational lifeguards, by using the National Institute of Occupational Safety and

Health (NIOSH) Generic Job Stress Questionnaire (NIOSH, n.d). This research utilized the Theory of Preventive Stress Management (TPSM). The TPSM combines the preventive medicine model and stress response model to create the prevention stress management model to help organizations with stressor identification, as well as, prevention of organizational stress. Occupational stress management could help organizations by identifying possible stressors and then providing preventive stress management to the organization. The research questions used for this research are as follow:

### **Research Questions**

- **Research question 1:** Are there stressors associated with the job of being a recreational lifeguard?
- **Research question 2:** Are there any differences in recreational lifeguard stressors related to gender?
  - **H1: Alternative Hypothesis:** There are significant differences in stressors between recreational lifeguards identifying as male and female.
  - **H2: Null Hypothesis:** There are no significant differences in stressors between recreational lifeguards identifying as male and female.
- **Research question 3:** Are there any differences in stressors related to recreational lifeguard years of experience?
  - **H1: Alternative Hypothesis:** There are significant differences in stressors received by recreational lifeguard with less than 1 year, 1-2 year(s), 2-3 and 3 and more years of experience.

- **H2: Null Hypothesis:** There are no significant differences in stressors received by recreational lifeguard with less than 1 year, 1-2 year(s), 2-3 and 3 and more years of experience.

### **Significance of the Study**

The increase of participation in recreational aquatic facilities has created an environment that needs more attention to stress management and drowning prevention (Otto, 2006). Development of aquatic safety teams, which include employment of recreational lifeguards, can be part of this preventive measure as well as identifying possible stressors which could affect the quality of work in recreational lifeguards. The data from this research may contribute to helping recreational aquatics facilities understand if stress management prevention will assist in drowning prevention.

### **Assumptions and Limitations**

The goal for this study was to identify possible stressors received by recreational lifeguards currently employed at recreational aquatic facilities. Participation in this study is voluntary and will only include lifeguards 18 years and older. Due to the topic of this study, certain limitations exist. Administration of the questionnaire will be done via online system (i.e. email links of attachment). With using online systems to send out the questionnaire, there will be no control in some variables such as: time of day, mood, pace, and location when completing the questionnaire. The second limitation with the questionnaire is length. The NIOSH Generic Job Questionnaire has 22 modules while this current study will only use 6 out of the 22 modules. This survey is estimated to take 15 minutes from beginning to end to complete.

The research study is affixed on the assumption that participants answer completely and honestly because the information will be used to identify stressors in recreational lifeguards. To counteract and minimize impact of limitations within this study, questionnaires that are incomplete will be omitted from the study. Limitations aside, this study may allow for more understanding of occupational stressors that exist in recreational lifeguards and if stress management prevention is linked to drowning prevention.

### **Definition of Terms**

The following terms have been operationally defined to give clarity to how these essential terms are used in this study:

- Bullying: “repeated and persistent negative acts towards one or more individual(s), which involve a perceived power imbalance and create a hostile work environment” (Salin, 2003, p.1214-1215).
- Civility: “a behavior involving politeness and regard for others in the workplace” (Anderson & Pearson, 1999, p.454).
- Harassment: “any negative interpersonal interaction that affects the terms, conditions, or employment decisions related to an individual’s job, or creates an intimidating, hostile, or offensive working environment” (Neall & Tuckey, 2014, p. 225).
- Incivility: “rudeness and disregard for others” (Anderson & Pearson, 1999, p.455).
- Job Performance: “task performance, defined as those activities that are directly involved in the accomplishment of core job tasks, or activities that directly

support the accomplishment of tasks involved in an organization's technical core” (Rich & Lepine & Crawford, 2010, p.620).

- Job satisfaction: “how people feel about their jobs and different aspects of their jobs. It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs” (Spector, 1997, p.2).
- Lifeguards: an individual who is “responsible for the lives of people who are participating in a variety of aquatic activities, with a legal responsibility to act in an emergency” (Shook et al., 2016, p. 3).
- Organization: an environment with working individuals which work is done and completed.
- Organizational Stress: “is the mind-body arousal resulting from physical and /or psychological demands associated with a job” and referred to as job stress (Quick, Wright, Adkins, Nelson, & Quick, 2013, p.19)
- Recreational Aquatics: a place in which organized water activity is completed.
- Stress: “experience of unpleasant emotions such as tension, frustration, anxiety, anger, and depression” which is triggered by a “physical or psychological stimulus” (Hart & Cooper, 2001, p. 94; Quick, Wright, Adkins, Nelson, & Quick, 2013, p.13).
- Stress Response: “is the generalized, patterned, unconscious mobilization of the body's natural energy resources” (Cooper, 2000, p.249).
- Stressor(s): “physical or psychological stimulus” to an experience, which triggers “unpleasant emotions” (Quick, Wright, Adkins, Nelson, & Quick, 2013, p.13; Hart & Cooper, 2001, p. 94).

- Patron Surveillance: “keeping a close watch over people in the facility” to minimize and react to incidents that need intervention (Bonifer, et al. 2007, p.3).
- Preventive medicine: is the part of medicine which is meant to “prevent health problems, disorders, illness, disease and epidemics” (Cooper, 2000, 247)

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **Lifeguarding**

From the 1920's through the 1950's, cities began investing thousands of dollars in pools due to the popularity (Wiltse, 2007). After conducting a survey, The National Recreation Association reported that the use of pools was the same as other leisure-time activities such as going to the movie theatre (Wiltse, 2007). With the increase of recreational aquatic facility usage, aquatic rescues continue to take place. The Pool or Spa Submersion: Estimated Nonfatal Drowning Injuries and Reported Drownings, 2019 Report (2019) stated 1,071 drownings occurred from 2014 through 2016 from accidental drownings. More attention was given to drowning preventions due to drownings continuing to occur. One of the preventive measures some recreational aquatic facilities took was, creating aquatic safety teams, which consist of employment of lifeguards.

Lifeguarding, in the United States, dates as far back as the 1700's when the United States Lifesaving Service began and became part of the U.S. Coast Guard. In 1912, the Young Men's Christian Association (YMCA) organized the YMCA Lifesaving



Service to train individuals on lifesaving skills. This was the first year individuals started to become trained in lifeguard techniques in the United States. In 1914, American Red Cross Commodore, Wilbert E. Longfellow followed suit, starting Red Cross Lifesaving Corps. This program focused on training volunteers on lifesaving methods and resuscitation techniques for aquatic activities (Longfellow, 2014).

In the later years, American Red Cross switched Longfellow's into an educational swimming program currently known as Longfellow's Whale Tales. This program was implemented to help instruct swim lessons to citizens to prevent drownings from occurring. American Red Cross created a separate lifeguard program which trains and educates community members in lifesaving techniques including water rescues, cardiopulmonary resuscitation, and first aid. Other lifesaving organizations followed suit including the United States Lifesaving Association (USLA) founded in 1964, and Jeff Ellis Associates found in 1980s (Phillips, 2011). A few years later, in 1983 and 1986, American Red Cross, YMCA, and Boy Scouts of America (BSA) joined together to expand and develop a nationally ranked lifeguard training program. With effective aquatic life saving training, established, by 2000's, The Center for Disease Control, reported a decline in accidental drownings that had taken place with only 1.29 deaths per 100,000 people (Center for Disease Control, 2012). However, drownings are still one of the highest causes of death in the United States recording 18% which the highest recorded drowning percentage out of 60 countries (Lin, Wang, Lu, & Kawach, 2014).

### **Roles in Recreational Lifeguards**

Most recreational aquatic facilities have a staff aquatic safety teams, which includes lifeguards. For an individual to earn a lifeguard certification, they must attend a

certified lifeguard training (i.e: American Red Cross, Ellis Associates, Starguard). Lifeguards are trained in water rescues, cardiopulmonary resuscitation, automatic external defibrillator, and first aid.

In general lifeguards' primary responsibilities consist of surveillance of patrons, responding to emergencies, and providing effective care (Bonifer, et al. 2007). Secondary responsibilities of lifeguards typically range from completing reports and records, performing maintenance or cleaning as needed, and checking facility for any hazardous conditions which could lead to accidents or injuries (Bonifer, et al. 2007). Due to the job responsibilities associated with the job of a lifeguard, stressors may cause physical or psychological stimuli which could impact lifeguards.

## **Stress**

Throughout literature, stressor(s) and stress has been operationally defined in several ways. To provide clear understanding and communication stressor(s) will be defined as "physical or psychological stimuli to an experience," which triggers "unpleasant emotions" (Quick, Wright, Adkins, Nelson, & Quick, 2013, p.13; Hart & Cooper, 2001, p. 94). Stress will be defined as "experience of unpleasant emotions such as tension, frustration, anxiety, anger, and depression") which is triggered by a "physical or psychological stimulus" (Hart & Cooper, 2001, p. 94; Quick, Wright, Adkins, Nelson, & Quick, 2013, p.13). Identified as one of the leading factors, stress is affecting organization, by declining quality of work (Cooper, Dewe & O'Driscoll, 2001).

## ***Stressors from Work***

Occupational stress is not only exclusive to professions such as nurses, firefighters, police officers, and supervisors, but can include stress within recreational

lifeguards, as well. Stephen Fineman (2003) described the twentieth and twenty-first century as the “Stress Age”, where stress within the workplace has become accepted as an excuse for decreased productivity, increased absenteeism, and increased health problems. Occupational stress within lifeguards may negatively impact their productivity at work (i.e. vigilance, reaction time, productivity) (Health Advocate, 2009). Stress can cause decreased vigilance and reduces memory which could cause an inability to identify and save a drowning victim (Kowalski-Trakofler, Vaught, & Scharf, 2003). The American Institute of Stress (n.d.) has reported statistical data which supports the increase in occupational stress over the years from workload, pressure at work and workplace bullying.

### ***Job Responsibility***

Some jobs like firefighters, police officers, nurses, and lifeguards, are identified as stressful jobs due to the nature of the responsibilities within their occupation. Some of these responsibilities may be effective at the time of employment and some of these responsibilities could go into effect in the future of an individual’s career. Working individuals will encounter multiple responsibilities throughout their career, some responsibilities could fluctuate causing changes in work factors, for example job demands. Job demand is viewed as “those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (i.e., cognitive or emotional) effort and therefore associate with certain physiological and/or psychological costs” (Schaufeli & Bakker, 2004, p.296). Occasionally, job demand can have negative impacts which places this work factor (job demand) as a possible stressor. Job demand can present both physical and psychological demands on an individual. For

example, workload can have both physical and psychological demands on an individual.

### ***Workload***

As labor relations shift and the competitiveness of organizations continue to increase, modifications to workload will continue to change. The American Institute of Stress (n.d.) “showed that roughly half of workers (48%) say they at least sometimes have too many unreasonable deadlines and/or too much work to do and that 42% feel they are sometimes, rarely or never having adequate control or input over their work duties” (p.2). Workload is perceived as the job demands and the capacity of an individual to accomplish those job demands (MacDonald, 2003). Workload can be altered in many ways within an organization. For example, funding alterations, staffing shortage, and increase in participation can create a heavier workload. If workload increases, then the ability of an individual to manage task demands will cap due to workload and performance (MacDonald, 2003).

The International Labor Organization shows “both quantitative workload (the amount of work to be done) and qualitative workload (the difficulty of work) have been associated with stress” (Workplace Stress, 2016, p.3). Some individuals have reported to have increased stress levels due to their workload because the lack of control they have over their work duties. When investigating the factor of workload and the relationship this had with workplace stress, evidence was also found that workload can also increase the pressure a working individual feels. Pressure can be influenced by deadlines or completing tasks in a timely manner. A statistical reporting in The American Institute of stress (n.d.) stated “38% [Americans] say they feel more pressured at work this year” (p.2).

As example when lifeguards work under pressure is when they respond to emergencies. In aquatic emergencies, where lifeguards are present, working under pressure, and making decisions in the first few seconds and minutes could prevent life-long damage and/or death. During most emergencies, decision making and judgements about the situation have to be made under pressure and prolonged stress (Kowalski and Vaught, 2003). Job responsibilities, specifically related to workload (i.e. amount of work and pressure), have shown to be a stressor in working individuals.

Job responsibilities all require some level of vigilance. Vigilance is the “state of readiness to detect and respond to certain small changes occurring at random intervals in the environment” (Mackworth, 1970,158). Covered in the American Red Cross Lifeguard Management handbook, the “primary responsibility of a lifeguard is to ensure patron safety and protect lives—including their own” (Bonifer, et al. 2007, p.3). To ensure patron safety lifeguards, perform patron surveillance defined as, “keeping a close watch over people in the facility” (Bonifer, et al., 2007, p.3). When lifeguards are on patron surveillance, vigilance is at a high state due to the concurrent need for preparedness and responsiveness to changes within the recreational aquatics’ facility. Galinsky, Rosa, Warm, and Dember (1993) found working individuals who accomplished a vigilant task would report amplified stress levels. Vigilance could act as a stressor in lifeguards due to their vigilant job responsibilities.

### ***Work Environment***

The environment in which an individual works has presented as a stressor. Stress due to environmental conditions will influence an individual's productivity, performance, and health. Work environments which change frequently can set an unstable working

environment leading to increased stress. Aspects of the work environments that have presented as stressors are noise, light and temperature (i.e. humidity or air conditioning) (Vischer, 2007).

### **Noise**

Work environments can have expected noise (i.e. music or group discussions, tv playing) and unexpected noise. The National Institute Occupational Safety and Health (NIOSH) (1998) recommended any individual who encounters noise only be exposed to 85 decibels A-weighted (dBA) for an eight-hour work shift. Exceeding 85 dBA in the workplace can be done by music, group talking, machinery, and a combination of all three. A typical conversation noise level is around 60-70 dBA (Decibel Level Comparison Chart, n.d.). Noise which is higher than the recommended levels can promote distraction and health consequences which present as a stressor leading to increased stress levels. For lifeguards, noise will originate from patrons' conversations, facilities machinery and from possible music. Lusk, Hagerty, Gillespie, and Caruso (20010) stated "exposure to noise acts a stressor", which impacts stress levels and influence productivity, performance and health (p. 273). Noise is not the only environmental factor which has been studied as a stressor among lifeguards. Lighting has also been seen to cause stress within working individuals.

### ***Lighting***

Some jobs are located inside a building and some jobs are located outside. Depending on the location of the job, lighting will differ. The lighting for the work environment will derive from either natural light (i.e. sunlight) or artificial light (i.e. light bulbs, lamps etc.). Natural lighting and windows have been shown to contribute to

positive attitudes, behavior, and health with individuals who have daily access to this type of light. Leather, Pyrgas, Beale, and Lawrence (1998) discovered working individuals who have access to nature or windows have lower levels of stress due to the opportunity to recover from mental fatigue. They also found the working individuals who have access to nature and windows have elevated cognitive processing which increases productivity and decreases workload due to them being able to finish tasks during work which decreases stress. Working environments could provide sources for natural light from either a window or door giving employees access to different types of light.

Lifeguards who work indoors can have less access to sunlight which could be diminutive and small due to facility layout. Lighting for lifeguards who work inside will occur from artificial lighting and is reported to be stressful, draining, and creates a harder work environment due to inadequate levels of lighting (Applebaum, Fowler, Fiedler, Osinubi, & Robson, 2010). Inadequate lighting or natural lighting in aquatic facilities could act as a stressor through influencing productivity and performance in lifeguards.

### ***Temperature***

Working environments where temperatures can affect an individual's occupational comfort could pose as a physiological stressor as well. Occupation Safety Health Association (OSHA) reports temperatures below 91°F at risk for heat stress is low. OSHA reports when temperatures reach greater than 91°F heat related stress precautions should be implemented. Individuals whose job requires them to be in direct sunshine (i.e. lifeguards) can increase their heat index consumption by 15°F due to the direct sunlight (Jacklitsch, Williams, Musolin, Coca, Kim, & Turner, 2016). For lifeguards who work at an outdoor pool over the summer, many are at increased risk of

heat stress due to the exposure to direct sunlight. Lifeguards who work in an indoor recreational aquatics' facility are exposure to temperatures, which could present as a stressor due to the increase in humidity, poor ventilation, or lack of air conditioning (Jacklitsch, Williams, Musolin, Coca, Kim, & Turner, 2016). The critical responsibilities and decisions which lifeguards perform could have impaired effects by thermal stressor, specifically heat, humidity, poor ventilation and lack of air conditioning. Identifying if thermal stressors act as factors in lifeguards' stress, will allow aquatic management teams and supervisors to address this topic as needed to ensure effective productivity, performance, and health in all lifeguards.

### ***Danger and Hazards***

The last work environment stressor noted has to do with the danger and hazards associated with the job. Occupations which are identified as having higher risk for work hazards like chemical hazards, legal responsibilities, and risk of one's health can pose additional stress to a working individual. Cooper, Dewe, and O'Driscoll (2001) discussed that most individuals who encounter danger will steer away from thinking or worrying about the danger. This could pose a threat due to injury or not being mindful about the dangers which the task entails. In lifeguards, working hazards could be a stressor due to the chemicals (i.e. sodium hypochlorite), legal responsibilities, and risk for individuals physical or mental health.

The stressors within the working environment can derive from noise, lighting, temperature and working hazards. Every individual will experience a different work environment in which some of these stressors could be isolated and can happen concurrently (Cooper & Dewe & O'Driscoll, 2001). Duration of tolerance for



uncomfortable working conditions will fluctuate for each individual, and can cause or create stress, and possibly impacting work productivity, and performance.

### ***Workplace Civility***

**Civility.** Civility in the workplace can be perceived differently depending on how an individual perceives work norms like behavior and beliefs and attitudes in the workplace. Civility in this study is defined as “a behavior involving politeness and regard for others in the workplace” (Anderson & Pearson, 1999, p.454). Civility is more than being polite to co-workers, but also about the positive interactions that are held and relationships which are maintained. For organizations to have civility, organizational leaders must create an open trusted relationship amongst all employees (Reina & Reina, 1999). If work norms are perceived differently by organizational employees, there is a higher chance for incivility in the workplace.

**Incivility.** Workplace culture can influence a positive but also negative environment leading to incivility. Workplace incivility is defined in this research as “rudeness and disregard for others” (Anderson & Pearson, 1999, p.455). Incivility within the workplace could stem from many different aspects. Four main aspects being focused on are behavior, attitude, bullying, and interpersonal relationships.

**Intimidating, Tormenting, Harassing and Anger.** Negative behavior and attitude like intimidating, tormenting, harassing and anger are all are way in which incivility can arise in the workplace. This type of behavior can originate from organizational changes, budget cuts, restructuring and more this could lead to increased workload for some individuals (Salin, 2003). Behavior and attitude can stem from feelings. How one is feelings can fluctuate depending on what an individual is

experiencing. Negative feelings (i.e. anger) are subjective in nature and can appear as psychological or physiological response to a situation. For example, anger can be a psychological feeling which can lead to a negative behavior or attitude. Anger can originate from added responsibilities, changes in work schedule or workplace bullying. Negative behavior specifically bullying in the workplace has shown “higher turnover rates, and intent to leave organization, high absenteeism, and decreased commitment and productivity (Salin, 2003).

**Interactions.** Incivility can also appear as negative interactions between co-workers, for example bullying amongst co-workers or supervisors. Saline (2003) defines bullying “as reported persistent negative acts towards one or more individual(s), which involve a perceived power imbalance and create a hostile work environment” (p.1214-1215). The United States Workplace Bullying Survey from 2017 reported “thirty million American workers have been, or are now being, bullied at work”, placing workplace bullying as an epidemic for all organizations (p.2). Nielsen, Glaso, and Einarsen (2012) explained some examples for workplace bullying to be “involves (involving) exposure to verbal hostility, being made the laughingstock of the department, having one’s work situation obstructed, or bring socially excluded from the peer group” (pg.196). Bullying is identified as a workplace stressor due to the impact it has on an individual’s mental and emotional health. When an individual is being bullied, they may feel alone or powerless leading to scary and stressful situations (Fineman, 2003) which, in turn, puts them in a place for decreased productivity, performance, and individual health.

## **Interpersonal Relationships**

Interpersonal relationships are the last aspects, in this review, in which incivility can be presented in the workplace as a stressor. Interpersonal relationships in the workplace are important due to the social support they provide for everyone (Frone, 1992). “The quality of human relationships at work seems to play an important role in the perception of stress” (Appelberg, Romanov, Honkasalo, & Kkoskenvuo. 1991. p.1051). Having interpersonal relationships at work provides understanding of task, goals, and responsibilities for employees which in turn has shown positive performance (Tran, Nguyen, Dang, & Ton, 2018). With majority of organizational employees spending most the workday interacting interpersonal relationships are important to maintain (Caillier, 2017). By engaging with others in decision making, co-workers have the opportunity to build and maintain relationships and also provide educational feedback. (Khoa, Nguyen, Dang, & Ton, 2018).

Working individuals who are given educational feedback, are reported to have high levels of motivation and commitment to their job. Tran, Nguyen, Dang, & Ton (2018) specified that individuals who are committed to their job report high job satisfaction, which in return, minimized possible occupational stress. The continuous communication, support, assistance with task and rewards have all been reported to be positive indicators in interpersonal relationships to ensure these relationships do not turn into stressors (Cohen, Gottlieb & Underwood, 2004).

Interpersonal relationships are important to reduce occupational stress within all organizations (Caillier, 2017). With a large majority of lifeguards being in the younger age range, 15 years old to 30 years old, is essential for supervisors to give support,

positive feedback, and knowledge so these individuals can grow. Making sure lifeguards have positive social relationships will help reduce possible stressors (Caillier, 2017).

### **Theory of Preventive Stress Management**

Preventive stress management is an “organizational philosophy and set of principles that uses specific methods for promoting individuals and organizational health while preventing individuals and organizational distress” (Quick, Wright, Adkins, Nelson, Quick, 2013, p.24) The five principles which the Preventive stress management philosophy is created from include:

1. “Individual and organizational health are interdependent”
2. “Leaders have a responsibility for individual and organizational health”
3. “Individual and organizational distress are not inevitable”
4. “Each individual and organization reacts uniquely to stress”
5. Organizations are ever changing, dynamic entities” (Cooper, 2000, p. 247).

These principles are extended into a theory by joining the preventive medicine model and stress process in organizational framework.

### ***Preventive Medicine Model***

Preventive medicine is the part of medicine which is meant to prevent “health problems, disorders, illness, disease and epidemics” (Cooper, 2000, p.247). Preventive health prevention was focused on chronic diseases due to the progression of stages which include exposure to illness, early symptoms, and incapacitating disease. Preventive medicine provides an opportunity to give both preventive measures and treatment options to individuals at each stage of disease. Preventive measures are aimed to “slow, stop or

reverse the progression of the disease” (Cooper, 2000, p. 248). Primary prevention is used to reduce health risk and exposure. While the second prevention is early detection and intervention of disease (Cooper, 2000), the last prevention is therapeutic decisions. This includes treatment options, maintaining comfort, and attempting to restore function (Cooper, 2000). Chronic diseases are inevitable in individuals, but evidence has been provided to preventive diseases even when exposed to health risk (Cooper, 2000).

### ***Stress Process Model***

The stress response, defined by Cooper (2000), “is the generalized, patterned, unconscious mobilization of the body’s natural energy resources” (p.249). This is also known as the general adaption syndrome, founded by Hans Selye, or the fight-or-flight response. Specific attention was drawn toward the psychological stress response process in the workplace (Cooper, 2000; Quick, Wright, Adkins, Nelson, & Quick, 2013). Quick, Wright, Adkins, Nelson, & Quick (2013) stated that Selye’s framework of general adaption syndrome (GAS) consist of three stages: alarm, resistance, and exhaustion. The stress response or emergency response is derived from the alarm stage, where an individual “struggles, fights, and is [exposed] to health risk and distress” (Cooper, 2000; Quick, Wright, Adkins, Nelson, & Quick, 2013). Specific focus was aimed toward organizational stress response due to the chronic disease seen in working individuals (Cooper, 2000).

Researchers identified triggers such as, organizational demands, environment, and conflict as the main triggers for organizational stress (Cooper, 2000). Researchers observed the long-term effects stress could cause to individuals with the belief that stress would not kill individuals (Quick, Wright, Adkins, Nelson, & Quick, 2013). To aid in

managing and preventing organizational stress the Preventive Stress Management Model was created by join both preventive medicine model and stress response model (Cooper, 2000; Quick, Wright, Adkins, Nelson, & Quick, 2013).

### ***Preventive Stress Management Model***

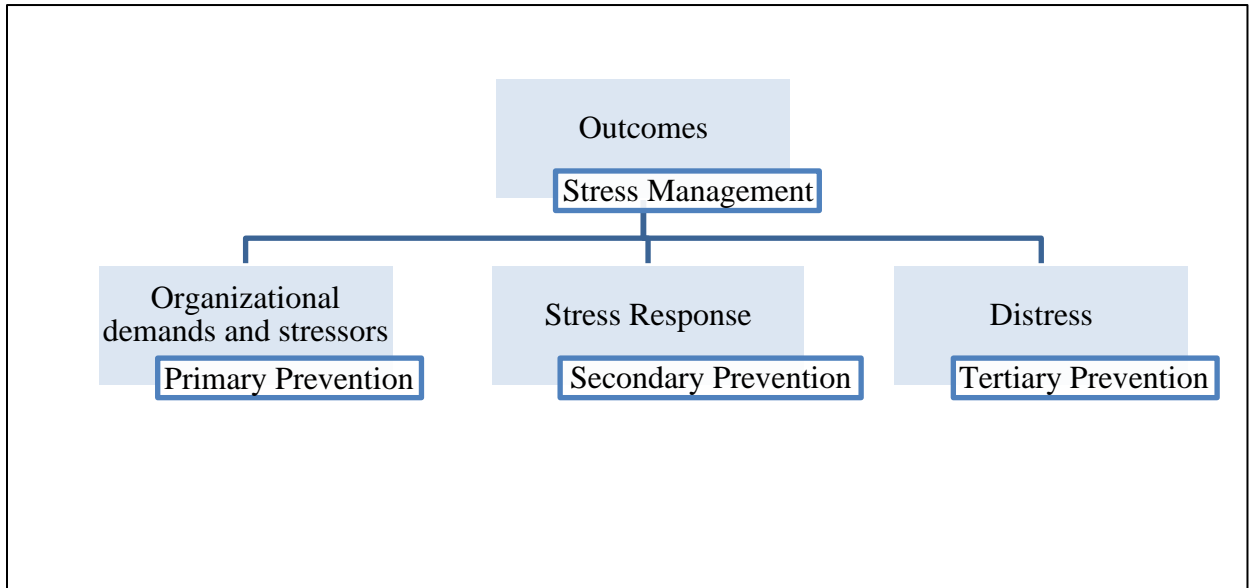
The Preventive Stress Management Model formed by merging preventive medicine model and stress response model into an organizational framework (Cooper, 2000). The theory of preventive stress management in organizations offers three approaches, to reduce and prevent organizational stress (Cooper, 2000). The following three approaches are: “primary, secondary, and tertiary prevention” which are outlined in Figure 1 (Cooper, 2000, p.260).

The primary prevention of the stress management model reduces the demands or stressors which individuals come into contact within organizational setting (Quick, Wright, Adkins, Nelson, & Quick, 2013). The secondary prevention targets how individuals and organizations respond to high work demands, while the tertiary prevention works to treat the “psychological, behavioral or medical distress” individuals encounter during working hours (Quick, Wright, Adkins, Nelson, & Quick, 2013, p.25). Occupational stress management has been placed on individuals without guidance due to individuals be part of the organizational system (Quick, Wright, Adkins, Nelson, & Quick, 2013). Quick, Wright, Adkins, Nelson, and Quick (2013) states “much of the occupational stress originates from, and [it is] effects are seen in, the organization(s) itself” (pg.27). This has created a need to identify possible stressors in organizational settings which is this research will be using the Preventive Stress Management Model to identify organizational stressors within recreational lifeguards which is the primary

prevention of the Theory for Preventive Stress Management in Organizations (Quick, Wright, Adkins, Nelson, & Quick, 2013) (see figure 1).

**Figure 1**

*Preventive Stress Management Model*



## **Conclusion**

With increased use of recreational aquatic facilities, aquatic rescues and drownings continue to take place which has created recreational aquatic facilities to take preventive measures like creating aquatic safety teams, which includes lifeguards (Wiltse, 2007). Lifeguards job responsibility generally consist of patron surveillance, responding to emergencies, and providing effective care, which could be triggers of occupational stress within lifeguards. Occupational stress is generated from job responsibilities, workload, work environment, and organizational civility which shows that occupational stress originates from and individuals are affected by the organization (Quick, Wright,

Adkins, Nelson, & Quick, 2013). By utilizing the Theory of Preventive Stress Management in Organizations, individuals and organizations can identify strategies in each of the three preventive approaches to reduce occupational stress in organizations (Cooper, 2000; Quick, Wright, Adkins, Nelson, & Quick, 2013).



## CHAPTER III

### METHODOLOGY

#### Methodology

This study will investigate stressors within recreational lifeguards while working in recreational aquatic facilities. The following research questions will be used for this study:

#### Research Questions

- **Research question 1:** Are there stressors associated with the job of being a recreational lifeguard?
- **Research question 2:** Are there any differences in recreational facility lifeguard stressors based on relation to gender?
  - **H1: Alternative Hypothesis:** There are significant differences in stressors between recreational facility lifeguards identifying as male and female.
  - **H2: Null Hypothesis:** There are no significant differences in stressors between recreational facility lifeguards identifying as male and female.
- **Research question 3:** Are there any differences in stressors based on recreational lifeguard years of experience?

- **H1: Alternative Hypothesis:** There are significant differences in stressors received by recreational lifeguard with between 1-2 year(s), 3-4, and 4 and more years.
- **H2: Null Hypothesis:** There are no significant differences in stressors received by recreational lifeguard with between 1-2 year(s), 3-4, and 4 and more years.

### **Research Design**

To identify possible stressors in recreational lifeguards, which could be triggers for stress, this study will be conducted as a questionnaire based social survey research. The NIOSH Generic Job Stress Questionnaire (NOISH, n.d.) will be utilize electronic delivery via email link to a Qualtrics survey (Qualtrics, 2005).

### **Participants**

**Population.** The population for this research will include male and female lifeguards who are minimum 18 years of age and whom are currently working at a recreational aquatic facility.

**Sample.** The following places were used for this convenience sampling: Oklahoma State University Department of Wellness, Kingsport Aquatic Center, Johnson City Parks and Recreation, , Western Washington University Recreational Center, Texas A&M Recreational Sports-Department of Recreational Sports, Campus Recreation Texas A&M Commerce, Wentzville Missouri and Recreation, Texas State University, The University of Texas at San Antonio, and University of Oklahoma Fitness and Recreational Center. All participants must be at least 18 years' age, hold a current and valid certification in American Red Cross lifeguarding, Ellis and Associates, Starguard

Elite, and YMCA, and currently employed at a recreational aquatic facility. If any participant does not meet the following criteria they will be except from the study.

### **Date Collection**

The supervisors from the following recreational aquatic facilities: Oklahoma State University Department of Wellness, Kingsport Aquatic Center, Johnson City Parks and Recreation, , Western Washington University Recreational Center, Texas A&M Recreational Sports-Department of Recreational Sports, Campus Recreation Texas A&M Commerce, Wentzville Missouri and Recreation, Texas State University, The University of Texas at San Antonio, and University of Oklahoma Fitness and Recreational Center were sent an email requesting lifeguard participation. After approval of supervisors and Oklahoma State University Institutional Review Board (IRB) the supervisors who agreed to allow their lifeguards to participate, they were sent an email explaining the study with a Qualtrics link. The supervisors were asked to forward the email to their lifeguards. Some supervisors sent the email on to other recreational aquatic supervisors which created a snowball effect.

Participants were asked to answer the questionnaire via Qualtrics survey. The participants had 2 weeks to complete the questionnaire from the time the email was sent. The anticipated sample size for this study is 50 lifeguards with a minimum sample size of 34 lifeguards (Rasmussen, 2015).

After the 2-week period each survey was cross referenced to ensure all requirements were meant. All participants must be at least 18 years' age, hold a current and valid certification in American Red Cross lifeguarding, Ellis and Associates, Starguard Elite, and YMCA, and currently employed at a recreational aquatic facility.

Any participant who is does not meet the following qualifications will be except from the study. Any questionnaire which is not completed will also be eliminated from the study.

### **Instrument**

Participants of this study will be given sections of the NIOSH Generic Job Stress Questionnaire (NOISH, n.d.). The questionnaire contains 7 sections which includes 63 question with utilizing the Likert Scale for answers ((NOISH, n.d ) This questionnaire takes approximately 15 minutes to complete without break. The survey is distributed to participates using Qualtrics software via email (Qualtrics, 2005). This questionnaire will The NIOSH Generic Job Stress Questionnaire showed consistent reliability (Cronbach's alpha, mean = 0.81), (Hurrell & McLaney, 1988). The NIOSH Generic Job Stress Questionnaire has been reported to have high validity and reliability (Zagross & Jamileh, 2017).

## **CHAPTER IV**

### **RESULTS**

#### **Results**

The purpose of this study was to identify possible stressors within recreational lifeguards. This study further investigated whether stressors differed based on gender and years of experience in recreational lifeguarding.

#### **Descriptive Summaries**

A total of 53 individuals completed and submitted responses in the questionnaire. Not all respondents met the requirements for this study. Respondents were eliminated due to not meeting the following: be at least 18 years of age, hold a current and valid lifeguard certification in American Red Cross lifeguarding, Ellis and Associates, Starguard Elite, and YMCA or any other lifeguard agency, currently employed at a recreational aquatic facility, and/or completed all questions in the survey. If the respondent did not meet any of the study participation requirements, they were eliminated from the study. After eliminating respondents who did not meet the requirements, a total of 37 respondents were included in the responses analyzed. Of the 16 responses eliminated, 12 did not currently work as a lifeguard, and 4 were under the required age of 18.

The first items on the questionnaire were inquired regarding demographic information, including gender, age, ethnicity, and years of experience. The responses seem to indicate that 26 respondents identified as female with 11 respondents identifying as male (see Table 1).

Table 1:

*Population Demographics – Gender*

Gender	<i>n</i>	%
Male	11	29.7
Female	26	70.3
TOTAL	37	100.0

The second demographic item requested was age with a range of 18-47 years being reported. Majority of respondents seem to identify between the ages of 18 – 23 years old, with age 19 being the most reoccurring age identified. The mean age was established as 22.68 years old (see Table 2).

Table 2:

*Population Demographic – Age*

Age	<i>n</i>	%
18	6	16.2
19	8	21.6
20	7	18.9
21	3	8.1
22	3	8.1
23	4	10.8
24	1	2.7
25	1	2.7
38	2	5.4
46	1	2.7
47	1	2.7
TOTAL	37	100.0
Mean = 22.68	St. Dev. = 7.288	Range = 18 - 47

The third demographic item inquired was ethnicity of the respondents. A total of 73% of respondents identified as Caucasian, 8.1% identified as Hispanic or Latino and, 18.9% identified as other. The other category included the following ethnicities; Caucasian and American Indian (2 identified), Caucasian and Asian (1 identified), Caucasian and Hispanic or Latino, 1 identified, Black/African American, 2 Identified, and not specified (1 identified). Majority of respondents identified as Caucasian for ethnicity (see Table 3).

Table 3:

*Population Demographic – Ethnicity*

Ethnicity	<i>n</i>	%
Caucasian	27	73.0
Hispanic or Latino	3	8.1
Asian	0	0
Native Hawaiian or Pacific Islander	0	0
Other	7	18.9
TOTAL	37	100

The last demographic item inquired was years of experience as a lifeguard. The responses seem to indicate that 48.6% of respondents reported having 3 or more years of experience as a recreational lifeguard. The mode shows that 3 or more years of experience as a recreational lifeguard was the most reoccurring answer. These responses indicate the almost half of the lifeguard respondents had at least 3 or more years of experience as a recreational lifeguard.

Table 4:

*Population Demographics – Years of Experience*

Years of Experience	<i>n</i>	%
Less than 1 year	3	8.1
1 to 2 years	11	29.7
2 to 3 years	5	13.5
3 or more years	18	48.6
Total	37	100.0
Mode = 4	Median = 3.00	

**Questionnaire Summary**

The NIOSH Generic Job Stress Questionnaire divided into sections including: a) Conflict at Work, b) Mental Demands, c) Physical Environment, d) Social Support, e) Work Hazards, and f) Workload and Responsibility. Each section has their own Likert scale.

**Conflict at Work**

The Conflict at Work section in the NIOSH Generic Job Stress Questionnaire inquiries about work problems, friendliness, harmony, relationships, and agreements. This section includes Likert scale scoring which was coded as 1 = Strongly Disagree, 2 = Moderately Disagree, 3 = Neither Agree or Disagree, 4 = Moderately Agree, and 5 = Strongly Agree. Items indicated with a star (\*) were reversed coded.

The responses seem to indicate that respondents strongly agreed with the following items: harmony, supportive of each other’s ideas, a “we” feeling within their group, agreement, and cooperation with their groups at work. The respondents strongly disagreed with the following items: clashes, bickering, dissension, withholding



information, lack of assistance from other groups and other groups creating problems within their groups at work.

The data presented with a variation in responses for difference in opinion, disputes within groups and personality clashes within groups. The responses seem to indicate a trend of harmony within recreational lifeguard's working groups but also a trend of groups having difference in opinion and personality clashes within their working groups. For the Conflict at Work section difference in opinion, disputes within groups and personality clashes within groups were noted as perceived stressors in recreational lifeguards (see Table 5).

Table 5:

*NIOSH Generic Job Stress Questionnaire – Conflict at Work*

	Statement	<i>n</i>	Mean	St. Dev.
Q1	*There is harmony within my group	37	1.78	.712
Q2	In our group, we have lots of bickering over who should do what job.	37	1.89	1.048
Q3	There is difference of opinion among the members of my group.	37	2.95	1.104
Q4	There is dissension in my group.	37	2.27	1.097
Q5	*The members of my group are supportive of each other's ideas.	37	1.84	.866
Q6	There are clashes between subgroups within my group.	37	2.16	1.068
Q7	*There is friendliness among the members of my group.	37	2.70	1.266
Q8	*There is "we" feeling among members of my group.	37	1.32	.530
Q9	There are disputes between my group and other groups.	37	1.92	.924
Q10	*There is agreement between my group and other groups.	37	1.84	.958
Q11	Other groups withhold information necessary for the attainment of our group's tasks.	37	2.11	.936
Q12	*The relationship between my group and other groups is harmonious in attaining the overall organizational goals.	37	2.22	1.134
Q13	There is lack of mutual assistance between my group and other groups.	37	1.65	.824
Q14	*There is cooperation between my group and other groups.	37	1.95	.941
Q15	There are personality clashes between my group and other groups.	37	2.49	1.170
Q16	Other groups create problems for my groups.	37	2.46	1.426

## Mental Demands

The Mental Demand section for this questionnaire inquired about recreational lifeguards' concentration, memory load, taking it easy, and attention to work. This section includes a Likert scale scoring which was scored as 1 = Strongly Agree, 2 = Slightly Agree, 3 = Slightly Disagree and, 4 = Strongly Disagree. Items which are indicated with an asterisk (\*) were reversed coded.

The responses seem to indicate that respondents strongly agree their job requires concentration (Q1:  $\bar{x} = 3.43$ , Q3:  $\bar{x} = 3.32$ ) and memory load (Q2:  $\bar{x} = 3.54$ ). The responses seem to indicate that respondents disagreed with letting mind wander and still get the work done (Q5:  $\bar{x} = 2.92$ ). The responses seemed to vary for taking it easy with 15 respondents reporting slightly agree and 15 respondents reporting they strongly agree.

The responses seem to indicate recreational lifeguard jobs require a great deal of concentration at times and the requirement to remember a lot of things for the job. These reports also seem to indicate that some recreational lifeguards are not able to let their mind wander and still get work done. According to the responses in the Mental Demand section job concentration and memory load were identify as perceived stressors in recreational lifeguards (see Table 6).

Table 6:

*NIOSH Generic Job Stress Questionnaire – Mental Demand*

	Statement	<i>n</i>	Mean	St. Dev.
Q1	*My job requires a great deal of concentration.	37	3.43	.929
Q2	*My job requires me to remember many different things.	37	3.54	.869
Q3	*I must keep my mind on my work at all times	37	3.32	.973
Q4	I can take it easy and still get my work done.	37	2.59	.865
Q5	I can let my mind wander and still do the work.	37	2.92	1.038

## **Physical Environment**

The following statements were asked regarding respondent's physical work environment including lighting, noise, temperature, air circulation, and work hazards. This section has a Likert scale scoring which was coded as 1 = True and 2 = False. Items which are indicated with an asterisk (\*) were reversed coded.

The responses seem to indicate that respondents answered false on the following items; poor lighting, poor physical environment, and crowded work area. The responses seem to indicate the majority of respondents answered true for good air quality and circulation and being protected from dangerous substances. Responses seemed to have varied for comfortable temperatures (Q3:  $\sigma = .505$  and Q4:  $\sigma = .475$ ), humidity (Q5:  $\sigma = .502$ ), and noise level (Q1:  $\sigma = .639$ ).

The responses seem to indicate that the majority of recreational lifeguards responding work in an environment with good lighting and a less crowded environment. The responses also seem to indicate some recreational lifeguard respondents do work in environments where temperatures are uncomfortable, as well as, the humidity within the facility being less than ideal. For the Physical Environment section comfortable work environment, humidity and noise level are being noted as perceived stressors in recreational lifeguards (see Table 7).

Table 7:

*NIOSH Generic Job Stress Questionnaire – Physical Environment*

	Statement	<i>n</i>	Mean	St. Dev.
Q1	*The level of NOISE in the area(s) in which I work is usually high.	37	1.62	.639
Q2	*The level of LIGHTING in the area(s) in which I work is usually poor.	37	1.19	.397
Q3	The TEMPERATURE of my work area(s) during the SUMMER is usually comfortable.	37	1.46	.505
Q4	The TEMPERATURE of my work area(s) during the WINTER is usually comfortable.	37	1.32	.475
Q5	*The HUMIDITY in my work area(s) is usually either too high or too low.	37	1.43	.502
Q6	The level of AIR CIRCULATION in my work area(s) is good.	37	1.27	.450
Q7	The AIR in my work area(s) is clean and free of pollution.	37	1.22	.417
Q8	In my job, I am well protected from exposure to DANGEROUS SUBSTANCES.	37	1.14	.347
Q9	*The overall quality of the PHYSICAL ENVIRONMENT where I work is poor.	37	1.14	.347
Q10	*My WORK AREA(S) is/are awfully crowded.	37	1.19	.397

**Social Support**

The Social Support items in the NOISH Generic Job Stress Questionnaire include items related to social support they have in relationship to the respondent’s immediate supervisor, other people at work, your (respondents) spouse, friends and relatives. This section uses a Likert scale scoring, which was coded as 1 = Very Much, 2 = Somewhat, 3 = A Little, 4 = Not at All and 5 = Don’t Have Any Such Person. This section had no reverse coding items.

The responses seem to indicate over two thirds of respondents responded “very much” for their immediate supervisor going out of their way to make their work life easier, easy to talk to, and being able to rely on them when things get tough at work. Over

half of the respondents responded “very much” for immediate supervisor willing to listen to your personal problems. These responses seem to indicate there is a high social support from immediate supervisor for both work related matters and personal problems.

Data analysis indicated that over half of the respondents reported that other people at work were easy to talk to and could be relied on when things get tough at work.

Responses were more varied for the items “other people at work go out of their way to make work like easier”, and “other people at work are willing to listen to your personal problems.”

The responses seem to indicate that respondents do not believe others go out of their way to make life easier for them as much as their immediate supervisors do. The responses also indicate a decrease in social support from other people at work for personal problems, which seems to indicate that recreational lifeguards have more social support from their immediate supervisors than other people at work when it comes to their personal problems.

Over two thirds of the respondents answered “very much” for your spouses, friends and relatives being easy to talk to and willing to listen to personal problems. Over half the respondents stated they “very much” have someone to rely on when things get tough at work. The responses seemed to vary for how much your spouse, friends and relatives go out of their way to do things to make your life easier. These responses seem to indicate that respondents have greater social support relating to their personal problems with their spouses, friends and relatives. These responses also seem to indicate that respondents have varied social support when it comes to spouses, friends and relatives going out of their way to make work life easier. The perceived stressors identify for the

Social Support section are “going out of way to make work life easier”, specifically from spouses, friends and relatives and other people at work, as well as, “listening to personal problems”, specifically from other people at work (see Table 8).

Table 8:

*NIOSH Generic Job Stress Questionnaire – Social Support*

	Statement	<i>n</i>	Mean	St. Dev.
	How much do each of these people go out of their way to do things to make your work life easier for you?			
Q1	Your immediate supervisor (boss)	37	1.65	1.006
Q2	Other people at work	37	2.16	.928
Q3	Your spouse, friends and relatives	37	2.14	1.182
	How easy is it to talk with each of the following people?			
Q4	Your immediate supervisor (boss)	37	1.51	.837
Q5	Other people at work	37	1.49	.692
Q6	Your spouse, friends and relatives	37	1.41	.896
	How much can each of these people be relied on when things get tough at work?			
Q7	Your immediate supervisor (boss)	37	1.43	.929
Q8	Other people at work	37	1.68	.852
Q9	Your spouse, friends and relatives	37	1.86	1.182
	How much is each of the following willing to listen to your personal problems?			
Q10	Your immediate supervisor (boss)	37	1.89	1.048
Q11	Other people at work	37	2.14	.887
Q12	Your spouse, friends and relatives	37	1.43	.929

### **Work Hazards**

The section for Work Hazards in the NIOSH Generic Job Stress Questionnaire gathered information related to physical and verbal work hazards. The following section uses a Likert scale scoring, which was coded as for item Q1 as 1 = Yes and 2 = No. The other items (Q2-Q5) were coded as 1 = Never, 2 = Occasionally, 3 = Sometimes, 4 = Fairly Often, and 5 = Very Often. The following section had no reverse coded items.

Two thirds of the respondents seemed to indicate their job, as a recreational lifeguard, provides a direct service to specific groups of people. The responses seem to indicate that over two thirds of the respondents have also not been physically assaulted within the past 12 months while performing their job. A total of 4 respondents indicated they were occasionally, sometimes or very often physically assaulted within the past 12 months while performing their job.

The responses seemed to vary for the exposure to verbal abuse by clients or general public, exposure to physical harm or injury, and exposure to legal liability. The responses seem to indicate that two thirds of the respondents have been occasionally, sometimes or fairly often verbally abused by clients or the general public, exposed to physical harm or injury, and exposed to legal liability.

These results seem to suggest that recreational lifeguards are exposed to some physical and verbal hazards in their job, as well as, legal liability. The following items are noted as perceived stressors within recreational lifeguards (see Table 9).

Table 9:

*NIOSH Generic Job Stress Questionnaire – Work Hazards*

	Statement	<i>n</i>	Mean	St. Dev.
Q1	Does your job primary involve providing direct service to specific groups of people or client populations?	37	1.11	.315
Q2	How often does your job expose you to verbal abuse and/or confrontations with clients or the general public?	37	2.43	1.119
Q3	How often does your job expose you to the threat of physical harm and injury?	37	1.93	.862
Q4	How often have you been physically assaulted within the past 12 months while performing your job?	37	1.22	.750
Q5	How often does your job personally subject you to potential legal liability?	37	2.68	1.435

## **Workload and Responsibility**

The Workload and Responsibility section of the NIOSH Generic Job Stress Questionnaire include information about quantity, amount of time, and responsibility each respondent has during work. The following section uses a Likert scale scoring, which was coded as 1 = Hardly Any, 2 = A Little, 3 = Some, 4 = A Lot, and 5 = A Great Deal. Items which are indicated with an asterisk (\*) were reversed coded.

The responses seem to indicate over half of the respondents answered “some” or “a lot” to slowdown in workload (Q1:  $\bar{x} = 3.46$ ), quantity of time to think (Q2:  $\bar{x} = 3.05$ ), volume of workload (Q3:  $\bar{x} = 3.11$ ), amount of time to complete work (Q5:  $\bar{x} = 2.45$ ), quantity of task (Q6:  $\bar{x} = 3.05$ ), amount of quiet time (Q7:  $\bar{x} = 3.04$ ), and responsibility of the morale of others (Q10:  $\bar{x} = 3.54$ ). These responses seem to indicate that respondents feel they have some or a lot of workload, as well as, some or a lot of time to complete task.

The responses seem to have varied for the quantity of work others expect you to do with over two thirds of the responses being “a lot” or “a great deal”. The “quantity of work others expect of you” has a response mean score of 4.11, which is greater than the “quantity of workload”, which has a response mean score of 3.11. These responses seem to indicate that respondents feel they have more workload which is expected by others.

The responses also seem to have varied for item Q8 (quantity of responsibility for the future of other) with two thirds indicating they have, “some”, “a lot”, or “a great deal” (Q8:  $\bar{x} = 3.76$ ). Over two thirds of the respondents indicated they have either “a lot” or “a great deal” of responsibility for the welfare and lives of others (Q11:  $\bar{x} = 3.97$ ). These



responses seem to indicate that respondents feel they do have responsibility for the future and welfare of others as a recreational lifeguard.

The responses seem to indicate that some respondents feel they have “hardly any responsibility of others’ job security” while other respondents feel they have “a great deal” (Q9:  $\bar{x} = 2.97$ ). These responses seem to indicate that some respondents feel they are responsible for others job security. However, other respondents feel they are not responsible for others job security.

The responds seem to indicate recreational lifeguards feel they have “some” responsibility for the morale of others (Q10:  $\bar{x} = 3.54$ ). Results also present that recreational lifeguards feel they have “some” task, projects, or assignments and workload to complete (Q3:  $\bar{x} = 3.11$  and Q6:  $\bar{x} = 3.05$ ). These results seem to indicate that recreational lifeguards feel they have some responsibility for the morale of others and have some task and workload which has to be complete.

Overall, responses seem to indicate that respondents feel they have some workload, but they feel they have a greater amount of workload which is expected from others. Responses also seem to indicate that respondents feel they have enough time to complete task. Lastly, the responses seem to indicate that respondents feel they have responsibility for the future and welfare of others but only some of the respondents fill they have responsibility for others’ job security. For the Workload and Responsibility section the following are being noted as perceived stressors due to the trends: quantity of work others expect of them, quantity of responsibility for the future of others, quantity of responsibility for the welfare and lives of others, quantity of responsibility for the morale of others, quantity of task, assignments and projects and workload (see table 10).

Table 10:

*NIOSH Generic Job Stress Questionnaire – Workload and Responsibilities*

	Statement	<i>n</i>	Mean	St. Dev.
Q1	*How much slowdown in the workload do you experience?	37	3.46	1.016
Q2	*How much time do you have to think and contemplate?	37	3.05	1.104
Q3	How much workload do you have?	37	3.11	.875
Q4	What quality of work do others expect you to do?	37	4.11	.737
Q5	*How much time do you have to do all your work?	37	2.54	.900
Q6	How many projects, assignments, or task do you have?	37	3.05	1.104
Q7	*How many lulls between heavy workload periods do you have?	37	3.08	1.064
Q8	How much responsibility do you have for the future of others?	37	3.76	1.188
Q9	How much responsibility do you have for the job security of others?	37	2.97	1.708
Q10	How much responsibility do you have for the morale of others?	37	3.54	1.016
Q11	How much responsibility do you have for the welfare and lives of others?	37	3.97	1.384

The NIOSH Generic Job Stress Questionnaire questioned respondents on possible stressors related to Conflict at Work, Mental Demands, Physical Environment, Social Support, Work Hazards and Workload and Responsibility. The results indicated there are possible stressors associated with the job of being a recreational lifeguard, which included: difference in opinion, disputes within groups, personality clashes within groups, job concentration, memory load, comfortable temperatures, humidity, noise level, social support, exposure to verbal abuse by clients or general public, exposure to physical harm or injury, legal liability, quantity of work others expect of them, quantity of responsibility for future of others, quantity of responsibility for welfare and lives of

others, quantity of responsibility for morale of others, workload, and quantity of task, assignments, and projects.

### **Difference in Lifeguard Stressors Related to Gender**

A Mann-Whitney U test was completed on all NIOSH Generic Job Stress sections including Conflict at Work, Mental Demands, Physical Environment, Social Support, Work Hazards and Workload and Responsibility, to determine if there were differences in lifeguard stressors related to gender (male and female). Of the responses, females presented with majority lowest mean ranks for Conflict at Work (Q1, Q3-Q4, Q6-Q9, Q12-Q14, Q6) and Social Support items (Q1-Q3, Q6-Q9, Q12). The results showed that majority of lowest mean ranks for males was from Physical Environment (Q1, Q2, Q4, Q5, Q7, Q9) and Work Hazards (Q2, Q3, Q5). The outcomes for Mental Demand (Q1-5) and Workload and Responsibilities (Q1-Q11) presented males with the lowest mean rank for all items in both sections (see Table 11).

The items Q3 and Q4 from Mental Demand section and Q8 and Q9 from Workload and Responsibility section were the only responses that indicated statistically significant difference in lifeguard stressors related to gender. In the Mental Demand section, Q3 indicates that females had higher agreement than males with the idea that they have to keep their mind on their work at all times. Also, males were more likely than females to agree they can take it easy and still get their work done.

Regarding the Workload and Responsibility section, females reported feeling more responsibility for the future of others and being responsible for the job security of others. These items being statistically different between males and females may indicate

females feeling more responsibility as a lifeguard and may add to stressors felt by female lifeguards.

Table 11

*Difference in Lifeguard Stressors Related to Gender*

Items	Mean Ranks		P-Value
	Male ( <i>n</i> = 11)	Female ( <i>n</i> = 26)	
<b>Conflict at Work</b>			
Q1	19.45	18.81	<i>p</i> = .883
Q2	18.55	19.19	<i>p</i> = .883
Q3	20.14	18.52	<i>p</i> = .682
Q4	19.55	18.77	<i>p</i> = .857
Q5	19.00	19.00	<i>p</i> = 1.000
Q6	19.18	18.92	<i>p</i> = .961
Q7	21.68	17.87	<i>p</i> = .332
Q8	21.09	18.12	<i>p</i> = .460
Q9	21.86	17.79	<i>p</i> = .300
Q10	17.23	19.75	<i>p</i> = .523
Q11	18.64	19.15	<i>p</i> = .909
Q12	22.23	17.63	<i>p</i> = .242
Q13	21.14	18.10	<i>p</i> = .441
Q14	21.14	18.04	<i>p</i> = .421
Q15	15.64	20.42	<i>p</i> = .229
Q16	21.09	18.12	<i>p</i> = .460
<b>Mental Demand</b>			
Q1	14.86	20.75	<i>p</i> = .132
Q2	17.50	19.63	<i>p</i> = .523
Q3	12.91	21.65	<i>p</i> = .026
Q4	13.95	21.13	<i>p</i> = .021
Q5	16.68	19.98	<i>p</i> = .065
<b>Physical Environment</b>			
Q1	16.68	19.98	<i>p</i> = .402
Q2	18.86	19.06	<i>p</i> = .961
Q3	20.59	18.33	<i>p</i> = .566
Q4	21.41	17.98	<i>p</i> = .384
Q5	17.73	19.54	<i>p</i> = .658
Q6	22.41	17.56	<i>p</i> = .216
Q7	18.36	19.27	<i>p</i> = .832
Q8	19.86	18.63	<i>p</i> = .756
Q9	15.50	20.48	<i>p</i> = .756
Q10	21.18	18.08	<i>p</i> = .204

Table 11 continues next page.

Table 11

*Difference in Lifeguard Stressors Related to Gender*

Items	Mean Ranks		P-Value
	Male (n = 11)	Female (n = 26)	
<b>Social Support</b>			
Q1	21.18	18.08	<i>p</i> = .441
Q2	22.23	17.63	<i>p</i> = .242
Q3	23.91	16.92	<i>p</i> = .075
Q4	17.68	19.56	<i>p</i> = .635
Q5	18.00	19.42	<i>p</i> = .731
Q6	22.73	17.42	<i>p</i> = .181
Q7	20.59	18.33	<i>p</i> = .566
Q8	21.18	18.08	<i>p</i> = .441
Q9	21.91	17.77	<i>p</i> = .300
Q10	17.68	19.56	<i>p</i> = .635
Q11	18.23	19.33	<i>p</i> = .781
Q12	19.86	18.63	<i>p</i> = .756
<b>Work Hazards</b>			
Q1	22.05	17.71	<i>p</i> = .270
Q2	16.36	20.12	<i>p</i> = .349
Q3	17.86	19.48	<i>p</i> = .682
Q4	20.55	19.35	<i>p</i> = .589
Q5	16.27	20.15	<i>p</i> = .332
<b>Workload and Responsibility</b>			
Q1	16.09	20.23	<i>p</i> = .300
Q2	15.55	20.46	<i>p</i> = .216
Q3	14.18	21.04	<i>p</i> = .081
Q4	16.23	20.17	<i>p</i> = .316
Q5	16.86	19.90	<i>p</i> = .441
Q6	17.27	19.73	<i>p</i> = .544
Q7	16.77	19.94	<i>p</i> = .421
Q8	11.55	22.15	<i>p</i> = .005
Q9	12.64	21.69	<i>p</i> = .019
Q10	13.86	21.17	<i>p</i> = .060
Q11	13.91	21.15	<i>p</i> = .065

**Difference in Lifeguard Stressors Related to Years of Experience**

A Kruskal-Wallis Test was completed for all the following section in the NIOSH Generic Job Stress questionnaire: Conflict at Work, Mental Demands, Physical Environment, Social Support, Work Hazards and Workload and Responsibility, to

determine if there were differences in lifeguard stressors related to years of experience (less than 1 year, 1-2 years, 2-3 years or 3 or more year.

The difference seems to indicate that lifeguards having 1-2 years of experience differ significantly than those with less than one year, 2-3, and over 3 years of experience. No other item on the NIOSH questionnaire indicated significantly different responses when comparing lifeguard experience. Question 5, How easy is it to talk to other people at work, was reported by lifeguards with 1-2 years' experience much higher than those with less than 1 year of experience. This could indicate that those reporting 1-2 years' experience felt they had a significantly easier time connecting or communicating with other at work. Those with less experience may not be connecting or communicating as easily and those with more experience may be less likely to connect with others at work (see Table 12).

Table 12

*Difference in Lifeguard Stressors Related to Years of Experience*

Items	Mean Ranks				P-Value
	< 1 year	1 to 2 years	2 to 3 years	>3 year	
<b>Conflict at Work</b>					
Q1	7.50	18.05	22.20	20.61	$p = .165$
Q2	16.50	16.41	20.20	20.67	$p = .690$
Q3	19.50	19.23	21.40	18.11	$p = .938$
Q4	27.33	15.64	23.90	18.31	$p = .231$
Q5	22.50	18.50	19.10	18.69	$p = .932$
Q6	16.00	17.41	19.20	20.42	$p = .842$
Q7	13.50	18.91	17.10	20.50	$p = .570$
Q8	10.50	20.41	20.50	19.14	$p = .453$
Q9	24.83	14.95	23.30	19.31	$p = .331$
Q10	14.00	21.23	23.50	17.55	$p = .428$
Q11	15.50	19.14	17.90	19.81	$p = .913$
Q12	18.67	19.27	20.60	18.28	$p = .777$
Q13	19.67	19.27	20.60	18.28	$p = .973$
Q14	12.00	19.55	24.20	18.39	$p = .406$
Q15	14.50	15.91	19.50	21.50	$p = .472$
Q16	24.17	17.00	13.40	20.92	$p = .358$
<b>Mental Demand</b>					
Q1	18.50	19.00	17.60	19.47	$p = .982$
Q2	17.83	18.36	20.70	19.11	$p = .962$
Q3	19.00	18.91	21.30	18.42	$p = .952$
Q4	18.83	18.68	16.70	19.86	$p = .941$
Q5	23.33	15.18	21.40	19.94	$p = .484$
<b>Physical Environment</b>					
Q1	20.50	22.55	19.30	16.50	$p = .409$
Q2	15.50	18.86	15.50	20.64	$p = .428$
Q3	22.83	18.91	17.90	18.72	$p = .899$
Q4	19.17	19.73	16.70	19.17	$p = .935$
Q5	17.17	21.09	14.70	19.22	$p = .625$
Q6	20.17	19.05	17.70	19.14	$p = .980$
Q7	15.00	20.05	15.00	20.14	$p = .433$
Q8	16.50	18.18	23.90	18.56	$p = .303$
Q9	16.50	19.86	16.50	19.58	$p = .667$
Q10	21.67	18.86	19.20	18.58	$p = .927$

Table 12 continues next page.

Table 12

*Difference in Lifeguard Stressors Related to Years of Experience*

Items	Mean Ranks				P-Value
	< 1 year	1 to 2 years	2 to 3 years	>3 year	
<b>Social Support</b>					
Q1	17.33	17.27	21.10	19.75	<i>p</i> = .833
Q2	9.17	15.27	22.70	21.89	<i>p</i> = .095
Q3	21.33	18.77	12.40	20.58	<i>p</i> = .448
Q4	12.50	19.68	20.60	19.22	<i>p</i> = .628
Q5	17.50	12.00	24.70	21.94	<i>p</i> = .019
Q6	22.00	16.05	14.50	21.56	<i>p</i> = .159
Q7	21.23	17.41	23.20	18.42	<i>p</i> = .467
Q8	15.50	14.59	18.10	22.53	<i>p</i> = .173
Q9	19.67	16.91	13.70	21.64	<i>p</i> = .345
Q10	18.67	21.32	22.00	16.81	<i>p</i> = .587
Q11	24.00	18.73	25.00	16.67	<i>p</i> = .340
Q12	22.00	19.00	17.80	18.83	<i>p</i> = .913
<b>Work Hazards</b>					
Q1	17.00	18.68	17.00	20.08	<i>p</i> = .660
Q2	15.50	17.59	21.80	19.67	<i>p</i> = .806
Q3	16.50	14.41	20.50	21.81	<i>p</i> = .275
Q4	17.00	18.82	20.50	19.03	<i>p</i> = .875
Q5	18.33	21.14	24.20	16.36	<i>p</i> = .419
<b>Workload and Responsibility</b>					
Q1	17.33	18.95	22.60	18.31	<i>p</i> = .860
Q2	9.33	22.59	25.30	16.67	<i>p</i> = .085
Q3	22.00	12.77	25.60	20.47	<i>p</i> = .071
Q4	31.50	20.00	17.80	16.64	<i>p</i> = .120
Q5	13.33	20.95	20.00	18.89	<i>p</i> = .702
Q6	18.17	20.86	16.20	18.89	<i>p</i> = .879
Q7	14.83	18.82	24.40	18.39	<i>p</i> = .611
Q8	24.17	17.68	20.20	18.61	<i>p</i> = .798
Q9	14.67	18.95	14.10	21.11	<i>p</i> = .495
Q10	16.00	15.55	16.70	22.25	<i>p</i> = .307
Q11	23.17	18.41	14.70	19.86	<i>p</i> = .647

**Conclusion**

In conclusion, The NIOSH Generic Job Stress Questionnaire reported out of the 37 respondents 26 respondents identified as female and 11 identified as male with the mean age being 22.68 years old. The majority of respondents identified as Caucasian



(78%) and having 3 or more years of experience (48.6%). The study inquired responses from lifeguard respondents related to possible stressors including: Conflict at Work, Mental Demands, Physical Environment, Social Support, Work Hazards, and Workload and Responsibility.

The results indicate there are possible perceived stressors in recreational lifeguards which include:

- difference in opinion
- personality clashes within groups
- comfortable temperatures
- noise level
- exposure to physical harm or injury
- quantity of work others expect of them
- assignments
- quantity of responsibility for future of others
- quantity of responsibility for welfare and lives of others
- quantity of responsibility for morale of others,
- exposure to verbal abuse by clients or general public.
- disputes within groups
- job concentration, memory load
- humidity
- social support
- legal liability
- workload, and quantity of task
- projects

The results also indicated a statistically significant difference in lifeguard stressors related to gender specifically in workload and responsibility. Females reported

feeling more responsibility for the future of others and being responsible for the job security of others. These results could indicate females feeling more responsibility as a lifeguard may add stressors felt by female lifeguards.

Last, the results also indicated statistically significant difference in, how easy is it to talk to other people at work, was reported by lifeguard with 1-2 years of experience much higher than those with 1 year or less. These results could indicate that lifeguards with less experience may not be connecting or communicating as easily and those with more experience may be less likely to connect with others at work.

## CHAPTER V

### CONCLUSION

#### Introduction

The purpose of this study was to identify possible stressors, reported by recreational lifeguards, in an effort to aid in prevention of stress and quality of work. The study questioned recreational lifeguards, 18 years or older in age, that held a current and valid certification in American Red Cross lifeguarding, Ellis and Associates, Starguard Elite, YMCA, and currently employed at a recreational aquatic facility. The following research questions guided the study:

- **Research question 1:** Are there stressors associated with the job of being a recreational lifeguard?
- **Research question 2:** Are there any differences in recreational facility lifeguard stressors based on relation to gender?
  - **H1: Alternative Hypothesis:** There are significant differences in stressors between recreational facility lifeguards identifying as male and female.
  - **H2: Null Hypothesis:** There are no significant differences in stressors between recreational facility lifeguards identifying as male and female.
- **Research question 3:** Are there any differences in stressors based on recreational lifeguard years of experience?

- **H1: Alternative Hypothesis:** There are significant differences in stressors received by recreational lifeguard with between 1-2 year(s), 3-4, and 4 and more years.
- **H2: Null Hypothesis:** There are no significant differences in stressors received by recreational lifeguards between 1-2 year(s), 3-4, and 4 or more years.

The NIOSH Generic Job Stress Questionnaire was used to identify perceived stressors in recreational lifeguards, while also investigating if gender or years of experience influence the difference of reported stressors in recreational lifeguards.

### **Implications**

If recreational aquatic facilities could identify the effects in which these noted items have on recreational lifeguards, it could aid in further development of future preventive stress management plan. With the implementation of preventive stress management plans, recreational aquatic facilities could avoid the work and possible turnover within their recreational lifeguards (Cooper, Dewe, & O’Driscoll, 2001). This could further lead to aiding in quality of work provided from recreational lifeguard and in turn aid in safer environments for patrons, including possible drowning prevention.

A potentially revealing finding is that lifeguards who identify as female differ significantly than those who identify as male in that females tend to feel more responsible for:

- mental demand,
- workload, and
- responsibilities.

This information may be important for recreational aquatic administrators because of the stressors that may be enhanced by gender. If recreational aquatic administrators could understand the severity that gender may have on the effect of perceived stressors in recreational lifeguards, aquatic supervisors could consider different plans to prevent stress among for each gender.

Responses revealed for social support that lifeguards having 1-2 years of experience differ significantly than those with less than one year, 2-3, and over 3 years of experience. This maybe important information for recreational aquatic administrators to understand due to the diverse years of experience in recreational lifeguards.

By understanding that possible stressors do exist including: difference of opinion, disputes between group, personality clashes, temperature, humidity, noise level, social support, physical and verbal abuse, and liability and responsibility for others, aquatic supervisors may now be better able to watch for those specific stressors to see if they are present within their organization. Also, knowing that gender and years of experience could have an effect in workload and responsibility, and mental demands aquatic administrators may be able to provide guidance to ensure these specific characteristics do not aid in creating stressors for recreational lifeguards.

### **Limitations**

One of the limitations for this study was it relied on self-reporting. Even when given the Likert scale for all sections, self-reporting accuracy can vary for each respondent. Additionally, the questionnaire was distributed online via Qualtrics link. Due to the questionnaire being online there was no control for respondents, time of day,

mood, pace or location. These limitations also could have impacted the accuracy of self-reporting.

Another limitation of this study was population, and sample size. This study utilized convenience sampling with additional participants recruited through snowball sampling. This research was conducted during the months of March and April of 2020. During this time the start of a national pandemic occurred, which may have caused additional limitations for this study. Due to the widespread infection, recreational aquatic facilities across the United States were required to close. Since the research took place during March and April 2020, around the time which recreational aquatic facilities were closing and recreational lifeguards were being laid off, this could have impacted the number of individuals checking emails and receiving the Qualtrics link while also effecting the accuracy of this study. The pandemic could have also impacted the response to stress. Due to individuals being placed on unemployment or furloughed during this pandemic, individual stress could have fluctuated, which in turn could cause varied responses.

### **Future Research**

There is potential for future research utilizing or modifying this study. This study could be duplicate to include other recreational aquatic facilities across the country. The scope of the study could be expanded to investigate if there is a difference in perceived stressors in recreational lifeguards related to type of lifeguard certification (i.e. American Red Cross, Ellis Associates, YMCA). This would allow for a review of the different types of training which lifeguards experience and how those trainings effect stress in recreational lifeguards.

An additional factor which could expand this research maybe investigating the effects of each perceived stressor in recreational lifeguards. This study could allow a better understanding if these perceived stressors have a positive or negative effect on recreational lifeguards.

Additionally, investigating the effect and degree of each perceived stressor related to gender, years of experience, and type of lifeguard certification could lead to a better understanding for the development of preventive stress management plan for recreational aquatic facilities.

The last scope, which could further expand this research, would be duplicating this research during a time in which a pandemic and economic instability is not occurring. This could give insight to the accuracy of responses.

## **Conclusion**

For this research, it was noted the following perceived stressors do exist in recreational lifeguards:

- conflict at work (i.e. difference in opinion and personality clashes)
- mental demands (concentration and memory)
- physical environment (i.e. uncomfortable temperatures and humidity)
- social support (i.e. support from direct supervisors, others at work, spouses, friends and relatives)
- work hazards (i.e. physical and verbal hazards and legal liability)
- workload and responsibility (i.e. quantity of workload from others, responsibility of the future and welfare of others and job security).

This research also found that individuals who identified as female differ significantly than those who identify as male in the sections for mental demand and workload and responsibilities. Additionally, this research discovered that lifeguards having 1-2 years of experience differ significantly than those with less than one year, 2-3, and over 3 years of experience for social support.

Although no other statistically significant differences were found for other sections of the NIOSH Generic Job Stress Questionnaire, this research has potentially connected some gaps in the research in this area. This could provide a guide for future research regarding recreational lifeguard stressors and preventive stress and aid aquatic facility administrators in providing support and stress management programs for their lifeguards.



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## APPENDICES

### **Emailed Invitation to Aquatic Supervisors for Participation Request**

Recreational Lifeguard Research Request

Hello,

My name is Madison Gump and I am a Master's student in the School of Kinesiology, Applied Health and Recreation at Oklahoma State University.

I am working on my thesis "Identification of Perceived Stressors within Recreational Lifeguards" and would like to have you and your lifeguards participate, if possible. If you agree to participate, I will send you an email containing an anonymous online survey link and will ask that you forward the email to your staff lifeguards.

This is voluntary for you to send to your lifeguards and voluntary for them to participant. The anonymous online survey consisting of questions that evaluate recreational lifeguards' self-reports of job characteristics. The completion time for this survey will take approximately 15 minutes.

If you agree to participate (receive the email and forward it to your lifeguards) in this study please send me an email reply stating you agree to participate. Once participation agreements are received, you should expect to receive the survey link email within a couple of weeks.

Thank you for your time,

Madison Gump  
Graduate Assistant of Aquatics  
Oklahoma State University  
Email:mgump@okstate.edu



## **Email to Aquatic Supervisors for Participants with Qualtrics Link**

Recreational Lifeguard Research Participants

Hello,

My name is Madison Gump and I am a Master's student in the School of Kinesiology, Applied Health and Recreation at Oklahoma State University.

I would like to invite your lifeguard staff to participate in my research study: 'Identification of Perceived Stressors within Recreational Lifeguards'.

Participation will entail completing an anonymous online survey consisting of questions that evaluate recreational lifeguards' self-reports of job characteristics. The completion time for this survey will take approximately 15 minutes. This is voluntary for you to send to your lifeguards and voluntary for them to participant.

If you agree to allowing your staff to participate in this research if you can please forward this email and link, which is provided below to the anonymous online survey.

[Identification of Perceived Stressors within Recreational Lifeguards](#)

Thank you for your time,

Madison Gump  
Graduate Assistant of Aquatics  
Oklahoma State University  
Email:mgump@okstate.edu

### **Aquatic Supervisor List of Acceptance**

Brittney Jacobs - Oklahoma State University

Chassy Smiley - Kingsport Aquatic Center

Rachel Evans – Johnson City Parks and Recreation

Richelle Harvey – Western Washington University Recreational Center

Sarah Shea – Campus Recreation Texas A&M Commerce

Stephanie Peruzzi – University of Oklahoma Fitness and Recreational Center

Mike Lueck – Wentzville Missouri Parks and Recreation

Julie Saldiva – Texas State University

Taylor Roby - The University of Texas at San Antonio



## School of Kinesiology, Applied Health and Recreation

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### CONSENT FORM

#### Identification of Perceived Stressors in Recreational Lifeguards

#### **Background Information**

You are invited to be in a research study about perceived stressors within recreational lifeguards. You were selected as a possible participant because you currently work as a lifeguard at a recreational aquatic facility. We ask that you read this form and ask any questions you may have before agreeing to be in the study. Your participation is entirely voluntary.

**This study is being conducted by:** Madison Gump, School of Kinesiology, Applied Health and Recreation, Oklahoma State University, under the direction of Donna Lindenmeier, School of Kinesiology, Applied Health and Recreation.

#### **Risks and Benefits of being in the Study**

**The risks to participants are:** There are no known risks associated with this project, which are greater than those ordinarily encountered in daily life.

**The benefits to participation are:** There are no direct benefits to you. More broadly, this study may help the researchers learn more about perceived stressors and preventive stress management in and may help future researchers with discovering stress levels within recreational lifeguards.

#### **Confidentiality**

The information you give in the study will be anonymous. This means that your name will not be collected or linked to the data in any way. The researchers will not be able to remove your data from the dataset once your participation is complete.

The information that you give in the study will be handled confidentially. Your information will be assigned a code number/pseudonym. When the study is completed and the data have been analyzed, this list will be destroyed. Your name will not be used in any report

The research team works to ensure confidentiality to the degree permitted by technology. It is possible, although unlikely, that unauthorized individuals could gain access to your responses because you are responding online. However, your participation in this online survey involves risks similar to a person's everyday use of the internet. If you have concerns, you should consult the survey provider privacy policy at <https://www.qualtrics.com/privacy-statement/>.

It is unlikely, but possible, that others responsible for research oversight may require us to share the information you give us from the study to ensure that the research was conducted safely and appropriately. We will only share your information if law or policy requires us to do so.

### **Voluntary Nature of the Study**

Your participation in this research is voluntary. There is no penalty for refusal to participate, and you are free to withdraw your consent and participation in this project at any time. The alternative is to not participate. You can skip any questions that make you uncomfortable and can stop the interview/survey at any time. Your decision whether or not to participate in this study will not affect your employment and/or grades.

### **Contacts and Questions**

The Institutional Review Board (IRB) for the protection of human research participants at Oklahoma State University has reviewed and approved this study. If you have questions about the research study itself, please contact the Principal Investigator at 865-255-1995, [mgump@okstate.edu](mailto:mgump@okstate.edu). If you have questions about your rights as a research volunteer or would simply like to speak with someone other than the research team about concerns regarding this study, please contact the IRB at (405) 744-3377 or [irb@okstate.edu](mailto:irb@okstate.edu). All reports or correspondence will be kept confidential.

### **Statement of Consent**

I have read the above information. I have had the opportunity to ask questions and have my questions answered. I consent to participate in the study.

**\*\*Proceeding to the following survey indicates that you agree to participate in this research study\*\***

## National Institute of Occupational Safety and Health Generic Job Stress Questionnaire

---

Start of Block: Demographics

Q1 What is your gender?

- Male
- Female
- Other \_\_\_\_\_

---

Q2 What is your age?

- \_\_\_\_\_

---

Q3 What is your ethnicity?

- Caucasian
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Pacific Islander
- Hispanic or Latino
- Other \_\_\_\_\_

---

Q4 How many years have you worked as a lifeguard?

- Less than 1 year
- 1 to 2 years
- 2 to 3 years
- 3 or more years

---

Q5 Do you hold a current lifeguard certification with American Red Cross, Ellis and Associates, Starguard Elite, and YMCA?

- Yes
- No

End of Block: Demographics

---

Start of Block: Conflict at Work

Please answer the following questions about your work situation.

---

Q1 There is harmony within my group.

- Strongly Disagree
- Moderately Disagree
- Neither Agree or Disagree
- Moderately Agree
- Strongly Agree

---

Q2 In our group, we have lots of bickering over who should do what job.

- Strongly Disagree
- Moderately Disagree
- Neither Agree or Disagree
- Moderately Agree
- Strongly Agree

---

Q3 There is difference of opinion among the members of my group.

- Strongly Disagree
- Moderately Disagree
- Neither Agree or Disagree
- Moderately Agree
- Strongly Agree

---

Q4 There is dissension in my group.

- Strongly Disagree
- Moderately Disagree
- Neither Agree or Disagree
- Moderately Agree
- Strongly Agree

---

Q5 The members of my group are supportive of each other's ideas.

- Strongly Disagree
- Moderately Disagree
- Neither Agree or Disagree
- Moderately Agree
- Strongly Agree

---

Q6 There are clashes between subgroups within my group.

- Strongly Disagree
- Moderately Disagree
- Neither Agree or Disagree
- Moderately Agree
- Strongly Agree

---

Q7 There is friendliness among the members of my group.

- Strongly Disagree
- Moderately Disagree
- Neither Agree or Disagree
- Moderately Agree
- Strongly Agree

---

Q8 There is "we" feeling among members of my group.

- Strongly Disagree
- Moderately Disagree
- Neither Agree or Disagree
- Moderately Agree
- Strongly Agree

---

Q9 There are disputes between my group and other groups.

- Strongly Disagree
- Moderately Disagree
- Neither Agree or Disagree
- Moderately Agree
- Strongly Agree

---

Q10 There is agreement between my group and other groups.

- Strongly Disagree
- Moderately Disagree
- Neither Agree or Disagree
- Moderately Agree
- Strongly Agree

---

Q11 Other groups withhold information necessary for the attainment of our group's tasks.

- Strongly Disagree
- Moderately Disagree
- Neither Agree or Disagree
- Moderately Agree
- Strongly Agree

---

Q12 The relationship between my group and other groups is harmonious in attaining the overall organizational goals.

- Strongly Disagree
- Moderately Disagree
- Neither Agree or Disagree
- Moderately Agree
- Strongly Agree



---

Q13 There is lack of mutual assistance between my group and other groups.

- Strongly Disagree
- Moderately Disagree
- Neither Agree or Disagree
- Moderately Agree
- Strongly Agree

---

Q14 There is cooperation between my group and other groups.

- Strongly Disagree
- Moderately Disagree
- Neither Agree or Disagree
- Moderately Agree
- Strongly Agree

---

Q15 There are personality clashes between my group and other groups.

- Strongly Disagree
- Moderately Disagree
- Neither Agree or Disagree
- Moderately Agree
- Strongly Agree

---

Q16 Other groups create problems for my group.

- Strongly Disagree
- Moderately Disagree
- Neither Agree or Disagree
- Moderately Agree
- Strongly Agree

End of Block: Conflict At Work

---

Start of Block: Mental Demands

Please indicate the degree to which you agree or disagree with the following statements about your job.

---

Q1 My job requires a great deal of concentration.

- Strongly Agree
  - Slightly Agree
  - Slightly Disagree
  - Strongly Disagree
- 

Q2 My job requires me to remember many different things.

- Strongly Agree
  - Slightly Agree
  - Slightly Disagree
  - Strongly Disagree
- 

Q3 I must keep my mind on my work at all times?

- Strongly Agree
  - Slightly Agree
  - Slightly Disagree
  - Strongly Disagree
- 

Q4 I can take it easy and still get my work done.

- Strongly Agree
- Slightly Agree
- Slightly Disagree
- Strongly Disagree

---

Q5 I can let my mind wander and still do the work.

- Strongly Agree
- Slightly Agree
- Slightly Disagree
- Strongly Disagree

End of Block: Mental Demands

---

Start of Block: Physical Environment

Please indicate whether the following statements about our job are TRUE or FALSE.

---

Q1 The level of **NOISE** in the area(s) in which I work is usually high.

- True
  - False
- 

Q2 The level of **LIGHTING** in the area(s) in which I work is usually poor.

- True
  - False
- 

Q3 The **TEMPERATURE** of my work area(s) during the **SUMMER** is usually comfortable.

- True
  - False
- 

Q4 The **TEMPERATURE** of my work area(s) during the **WINTER** is usually comfortable.

- True
- False

---

Q5 The **HUMIDITY** in my work area(s) is usually either too high or too low.

- True
- False

---

Q6 The level of **AIR CIRCULATION** in my work area(s) is good.

- True
- False

---

Q7 The **AIR** in my work area(s) is clean and free of pollution.

- True
- False

---

Q8 In my job, I am well protected from exposure to **DANGEROUS SUBSTANCES**.

- True
- False

---

Q9 The overall quality of the **PHYSICAL ENVIRONMENT** where I work is poor.

- True
- False

---

Q10 My **WORK AREA(S)** is/are awfully crowded.

- True
- False

End of Block: Physical Environment

Start of Block: Social Support

---

How much do each of these people go out of their way to do things to make your work life easier for you?

Q1 Your immediate supervisor (boss)?

- Very Much
  - Somewhat
  - A Little
  - Not At All
  - Don't Have Any Such Person
- 

Q2 Other people at work?

- Very Much
  - Somewhat
  - A Little
  - Not At All
  - Don't Have Any Such Person
- 

Q3 Your spouse, friends and relatives?

- Very Much
- Somewhat
- A Little
- Not At All
- Don't Have Any Such Person

---

How easy is it to talk with each of the following people?

Q4 Your immediate supervisor (boss)

- Very Much
- Somewhat
- A Little
- Not At All
- Don't Have Any Such Person

---

Q5 Other people at work?

- Very Much
- Somewhat
- A Little
- Not At All
- Don't Have Any Such Person

---

Q6 Your spouse, friends and relatives?

- Very Much
- Somewhat
- A Little
- Not At All
- Don't Have Any Such Person

---

How much can each of these people be relied on when things get tough at work?

Q7 Your immediate supervisor (boss)?

- Very Much
- Somewhat
- A Little
- Not At All
- Don't Have Any Such Person

---

Q8 Other people at work?

- Very Much
- Somewhat
- A Little
- Not At All
- Don't Have Any Such Person

---

Q9 Your spouse, friends and relatives?

- Very Much
- Somewhat
- A Little
- Not At All
- Don't Have Any Such Person

---

How much is each of the following willing to listen to your personal problems?

Q10 Your immediate supervisor (boss)?

- Very Much
- Somewhat
- A Little
- Not At All
- Don't Have Any Such Person

---

Q11 Other people at?

- Very Much
- Somewhat
- A Little
- Not At All
- Don't Have Any Such Person

---

Q12 Your spouse, friends and relatives?

- Very Much
- Somewhat
- A Little
- Not At All
- Don't Have Any Such Person

End of Block: Social Support



---

Start of Block: Work Hazards

Please answer each of the following questions as they apply to you.

---

Q1 Does your job primary involve providing direct service to specific groups of people or client populations?

- Never
- Occasionally
- Sometimes
- Fairly Often
- Very Often

---

Q2 How often does your job expose you to verbal abuse and/or confrontations with clients or the general public?

- Never
- Occasionally
- Sometimes
- Fairly Often
- Very Often

---

Q3 How often does your job expose you to the threat of physical harm and injury?

- Never
- Occasionally
- Sometimes
- Fairly Often
- Very Often

---

Q4 How often have you been physically assaulted within the past 12 months while performing your job?

- Never
- Occasionally
- Sometimes
- Fairly Often
- Very Often

---

Q5 How often does your job personally subject you to potential legal liability?

- Never
- Occasionally
- Sometimes
- Fairly Often
- Very Often

End of Block: Work Hazards

---

Start of Block: Workload and Responsibility

The next few items are concerned with various aspects of your work activities.

---

Q1 How much slowdown in the workload do you experience?

- Hardly Any
- A Little
- Some
- A Lot
- A Great Deal

---

Q2 How much time do you have to think and contemplate?

- Hardly Any
- A Little
- Some
- A Lot
- A Great Deal

---

Q3 How much workload do you have?

- Hardly Any
- A Little
- Some
- A Lot
- A Great Deal

---

Q4 What quality of work do others expect you to do?

- Hardly Any
- A Little
- Some
- A Lot
- A Great Deal

---

Q5 How much time do you have to do all your work?

- Hardly Any
- A Little
- Some
- A Lot
- A Great Deal

---

Q6 How many projects, assignments, or task do you have?

- Hardly Any
- A Little
- Some
- A Lot
- A Great Deal

---

Q7 How many lulls between heavy workload periods do you have?

- Hardly Any
- A Little
- Some
- A Lot
- A Great Deal

---

Q8 How much responsibility do you have for the future of others?

- Hardly Any
- A Little
- Some
- A Lot
- A Great Deal

---

Q9 How much responsibility do you have for the job security of others?

- Hardly Any
- A Little
- Some
- A Lot
- A Great Deal

---

Q10 How much responsibility do you have for the morale of others?

- Hardly Any
- A Little
- Some
- A Lot
- A Great Deal

---

Q11 How much responsibility do you have for the welfare and lives of others?

- Hardly Any
- A Little
- Some
- A Lot
- A Great Deal

End of Block: Workload and Responsibility

---



## Oklahoma State University Institutional Review Board

Date: 03/25/2020  
Application Number: IRB-20-161  
Proposal Title: Identification of Perceived Stressors within Recreational Lifeguards  
Principal Investigator: Madison Gump  
Co-Investigator(s):  
Faculty Adviser: Donna Lindenmeier  
Project Coordinator:  
Research Assistant(s):  
Processed as: Exempt  
Exempt Category:

### **Status Recommended by Reviewer(s): Approved**

---

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in 45CFR46.

**This study meets criteria in the Revised Common Rule, as well as, one or more of the circumstances for which continuing review is not required. As Principal Investigator of this research, you will be required to submit a status report to the IRB triennially.**

The final versions of any recruitment, consent and assent documents bearing the IRB approval stamp are available for download from IRBManager. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be approved by the IRB. Protocol modifications requiring approval may include changes to the title, PI, adviser, other research personnel, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any unanticipated and/or adverse events to the IRB Office promptly.

4. Notify the IRB office when your research project is complete or when you are no longer affiliated with Oklahoma State University.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact the IRB Office at 405-7443377 or [irb@okstate.edu](mailto:irb@okstate.edu).

Sincerely,

Oklahoma State University IRB

VITA  
MADISON GUMP  
Candidate for the Degree of  
Master of Science

Thesis: IDENTIFICATION OF PERCEIVED STRESSORS IN RECREATIONAL  
LIFEGUARDS

Major Field: Leisure Studies

Biographical:

Education:

Completed the requirements for the Master of Science in Leisure Studies at  
Oklahoma State University in July 2020.

Completed the requirements for the Bachelor of Science in Physical Education at  
East Tennessee State University, Johnson City, Tennessee in 2018.

Experience:

Kingsport Aquatic Center: July 2020 - Present

Oklahoma State University- Department of Wellness: May 2018-May 2020

Kingsport Aquatic Center: April 2017 – July 2018

East Tennessee State University Aquatics Manager: September 2017 – July 2018

Professional Membership:

NIRSA: 2018-Present

WWA: Present

AOAP: Present