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Public Safety Personnel and the Use of Peer-to-Peer Mental and Emotional Support Through Social Media

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MS, Walden University, 2015

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Dissertation Submitted in Fulfillment

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Abstract

The emotional and mental health of public safety personnel has been a topic that is continuing to receive attention. Being exposed to multiple traumatic events takes a mental and emotional toll on those who place their lives in harm's way to help others. The study was based on social cognitive theory which focused on self-efficacy through social influences and environment. The purpose of this study was to understand the experience of public safety personnel's training regarding their perceptions to mitigate emotional stress; the experience of public safety personnel with seeking mental health services; experience of public safety personnel with the stigma of receiving mental health services; the experience of public safety personnel's use of online social networks for emotional support; and the experience of peer-to-peer online support for mental health and receiving mental health services. The research design was basic qualitative with an open-ended questionnaire through a link placed into public safety Facebook groups. Nvivo software was used to code and identify themes for interpretation. The results showed inadequate initial and ongoing mental health training along with negative experiences when seeking mental health services. Mental health stigma has changed, but some participants still felt there was a stigma with seeking mental health services. Peer-to-Peer online support had positive results toward mental health when participants felt stigma amongst coworkers. Findings may be used for positive social change by providing adequate initial mental health training needs. Online peer-to-peer support may be the first step if a person is not ready to seek professional help and public safety personnel need specialized mental health due to the type of traumas they are exposed to each shift.

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Chapter 1: Introduction to the Study

Public safety professionals, also known as first responders, help with ensuring the safety of their communities. These professionals are defined as personnel in police departments, fire departments, 911 dispatch centers, and emergency medical services (EMS). Haugen et al. (2012) stated that with every shift that is worked, public safety and military personnel are in an occupation that puts them repeatedly in harm's way. The chances for posttraumatic stress disorder (PTSD) and depressive symptoms correlate with the number of traumatic events to which they are exposed (Park et al,. 2018).

One avenue of emotional support for public safety personnel with stressful experiences from emotionally traumatic calls is through online social network groups, but as Williams (2013) stated, there is a lack of research on emotional support and coping strategies in the line of work. Having additional resources, such as online social networks, provides a different outlet for public safety personnel with peers in the same specialty but not necessarily with direct coworkers or management. Naslund, et al. (2016) completed a study on unsolicited self-forming online communities of individuals with diverse health concerns. Naslund et al. showed that with peer-to-peer support there had been reported benefits from the interaction of those within the group and challenged stigma through empowerment and providing hope.

Background

Multiple researchers such as Kennedy et al. (2015), Minnie et al. (2015), and Williams (2013) have indicated a lack of preparation for the responder's mental health as regards adequately processing emotional stress from traumatic events of emergency calls.

This suggested that proper training was not provided to the public safety personnel during initial education for paramedic students. With paid public safety personnel, some employers provide mental health services because there is a perception related to mental health services that public safety personnel do not always seek help (Milligan-Saville et al., 2018). Milligan-Saville et al. showed a correlation between exposures to traumatic events and consumption of alcoholic drinks. There is a large population of volunteer firefighters who provide time to help their community outside of their normal paid job. These volunteer firefighters are not screened for mental health like the paid public safety services, nor do they have the resources for mental health services unless they seek them on their own (Milligan-Saville et al., 2018).

Peer-to-peer support provides others in the same line of work the ability to communicate and support each other. Social media is a platform that allows people from all over the world to communicate at any time of the day or night. These peers are not directly in the same department and thus allow for others to speak without confidentiality concerns or fear of stigma (Bartone et al., 2019). There has been a gap in research about mental health among public safety personnel and the research that has been completed is mainly from other countries outside of the United States.

Problem Statement

With the lack of proper training for healthy emotional coping skills, there have been other avenues used to gain the needed emotional support such as EAP (employee assistant program) and social media. Social media can connect people from all over the world and provide an additional outlet for public safety personnel. However, there has

been a stigma about public safety personnel seeking mental health services as it is seen as being mentally unstable or weak (Haugen et al., 2017). Given this mental health stigma, it is important to understand the experiences of public safety personnel seeking services to mitigate the stresses related to mental and emotional health. It should be determined if peer social media groups are being used by public safety personnel to help to improve the culture of mental health, emotional support, and stress. If so, the question becomes whether public safety personnel use online social media because they feel the resources are inadequately provided by or because they are uncomfortable seeking treatment from their employers.

Purpose

The purpose of this study was to understand training used to mitigate stressful work duties and the use of online social media by public safety personnel for emotional support. The study results can be used to recommend additional resources for public safety personnel to support improving mental and emotional health. I used a qualitative questionnaire as the main approach for data collection.

Research Questions

RQ1: What is the experience of public safety personnel's training regarding their perceptions to mitigate emotional stress?

RQ2: What is the experience of public safety personnel with seeking mental health services?

RQ2a: What is the experience of public safety personnel with the stigma of receiving mental health services?

RQ2b: What is the experience of public safety personnel's use of online social networks for emotional support?

RQ2c: If using online social media for support; what is the experience of peer-to-peer online support for mental health as regards to stigma of receiving mental health services?

Theoretical Framework

The theoretical framework for this study was social cognitive theory focused on the construct of self-efficacy. Social cognitive theory is based on social influences with an emphasis on a person's environment and past experiences (Bandura & Adams, 1977). The six constructs of the social cognitive theory are (a) reciprocal determinism, (b) behavioral capability, (c) observational learning, (d) reinforcements, (e) expectations, and (f) self-efficacy. Social cognitive theory also considers the relationship between the person and the agency with sociostructural influences (Bandura, 1986). All these constructs focus on the perceived choice of how someone copes based on previous experiences and how they cope when faced with obstacles, and aversive experiences (Bandura & Adams, 1977).

Self-efficacy is a construct based on a person's previous behavior during a threatening activity on being able to expand on their inhibitions through corrective experience (Bandura& Adams, 1977). Social cognitive theory states that these emotions signal a negative outcome and poor performance (Ng & Lucianetti, 2015). A person who does not persist while facing obstacles will cease their coping mechanism prematurely

and continue with self-debilitating behavior and expectations as stated with self-efficacy theory (Ng & Lucianetti, 2015)

Bandura (1986) stated that while one construct is a focus, there are still other social cognitive constructs that play a role in a person's behavior. I used this theoretical framework because public safety professionals are exposed to events beyond their control and have to help others at the same time. Social cognitive theory concerns the relationship between the person and their public safety agency with sociostructural influences (Bedard-Gillian et. al, 2017). These events do not always involve overt physical trauma of blood and broken bones; other events can also have the same psychophysiological ramifications (Kennedy et. al, 2015). This theoretical framework will assist in the interpretation of the qualitative questionnaires and allow further insight into the person in public safety and use of online social network groups specific to their discipline.

Nature of the Study

For this study I used social cognitive theory and self-efficacy construct focus as the theoretical framework. This qualitative approach focused on the experiences of public safety personnel. The social cognitive theory allowed for a better understanding of a person's perceived coping choices based on behavioral settings, as well as how long they can withstand these obstacles, and aversive experiences. Shift work of public safety personnel doesn't allow control over what traumatic events they are exposed to. Being able to identify these events and work through them with healthy coping skills is important. The social cognitive theory guided the qualitative questionnaires of this study

to gain insight into how public safety personnel use online social network groups focused on their line of work.

Definitions

For a better understanding of terms in this study the following terms are defined in the context of this research.

Certified flight communicator (CFC): Certification developed for communication specialists in the Air Medical field such as flight following, navigation, map reading skills, aviation weather, PAIP, stress management, public relations, and medical terminology.

Emergency medical services (EMS): A person that works in an ambulance and may have licensure of paramedic or EMT.

Emergency dispatch center (EDC): An office a person manages a group of vehicles such as 911/police and send them where they are needed.

Emergency medical dispatcher (EMD): A professional telecommunicator, tasked with the gathering of information related to medical emergencies, the provision of assistance and instructions by voice, prior to the arrival of emergency medical services.

Emergency medical technician (EMT): A specially trained medical technician certified to provide basic emergency services

Employee Assistance Program (EAP): A voluntary, work-based program that offers free and confidential assessments, short-term counseling, referrals

Public Safety Personnel: A person that works in law enforcement, firefighter, dispatcher, and emergency medical services.

Paramedic: A person trained to give advanced emergency medical care to people who are injured or ill, typically in a setting outside of a hospital.

Significance

This research fills a gap of understanding of how online social media of peer-to-peer support is used by public safety personnel for mental and emotional support. Heyman et al. (2019) stated that more public safety personnel such as police officers and firefighters have died from suicide than in the line of duty. Venteicher (2017) wrote focusing on a story told by parents of a paramedic who committed suicide at the age of 27. They stated that speaking up about the emotional strain in the public safety personnel culture is discouraged and considered weak.

Venteicher (2017) stated that in a survey of over 4,000 public safety personnel, 6.6% had admitted to attempting suicide, which is more than 10 times the rate of the general population. The United States is not the only country with an increased rate of public safety personnel suicides. Erich (2014) reported that in Canada an increased number of public safety personnel die from suicide. A former paramedic had also stated in that article that they had seen bullying happen because someone spoke up and asked for help.

The anticipated social change from this research is to support adding additional resources accessible to public safety personnel, understanding mental health stigma, and improving their overall mental health. This study is important for public safety personnel because being mentally healthy improves self-confidence and leads to lower burnout rates and suicides (Cannuscio et al., 2016). The increased suicide rates for public safety

personnel are not only in the United States but an issue in other countries too (Erich, 2014). The use of social media and the connections that are made worldwide help with social change. The mitigation of stigma associated with mental illness and having a connection through social media that someone would not normally have can change that person's life.

Limitations, Challenges, Barriers

Limitations that may have affected this study were that the study population was limited to those who are on social media and belong to the different public safety personnel groups. This public safety personnel population was from a large social media population for additional randomization; therefore, the population may include those from all over the world. The data were collected during COVID-19 pandemic and the influence of the pandemic is unknown. A potential barrier as a researcher was that I am currently still in public safety field in multiple disciplines; however, I have kept my background and experience from influencing the study. This was important and a reason why the survey was placed online, to prevent bias. To minimize bias, I have strictly followed Walden's ethical guidelines and maintained a neutral position.

Summary

Mental health stigma plays a role in whether public safety personnel seek services after being exposed to a traumatic event. Researchers have indicated a need for further research with interventions tailored for public safety personnel. Social media such as Facebook has allowed for peer-to-peer support outside the person's department. Social media allows for connection throughout the world and the ability to see how others cope

and the type of interventions they have access to. Being able to analyze the importance of the use of social media by public safety personnel will allow for further interventions to be identified.

Chapter 2: Literature Review

Cannuscio et al. (2016) stated there is an increasing strain on and burnout rate within public safety personnel due to the increased nonemergent 911 calls. This increase of nonemergent calls results in higher stress and low morale with increased desensitizing to public safety personnel. When the calls for 911 response increases in the communities, the statistical data have shown these calls are typically deemed non-emergent requests (Cannuscio et al., 2016). A nonemergent request is a medical or trauma complaint that is nonlife-threatening. For example, a caller may call 911 at 03:00 am complaining of foot pain although the pain had been the same for 2 weeks.

William (2013) said that paramedics perform a frontline role in assessing, managing, treating, and transporting the public to hospitals from a variety of different medical and traumatic emergencies. Public safety personnel are expected to handle their own emotions during high-stress events in the presence of emotionally distressed patients or relatives. However, William stated that there is a lack of research on emotional support and coping strategies for personnel in this line of work.

Social media can connect people from all over the world and provide an additional outlet for public safety personnel. Having additional resources, such as online social networks for peer-to-peer support, provides a different outlet for public safety personnel because they are peers within the same specialty. However, there is a stigma with public safety personnel about seeking mental health services as it is seen as something negative (Haugen et al., 2017).

Pentina and Zhang (2017) compared the emotional aspects of encounters and face-to-face encounters. They looked at the Big Five personality traits such as extroversion, agreeableness, openness, neuroticism, and conscientiousness with social support and whether they related to positive emotions on social media. The data were collected by an online survey with a broad spectrum of social media users. The results suggested that low self-esteem does not trigger a greater amount of emotional sharing for both social media and real life. Pentina and Zhang (2017) suggested that some personality traits were more likely to post positive emotions based on their perceived social support. Pentina and Zhang indicated that further research was needed based on longitudinal research with indications for additional studies of emotional support. The study was limited to using a broader context and population with not setting specific criteria to narrow down selected participants (Pentina & Zhang, 2017)

Strategy Used for Literature Search

The strategy I used for the literature search was keywords placed into the search engines for journals through the Walden University Library site. I searched Science Direct, Sage Journals, Psychiatry Research, Journal of Affective Disorders, Journal of Traumatic Stress, Australian Journal of Psychology, Journal of Loss and Trauma, Keywords I used police or law enforcement and mental health stigma, which resulted in three articles published after 2015. Additional searches were for police or law enforcement and PTSD or post-traumatic stress disorder, mental health. Firefighter or Fire department and PTSD or Post-traumatic stress disorder were also placed as keywords. I also searched with EMS and PTSD, mental health, and then peer to peer

support, social support. Searching with the keywords of Social Cognitive Theory, self-efficacy and public safety personnel, first responders, firefighters, EMS, police, law enforcement resulted in zero articles. I then searched Social Cognitive Theory, self-efficacy and mental health. Additional searches were done placing mental health stigma and public safety personnel, seeking mental health services and public safety personnel in seven articles. The organization of the literature starts with the theoretical framework and then the history of PTSD, peer-to-peer support, emergency dispatch, emergency medical services, firefighters, and law enforcement.

Theoretical Framework

Social cognitive theory has six constructs of social cognitive theory which are (a) reciprocal determinism, (b) behavioral capability, (c) observational learning, (d) reinforcements, (e) expectations, and (f) self-efficacy. Social cognitive theory focusing on construct of self-efficacy looks at the social influences and environment of the person. All the constructs focus on a person's perceived choice based on pervious experiences and perceived choices of how to cope during these obstacles (Bandura & Adams, 1977). When threatened with negative emotions due to facing an obstacle the person's coping mechanism will prematurely cease and will continue with self-debilitating behavior (Ng & Lucianetti, 2015).

Ozyilmaz et al. (2017) completed a study using social cognitive theory with self-efficacy of an employee and employer with trust in the organization. One of Ozyilmaz et al.'s hypotheses correlated self-efficacy and trust in the organization to predict turnover intentions. Ozyilmaz et al. stated that self-efficacy had a significant role with an

employee's work-related attitude and behavior along with being a key predictor of performance. The trust in the organization was stated confident and positive expectations about the multiple constituencies regarding the conduct, motives, and intentions. The multiple constituencies were defined as owners, leadership, or other decision makers (Ozyilmaz et al., 2017).

The external environment provides opportunities for the employee to practice self-efficacy. An employee with higher levels of self-efficacy may influence their work environment to shape their needs and happiness. The other aspect of high self-efficacy is that these employees are not likely to report their intent to go to another job. As the employee may try to find a better job outside of the company but the same industry. The data were collected in Turkey from a heavy manufacturing company. A stratified random sampling was completed from employees and supervisors. A gap in literature stated was the understanding of boundary conditions from the relationship between motivation and employee workplace outcomes. Ozyilmaz et al. (2017) concluded an employee with high self-efficacy was less likely to quit their job and has benefits for that organization.

Tomas (2021) completed a study on occupational self-efficacy and the reciprocal relationship to job demands. As certain job characteristics plays a role in the employee's health such as work overload and role ambiguity can cause stress. Tomas defined personal resources as "individual characteristics linked to resilience and perceived control over one's environment" (p. 2). A three-wave full panel design was used to examine reciprocal mediation effects. Tomas hypothesized there was a relationship between higher levels of role ambiguity, role conflict and mental health complaints which resulted

in lower self-efficacy. Also, low self-efficacy would show a relation to higher mental health complaints (Tomas, 2021).

The data collection was completed over a 6-month time frame and in collaboration with human resource managers. The workplace consists of highly educated employees with no manual labor. Data collection was done via online questionnaire and sent to each employee regardless of their participant in previous questionnaires. A total of 23.1% or 212 employees completed all three questionnaires. The results showed that strengthening self-efficacy can provide additional benefit that had been looked over before by linking job demands and employee strain. Preserving mental health at the workplace is worthwhile on its own but can save substantial financially because of absenteeism and decreased productivity (Tomas, 2021).

Alessandri et al. (2018) completed a study looking at burnout as a work-related syndrome based on emotional and interpersonal stressor. Prolonged exposure to these stressors has been associated negatively to the person of anxiety, depression, life dissatisfaction and mood disturbances. The organization has a negative outcome of turnover and absenteeism. The Big Five personality traits account for individual differences and strong associations to work-related outcomes. Alessandri et al. looked at the role of self-efficacy and managing negative emotions at work to the relationship of personality traits and burnout symptoms.

Alessandri et al. (2018) collected data from “military cadets first enrolled in one of the most prestigious military schools in Italy” (p. 825). Being newcomers, the cadets are likely to experience stress as they have to adjust to the new demanding environment,

social and organizational life. The cohort consisted of 416 cadets with ages from 19 to 32. The 355 or 85.3% of the cadets had a high school degree and 61 or 14.7% had an university degree. There was 53 or 12.7% of the participants that dropped from the study leaving 363 or 87.3% retention rate. The results strongly supported that emotional stability and personality trait protect against developing of burnout symptoms. Emotional stability set the basis for a persons perceived ability to manage negative emotions and those with higher emotional stability showed an increased ability of negative emotions. Emotional self-efficacy was a key mechanism from developing burnout symptoms (Alessandri et al., 2018).

Mental Health Stigma

Ricciardelli et al. (2018) completed a study in Canada regarding mental health stigma, individual factors, and public safety personnel. Ricciardelli et al. stated there were multiple limitations such as sample sizes being small, mainly quantitative data, singular clinical studies for previous research. Public safety personnel exposure to trauma varies based on the occupation with directly in person for law enforcement, firefighters, EMS Others are vicariously exposed to trauma such as dispatchers that have to listen to the caller while waiting for others to arrive and administration may experience trauma vicariously from reviewing the documentation for the traumatic events. There have been several mental health conditions such as PTSD, major depressive disorder, and several others due to the exposure to traumatic events (Ricciardelli et al., 2018).

Ricciardell et al. (2018) stated that stigma leaves the feeling of being discredited by peers when they are seeking care for mental health issues. Stigma may cause an

individual to feel that peers think they are lazy, weak, and was not suited for the job. This was stated to be a barrier for a public safety personnel for self-care and taking time from work. The social identity of a stigmatized person may have the feeling of being devalued which social identity may be focused on that single attribute for stigmatization. The methodology used was an online survey of both quantitative and qualitative components from September 2016 to January 2017. Recruitment was done through different media effort and the self-reported measures stated to have substantial quantitative data with the option of responding to four open-ended items.

The results for stigma directed towards other public safety personnel with mental disorders and may be a system-level process and within the different organizations with creating reinforce notions of abusing the system as when those positions are open because that employee is on leave it then extra may not get filled leaving extra work for others. Stigma may not be attributed to just a mental disorder, but the process of care-seeking based on mechanism of injury and complicating notions of seeking help as being socially acceptable. These stresses can transcend into the public safety personnel's home life or vice versa (Ricciardelli et al., 2020).

Ricciardelli et al. (2020) stated that across all the groups those that expressed experiencing mental health injury there was reinforcing the notion of playing the system. The structural stigma may increase the stress felt by public safety personnel resulting in having little to no staff to fill these positions because it resulted into fatalistic attitudes and pervasive structural stigma. The discussion from the different scenarios creates a

culture that stigma and care-seeking lead to the vicious cycle of distress and disincentivizes care-seeking.

Carlton et al. (2020) completed a study looking at the diverse stressors public safety personnel exposed to during work protecting the population from harm. Carlton et al. stated that other studies completed looking at public safety personnel the occupational stressors were cited of "high job demands, low levels of resources, control and social support" (p. 2). The questions of the study were related to operational and organizational stressors because this type of work is necessarily requiring increased exposure to traumatic events. There were five main research questions for this study with looking at the organizational, operational, positive screens for mental health outcomes, and the unique associations between these stressors. The data were collected from an online self-reported survey with recruitment through emails sent to actively employed public safety personnel (Carlton et al., 2020).

The sample showed 8520 public safety personnel responded to the first question to indicate which public safety field the provider works in of which 4820 gave enough to distinguish the actual field that provider is in. Out of the 4820 (56.6%) providers 379 were flagged for inconsistent responses and excluded from the final sample. The final sample total was 4441 (52.1%) of the total sample included in the final study. The results showed that one element associated with mental health stressors throughout the different fields of providers of operational and organizational were significantly associated (Carlton et al., 2020).

Even with the operational and organizational stressors being significant, results associated to mental health had high ratios where the providers felt they needed to prove themselves to the organization of being sick or injured and then there was also the providers coworkers that seemed to look down upon them. One of the strengths was the sample size was diverse and appeared to be a representative of the population (Carleton et al., 2020). A limitation was that the sample size was selected and not randomized which indicated the need for further research. Carleton et al. concluded that with the positive screenings for mental health disorders that an action plan needs to be assessed for organizational and operational stressors with the largest gain being on leadership within the public safety organizations.

Krakauer et al. (2020) completed a study based on Canadian public safety personnel with estimates of 45% of providers screened positive for at least one mental health disorder when the general population has rates closer to 10% for one mental health disorder. Exposure to traumatic events is unavoidable and published program evaluation based on public safety personnel has been limited. Mental health knowledge and literacy may help the provider to better know and identify when help seeking is needed along with treatment options (Krakauer et al., 2020).

Stigma has been a barrier to seeking treatment and because both self-stigma and public stigma have shown to be inversely related to help seeking. This stigma has often been associated to the provider as being "perceived as in capable, incompetent, weak and a failure" (Krakauer et al., 2020, p. 2). The study was to determine mental health knowledge, stigma in the workplace and intentions of a relationship representation of a

national sample in Canada. The hypothesis was that an increased knowledge of mental health decreased the stigma seen and thus will then correspond to the prevalence in each public safety category (Krakauer et al., 2020).

The participants were recruited as part of an online survey disturbed through email with an IRB approval through University of Regina. A total of 8,520 started the survey with a total of 4,108 (48.2%) completed all of the questions needed for analyzation (Krakauer et al., 2020). This was a self-reported questionnaire with 11 of the questions to measure attitude of avoidance, danger or unpredictability toward people with mental illness. One answer that was reported on this survey towards people with mental illness "I would try to avoid a coworker with a mental illness" (p. 3). It was theatricalized that when knowledge of mental health illness increased the stigma decreased along with intentions to use recourses accessible to them. One aspect discussed was the diversity of mental health conditions between male to female public safety providers because females have the possibility of increased exposure to sexualizations, disrespect and violence than their male partners. Further research was stated that determining better practices for mental health support amongst public safety providers was needed (Krakauer et al., 2020).

Posttraumatic Stress Disorder (PTSD)

PTSD was first added in 1980 to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III) with the initial stipulation of the trauma being of an outside etiology such as war, torture, rape, natural disasters, and man-made disasters. The DSM-III characterized ordinary stressors such as divorce, failure, and serious illness as adjustment

disorders. The distinction between these is that the normal adaptive capabilities are overwhelmed with the stressor (Friedman, 2013).

Friedman (2013) stated that PTSD has its uniqueness for diagnoses since there is great importance based on the etiological agent. For PTSD to be diagnosed certain criteria must be met. The update to the DSM-IV has made significant changes to the criteria which are important for the diagnosis of both conceptual and clinical implications. There was also a change in how PTSD was classified from being an anxiety disorder to trauma and stressor-related disorder. The different criterion, stressor criterion is described below:

Specifies that a person has been exposed to a catastrophic event involving actual or threatened death or injury, or a threat to the physical integrity of him/herself or others. Indirect exposure includes learning about the violent or accidental death or the perpetration of sexual violence to a loved one. Exposure to electric media is not considered a traumatic event. On the other hand, repeated, indirect exposure to the gruesome and horrific consequences of a traumatic event is considered traumatic. (Friedman, 2013, para 8)

One new feature of DSM-IV stated that the rest of the criteria are symptom clusters, and all had onset or were significantly exacerbated after the traumatic event. Intrusive recollection criterion refers to

> Symptoms that are perhaps the most distinctive and readily identifiable symptoms of PTSD. For individuals with PTSD, the traumatic event remains, sometimes for decades or a lifetime, a dominating psychological experience that retains its

power to evoke panic, terror, dread, grief, or despair. These emotions manifest during intrusive daytime images of the event, traumatic nightmares, and vivid reenactments known as PTSD flashbacks. Furthermore, trauma-related stimuli that trigger recollections of the original event have the power to evoke mental images, emotional responses, and physiological reactions associated with the trauma. (Friedman, 2013, para 9).

Avoidance criterion is explained as follows.

Consists of behavioral strategies PTSD patients use to reduce the likelihood that they will expose themselves to trauma-related stimuli. PTSD patients also use these strategies to minimize the intensity of their psychological response if they are exposed to such stimuli. Behavioral strategies include avoiding any thought or situation which is likely to elicit distressing traumatic memories. In its extreme manifestation, avoidance behavior may superficially resemble agoraphobia because the PTSD individual is afraid to leave the house for fear of confronting reminders of the traumatic event(s). (Friedman, 2013; para 10)

Negative cognitions and mood criteria explained as follows.

Reflect persistent alterations in beliefs or mood that have developed after exposure to the traumatic event. People with PTSD often have erroneous cognitions about the causes or consequences of the traumatic event which leads them to blame themselves or others. A related erroneous appraisal is a common belief that one is inadequate, weak, or permanently changed for the worse since exposure to the traumatic event or that one's expectations about the future have

been permanently altered because of the event (e.g., “nothing good can happen to me,” “nobody can be trusted,” “the world is entirely dangerous,” “people will always try to control me”). In addition to negative appraisals about the past, present, and future, people with PTSD have a wide variety of negative emotional states such as anger, guilt, or shame. Dissociative psychogenic amnesia is included in the symptom cluster and involves cutting off the conscious experience of trauma-based memories and feelings. Other symptoms include diminished interest in significant activities and feeling detached or estranged from others. Finally, although individuals with PTSD suffer from persistent negative emotions, they are unable to experience positive feelings such as love, pleasure or enjoyment, such constricted effect makes it extremely difficult to sustain a close martial or otherwise meaningful interpersonal relationship (Friedman, 2013para 11).

Alterations in arousal or reactivity criterion is explained as follows.

Most closely resemble those seen in panic and generalized anxiety disorders. While symptoms such as insomnia and cognitive impairment are generic anxiety symptoms, hypervigilance and startle are more characteristic of PTSD. The hypervigilance in PTSD may sometimes become so intense as to appear like frank paranoia. The startle response has a unique neurobiological substrate and may be the most pathognomonic PTSD symptoms. DSM-IV’s Criterion D2, irritability or outbursts of anger, has been separated into emotional (D4) and behavioral (E1) components in DSM-V. The irritable and angry outbursts may sometimes be

> expressed as aggressive behavior. Finally, reckless and self-destructive behavior such as impulsive acts, unsafe sex, reckless driving, and suicidal behavior are newly included in DSM-V, as Criterion E2 (Friedman, 2013; para 12).

Duration criterion is explained as follows "specifies that symptoms must persist for at least one month before PTSD may be diagnosed" (Friedman, 2013; para 13). Functional significance criterion is explained as follows "specifies that the survivor must experience significant social, occupational, or other distress as a result of these symptoms" (Friedman, 2013; para 14). Exclusion criterion "specifies that the symptoms are not due to medication, substance use, or other illness" (Friedman, 2013; para 15). For assessing PTSD, psychometric and psychophysiological assessment techniques were developed when working with Vietnam war Veterans and were proven to be to succeed. These tools were modified and used with natural disaster survivors, rape/incest, or other traumatized individuals. The neurobiology associated with PTSD can include hyperarousal, increased sensitivity, and sleep abnormalities linked with the sympathetic nervous system (Friedman, 2013).

PTSD typically has other comorbid diagnoses that are usually met, and those diagnoses are major affective disorders, dysthymia, alcohol, anxiety, or personality disorders along with substance abuse disorders. With the classification changes, there are two new subtypes included in the DSM-V and those are preschool subtypes for children 6 years and younger of which have fewer symptoms and lower threshold to be met for the diagnosis. The other is the dissociative subtype where full PTSD criteria with exhibiting depersonalization or derealization (Friedman, 2013).

Friedman (2013) stated that there are many approaches for treatments with PTSD and the most effective and successful intervention is cognitive-behavioral therapy (CBT) and medication. CBT can encompass several different types of therapies such as prolonged exposure therapy (PE), cognitive processing therapy (CPT), eye movement desensitization and reprocessing (EMDR), and stress inoculation therapy (SIT). Selective serotonin reuptake inhibitors (SSRI) have been the medication of choice for treatment, but other antidepressants have shown promising results (Friedman, 2013).

For those considered to have mild to moderate PTSD the most effective therapy is group therapy. Of which, Friedman (2013) stated the empirical support is limited. This provides a setting for those to discuss the memories and symptoms along with functional deficits among others that have had similar experiences. Friedman stated that with therapy the goal needs to be realistic as some cases are severe and complex, and with PTSD being chronic, does not always respond to the current therapy. The ongoing growth of knowledge with PTSD will help to design interventions effective for individuals affected by this disorder (Friedman, 2013).

Kessler et al. (2017) looked at the association of earlier exposure and mental disorders with PTSD after subsequent traumas. The article stated that not everyone who experiences a trauma will develop PTSD but that individual differences are dependent on the vulnerability of that individual. It is from these understandings of the differences and after a trauma, exposure happens for those high-risk individuals allow for preventive interventions to be created. Although the epidemiological research showed that early

trauma exposure and history of psychopathology are strong predictors after subsequent traumas for PTSD (Kessler et al. 2017).

The article stated that earlier traumas were external, and it had presumably predicted future PTSD because first it is the influence of stable vulnerability factors and second the exposure to these traumas caused biological or psychological vulnerabilities. There are childhood adversities (CAs) that occur early in life and have been associated with increased risks of psychopathology of which Kessler et al. (2017) stated it was difficult as CAs are associated with parental psychopathology and genetic risk. A limitation stated is that with epidemiological studies the associations of earlier traumas with PTSD after subsequent traumas are hence limited to the individuals that developed PTSD are due to earlier traumas. This brings in the complications of the same research with CAs. This also brings a gap identified for future investigations on the environmental implications and differences in vulnerability (Kessler et al., 2017).

The data from the study were analyzed from WHO World Mental Health (WMH) Surveys which included 34,676 respondents that reported on trauma exposure during their lifetime. There were 22 community epidemiological surveys within the WMH series completed. Of these surveys, three of the 22 surveys were in low/lower-middle income counties, seven in upper-middle countries, and 12 in high-income countries. Interviews were also administered by trained personnel after obtaining informed consent with the procedures being approved by an IRB (Kessler et al., 2017).

Kessler et al. (2017) stated that even with the limitation identified 70.4% of the respondents did indicate exposure to one or more traumatic events. Kessler et al.

believed that the number is vastly underreported because of the stigma that sounds mental health. The type of trauma had been indicated to increase the chances of PTSD developing (Kessler et al., 2017).

Mental Health Support

Charleton (2021) defined public safety personnel of border services and police officers, public safety communications officials, correctional workers, firefighters, emergency medical services along with emergency managers. The study was completed in Canada with research efforts as stated by Charleton "a special and historically underserved population specifically, Public Safety Personnel" (p. 168). Carleton stated about his time when he had to encounter public safety personnel when he was in a motor vehicle crash in 1984. Charleton stated in retrospective those that he interacted with that day made a direct impact on his career path. Carleton also stated that he never took into account that these public safety providers have usually done these types of things several times a day in which the general public doesn't take into account.

Charleton (2021) made a reference to the news article that within 10 weeks there where a total of 13 public safety personnel that committed suicide. Several articles make reference to these public safety personnel and mental health of which the Federal Minister of Health needed to develop a National Action Plan for public safety personnel based on addressing PTSD and other related challenges. The participants of the roundtable for this action plan stated there was an absence of robust information specific related to public safety personnel and it was important to improve the available data in

Canada and reducing the barriers for mental health along with the experience to access these services (Charleton, 2021).

Carleton (2021) stated there was a summit hosted by Memorial University in 2017 focused on PTSD where the key researchers to survey and meet with public safety personnel and leadership. The summit allowed for the collaborations and able to launch the CIPSRT (Carleton & Ricciardelli, 2017). The CIPSRT community was supported, and a large interdisciplinary team was assembled as a living document that is updated. The third edition of it was being updated in the fall of 2020 which included COVID-19. A free video was also created in awareness of PTSD and was free to the public June 2020. Carleton stated that some of the next steps to help public safety and mental health is not only supporting public safety person mental but increase the basic and applied research capacity, longitudinal applied research, supporting programs that support mental health while developing improvements.

Vig et al. (2020) completed a study on social support with positive mental health outcomes. The perceived social support which is subjective by that person can be associated with how that person feels about mental health and social support. One gap that was found with this study is Vig et al. had not found any published articles comparing the support across the different public safety personnel. Vig et al. had participants completed an anonymous survey between September 2016 through January 2017. The survey included the life events checklist from the DSM-5 that included 16 events that may lead to distress or PTSD.

The results from Vig et al. (2020) showed that 8520 public safety personnel started the survey and they had to exclude 4282 or 48% due to not completing the survey. This was a quantitative analysis using logistic regression to show the association between perceived social support and mental health disorders. The study was designed to assess if having higher perceived social support was associated with screening positive for PTSD or major depressive disorder (MDD). There was a limitation with lack of data from those that started the survey and not finishing which would have provided a larger sample for the different public safety personnel. Empirical evidence of the differences was provided and has robust associations between social support and screening positive for mental health disorders. There was an association with also having to work in remote areas of having fewer social connections and having less access to support (Vig et al., 2020).

Ricciardelli et al. (2020) stated that with the exposure of trauma to public safety personnel compared to the public that it may result in other mental health disorders. The multinational evidence from exposure to traumatic events has shown that public safety personnel have a higher risk of mental health disorders. Indirect exposure also has a significant risk and secondary traumatic stress. The study looked at a trauma hierarchy and what public safety personnel constitute as a traumatic event. The survey was online and administered for five months between 2016 to 2017. The survey consisted of 16 closed ended questions with an option to choose other which provided an open-ended question for further explanation. There was a total of 4441 participants that completed the closed ended question but Ricciardelli et al. focused on the 284 that provided open-ended responses.

The analysis used was semi grounded constructed with axial coding for the coders to disaggregate and reclassify emergent themes. Ricciardelli et al. (2020) stated "Suffering based on an experience that is perceived as widely accepted as traumatic among PSP was deemed legitimate, whereas the same amount of suffering resulting from an experience perceived as unlikely for most PSP" (p. 157). The discussion of the trauma hierarchy from the open-ended questions stated that suffering from the public safety personnel may be considered more legitimate if the exposure was direct versus being indirect or cumulative. This can cause the public safety personnel to deny their feeling and feel like they do not need to obtain help. How trauma is perceived, and differences may impact the stigma where the way to reduce stigma is to increase those in public safety seeking treatment (Ricciardelli et al., 2020).

Shield et al. (2021) completed a study looking at the mental health screening questionnaires, validation within the public safety populations and reviewing the empirical evidence. The literature review was conducted between September 2019 and December 2019. The review was done based on the results from several different data bases. The analysis was done looking at the psychometric properties of each questionnaire reported for sensitivity and specificity. The results show 22 different screening questionnaires based on mental health and substance abuse issues. Even with these questionnaires being validated within the public Shied, et al stated there is very few studies that validates screening tools used for public safety personnel. This shows a gap for questionnaire specifically for public safety personnel and looking at the gap of being

able to identify those that may be at higher risk of developing mental health symptoms (Shields et al., 2021).

Online Mental Health

Prescott et al. (2020) on the use of online mental health communities as the online platforms had facilitated access to collect data and assimilate through different means. Online platforms have been used for self-regulation and with a person's own mental health has been able to use peer-to-peer support of the social media groups. These groups are solely led by the user themselves. The different users are another form of support for seeking help. Online help has changed over the years such as e-health, online platforms for delivering therapies and has proven to be helpful.

Prescott et al. (2020) stated a study in the United Kingdom looked at the use of online platforms and used a qualitative analysis that found online mental health communities were an "invaluable resource for users to turn to when they seek peer-to-peer support" (p.300). These resources are a lower level of support and are beneficial to those users, although still do not replace the services of a mental health counsellor. When assessing social cognitive theory Prescott, et al stated a person's behavior is based personal, behavioral and environmental factors but to also consider the outcome is also based on personal beliefs and self-efficacy (Prescott et al., 2020).

The rationale that Prescott et al. (2020) for analyzing how online mental health communities help is by the online users having a sense of community, change stigma along with knowledge of and understanding different mental health interventions. The

methodology used was an online questionnaire where the community is based in America but has members worldwide. Questionnaires were removed that violated the community guidelines and moderation in the group is done by volunteers. The qualitative questions were open-ended. With the community there was a sense of feeling less isolated, sharing of experiences and communication with likeminded people (Prescott et al., 2020).

The online users may not be comfortable with those closest the person to them offline and with their mental health struggles thus made it more comfortable to turn to the online platform. The other online users that are familiar with similar mental health issues can also discuss coping mechanisms they experienced. Crisis point aversion was another topic for online mental health communities as other members of the group may recognize, suggest a site to access for intentions to alleviate the severity of harmful thoughts. The limitation was that the sample was small as they were self-selected participants by online survey. Some responses were limited to a couple of sentences and participants were not asked if they had an official diagnosis. Further research and understanding of how transitioning from online to offline professional help can be established (Prescott et al., 2020).

McCall et al. (2021) completed a study looking at public safety personnel in Canada and internet delivered cognitive behavioral therapy (ICBT). Public safety personnel reported barriers such as access to mental healthcare, stigma, workplace repercussions along with distrust or discomfort of mental health providers. Some of the concerns with stigma is the confidentiality and fear of seeking mental health services. McCall, et al stated that ICBT had been growing with interest because it is through a web

browser with security features allowing for similar face to face mental health therapy. Evidence on the how public safety personnel seek ICBT can allow for challenges to be addressed and become tailored to treatment (McCall et al., 2021).

Services for ICBT began offering services in December 2019 for the public. Participants were enrolled between December 2019 and March 2021. The data were analyzed using a mixed methods were the quantitative analysis addressed all of the research questions and the qualitative addressed the research question for motivation of public safety personnel seeking mental health services. Many public safety personnel learned of ICBT through work and stated several reasons of wanting to try the therapy as to manage their symptoms on their own, convenience, not feeling understood from previous therapist and difficulty of going to face to face therapy (McCall et al., 2021).

McCall et al. (2021) stated the key implications with the results for the public safety population needing resilience-building treatments, specialization and stated this population is clinically complex while needing ongoing mental health support. Some of the limitations with the study was that it only looked at public safety personnel that signed up for ICBT and does not provide information on those that did not sign up. The other limitations stated data was collected during COVID-19 pandemic and does not know how much the results were influenced by it. McCall, et al stated in the conclusion that tailored ICBT may be effective for the public safety population and with the population being clinically complex that just specialization may not be require but to also consider transdiagnostic and ongoing mental health support.

Beahm et al. (2021) completed a study based on inter interventions of ICBT and public safety personnel to understand their experiences of the treatment. Public safety personnel are exposed to a diverse range of trauma during their shifts. Past research showed positive results for ICBT with public safety personnel. The study was designed as qualitative and an evaluation of ICBT for public safety personnel. The public safety personnel wellbeing course was offered in Canada which offered tailor ICBT for this population. The study had 82 participants enrolled between December 2019 and June 2020. The treatment was eight weeks with at total of 57 participants as 10 participants withdrew from the program and 15 did not complete the survey (Beahm et al., 2021).

Beahm et al. (2021) stated the measurement of the data was from Patient Health Questionnaire-9, Generalized Anxiety Disorder-7 and PTSD checklist for DSM-5 of which questions after were opened for treatment satisfaction. The second part of the data was analyzing communication of emails between the participant and therapist. There was an option of homework reflection question that focused on the issues they had during the week before. The qualitative data for the three sources were placed into Nvivo 12.0 for analyzation. Themes were created with the information coded with an inter-coder reliability of 20% after the initial codebook (Beahm et al., 2021).

The results from the study stated that 97% of the participants would recommend the program to other public safety personnel and felt they benefitted from it. One limitation reported by 44% of participants was being able to keep up with the eight-week course. About 25% of the participants reported having a negative effect with increased symptoms but a couple indicated the overall increase of those symptoms helped them in

recovery. Convenience, flexibility, and course design were found as positive aspects. ICBT is one solution that is currently being researched for helping public safety personnel. The conclusion stated that PSP wellbeing course was transdiagnostic and had positive impact on the clients. The skills learned help to improve overall wellbeing even (Beahm et al., 2021).

Peer to Peer/Social Support

Asad and Chreim (2016) defined peer support as "any organized support provided by and for people with mental health problems" (p. 1). Asad and Chreim stated how important peer support and the recovery process is and looked at the formal to informal models. Some of the advantages stated were a benefit to the clients and system that includes holistic care with the ability to reach the populations most vulnerable and hard to reach. It is the ability to change the perceptions and stigma with growth during the exchange of stories between clients (Asad & Chreim, 2016).

While there are several advantages to peer support there are still challenges such as role definition and being integrated into the mental health teams. Asad and Chreim (2016) completed a qualitative approach with the focus on narrative interviews for the participants to be able to elaborate on personal experiences. The data was collected as Assertive Community Treatment Team (ACTT) and non-standardized team (non-ST) where ACTT "is a client-centered, recovery-orientated mental health service delivery model" and non-ST are "formal models include different types of programs where peer support providers are employed" (Asad & Chreim, 2016, p 768). Asad and Chreim collected their data from purposive sampling which allowed for the selection of

participants to be from the two different environments. The recruitment had 12 participants with eight of those employed at different ACTTs and four in different non-STs (Asad & Chreim, 2016).

Asad and Chreim's (2016) data analysis looked at their role definition and role acceptance by other members of the team and stigma. Client engagement and boundaries were also examined. Two researchers were involved in the analysis with a copy of the finding sent to all the participants. The data showed that participants had an evolution with acceptance by their other team members which showed an increasing understanding of the peer support role. The participants also disclosed their past illness and can advocate for a client's needs and educate the team. The participants can be "information liaisons" to share what is needed for health and recovery goals in mind (Asad & Chreim, 2016).

Peer support providers also encountered situations where the person is still in denial of their illness and does not want the support or it is a court-ordered treatment. The participants also had to learn when it was a good time to disclose their illness with clients because some did not take the information well and no longer wanted them to help them. When the information is disclosed at the right time from the peer support providers it does help with rapport. One of the limitations stated by Asad and Chreim (2016) is the limited number of participants, and all were from the same area. One area for further research is to look at the differences in the experiences of providers working in a different context (Asad & Chreim, 2016).

Bartone et al., (2019) completed a systematic review on peer support services as the articles stated the implementation of peer support programs help others to cope with a variety of problems such as mental health, alcohol, and substance abuse. It was recently that these programs have become accepted within society as an effective adjunct. Since 1990 these support groups have increased and in 2005 it was estimated to be over 10,000 peer support groups in the United States. There were other groups such as chronic illness, diabetes, law enforcement, firefighters, and military included in the total (Bartone et al., 2019).

Bartone et al., (2019) defined peer support as "a system of giving and receiving help founded on key principles of respect, shared responsibility, and mutual agreement of what is helpful" (p. 138). Peer support services usually involve others that have a similar background that provides connections and trust to be established. These services promote hope and recovery along with empathic understanding from illness to traumas, psychological well-being, and improved life skills. It was believed that the underlying of peer support is social support which has been associated with good health and outcomes of people when they are confronted with other stressful events (Bartone et al., 2019).

A couple of studies completed showed examples of Vietnam veterans and Gulf war veterans showed that peer social support reduced ill effects and influenced positive outcomes. Even with individuals needing support by professional therapy, some were able to get the same benefit from the peer social support groups. These programs showed that fewer and shorter hospital stays with improved satisfaction in their health (Barton et

al., 2019). Bartone et al. stated that none of the studies had shown anything detrimental from the peer support groups but several had positive effects.

Bartone et al., (2019) search for references was completed using databases such as PubMed, PsycINFO, and CINAHL with the date range from 1991 to 2016. If either of the level-1 or level-2 terms appeared in the title or abstract, then the article was retained for further examination. Once the articles were examined further for the inclusion criteria then they were rated for evidence strength. The results provided 32 studies that met all of their criteria and then the articles were broken down by design and rated from high to low quality (Bartone, et al 2019).

Bartone et al. (2019) showed that there was no difference in symptoms when the individual experience support being in-person versus the internet. The individual was still able to receive the support and benefits of which they reported the feeling of isolation being reduced. Personal growth and reduced symptoms were also indicated from individuals through peer social support compared to mental health professionals of which it was not. Barton, et al stated in the discussion that with the growth of internet-based support programs there has been a link to the reduction of symptoms, and those that were available to do face-to-face peer support also increased the effectiveness of the program. The article also stated that further research needed to be completed as there was an indication of internet-based peer support programs growing (Bartone et al., 2019).

Emergency Dispatch

Golding et al. (2017) completed a study exploring the psychological health of emergency dispatch centers (EDC). Just like other emergency workers in health care

environments, there is a wide range of stressors from situational, organizational, and personal that report these stressors play a significant part in emotional exhaustion and burnout. Emergency dispatchers must triage the 911 calls that are coming into the center. There are times they are having to stay on the line with the caller giving vital instructions on helping the person they are with until the ambulance arrives (Golding et al., 2017).

Within the EDC stressors are associated with negative physical and psychological outcomes as this type of employment involves shiftwork. Shiftwork has shown an increased health risk that includes cancer, obesity, cardiovascular diseases, hypertension, burnout, depression, and anxiety. Golding et al. (2017) stated that literature reviews have focused on the other occupations within the emergency field but there have been no published sources looking at the impact of stress on psychological health for EDC (Golding et al., 2017).

Golding et al. (2017) completed a systematic review by searching eight databases during May 2016 using PRISMA guidelines. The titles and abstracts were reviewed and decided if the full text would be screened for inclusion criteria. The data that was collected had been competed by a team of reviewers that worked in pairs. Two coordinating reviewers oversaw the other reviewers for the consistency of the assessment tools. The data extraction had variations based on the study design. The studies were given a rating of strong moderate or weak (Golding et al., 2017).

The results identified 2,358 articles of which 914 were removed because they were duplicates of which 1,516 abstracts were reviewed and 1,401 were then removed. This left 115 articles to have full-text reading for further inclusion criteria. Out of the

115 articles that had the full text read 99 of the articles were excluded because they did not include EDC or related to psychological health or stress. Out of the 16 articles, there were seven qualitative and nine quantitative articles of which none were longitudinal studies or trials of interventions. These studies were from several different countries such as the United States, the United Kingdom, Australia, France, Sweden, and Ireland. When it came to assessing the articles for bias, they were all rated from weak, moderate, and strong with weak meaning there was a higher risk for bias (Golding et al., 2017).

Golding et al. (2017) identified two themes with the first being organizational and operational factors. These factors were reported to have increased stress for EDC personnel which include the lack of control and demands over workload, multitasking and balancing the demands that are needed to get help sent out, lack of understanding of the role by outsiders which resulted in feeling undervalued and demoralized. Constricted and inadequate workspaces increased stress and the feeling of not being in control after coming back from a break would often mean the EDC personnel would not leave their console to take breaks. Another stress identified was the lack of control over outcomes even with the effort to gain some control of being able to manually change the priority of the call. Golding, et al. showed that for those who had field experience the stress was increased as they felt there was not much they could do in the EDC when before they had a more hands-on and active role (Golding et al., 2017).

Golding et al. (2017) cited traumatic and abusive calls for added psychological stress and were positively correlated to PTSD symptoms and burnout. Incidents that related to traffic accidents, children or vulnerable populations, domestic violence, and

suicides were stated to be the most distressing. This also leads to more dispatchers reporting greater exhaustion and a greater desire to leave the organization. The second themes that was identified was interactions with others and the first being with supervisory relationships which then leads to frustration with poor leadership or lack of support, empathy, and understanding. It was perceived that leadership was too distant that they did not understand the demands of the job. Another aspect stated with leadership is that bullying and inappropriate behavior were not addressed by leadership (Golding et al., 2017).

Peer support was a way to reduce the emotional pressure seen by EDC personnel. There is more than one way for peer support and having formal support with a trained peer support professional was one of which another peer support was stated with storytelling and has dark humor. One negative state of Critical Incident Stress Debriefing (CISD) was no effect on the stress they felt after a CISD with a trained professional. Work-life and home life were other contributors to not having adequate outside interest along with support from family and friends. Dispatchers without the home support stated they did not confide in them (Golding et al., 2017).

Golding et al. (2017) stated there is a limitation-based EDC psychological health and the number of studies completed. The lack of control over the dispatcher's workload is a source of frustration and the excessive and demanding of it may also lead to emotional distress or burnout. The nature of the calls was another area that can cause stress as in compassion fatigue. It is the fatigue, emotional exhaustion, and burnout that may contribute to the higher rate of absences from EDC personnel. To help with

mitigating some of the negative effects of the job and reduce fatigue or burnout providing education on coping and strategies on emotion regulation. Peer support was stated as an avenue to reduce the negative effect of this highly demanding role. One avenue stated that needs to be explored and a gap is stress on EDC personnel and long-term psychological health (Golding et al., 2017).

Emergency Medical Services

Alaqeel et al. (2019) completed a descriptive cross-sectional study in Saudi Arabia based on emergency medical services (EMS) personnel as there was a deficit in studies where only firefighters were the only group studied among the high-risk groups. PTSD was first recognized in the DSM-III and was characterized by the exposure to traumatic events directly, witnessing or learning of these events happening to close friends or relatives, or having to repeatedly hear the details of the traumatic event. For PTSD to be diagnosed instead of acute stress disorder the person needs to experience the symptoms for longer than one month. In 2012 the prevalence worldwide was 10% with the United States having about 8.7% (Alaqeel et al., 2019).

Public safety occupations of police officers, EMS, and firefighters have the association of increased exposure to traumatic events and having to cope with these events are higher than the average person and thus more susceptible to developing PTSD. Alaqeel et al. states that “EMS personnel are at a higher risk than other emergency personnel” (p 29, para 2). Of these high-risk professions, the prevalence ranges from 3% to 24.5% with EMS personnel showing 22% in other studies (Alaqeel et al., 2019).

Alaqeel et al. (2019) was based in King Abdulaziz Medical City (KAMC) which has a Level I trauma center and is a tertiary health care center. The targeted population was paramedics, EMTs, and drivers. An IRB was obtained at the King Abdullah International Medical Research (KAIMRC). Alaqeel et al. obtained contact information for 110 EMS personnel from the management office of the KAMC EMS department. The 110 employees were sent an email with an invitation to participate. A link was provided in the email and participation was voluntary as all of the information collected was through a questionnaire with no identifying information (Alaqeel et al., 2019).

The first part of the questionnaire was demographic information, and the second part was Post-Traumatic Stress Disorder Checklist (PCL-C) that has 17 questions to help with identifying PTSD based on the DSM-IV criteria and used the 5-point Likert scale. The response had a range of 17-85 and the data were collected over 6 weeks. The statistical analysis was completed on the 2016 Microsoft Excel using SPSS version 24. The point cut-off was 30-35 which is an indicator for the presence of PTSD symptoms. A chi-square test was used association and the statistical significance with a 95% confidence interval (Alaqeel et al., 2019).

The results showed that out of the 110 EMS personnel that the survey was sent to 74 participants. All the respondents were men over the age of 30 and 42 were married. Half of the respondents were EMTs, and the majority of all participants had less than ten years of experience. EMTs had a higher proportion than paramedics at scoring above the cutoff point with 10 of the participants already having the diagnosis of PTSD but did not

have a statistical significance with the socio-demographic characteristics (Alaqeel et al., 2019).

Alaqeel et al. (2019) discussed that this was the first study in Saudi Araba to look at the prevalence among healthcare providers with a quarter of those screened within the EMS profession as having a positive screening for PTSD. Alaqeel et al. compared screened firefighters that had positive results for PTSD in Saudi Araba, and it showed 57% of which the article stated there may be better outlets and access to healthcare facilities for EMS personnel as compared to before. A meta-analysis of 20,000 rescuers showed a prevalence of 10% and this was worldwide (Alaqeel et al., 2019).

Alaqeel et al. (2019) results showed that there was no significance in the association between sociodemographic and PTSD. One aspect that was shown within the data was at the rate of those scoring for PTSD was half for those that were married compared to those that are single. A weak association was seen for those developing PTSD and the number of years worked in EMS. EMTs were affected more than paramedics and showed a risk factor of education playing a role in those developing PTSD. Alaqeel, et al. stated that there needs to be further research to understand the coping mechanisms and risk factors. Alaqeel, et al. stated the weakness is the higher rate of PTSD may be from the small sample size. As the sample size is based on one center it showed that further research is needed in this topic for prevalence, risk factors, and coping mechanisms (Alaqeel et al., 2019).

Donnelly et al. (2016) completed a study that looked at predictors for post-traumatic stress (PTS) and the sources used for social support with Canadian paramedics.

Donnelly, et al. stated that paramedics must deal with a variety of stressors in their everyday work that is related to patient care and considered “critical incident stress”. Which is defined as the death of a child, responding to family or friends, critically ill patients, exposure to bloodborne pathogens, verbal or physical abuse, and death or injury to the paramedic themselves in the line of duty from injury or vehicle crash. There was another stressor that has been linked between critical incident stress and posttraumatic stress symptomology (PTSS) (Donnelly, et al 2016).

Donnelly et al. (2016) stated the preliminary evidence showed chronic work stressors play a role in PTSS. A study was completed focusing on the United States EMS where a significant link was associated between organizational stress, operational stressors, and post-traumatic stress. A structural difference between EMS in the United States and Canada is unclear if there is a generalized phenomenon to the Canadian EMS. Donnelly, et al. stated it was important to understand how our EMS personnel receive help with managing their stress. The objective of this study was to determine if there was a relationship between chronic work-related stress and critical incident stress to the development of PTSS along with the identification of variables that can be associated with the development of PTSS in Canadian Paramedics. The secondary object identified is to determine where they would prefer to receive support for the stress (Donnelly et al., 2016).

Donnelly et al. (2016) study sampling came from one county that is in southwest Ontario with a call volume of 80,000 that was contacted via email to staff that worked as primary care paramedic (PCP) and advanced care paramedic (ACP) levels. There was a

total of five contacts by email informing about the study, with two invitations to participate in the study and two reminders. There was an option to unsubscribe from the study. The survey took place during the fall of 2011 and received approval of IRB from the University of Windsor Research Ethics Board (Donnelly et al., 2016).

Donnelly et al. (2016) collected the data using a standardized tool called the PTSD checklist (PCL). The PCL is a 17-item scale that provides measurements for PTSS and a threshold to indicate possible PTSD. The response options were on a 5-point Likert scale with the scoring capability of 17 to 85. Donnelly et al. used the cut-off score of 50 to indicate possible PTSD. The assessment showed two types of chronic stress and the EMS Chronic Stress Scales were used of which each scale had 10 items. The first was on Operational stress that included elements of working on the ambulance from shift work, fatigue, and risks of injury. The second was on Organizational stress that was associated with the culture of the organization. Levels of stress were asked to be reported over the last six months on a 7-point Likert scale with scores that could range from 10 to 70 (Donnelly et al., 2016).

Critical incident stress was assessed by examining both the number of exposures to a select number of critical incidents and then asked about the level of stress associated with them. The participants reported on the 7-point Likert scale how much the stress affected them over the last six months. The responses had a range of 0 to 252 after being summed up. Additional questions were asked about how the participant would prefer support to deal with work-related stress. The participant was also asked to score this response on a 7-point Likert scale (Donnelly et al., 2016).

The analysis was done using SPSS v. 22 and the responses that were missing data below 85% completion were removed from the analysis. Ordinary least squares (OLS) linear regression was used for determining the influences of the different stressors and post-traumatic stress. The R^2 coefficient was used to assess the fit of the model and ANOVA strategies were used to access the preferred method of source (Donnelly et al., 2016).

Donnelly et al. (2016) stated results showed 269 paramedics received the invitation to complete the survey and 162 (60%) had responded, nine were excluded from participants declining and eight respondents were removed from completion being under 85%. The total number of participants was 145 which still provided acceptable reliability. The data was analyzed for a bivariate relationship to be able to use a multivariate analysis and the results indicated that with PTSS there is a significant correlation with all three types of workplace stress. Model 1 of the study with demographic factors did not find significance associated. Model 2 with stress variables showed that operations stress had a significant association with PTSS. Model 3 the interaction of operational stress and critical incident stress increased the overall predictive power. This resulted in the interaction term critical incident as losing significance for an independent predictor of PTSS (Donnelly et al., 2016).

Donnelly et al. (2016) stated participant sources of social support indicated that 80% of those responded as being likely to refer to a friend or family member for emotional support, whereas 70% indicated they would go to a work partner which is defined as someone they work regularly with on the ambulance. Less than half of the

participants were likely to seek help from a co-worker and fewer from other resources. To assess the differences the ANOVA was utilized that revealed a significance in the sources for support. The post-hoc analyses with the Bonferroni correction reaffirmed the finding that respondents preferred their sources for the support over the other groups available (Donnelly et al., 2016).

Donnelly et al. (2016) found that there was a multitude of stressors that are significant for predictors of PTSS, and it was exacerbated when critical incident stress and operational stress were combined. Critical incident stress was not a predictor for PTSS although alone operational stress was a significant indicator. In the study population, the stressors in the domain had stated a need to be a target for intervention. Operational stress of shift work, missing meals, worry of injury, and the feeling of always being on the job with the lack of understanding from family and friends. These stressors in the EMS workplace and the correlation between operational stress and PTSS brings an area for an opportunity to provide an intervention. The conclusion suggests that with health and wellness addressing the impact of the chronic and everyday stressors for EMS personnel would help to mitigate PTSS. The study also suggested that interventions may help such as peer-to-peer support and family or friends that can support the affected paramedic (Donnelly et al., 2016).

Koopmans et al. (2017) completed a study on the relationship between emergency response services (ERS) personnel and suicide in Canada. In Canada, emergency response personnel are defined as police, ambulance, fire, dispatchers, and emergency room employees. Koopmans et al. stated that traumatic exposure and organizational

stress is related to the paramilitary working environment and this also leaves ERS at risk of developing mental health symptomology which could lead to other mental health issues. Koopmans et al. stated there is limited research when it comes to emergency responders and this study included information from systematic reviews, meta-analyses, cross-sectional studies, and case studies (Koopmans et al., 2017).

The statistics collected by Koopmans et al. (2017) showed that in ten weeks in Canada in 2014 there were thirteen ERS that committed suicide. These included those in the different fields of EMS, firefighters, law enforcement, and dispatch. This also increased to 23 over six months that year. The total number of suicides is 183 between the years 2014 to 2017. When this number is broken down it showed that 27 suicides happened between April and the end of December 2014, 51 in 2015, 48 in 2016, and 3 by the end of January 2017. With these numbers showing an increased need for mental help there is still limited research (Koopmans et al., 2017).

Koopmans et al. (2017) research included 16 articles reviewed and thus 12 articles were used to look at several different factors contributing to influencers. These indicated with law enforcement those currently working on the force were at a higher risk than those retired, and the risk also decreased with time on the force. Seven articles for EMS were located of which out of that seven only one article focused on suicide while the others focused more on critical incident exposure and management of which this topic is highly related to stress that correlates with PTSS in EMS. The other articles on EMS had a focus on stress management and coping mechanisms (Koopmans et al., 2017).

Koopmans et al. (2017) stated literature for dispatchers focused on the effectiveness of pre-arrival instructions of cardiopulmonary resuscitation (CPR), dispatching ambulances, and making split-second decisions based on only the information provided by the caller on the other end of the line. The information acquired from the study was that the dispatchers were less likely to experience the stress because they were not at the physical scene. While the research showed that emergency medical dispatchers (EMD) are exposed on average to 15.32 different types of traumatizing calls that would normally be classified as being duty-related for the development of PTSD without the need to physically be there (Koopmans et al., 2017).

Koopmans et al. (2017) stated literature on firefighters focuses on PTSD and cardiovascular diseases as only two articles focused on firefighters with one being on urban firefighters between the United States and Canada and the other being only focused on the United States. Koopmans, et al. indicated that firefighters that committed suicide were of violent methods. There was no difference between those in Canada and United States for active firefighters but those that had been on the fire service for fifteen years or more had a higher rate of PTSD. The same for both countries also showed that those who had family support and work social support were associated with lower PTSD rates (Koopmans et al., 2017).

Koopmans et al. (2017) stated a gap within research on ERS and suicides. While the research that is found on ERS focused on critical incident management. ERS are exposed to traumatic and life-changing incidents and mental health within this population needs further research related to suicide intent.

Firefighters

Park et al. (2018) completed a study focused on Korean firefighters where it is known to be vulnerable to PTSD and that major risk factors are based on the severity and frequency they are exposed to. The additional risk factors for PTSD for firefighters are occupational stress, job demand, limited job control, inter-group conflict, and poor support. As mental health has become more important over the last few decades emotional labor has received attention for possibly having a negative impact. "Emotional labor is defined as the process by which workers have to control their feelings per the organizational demands and occupational role" (Park et al., 2018, p53). The purpose of the study was to look at the high demands of emotional labor related to PTSD symptoms in Korean firefighters (Park et al., 2018).

The method used was through an online survey that was sent to 37 institutions and resulted in 7151 firefighter responses. The survey was measured by self-reporting of traumatic experiences, emotional labor, perceived stress, and posttraumatic stress symptoms. The analysis showed the participants' age range was 21 to 60 years old and 90.7% of them were male. The two-sample *t*-test indicated that emotional labor and emotional damage were significantly higher in female firefighters than male firefighters. When broken down into specific jobs the post hoc test showed that those in EMS had higher levels for emotional labor than fire suppression and fire officer. These tests showed that emotional damage and perceived stress were higher correlated (Park et al., 2018).

Emotional labor plays an important role when assessed with Korean firefighters and the severity of PTSD symptoms. The study found that the firefighters who already suffered from high demands in emotional labor are vulnerable to developing PTSD after the encounter of the traumatic events. When recent trauma had occurred, it had significantly correlated with PTSD symptoms and being significant indicators of PTSD. There were several limitations to consider such as if was a voluntary online survey by self-report and bias could have occurred due to recent traumatic events. The study did conclude with the evidence of emotional labor there is a need for intervention programs and policies to help mitigate post-exposure to traumatic events (Park et al., 2018).

Mental health within paid fire services has shown an increase in the severity of PTSD experienced by the number of traumatic events exposed to. Milligan-Saville et al. (2018) stated that ESW which include police officers, firefighters, and paramedics have a vital role in protecting or helping the public. Multiple studies had shown at least 10% of ESWs have PTSD along with a range of other mental disorders such as depression, acute stress disorder, substance use, and adjustment disorder. Milligan et al. (2018) focused on volunteer EMW which is the largest population of volunteer firefighters are in Australia, the United States, and Canada. There were a limited number of studies completed on volunteer services and they have a larger rate of PTSD, depression, and suicide plans or attempts when compared to those of paid services (Milligan-Saville et al., 2018).

Milligan-Savill et al. (2018) stated in volunteer service, there is a lack of screening beforehand like the paid services. There is an increased conflict with family-work relationships and the extra demands of being a volunteer. The participants of the

study were volunteers or staff members in the New South Wales Rural Fire Service (NSW RFS). They are the largest volunteer service and respond to brush or house fires, search and rescue storm damage, and motor vehicle crashes. The data parameter did not include any identifying information and basic demographics such as gender and occupational information. The baseline data that was collected was through an online survey from April to July 2017 (Milligan-Saville et al., 2018).

Self-reported information was assessed on the level and type of trauma that the participant was exposed to along with the average number of events per year. There was a list of events such as seriously injured or burned adults/children, deceased adults/children and being trapped or assaulted by other people. A four-item version of the PTSD checklist was on the online survey that scored participants based on their answer of being a probable case of PTSD. Psychological distress was also assessed using the Kessler Psychological Distress Scale. There were 423 completed online surveys that indicated a prevalence of the probable mental disorder. The result indicated that the higher the frequency of exposure to trauma correlated to the odds of suffering from PTSD (Milligan-Saville et al., 2018).

Based on the results the study from Milligan-Saville et al. (2018) showed the impact of mental health for volunteer services to be just as high as the paid firefighters and higher than that of the public. Several studies had indicated that volunteer firefighters had a higher incidence of mental health disorders. Milligan-Saville et al. stated one limitation with the study included non-firefighting or staff members in the survey. The main purpose of this study was to evaluate the links between exposure to

trauma incidents and mental health outcomes. Milligan-Saville, et al. found that those with increased trauma exposure had a greater risk for PTSD. Milligan-Saville et al. stated the type of traumatic event had a significant indicator that it could increase the risk for PTSD. The findings of this study indicated that the implantation of programs for the volunteer firefighter would be beneficial (Milligan-Saville et al., 2018).

Smith et al. (2018) completed a study looking at firefighters and post-traumatic stress, alcohol misuse, and alcohol use disorder (AUD) and how it relates to sleep disturbance. Literature had indicated an increased risk factor for PTS one coping measure is the use of alcohol. There are high demands on firefighters with sleep disturbances during the night for calls. Bivariate correlations have been shown within other research between alcohol and sleep disturbances and when they occur together the severity of PTS increases (Smith et al., 2018).

The purpose of the study was to evaluate PTS severity related to sleep disturbance and alcohol use. The participants were from an urban fire department and had consented to complete all of the online surveys had experienced at least one traumatic event and had had alcohol consumption at any point in their lifetime. There was series of questionnaires were sent to firefighters with participation being voluntary but if they completed all the questionnaires, they would receive 1 hour of continuing education (CE) along with being entered to win a raffle prize. The online surveys would continue for three months with email notification (Smith et al., 2018).

The results showed an interaction between PTS severity and sleep disturbance was associated with the severity of alcohol use. When the symptoms and sleep

disturbance increased the severity of alcohol consumption increased. There was a significant indication that the consumption of alcohol was also used as a coping mechanism. Based on the results PTS severity was associated with alcohol consumption and as a coping mechanism, thus the increase of PTS symptoms correlates to increase alcohol use which in turn has a negative effect. The PTS rates were compared to other studies and did have similar rates and were also higher than the public. Smith et al. (2018) limitations mentioned in this study is that it relied on self-reporting and cannot rule out bias, recommendation was that interviewing and experimental measures may help with eliminating some of the bias. Another limitation that was mentioned was that the sample comprised mostly male participants (Smith et al., 2018).

As firefighters are exposed to multiple traumatic events and the cost of being a firefighter is both physical and psychologically high. These firefighters have to respond to large-scale natural disasters, manmade disasters, and any other type of hazardous response that puts not only them but possibly their other co-workers at the risk of injury or death. There are risks for any potentially traumatic events (PTE) for a firefighter to have maladaptive behavioral risks and increased chance of alcohol abuse and tobacco use (Gulliver et al., 2018).

The purpose of this study was to understand the relationship between PTE exposure, PTSD, depression symptoms, and alcohol and tobacco use within the first three years after completing the fire academy. Other high PTE data showed that a significant number of firefighters had issues with binge drinking and tobacco use. Gulliever et al. (2018) stated that when firefighters who were smokers were asked to think about a

traumatic event they would puff more and inhale deeper. As both alcohol and tobacco use are iaffecting your health they are often used as a coping mechanism (Gulliever et al., 2018).

This study's first objective was to look at the frequency and intensity of tobacco use and alcohol for baseline information. The second part was to examine the sample to identify if the co-occurrence of tobacco and alcohol use changed. Gulliver et al. (2018) wanted to look at the trajectories for alcohol and tobacco use for the first three years of fire service. The last objective of the study was to determine if there was a link between tobacco and alcohol use with being exposed to traumatic events. Sample size comprised of following firefighters through their first three years of service after the academy. The sample size included 322 participants that had interviews at four points: one before graduating from the academy and then annually for the next three years. The study measured alcohol and tobacco use, work-related trauma exposure, PTSD, and depressive symptoms (Gulliver et al., 2018).

The results showed that the participants who were already tobacco users before the academy was also alcohol users, and the number of alcohol drinks were nearly doubled per week. The trajectory increased as the firefighters reached year two of their career and then declined toward year three. When tobacco was added into the data for predicting the number of alcoholic drinks it was an indicator that those who used tobacco had an increased number of alcoholic drinks compared to those who did not use tobacco. The study then looked at PTSD and depressive symptoms linked to alcohol usage. The

results did have a significant indication of PTSD symptoms and the number of alcoholic drinks (Gulliver et al., 2018).

Gulliver et al. (2018) stated findings from the study indicated the hypothesis was correct on the correlation between tobacco use, increased alcohol use, PTSD, and depressive symptoms. The study indicated that screening firefighters early into their career field can help with providing intervention appropriately. There were limitations stated of low endorsement on the measures for PTSD and depressive symptoms of which this was an expected limitation (Gulliver et al., 2018).

Law Enforcement

Velazquez and Hernandez (2019) completed a study using a systematic search of literature based on keywords related to a police officer and mental health stigma. The article defined first responders as police officers, firefighters, search and rescue personnel, and ambulance personnel. Velazquez and Hernandez then stated that it would focus on the first responder of police officers. The demands placed on police officers during each shift and the development of new exposures can exacerbate existing mental health conditions. With these conditions the impairment that the responders experience according to Velazquez and Hernandez "at work productivity loss, early retirement, alcohol abuse, divorce and increased rates of suicide" (p711). The focus was on barriers that prevent police officers from seeking mental health treatment (Velazquez & Hernandez, 2019).

The method used to complete the systematic literature search was placed in academic databases with descriptors related to police officers and mental health

descriptors. The results of the search with mental health came back with studies focused on PTSD, Depression, substance abuse, and suicide. The PRISMA (Preferred Reporting Items for Systematic Review and Meta-Analysis) guidelines were used and followed for this study (Velazquez & Hernandez, 2019).

Police officers are typically first on scene and are present during the most unavoidable exposures to trauma which increases the risk of developing mental health disorders. These exposures are reoccurring and accumulate with being exposed to dangerous situations. These traumatic events not addressed can have reminders to that officer months to years later. There is a need for intervention strategies for first responders to help with the burden of trauma-related experiences. Multiple studies have indicated the need for further interventions (Velazquez & Hernandez, 2019).

When it comes to duty-related trauma several aspects are involved with the high-stress environment the exposure from these events; the general public typically does not understand. Velazquez and Hernandez (2019) had suggested a variety of coping strategies to help with the mental well-being of first responders as traumatic stress is grouped into two areas of organizational and occupational stress. The stigma and negative stereotype of seeking mental health services had been identified as one of the major reasons that police officers do not seek mental health care. Social predisposition has identified how an officer looks at mental health and because of this an officer unknowingly has negative attitudes toward seeking help (Velazquez & Hernandez, 2019).

As changes happen within society the view of mental health with one intervention stated is law enforcement and mental health and wellness act of 2017. This helps with

identifying and addressing the additional physiological illnesses while performing their job. The implementation of these programs allows for officers to easily access these resources. Velazquez and Hernandez stated approximately 80% of first responders have experienced traumatic events and of those 10-15% are diagnosed with PTSD. With the implementation of this act, there has been a reduction in the rate of suicide (Velazquez & Hernandez, 2019).

Other programs stated by Velazquez and Hernandez (2019) about critical Incident stress debriefing (CISD) which is typically right after a significant incident. This type of debriefing has shown to not be as effective as thought it would because those involved in the debriefing are not as truthfully around their direct peers. Another form was the smart assessment on your mobile (SAM) which allowed for questions to be answered in the form of an app that allows for educational tools and initial screening tools to be used before an initial clinical interview. This tool has shown a significant correlation with SAM and responders being diagnosed with PTSD and depressive symptoms. Velazquez and Hernandez stated responders using it more comfortable seeking additional help. The app is called the PTSD coach that was developed by the US Veterans Affairs that targets the military to improve health literacy and reduce stigma (Velazquez & Hernandez, 2019).

The discussion of Velazquez and Hernandez (2019) stated three limitations with the first being stigma, the second being the lack of research completed in the United States and the last is the response to natural disasters. The culture that police officers are shaped in being able to address mental health is not a topic easily brought up as there are

more negative attitudes towards it. With interventions to help these first responders, there was more research completed in European countries than in the United States which may be related to the police culture in the United States. The limitation within the area of disasters for example terrorism or natural disasters has indicated a greater impact on first responder's mental health. Velazquez and Hernandez stated that having additional training in disaster preparedness may help with reducing PTSD and mental health wellness. Additionally, normalization of mental health wellness is important to improve the overall police culture. Changing culture is not an area that is changed automatically and thus will take early intervention and education (Velazquez and Hernandez, 2019).

Papazoglou and Chopko (2017) completed a study looking at the moral suffering of police officers with compassion fatigue and PTSD. When officers were asked why they provided first aid to not only the victims at a scene but also the criminals, the response provided by the one officer was "We are cops, we are not killers" (Papzoglou and Chopko 2017, p. 1). Papzoglou and Chopko stated with current research there was not an efficient amount completed for the phenomenon of moral suffering and then compassion fatigue happens when frontline personnel have morale. With the lack of empirical search, these research studies are conducted with frontline personnel.

Moral distress was originally defined in 1984 by Jameson, which is summarized as when the right course of action is not pursued because of a lapse in judgment. It had been instilled in police officers' role integrity and self-sacrifice to save those within the community that they serve. It is when the officer's actions to help the victim that does not get fully completed the officer can experience moral distress. When these incidences

of moral distress happen then compassion fatigue can show up and lead to ongoing forms of PTSD (Papzoglou & Chopko, 2017).

Papzoglou and Chopko (2017) approximated 25% of the police officers sampled had "reported killed or seriously injuring a suspect in the line of duty" (p. 3). There has been underlying guilt and shame when knowing the result of completing your job was followed by the harm of another human. Other experienced officers indicated that experiencing a moral injury is expected and thus in turn results in compassion fatigue and increases the risk of PTSD. As both terms seem to be similar there is still a difference between them as moral injury results in an actual injury or death when moral distress is from moral dilemmas. Papzoglou and Chopko limitations stated there are limited empirical studies on the role of moral distress, compassion fatigue, and PTSD symptomatology. Even with the limitations stated additional research focusing on the well-being of officers, work-related stress management, and empirical research are important for front-line personnel (Papzoglou Chopko, 2017).

Karaffa and Koch (2016) completed a study that assessed the view of police officers seeking mental health services, stigma, and pluralistic ignorance. Karaffa and Koch stated police officers have one of the most stressful occupations with the inclusion of around-the-clock shift work, reports, and administrative staff that is not supportive. When the researchers assessed mental health there was a high prevalence of depression and gastrointestinal issues due to the "fight or flight" during high-stress calls. Evidence of self-medicating with alcohol after exposure to calls for anxiety and depression and an

increase in the amount of alcohol for higher levels of depression and anxiety (Karaffa & Koch, 2016).

The stigma of mental health was one of the main reasons police officers do not seek help even though they may benefit from these services. Mental health stigma has been separated into two groups of public stigma and self-stigma. Karaffa and Koch (2016) had stated that both have negative attitudes toward them when seeking help. Karaffa and Koch stated study had been completed through multiple countries found that 50% of the respondents had the feeling of embarrassment if others knew about their use of mental health services. With self-stigma, it is one's view about their behavior not being socially acceptable because of this stigma officers do not want to seem weak as it was stated, "officers are warned throughout their training that losing control of their emotions could jeopardize their career" (Karaffa & Koch, 2016; p. 76).

Pluralistic ignorance is a phenomenon that is seen in groups where the officer believes one view openly but personally rejects the belief or behavior. Pluralistic ignorance is seen as a way for belonging to a group and that officer may feel inferior or shameful. Karaff and Koch stated this behavior commonly seen in officers that are rejected personally increases drinking, sexual behaviors, body image, and ethics. Thus, the officers saw their colleague's acceptance of mental health treatment as lower than what it is (Karaff & Koch, 2016).

Karaffa and Koch's (2016) purpose was the attitude toward seeking mental health services among police officers and to analyze if there is an occurrence of pluralistic ignorance. The study had 248 officers that were employed full-time in either of the two

states Texas and Oklahoma which completed a 62-item online questionnaire. This questionnaire was sent by email to 345 agencies. A total of 28 agencies responded to the email and 21 agencies participated with 7 declining to participate. The agencies that responded were mostly of ranking officers and not direct front-line personnel (Karaffa & Koch, 2016).

Karaff and Koch (2016) showed a correlation between public stigma and self-stigma with attitudes towards seeking mental health services. The officers who had a higher reaction to the negative view of mental health services also saw public stigma as being higher. These findings were important for the study for the planning of interventions and awareness for mental health services. When officers are informed; the emotions they have with some calls are normal and there are options for seeking help which can reduce stigma. Having recruits learn mental health well-being would be beneficial to the officers' long term and improve their careers (Karaffa & Koch, 2016).

Van Hasselt et al. (2019) completed a study analyzing the peers as law enforcement support (PALS) program. Law enforcement is considered a profession that is at high risk for mental health concerns. There is occupational stress and exposure to trauma which also has increased risk factors for developing mental and physical health complications. Van Hasselt, et al. stated some of the risk factors for law enforcement officers seen as more common are alcohol abuse and cardiovascular disease. The other risk factors that are not talked about are depression, PTSD, marital discord, and domestic violence. Van Hasselt, et al, stated "yearly estimates consistently indicate that nearly twice as many police officers die by suicide than a line of duty deaths" (p. 1).

Stigma with first responders seeking mental health services is still there. When services are available, these services are typically underused or not used. Van Hasselt, et al. (2019) stigma has been seen when an officer had seen a psychologist as that officer is weak or are unable to handle their job during high-stress situations. Mental health professionals are often seen as outsiders and establishing rapport is difficult, slow, or not developed. With these concerns, peer support programs have shown to have several advantages for example being trained to identify risk factors associated with suicide and other mental health disorders. Peers spend a lot of time with other officers. Trained peers can help to change the stigma and that needing help is not a weakness. Peer support has additional information for outside resources and able to help with providing this information (Van Hasselt et al., 2019).

Peer support programs started in the 1980s among several large police departments such as LAPD (Loss Angeles Police Department) and Boston Police Department. Limitations stated were trying to evaluate the peer support programs and there are no empirical studies to evaluate the effectiveness of these programs. The PALS program goal was for officers to provide support to each other whether it be professional or personal and work on the problematic areas of psychosocial well-being. These peer members must be sensitive to their team members' confidentiality and anonymity. Peer support members complete a 16-hour program focused on topics of stress, active listening skills, depression, substance use, anxiety and PTSD, suicide, tactical wellness, relationships/work-life balance, and scenario-based training (Van Hasselt et al., 2019).

Van Hasselt et al. (2019) purpose was to evaluate how the PALS programs geared interventions toward police officers as it required several different elements. Peer support had been able to provide secondary intervention to officers already having psychological stress. Conclusion of peer support teams needed to receive ongoing training to help with changes and keep up with the knowledge for problems and scenario-based training. Providing a comprehensive mental health strategy is important for law enforcement officers (Van Hasselt et al., 2019).

Summary

Based on the articles there was a significant indication that further intervention and resources need to be provided to our public safety personnel. PTSD originally started with our military after being exposed to traumatic events during wartime. As the scope of practice increases within the public safety personnel, they are having to make life and death decisions for the public when they arrive on a scene. There are many times they not only have the public watching them but family standing there when public safety personnel had let them know there is nothing more, they can do for their family member or that it is too late and there is nothing that can be done for them.

These images are there and have been shown to increase the chances of developing PTSD symptoms or depressive symptoms. Canada has been focusing on mental health for public safety personnel stating that specialization for the population is needed along with ongoing mental health services. Many organizations provide some form of support for their employees but a stigma with seeking mental health services and public safety personnel is afraid of their direct peers knowing they have been seeking

mental health services. Another issue that was seen within the literature review was those in volunteer services as they are not paid services and are not required to go through the same evaluations. With no mental health services provided to volunteer public safety personnel by the department are then required to seek care on their own. Many of the studies had been completed outside of the United States and provided limited data regarding public safety personnel seeking mental health services and the stigma surrounding mental health services in the United States.

Chapter 3: Research Method

The use of online social media has been increasing in the last several years. As groups with similar interests are formed in this platform, they are sometimes being used for emotional support. Prescott et al. (2020) stated belonging to a community online has helped individuals feel support that they may not feel at home. The purpose of this study was to understand training used to mitigate stressful calls and online social media posts by public safety personnel for mental health and emotional support. Cho (2017) stated that today a lot of people use different social media platforms for sharing and social networking with many of them sharing their happiness via Facebook.

Cho (2017) also stated that when people are stressed and have their ups and downs, they do not always tend to share that on social media unless they are seeking help or support. Information that is retrieved from social media sites provides useful information when studying people's state of emotional stress and depression (Cho, 2017). The approach was qualitative to identify how mental health stigma impacts emotional support for public safety personnel and their use of social media for that support. The study results may be used to recommend additional resources for public safety personnel to support improving mental and emotional health. I used an online qualitative questionnaire with open-ended questions. I allowed for the option to answer these questions through interviewing. However, none of the participates chose this option.

Research Design and Rationale

RQ1: What is the experience of public safety personnel's training regarding their perceptions to mitigate emotional stress?

RQ2: What is the experience of public safety personnel with seeking mental health services?

RQ2a: What is the experience of public safety personnel with the stigma of receiving mental health services?

RQ2b: What is the experience of public safety personnel's use of online social networks for emotional support?

RQ2c: If using online social media for support; what is the experience of peer-to-peer online support for mental health as regards to stigma of receiving mental health services?

If a person had grown up with some traumatic exposure, then the traumatic exposure observed in the job may be familiar to other life experiences. Social cognitive theory and self-efficacy can be linked between job demands and working conditions. Public safety personnel are exposed to traumatic events almost daily depending on the type of call received through 911. Their approach to life and coping mechanisms are important for mental health and emotional well-being. There is a gap in the current research on the use of social media by public safety personnel for mental health and emotional well-being with peer-to-peer support.

I used a basic qualitative method with a semistructured questionnaire to address the research questions. The use of this method allowed for the participants to give their views of the questions being researched anonymously. The questionnaire responses were coded by identifying similar topics, issues, and similarities.

Role of the Researcher

In my role as the researcher, I did my best to be impartial and to guarantee confidentiality. To limit bias, I strictly followed Walden's ethical guidelines. I have worked in public safety for over 16 years and in two different disciplines. Having a background in this field allowed me to facilitate these conversations. I maintained a neutral position and did my best to prevent personal bias. The use of the questionnaires was online and in two different groups for each discipline and was completely anonymous. I am not an administrator and have no administrative rights in these groups. I did not have any personal relationship with the administrators for these groups.

Methodology

The qualitative questionnaire that I used consisted of open-ended questions that allowed for common themes to be identified. Nvivo was the qualitative software used for coding and identifying of themes. Personal experience provides more detail, focus, and actions taken of lived experiences and resilience from outside stressors. The questionnaire had assessed two different social media groups in four public safety career fields law enforcement, fire services, emergency medical services, and communication/dispatch centers with a total of eight social media groups.

Creswell and Creswell (2018) stated that there are many approaches for collecting qualitative data, which is why I used a basic qualitative method with the population that currently work in public safety. I developed the questionnaire questions for this study based on the research questions. I consulted with a small test group of four people who were friends and family currently in public safety work in each category (Appendix).

The group participants were recruited online from the social media platform Facebook. I used purposeful selection of groups since I needed to request access from the administrators and the groups were set to private. Before the study, I was already in two different dispatch groups and EMS groups: 911 dispatch groups named “911 Dispatchers: Misfits of Emergency Services” had 20,000 members and “Nocturnal Dispatchers: Life in the Dark” had 57,000 members along with two EMS groups named “EMS Junkies” had 25,000 members and “EMS First Responders-Misfits” had 12,000 members was included in the study. Upon looking in the group search with placing firefighter or police, multiple groups came up. I chose four groups based on their names “Firefighter & First Responder Uncensored” had 5,600 members, “Firefighter community” had 16,000 members, “Law-Enforcement Today” had 22,000 members, and “USA Law Enforcement Support” had 9,600 members. I had messaged the administrators of each group to explain my study and request access to the group. The population within these groups were from all over the world. The participant selection from each group was based on who answered the questionnaire.

The questionnaire was placed by a link, and after the potential participants clicked on the link, two screening questions for inclusion criteria were asked.

1. Are you 18 years old or older?
2. Do you currently work in public safety such as Fire, EMS, Police, or Dispatch?

The links were open for a limited time and were cut off at 24 hours. The minimal number of questionnaires aimed for completion would have been three to 10 per group as

Creswell and Creswell (2018) stated that there is no right answer to the number needed to collect in sample but a sample size could be "based on selecting a fraction of the population or selection a sample size that is typical based on past studies" (p.151). Creswell and Creswell stated that saturation was based on grounded theory and if narrative interviews were done then 20-30 was a good approximation. There was a total of eight groups chosen to participate and of the population the aim is three to 10 questionnaires with a minimum of 24 to maximum of 80 since there was the option given for an interview instead of answering the questionnaire online. The option for interview was not chosen by any participants.

If there were not enough questionnaires answered, then I asked the group administrator to replace the link at a different time for it to be open for another 24 hours. These groups had the questionnaire reposted for a second time "Nocturnal Dispatchers: Life in the Dark, Firefighter & First Responder Uncensored, Firefighter community, Law-Enforcement Today and USA Law Enforcement Support". The questions were standardized open-ended questions to allow each participant to write their answer in their own words which also has a limitation of 500 words. Demographic questions asked first to indicate which public safety discipline the participants belong to, if the participant was in more than one field, and if they still currently work in that field. The participant inclusion criterion was met if they are over 18 and are still currently working in public safety.

A secondary option for participants was a narrative interview with the exact same questions being placed into the questionnaire by me when the participant still wanted to

participate but felt like they cannot express their opinion in the appropriate written words. The rationale for this option was the minimum requirement of education before being accepted into the different public safety programs is a high school diploma. When the programs are completed, most are certificate programs. There are programs in public safety such as paramedics that have agreements with colleges to continue education to receive an associate degree (Associate of Applied Science in Paramedicine; n.d.; Paramedic Curriculum, 2022). None of the participants chose this option.

The survey was a link through surveyhero.com with the criteria questions asked once the link was clicked.

Recruitment, Participation and Data Collection

The questionnaire for each discipline was open for 24 hours with a scheduled closing date and time. When that time frame was up the link if opened will say that it was closed. I asked the administrators who placed the link in the Facebook group to notify me by messenger that it had been placed. I then made sure the date and time were set to 24 hours.

There were two groups for each discipline and four different disciplines of firefighters, law enforcement, EMS, and dispatch for a total of eight groups. The approach used was social cognitive theory with self-efficacy; my goal for participation size being adequate of 20-30 questionnaires completed for grounded theory (Creswell & Creswell, 2018). The goal was for three to 10 questionnaires per group to be completed with a total number of questionnaires for coding of 24 to 80. Saturation for the sample size was met based on the fraction size of the population based on previous studies and

when there were no new themes identified in the data being analyzed (Creswell & Creswell, 2018).

The software used to provide the link for the questionnaire was through surveyhero.com which collected all the information input into the survey by the participants and imported to an Excel document. The beginning of the questionnaire stated there was no identifying information linking participants to the questionnaire. Additional security for confidentiality with the survey it was anonymous. Surveyhero.com showed a label to survey participants that officially confirmed the anonymity of the survey. The feature had hidden email address, IP address, link parameters, metadata, and any piece of information that might have allowed me to identify a participant.

The information provided was used in research and the participant agreed that some of the information may be quoted within the document. The only identifying information collected in the survey was if the participant requested to be interviewed. None of the participants made this request. Each questionnaire was placed into Nvivo for creating codes and looking for common themes for further analysis.

Data Analysis Plan

Questions 3 to 6 in the questionnaire were demographics for gathering background information. Questions 7 through 13 were open-ended questions and to answer in 500 words or less. Table 1 shows the research question aligned to the survey question. The demographic questions were required to be answered before the questionnaire would allow the participant to move to the next page. Surveyhero.com

allowed the surveys to be separated by the question. I used this option to check the surveys for participants who provided their email information for an interview.

The Institutional Review Board (IRB) was also written for when an interview was requested instead of filling out the survey, I would correspond through my Walden email to set up a date and time. I would state that the conversation was recorded for complete transcription to be done by me. I would ask the participant to interview by zoom. Zoom has the option of voice instead of video for added confidentially. Having administrator rights with the survey, I had the option to input questionnaires that are completed by paper or other means and be included in the completed surveys. I would have asked each question in order of the questionnaire and placed directly into the questionnaire. Once the interview was complete, I would email the transcribed answers to the participant for confirmation of their answers. Again, none of the participants requested the interview option.

I completed the data collection process obtaining the results from the questionnaire, participants had to be over the age of 18 and currently still working in public safety. I excluded questionnaires from the results that were not completed past the demographic portion by the participant. The data was exported from surveyhero.com and imported into NVivo for further coding and then analysis. Each answer was reviewed looking for patterns, creating codes and placing into themes, then naming the themes.

Table 1

Research Questions and Corresponding Survey Questions

		Survey Questions
RQ1	What is the experience of public safety personnel's training and their perceptions to mitigate emotional stress?	7. With your initial schooling/training in your public safety field can you please explain what training you received on mental health and emotional health? a. Please, provide further detail on training you have received on how to keep yourself mentally and emotionally healthy? b. Have you received additional training later in your career about staying mentally healthy and if so, please provide further detail?
RQ2	What is the experience of public safety personnel with seeking mental health services?	8. Explain any encounter you have had with seeking mental health services for yourself? 9. What are your feelings about seeking mental health services? a. Explain how those feelings changed over your career?
RQ2a	What is the experience of public safety personnel with the stigma of receiving mental health services?	10. Provide further detail on your feelings of how others would see you after seeking mental health services?
RQ2b	What is the experience of public safety personnel's use of online social networks if being used for emotional support?	11. With being in the Facebook group, how do you feel about the support you get for your mental and emotional health?
RQ2c	What is the experience between peer-to-peer online support for mental health and the stigma of receiving mental health services?	12. What are your feelings about being in the Facebook group and being able to express your feelings for any emotional issues without any judgment? 13. Do you feel you get more support through the Facebook group than you would with your co-workers and why?

Issues of Trustworthiness

I structured the questionnaire through a website. Internal validity is expressed with when the observed results represent the truth in the population studied. External validity was provided when the sample group is representative of the target population and saturation had been reached. The targeted population was those who are in public safety and the questionnaire was placed in social media groups specifically for this population. Dependability was established by providing audit trails with the collection and coding process in a transparent manner (Creswell & Creswell, 2018). Intra-coder reliability was obtained with 30% of the questionnaires being double coded for consistency (Van den Hoonaard, 2008).

Ethical

Access to participants was gained when I had contacted the administrators of each group and then ask that they post the link into the group. I did not have any contact with any of the human participants, the data collected were completed confidentially, and there was no identifying information asked in the questionnaire. Informed consent was made available for all participants giving information regarding the nature of the study, confidentiality, and relevant contact information. There were no ethical concerns related to the recruitment of participants and data collection was randomized and anonymous participation.

Summary

Use of social media has grown over the years and people have been using these different platforms to express not only their happiness but emotional distress too. I placed

a questionnaire in the social media platform Facebook focused on the different groups that are for these services police, fire, EMS, and dispatch. These groups were “911 Dispatchers: Misfits of Emergency Services” had 20,000 members and “Nocturnal Dispatchers: Life in the Dark” had 57,000 members, EMS groups named “EMS Junkies” had 25,000 members and “EMS First Responders-Misfits” had 12,000 members, “Firefighter & First Responder Uncensored” had 5,600 members, “Firefighter community” had 16,000 members, “Law-Enforcement Today” had 22,000 members, and “USA Law Enforcement Support” had 9,600 members. The questionnaires had been analyzed for common themes and recommendations of further resources to help with mental and emotional stress.

Chapter 4: Results

The overall purpose of this study was to understand training used to mitigate stressful work duties and the use of online social media by public safety personnel for mental health, stigma, and emotional support for public safety personnel. Participants answered questions about their experiences with seeking support for emotional and mental health and using social media for seeking support. I analyzed the impact of peer-to-peer support and social media use based on these research questions:

RQ1: What is the experience of public safety personnel's training regarding their perceptions to mitigate emotional stress?

RQ2: What is the experience of public safety personnel with seeking mental health services?

RQ2a: What is the experience of public safety personnel with the stigma of receiving mental health services?

RQ2b: What is the experience of public safety personnel's use of online social networks for emotional support?

RQ2c: If using online social media for support; what is the experience of peer-to-peer online support for mental health as regards to stigma of receiving mental health services?

In this chapter, I discuss settings, demographics, data collection, evidence of trustworthiness, analysis, and results.

Settings

I placed an anonymous questionnaire on Facebook groups that pertained to public safety. These public safety groups were private groups that contained thousands of people. There were two groups per public safety area were purposely selected and those were "911 Dispatchers: Misfits of Emergency Services" had 20,000 members and "Nocturnal Dispatchers: Life in the Dark" had 57,000 members, EMS groups named "EMS Junkies" had 25,000 members and "EMS First Responders-Misfits" had 12,000 members, "Firefighter & First Responder Uncensored" had 5,600 members, "Firefighter community" had 16,000 members, "Law-Enforcement Today" had 22,000 members, and "USA Law Enforcement Support" had 9,600 members. The questionnaires had been coded, analyzed for common themes, and recommendations of further resources to help with mental and emotional stress. There was an option to be interviewed instead of completing the online survey. No one who had access to the groups requested an interview. All the results are from questionnaires completed via the online link and anonymously.

Demographics

The study consisted of 27 surveys being used for the results with the public safety personnel representation showing nine of the participants worked for two different or mores different agencies. This resulted in firefighters being represented with six, EMS 10, law enforcement six, and dispatch 18. The years of experience ranged from two participants with 1 year and under, three participants as 1-5 years' experience, two participants with 6-10 years' experience, two participants with 11-15 years' experience,

and 18 participants having more than 16 years' experience. The public safety personnel comprised 11 male participants and 16 female participants. Table 2 was sorted by age of the participant.

Table 2

Demographics

				Public safety agency			
Participant	Gender	Age group	Years of experience	Fire	EMS	Law Enforcement	Dispatch
5	Male	18-24	Under a year		X		
19	Male	18-24	Under a year		X		
2	Female	25-35	1-5 years				X
6	Female	25-35	1-5 years				X
12	Female	25-35	1-5 years		X		X
21	Male	25-35	6-10 years		X		
15	Female	36-45	11-15 years	X	X	X	X
16	Female	36-45	16+ years				X
17	Male	36-45	16+ years	X		X	
23	Female	36-45	16+ years				X
25	Female	36-45	16+years		X		X
27	Female	36-45	6-10 years				X
1	Male	46-55	16+ years		X	X	
3	Male	46-55	16+ years	X			
4	Male	46-55	16+ years		X		
7	Female	46-55	16+ years				X
20	Male	46-55	16 + years		X		
22	Female	46-55	16+ years				X
24	Female	46-55	16+ years				X
26	Female	46-55	16+ years	X		X	X
8	Male	55+	11-15 years	X			
9	Male	55+	16+ years				X
10	Female	55+	16+ years	X	X		X
11	Female	55+	16+ years				X
13	Female	55+	16+ years				X
14	Male	55+	16+ years			X	X
18	Female	55+	16+years			X	X

Data Collection

Data collection began in March 2021 after receiving Institutional Review Board approval (Approval Number 02-19-21-0302080). There were two groups chosen for each public safety discipline. I sent messages to the administration of the Facebook Groups chosen. The administrators responded to me asking me to post the survey. Once I received approval to post in the group, I posted the approved social media post with the link to the anonymous survey. The social media post advised if the participant would prefer to be interviewed instead of completing the survey, and my Walden email information was provided at the end of the post.

The survey was set to close at 24 hours with the goal of three-10 surveys answered. There were two groups "USA Law Enforcement" and "Firefighter community" that did not have at least 3 surveys completed and I posted a third time. The message sent to the administration of the Facebook Group advised that if there were not enough surveys completed then I would post the survey at another time and date. I completed the final download from Surveyhero.com in May 2021 and exported a total of 48 responses into an Excel spreadsheet for analysis. There was a total of 21 questionnaires that was not completed past the demographics and were removed from the final analysis. This left 27 surveys for the final analysis to be coded and placed into themes.

The surveys that had met the criteria were organized and exported into an excel document for coding and received a participant number. Nvivo imported the excel data, they were reviewed, and created initial codes created. The original data was saved and as

data was separated out into different categories, they were saved under a different name in an Excel format. Once the coding was completed, they had been combined into themes.

Data Analysis

I removed 21 surveys from the final analysis out of the 48 that were not completed past the demographics or if the participant was not currently working in public safety, leaving a remainder of 27 surveys. Table 3 shows the number of participants that answered each question out of the 27 surveys. I took each question and moved it into its own Excel spreadsheet for further analysis. I used the software Nvivo for codding which allowed me to highlight phrases or words and placed them into the code created as shown in figures one, two, and three. Then I used those codes to look for common themes based on the questions related to each research question. The questions of the survey were designed to the following areas for this research study: (a) understand if the training was received initially for emotional and mental health, how the participant can mitigate stress, and any extra training they have received since working in public safety; (b) if emotional and mental health services were sought, if they experienced stigma and how it has changed; and (c) how their experience has been with peer-to-peer support and the use of social media. “Initial Training,” “Seeking mental health services,” and “Social Media” were the themes created.

Figure 1

Initial Training Theme and Codes

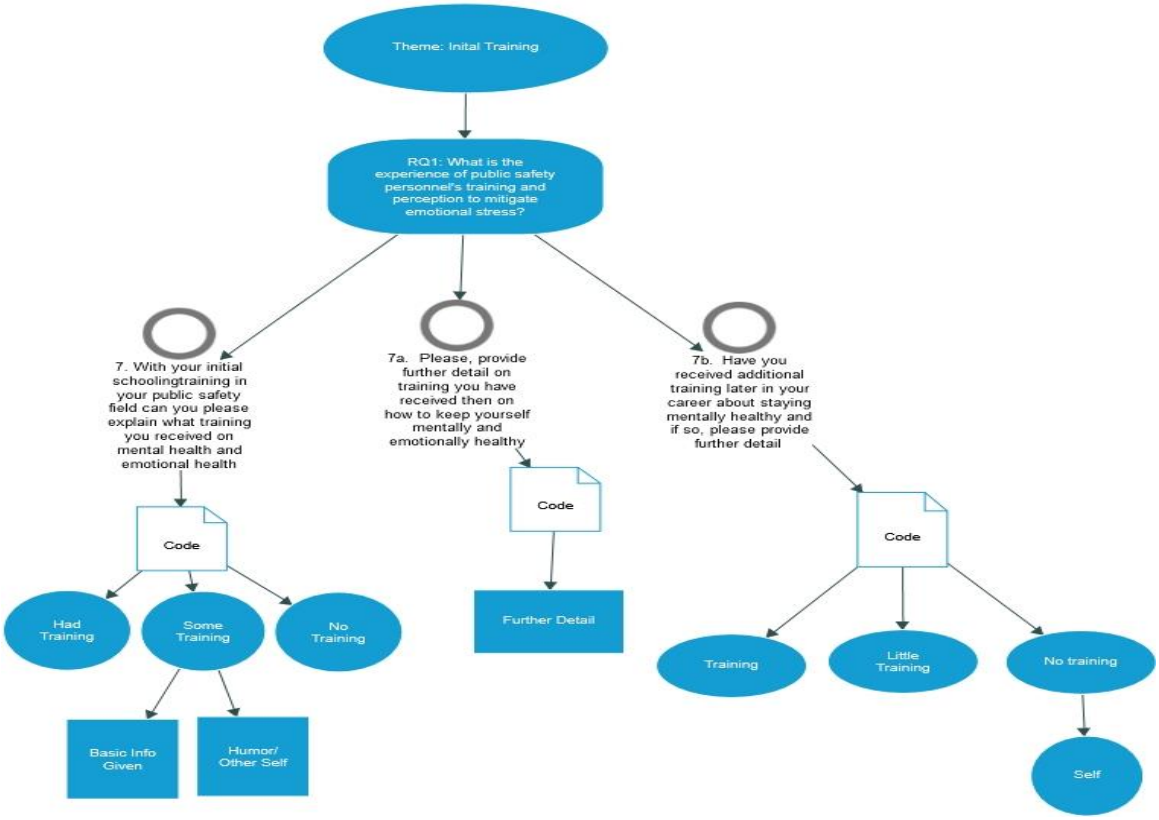


Figure 2

Seeking Mental Health Services Theme and Codes

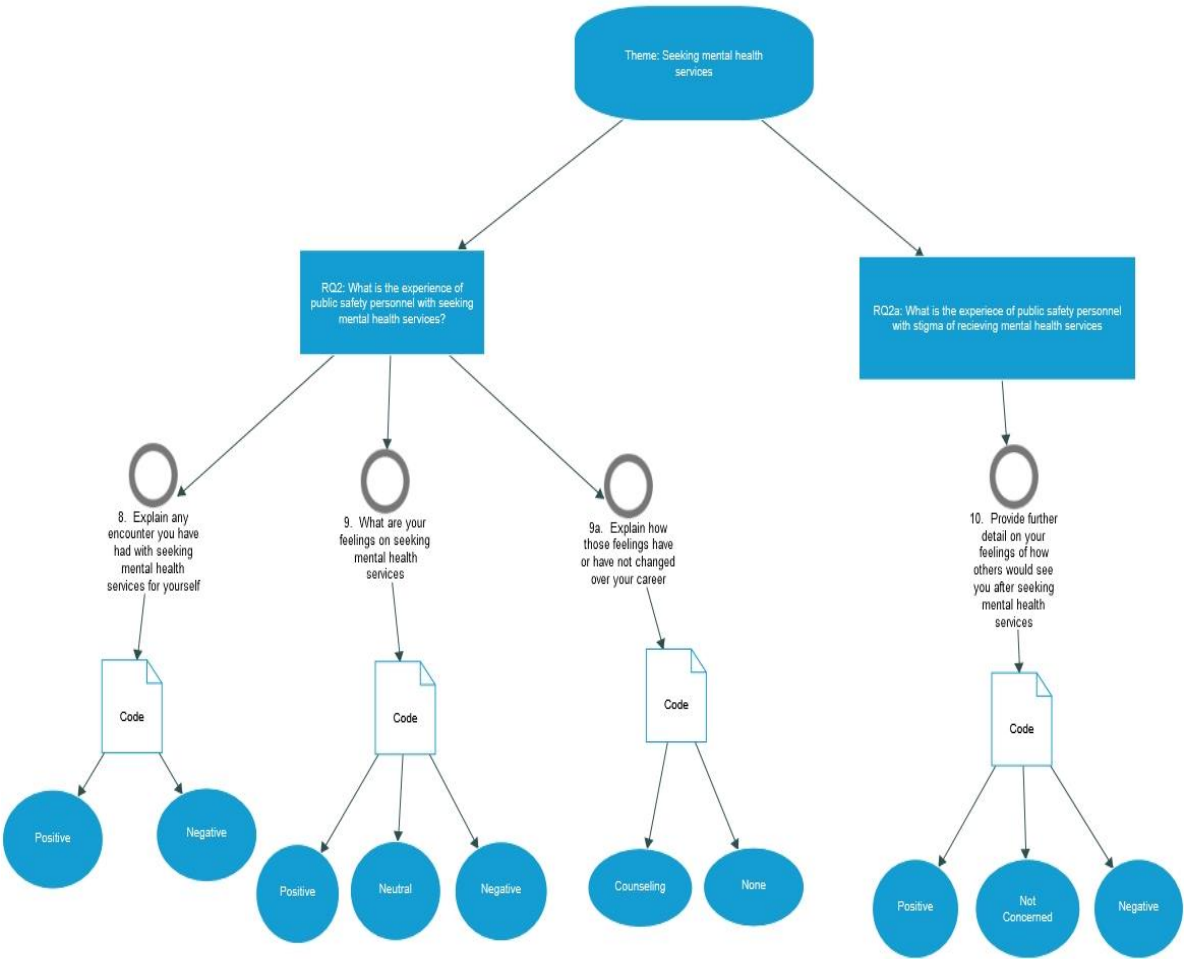
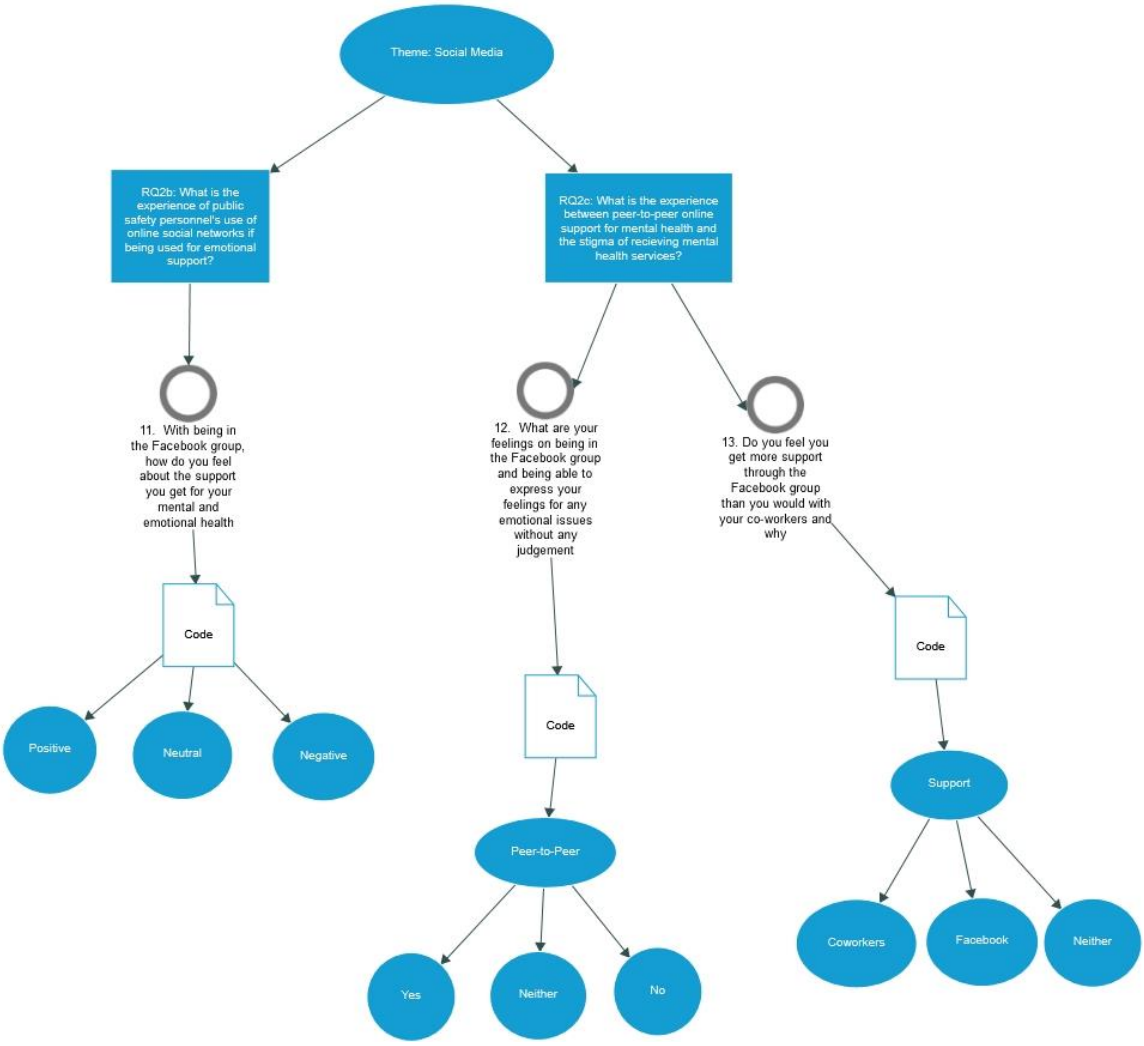


Figure 3

Social Media Theme and Codes



Results

The themes identified related to each research question was “Initial Training”, “Seeking Mental Health Services”, and “Social Media.” Table 3 shows number of participants corresponding to each survey question out of the 27 participants. The research questions are:

RQ1: What is the experience of public safety personnel’s training regarding their perceptions to mitigate emotional stress?

RQ2: What is the experience of public safety personnel with seeking mental health services?

RQ2a: What is the experience of public safety personnel with the stigma of receiving mental health services?

RQ2b: What is the experience of public safety personnel’s use of online social networks for emotional support?

RQ2c: If using online social media for support; what is the experience of peer-to-peer online support for mental health as regards to stigma of receiving mental health services?

Table 3

Survey Questions and Corresponding Number of Participants

Survey Question	Participants answered Survey question	Total number of participants
7. With your initial schooling/training in your public safety field can you please explain what training you received on mental health and emotional health?	26	27
7a. Please, provide further detail on training you have received on how to keep yourself mentally and emotionally healthy?	27	27
7b. Have you received additional training later in your career about staying mentally healthy and if so, please provide further detail?	26	27
8. Explain any encounter you have had with seeking mental health services for yourself?	23	27
9. What are your feelings about seeking mental health services?	26	27
9a. Explain how those feelings changed over your career?	25	27
10. Provide further detail on your feelings of how others would see you after seeking mental health services?	23	27
11. With being in the Facebook group, how do you feel about the support you get for your mental and emotional health?	24	27
12. What are your feelings about being in the Facebook group and being able to express your feelings for any emotional issues without any judgment?	24	27
13. Do you feel you get more support through the Facebook group than you would with your co-workers and why?	23	27

Initial Training

Initial training was the first theme identified to understand the baseline knowledge of public safety personnel with emotional and mental health, it is important to know if initial training was received. Research question one; what is the experience of public safety personnel's training regarding their perceptions to mitigate emotional stress? The question was answer with the theme initial training and questions 7 and 7a were asked to gauge participants' initial education and how they stayed emotionally and mentally healthy. Twenty-six out of 27 participants answered Question 7 and all 27 participants answered 7a. There was a variety of different answers about their initial training with the most common response being "no training." For example, Participant 2 stated "In relation to the job, absolutely none. I take care of my mental health on my own after tough calls". Participant 5 stated "I received minimal training on this (basically how to ID someone in a crisis and ways to cope with handling emotionally traumatic things)." Participant 20 stated, "I went to Paramedic school in 1988. Then, they didn't teach anything about mental health, or how to cope with the traumas I saw on a daily basis."

The additional answers to Question 7a were participants self-learned how to keep themselves emotionally and mentally healthy. Several of the answers were given with self-learned resources of exercising, coworkers, "bizarre" sense of humor, chaplains, and friends. Participant 4 stated "I have developed a very bizarre sense of humor that allows me to disconnect from trauma and death and allow me to maintain a level of sanity in a world of insanity." Participant 10 stated they had no initial training for Question 7 and for question 7a stated,

> I am struggling, they work us way too much and we are normally short-staffed. I am also dealing with neck and shoulder issues. I have used the counseling services provided a few times in the past couple of years but going through my own insurance to help with depression and sleep problems. I have 2 dogs that keep me sane and walking.

Participant 14 stated with Question 7 that no training was initially received and with 7a stated, "We have access to peer-to-peer counseling, and we have EAP. We have had chaplains and K9 come in after major incidents." Participant 9 initially stated with Question 7 it was mostly on the job training but with 7a stated,

> With 40+ years in Public Safety to include Police, Fire, EMS, and Military I have learned to cope. So, suppression of my past has worked for me to a degree. I would guess with a full behavioral exam there might be some PTSD.

The third part of Question 7b had 26 out of 27 participants answer. The question was to understand if additional training was received later in the participant's career and how it had helped with staying emotionally and mentally healthy. The most common answer was "none" with three participants out of the 27 that had a positive answer for Question 7b. One participant stating that the administration felt obligated and another there were speakers and training videos on healthy ways to cope with stress. Several of the participants that did obtain additional training stated it was self-initiated. An example is with Participant 3 with Question 7 "very little, just what is in the textbook," Question 7a "talk to coworkers" and with 7a stated "A little mostly after incidents happen and admin feels obligated." Participant 14 initially did not receive training, but the agency has

attempted to improve by the statement of “We have had speakers and training video on when stress gets to be too much. I have learned breathing techniques and healthy ways to cope with stress.” The results for research question one showed that adequate mental and emotional health education had not occurred during initial training and neither during the public safety personnel’s career.

Seeking Mental Health Services

When it comes to seeking services for mental and emotional health, there has been a stigma with those in public safety. The second theme identified was seeking mental health services. The following questions were asked to understand if the participants had sought out services, their feelings about seeking those services and if others knew how they felt they would be viewed by others of which 23 out of 27 participants answered Question 8. Question 8 was to gauge if the participants had sought mental health services for themselves and their experiences. The answers showed about half stating “none” and the other half having sought services. Participant 9 stated “I did talk to someone about PTSD but do not wish to pursue any further, I do not want that diagnosis or label” and another participant stated they speak with their friends and family. Two participants had sought services for the team or a team member from management after a hurricane of which Participant 24 stated “After a Super Storm Hurricane our dispatch team requested services but was denied.” The response from the Participant 26 trying to help another coworker after a fatal motor vehicle crash and was denied as was told “it’s not like she was there.”

Participant 12 stated they were trying to get help for something other than it being work related stated “I have sought help one time in my life, it was not related to work. I was struggling after leaving an abusive relationship and reached out to a local company that is geared toward that and was kind of laughed at. The person I was set up with was very blasé about it all and very limiting. She essentially, you're not struggling because I had housing, was working, etc. and I was simply seeking help for mental health.” Participant 4 stated they were called into a defining moment for the United States from a terrorist attack and stated,

> As an EMT of over 22 years I have seen some of the most horrific things. I was called into work on 09/11/01 and lost three friends that day plus at least five others since them due to exposures. I have spoken to friends and family, and they helped me get through it and come out stronger.

Question 9 was to understand the participant’s feelings on seeking mental health services 26 out of the 27 participants answered. The results showed that the public safety personnel’s feelings were that seeking mental health services was good, and there were a few who indicated they had bad experiences, stating that were not personalized enough and not geared towards public safety personnel. For example, Participant 2 stated,

> I think it’s perfectly healthy to seek out someone to talk to, if needed. Counseling is an amazing thing that not enough people take advantage of. I also think that if you need medications to be in a normal state of function, that is perfectly acceptable as well & should in no way impact your job.

Participant 18 stated “I used to resist the notion, thinking it was weak to seek help. I now know better that my mental health is so much more important.”. Question 9a had 25 out of 27 participants answer which asked how their feelings about seeking services have changed over their career. The results showed that the feelings about seeking mental health services had changed. Participant 18 stated,

> Totally changed. I even have spoken to all new dispatchers that they need to talk someone if they are upset. Do not let it fester. It will eat you up inside. I am a work in progress. I have good days and bad. I need to take more time off and enjoy my life.

There were four that have felt it had not changed and an example was from participant 26 “Feelings have not changed for me. I feel Dispatch has been omitted from the CISM debriefing. Maybe more recently they get asked. We’ve always had an agreement in our center that we will talk out bad calls amongst ourselves”. Research question two results showed that several public safety personnel had sought mental health help for themselves or others had bad experiences but did feel that seeking mental health care is changing over their career.

Question 10 asked how participants felt about others knowing they had sought out services 23 participants responded out of 27. The most common answer was that they did not care what others thought if they sought mental health services. Example was Participant 2,

> I wouldn't be concerned about what others think. It's also my personal business. So, if I chose to share that with someone, it would be people that I know will accept me and my situation.

Seven participants stated there was still a stigma with seeking services stating Participant 23 "Across the board in public safety it's not done a lot. It's perceived as weak" and participant 20 "In my area, as long as your employer doesn't find out, I have noted that your peers will tend to stay away from you". For research question two a: the results showed that the stigma regarding mental and emotional health in public safety is changing but there are some public safety departments that the stigma is still there.

Social Media

Social media has increased in use over the past decade and allows for people to interact with each other anywhere they live in the world. The third theme identified was social media. Question 11 was asked to understand how participants felt about the support received from social media regarding mental and emotional health 24 participants answered out of 27. The answers were positive with some of the answers from Participant 3 stating "You can see that other responders deal with the same issues. A few people speak up but not everyone. It is good even if you don't say anything." Participant 6 stated,

> It seems that the majority of us have the same dark humor. The fact that others are on the same level from around the word is great - and it's another resource for mental and emotional health make over.

Participant 12 stated,

> It is nice to see there are others going through the same things. With the nature of the work, we do it can be difficult to accept even empathy as we know that unless you do this work too then you don't truly understand what we're dealing with.

Research question two b: results showed that social media has been positive with peer-to-peer support.

Question 12 was about the participant's feelings on being able to express themselves in the social media group and not feel judged with answers from 24 out of 27 participants. The responses to this question had several mixed responses but overall were positive. Participant 4 stated "People in the group understand better than those not in the group what we go thru on a daily basis and are more able to express feelings and not be judgmental." Participant 25 stated "Love it. We all have the same problems; some just have a more difficult time dealing with them." Some answers still thought there was judgment in the Facebook groups for example from Participant 16 stating,

> Some days I feel that there would be support, other days I feel there would be none just because those in the group who are not dispatchers tend to put down dispatchers for being emotionally affected by calls.

Question 13 was to understand if participants more support through Facebook than their coworkers with 23 participants answering out of 27 participants. The responses on this question showed mixed results with half who would rather speak with a coworker stating for example Participant 5 "I would prefer a coworker due to the face-to-face interaction and them having been there to possibly experience the same situation with me." Compared to participant 14 stating,

> Wider experience level, however, I work at a great agency and with a great group of people. If you have a traumatic call and need time, they will give it to you. This includes calling in a replacement.

Another example would be participant 23 “Yes, the people in the group are removed from the politics and friend groups of my agency”. Participant 26 stated “yes, its kind of more anonymous.” The results for research question two c: showed that some public safety personnel feel social media is better for them to express their feeling and there are some that would prefer coworker for peer support.

Evidence of Trustworthiness

Creswell and Creswell (2018) stated that internal validity threats “are experimental procedures, treatments, or experiences of the participants that threaten the researchers to draw correct inferences from the data about the population in an experiment” (p.169-170) Internal validity for this qualitative research study was expressed in selection with the anonymity of the survey with no identifying factors with the equality of being distributed among the different experimental groups. External validity is when the interaction of setting and treatment of which “a researcher cannot generalize to individuals in other settings” (p. 172). This research was conducted only involving those that are active in online social media of purposefully selected Facebook groups. For external validity further studies would need to be done within different online and offline platforms. Dependability was provided from audit trails with collection and coding being transparent. Intracoder reliability was obtained with coding as I double-coded 30% of the questionnaires for consistency (Van den Hoonaard, 2008).

Summary

The different answers provided by participants were helpful for this research study and understanding initial training for mental and emotional care but also how they have been able to mitigate the stressful duties of work like. The participants were able to give their responses expressing how they initially obtained training for staying emotionally and mentally healthy, how it had changed, and their thoughts with using social media. The responses were open ended questions and anonymous. The information gained was a valuable part of the analysis. The next chapter focuses on the interpretation of the results which helps with the indication for positive social change, recommendations, and conclusion of the study.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to understand training used for emotional support and to understand training used to mitigate stressful calls for public safety personnel. With social media such as Facebook, people tend to share their happiness, but they do not always share when they are stressed or having downs unless they are seeking help or support (Cho, 2017). This study was completed using a qualitative design and guided by the social cognitive theory focused on self-efficacy. The social cognitive theory uses social influences and the influences of a person's environment and resiliency from past experiences.

I conducted anonymous surveys directed at participants who were online within specific Facebook groups for those currently in public safety. The surveys asked about initial training received in their career to mitigate stressful calls and perceptions of stigma regarding seeking mental health services. In this chapter, I discuss the interpretation of the findings, limitations of the study, recommendations, implications for social change, and the conclusion of the study.

My Experience in Public Safety

I have been working in public safety since 2006 and started out in EMS and working on an ambulance. When I started my work in public safety, I do not remember anything being said about taking care of our own mental health just how to handle patient's having issues with mental health. I worked only ambulance until 2012 when I obtained my emergency medical dispatcher (EMD) license. The company I worked for was hospital based and EMDs dispatched for multiple counties throughout the southern

and eastern part of the state. There is a difference between being just EMS versus dispatching as ambulances were dispatched, but my team also had four to five helicopters dispatched for scene flights. This required the dispatcher to have their certified flight communicator (CFC) license of which I also had.

There were a few times when we had leadership or a chaplain call into dispatch to see what crew ran a specific call and never asked us in the dispatch center were doing okay or even call back to make sure we were doing okay. As a dispatcher there were a few calls that I will never forget. One of them is a mother screaming into the phone as she just lost her last child and having to tell her she needs to get into the bathroom, lock it and hide until law enforcement arrived as the assailant was still in the house. Staying on the line with that mother trying to calm her with my voice and only hanging up when I heard law enforcement was hard. Another one is in a single, 12-hour shift because of the number of counties we dispatched for, every hour I was on the phone giving cardiopulmonary resuscitation (CPR) instructions and by the end of the day I handled 12 cardiac arrests. The leadership that was on shift that day did not ask if I need to take a break or even ask if I was okay.

Another call that I remember vividly is when I was working on the ambulance and responded to a patient on the side of a street having a mental health emergency. There was a lot that happened on that scene but by the end we had to give medication to the patient to prevent them from being a harm to themselves or others. When I had gotten home, I realized the physical ramifications of that call when I found bruises and even a

bruise in the shape of a handprint from the patient on my inner thigh where I was forcefully grabbed.

Not knowing what happened to some of the patients is hard but there are times that you do get someone coming to the ambulance base that you normally work out of to tell you thank you. Telling you that if we had not insisted that he be taken to the hospital by helicopter the doctor told him he would have died on the way to the hospital by ambulance.

My employers throughout the years have provided the option to seek counseling through the EAP program. I have sought counseling services several times and after getting through some of my childhood traumas have been told that they do not know how I am not a drug addict from it of which I have always responded that helping others is what helped me get through those traumas. I have also experienced where the counselor did not know how to help me because they do not have the specialization for the number of traumatic events I have seen or heard for the last 16 years.

Interpretation of Findings

Knowing how to mitigate emotional stressors that normally signal negative outcomes is an essential coping mechanism to prevent or decrease the chances of self-debilitation behavior or expectations. In this study, I examined participants' initial training regarding mental health practices for baseline comparison to how it had changed throughout their career. I examined the participant's experience in their field of the stigma they would feel after seeking mental health services. I further examined the use of online social media Facebook groups to see how participants got support from the group,

their feelings of being able to express themselves there, and if they felt they get more support from the Facebook group than from their coworkers.

The first area that I examined was initial training. McCall et al. (2021) stated that public safety personnel should have ongoing mental health support and is clinically complex. The first question asked participants to explain what initial training was received during their schooling/training on taking care of their mental and emotional health. The most common response in the survey was no training. The follow-up questions to their initial training were to provide further detail on training received later in their career. The most common answer to this question was none.

Some of the other answers that were stated are that the administration felt obligated to provide mental health services; another participant stated they had speakers and training videos and were given healthy ways to cope with stress. These findings did correlate with the literature from Golding et al. (2017) that leadership was distant and did not understand the current demands of the job. The relationships between the employee and supervisor were sometimes strained because the employees felt a lack of support, empathy, and understanding (Golding et al., 2017). RQ1 was: What is the experience of public safety personnel's training regarding their ability to mitigate emotional stress? The baseline knowledge to evaluate the participant's responses was a three-part question seeking their training when they entered the public safety field and if they have received any further training throughout their career to help with the emotional and mental stress. The results showed that adequate education and training was not provided on how to handle emotional and mental stress within this career field and that the disciplines in

which they work have not provided their employee's additional training for staying or seeking mental and emotional support.

The second theme identified was seeking mental health services, with the first part asking the participants about any encounter they have had with seeking mental health services for themselves. This question was to gauge if the participants have sought services and their experience with seeking those services. The answers did show that half of the questionnaires were answered with "none," but the other half had sought services. Two participants explained that when services were sought for a coworker that was having trouble, they were denied by their leadership citing that because the person was in dispatch and was not physically at the scene, no assistance was needed. Another response was not wanting to be labeled with PTSD. This correlates with Velazquez and Hernandez (2019) who stated that one of the barriers to seeking mental health services is stigma and negative stereotypes.

Emergency dispatchers must triage 911 calls and speak with those on the other end providing instructions while the caller is waiting for help to arrive. Golding, et al (2017) stated that these stressors are associated with negative physical and psychological outcomes. The results seen correlate with the literature about being frustrated with leadership because of the lack of support, empathy, and understanding. This barrier often leads to burnout and higher turnover for departments (Golding, et al, 2017).

RQ2: What is the experience of public safety personnel with seeking mental services? Half of the participants stated they have not sought mental health services, and the other half said they did not want a label such as PTSD, had confided in friends and

family or were denied services that were provided for others responding to the emergency. The interpretation from these results was that the participants have not had a good experience with seeking mental and emotional support although feel the stigma is changing regarding seeking mental health care.

The second part of this theme was to understand the participant's feelings on seeking mental health services and how they have changed over the years. The answers received stated that seeking services were good, with one of the answers providing further experiences they have had with seeking those services that were not geared enough towards public safety personnel. The second part of the question asked was if their view about seeking mental health services had changed over their careers. The most common answer was that their view has changed, with one participant stating that it had not because they are always omitted from CISM due to being in dispatch.

The last part of this theme regarded how the participants would feel if others knew they have sought out mental health services. The most common response was that they did not care what others thought, although there were seven who stated there was still a stigma, and they would be perceived as weak, or they would lose their job if their employer found out. Karaffa and Koch (2016) stated that because of the stigma officers do not want to appear weak and "officers are warned throughout their training that losing control of their emotions could jeopardize their career" (p. 76).

RQ2a was: What is the experience of public safety personnel with the stigma of receiving mental health services? The results from the survey showed that the common theme was the participants did not care what others thought. The interpretation from the

results showed that the participants felt the stigma surrounding seeking mental health services and others knowing has changed. Krakauer et al. (2020) stated that a barrier for treatment seeking behavior and negative attitudes towards mental health disorders may be associated with stigma. Krakauer et al. concluded gaining mental health knowledge may lower stigma and encourage an environment where others are willing to share their mental health concerns.

The third theme identified was social media as over the last decade the use of social media has increased. It allows anyone to communicate with each other no matter their geographical location. The question asked was about being in the Facebook group, how they felt about the support they got for their mental and emotional health? This question was to understand how participants felt about the support they have received through social media. Prescott et al. (2020) stated with online mental health communities there is a sense of belonging versus when the person doesn't feel they can speak someone close to them offline. The answers were positive in that even though they have not personally posted anything in the group, they can see that others are going through the same thing. This correlates with a statement in Vig et al. (2020) that perceived social support reduced the number of participants for screening positive for PTSD.

R2b was as follows: What is the experience of public safety personnel's use of online social networks for emotional support? The responses were positive with the support they feel being part of the Facebook group. The interpretation of this result was that being in the social media group has a positive effect in supporting their mental and emotional health.

The second part of the social media theme assessed the participant's feelings about being able to express themselves without being judged. The responses were mixed, but overall, they were positive with some expressing that the groups have a better understanding of the issues and are a great tool and resource to have. The third part of the social media theme was to understand how participants felt about the support they received through social media versus support from coworkers. The responses were also mixed, with half of the participants stating that they preferred their coworker's counsel because they were there at the time of the stressful situation, and the other half liked that the Facebook group had a wider experience level and more anonymous or the participant did not trust their coworkers.

RQ2c was: What is the experience between peer-to-peer online support for mental health as regards the stigma of receiving mental health services? The responses to the two questions used to answer this research question were mixed as half of the responses would rather turn to social media and the other half would rather speak to their coworkers. The overall interpretation of the result for positive peer-to-peer online support for avoiding feelings of stigma when the participant feels there is a stigma amongst coworkers.

Social cognitive theory with the focus on construct of self-efficacy focuses on the social influences and environment of the person. The results from research question one showed that adequate education was not received during initial training, nor has it been received throughout the public safety personnel's career. The results for research question two and experience of the participants had seeking mental health care for

themselves, or others had not been positive but for research question two a: feels the stigma for seeking mental health has changed. The use of social media groups with research questions two b and two c: that the participants had found support knowing that others are experiencing the same thing or with coworkers whom they are comfortable knowing they need support. The result of this study shows that for public safety personnel and social cognitive theory focused on self-efficacy construct the use of social media and others through coworkers helps with building resilience as initial mental health education has not been adequate for all the traumatic events experienced on a daily basis.

Limitations

There were six limitations to this study. The first was obtaining permission from the administrators to post the survey. Each group selected had more than one administrator listed, and I chose one of the administrators to ask permission. Most of the time the administrators would message me back and tell me to post the link. When an administrator did not respond to me, I would then message another administrator listed. After no response from the administrators, I would post in the group asking for an administrator to contact me. When neither one of those avenues worked; I found a different group for that public safety service to contact the administrators to ask permission to post the link to the survey.

The second limitation was the sample size. I wanted three to 10 surveys per group since I did not know if anyone would seek an interview instead. The minimal number of questionnaires fully completed I was seeking was 24 with a minimum of three

surveys per group and I ended up with a total of 20 fully complete with seven that were missing answers for some questions.

The third limitation was that the survey only included those that are currently on Facebook and are a part of the group that was selected. The fourth limitation was the option for an interview was given and no participants requested an interview. The fifth limitation was some surveys that were completed gave minimal answers compared to others that provided examples and reasons for their answers. The sixth limitation was the data was collected during the COVID-19 pandemic which might have impacted participants' responses.

Recommendations

One of the limitations stated above was the lack of participants. Obtaining more participants from public safety would provide increased robustness to the sample population. Another recommendation is the population sample was limited to the groups that were chosen on Facebook based on their description and if it was a closed or open group. Having access to more public safety groups would increase the sample population. The last recommendation is narrative interviews would provide further in-depth answers to understand further how social media is used.

Implications

Participants currently working in public safety and belonging to the selected Facebook groups were the center of this study. Even with the limitations mentioned above, this study provides positive social change implications. Mental and emotional health is imperative to being able to provide help to others in their community. Most of

the participants did not have adequate initial training regarding how to stay mentally and emotionally healthy or throughout their career being provided additional resources.

This study can be used to start the conversation about staying mentally and emotionally healthy at the beginning of public safety personnel's career. The idea is that seeking mental health services needs to be normalized and is important for incoming public safety personnel at the beginning of their career. This study also provides a sense of awareness for mental and emotional health and the impact it has on those within this profession.

A proposed outcome of social change for public safety personnel from this study is that online peer support is another avenue for mental and emotional health as the person may not be ready to seek professional help. McCall et al. (2021) and Beahm et al. (2021) studied the use of ICBT for public safety personnel and it needed to be specialized for the population and has shown as beneficial. This study shows there still needs to be adequate education and address the importance of seeking help. Mental health stigma may have lessened in some areas, but it is still there. Awareness and communication are important for public safety personnel when it comes to mental and emotional health.

Conclusion

Public safety personnel perform a frontline role to help others within the community while they are having to control their own emotions at the same time. Seeking services for mental and emotional support has been seen negatively within this profession (Haugen et al., 2017). Many public safety personnel are worried that if their employers find out they have obtained services they will lose their job. The main goal

for mental and emotional health in public health is awareness and suicide prevention. With Healthy People 2030 there is a call to action for a national strategy for suicide prevention (Healthy People 2030, 2021).

Vig et al. (2020) stated perceived social support is important and has been associated with better mental and emotional health outcomes. Awareness brings the attention of seeking mental and emotional help and is a modifiable risk. Normalization of these feelings is important as public safety personnel has unavoidable exposures to trauma. Preventative actions would be discussing mental and emotional well-being during their initial training and providing resources such as continuing education, going into your primary care provider, and telemedicine for mental health services.

Stigmas are still associated with mental health services even though many have stated it has changed over the years. This is a barrier for many seeking services as they are afraid, they may lose their jobs. Even though this barrier can be modified it may not happen within all departments. This conversation may be difficult but would be a start to changing the stigma. Being able to seek services without the fear of judgment is important for mental and emotional health. There is still a gap in literature with public safety population. This study helps with how online communities specifically for public safety personnel may be the first step for those not ready to seek professional help yet. Prescott, et al (202) stated with online mental health communities' peers may also experience the same issues and are objective to that person's situation.

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Appendix: Survey/Interview Questions

Basic Demographic Information

1. Are you 18 years old or older?
    a. Yes
    b. No
2. Do you currently work in public safety field such as Fire, EMS, Law Enforcement or Dispatch?
    a. Yes
    b. No
3. What age group do you belong to?
    a. 18 -24
    b. 25-35
    c. 35-45
    d. 45-55
    e. 56 +
4. Which public safety agency do you work for? (Select all that apply)
    a. Fire
    b. EMS
    c. Law Enforcement
    d. Dispatch
5. How many years of experience do you have?
    a. Under a year
    b. 1-5 years
    c. 6-10 years
    d. 11-15 years
    e. 16 + years
6. Gender
    a. Male
    b. Female
7. With your initial schooling/training in your public safety field can you please explain what training you received on mental health and emotional health?
    a. Please, provide further detail on training you have received on how to keep yourself mentally and emotionally healthy?
    b. Have you received additional training later in your career about staying mentally healthy and if so, please provide further detail?
8. With your initial schooling/training in your public safety field can you please explain what training you received on mental health and emotional health?
    a. Please, provide further detail on training you have received on how to keep yourself mentally and emotionally healthy?

    b. Have you received additional training later in your career about staying mentally healthy and if so, please provide further detail?
9. Explain any encounter you have had with seeking mental health services for yourself?
10. What are your feelings about seeking mental health services?
    a. Explain how those feelings changed over your career?
11. Provide further detail on your feelings of how others would see you after seeking mental health services?
12. What are your feelings about being in the Facebook group and being able to express your feelings for any emotional issues without any judgment?
13. Do you feel you get more support through the Facebook group than you would with your co-workers and why?

Research Questions in relation to Survey Questions

RQ 1- What is the experience of public safety personnel's training regarding their perceptions to mitigate emotional stress?

7. With your initial schooling/training in your public safety field can you please explain what training you received on mental health and emotional health?
    a. Please, provide further detail on training you have received on how to keep yourself mentally and emotionally healthy?
    b. Have you received additional training later in your career about staying mentally healthy and if so, please provide further detail?

RQ 2 – What is the experience of public safety personnel with seeking mental health services?

8. Explain any encounter you have had with seeking mental health services for yourself?
9. What are your feelings about seeking mental health services?
    a. Explain how those feelings changed over your career?

RQ 2a. What is the experience of public safety personnel with the stigma of receiving mental health services?

10. Provide further detail on your feelings of how others would see you after seeking mental health services?

RQ 2b. What is the experience of public safety personnel's use of online social networks if being used for emotional support?

11. With being in the Facebook group, how do you feel about the support you get for your mental and emotional health?

RQ 2c. What is the experience between peer-to-peer online support for mental health and the stigma of receiving mental health services?

12. What are your feelings about being in the Facebook group and being able to express your feelings for any emotional issues without any judgment?
13. Do you feel you get more support through the Facebook group than you would with your co-workers and why?