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# Firefighters' Perceptions and Experiences of Seeking Mental Health Treatment Services

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Abstract

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## Abstract

Firefighters are repeatedly exposed to trauma on the job, which could result in the need for mental health services; however, many firefighters experience barriers that impede their access to available resources. Additional research is needed from a qualitative lens on firefighters' help-seeking behaviors to inform the development of treatment interventions. The purpose of this study was to explore firefighters' perceptions and experiences of seeking professional mental health treatment services. A generic qualitative approach and interpretive lens were used for the investigation. Twelve active U.S. firefighters with a minimum of 2 years on the job participated in semistructured interviews. Thematic analysis yielded five themes: (a) trauma exposure, (b) fire service culture, (c) perceptions of available resources, (d) financial burden, and (e) the role of interpersonal relationships in seeking help. Participants reported various barriers to seeking help: their perceptions of support, stigma, access to treatment, availability of services, and financial costs. Additionally, participants had mixed views on employee assistance programs, specifically in regard to confidentiality protections and availability of competent clinicians. Understanding the perceptions and experiences of firefighters related to seeking mental health treatment may empower firefighters by giving them a platform to have their voices heard, inform clinicians on how to tailor treatment, and alert policy makers about the need to make resources available to this population. Positive social change implications include improved access to resources and decreased stigma.

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# Chapter 1: Introduction to the Study

Firefighters serve an essential role in society in providing vital emergency services to communities (Johnson et al., 2019). Although they provide necessary safety and protection services to communities, they often, by the nature of the work, place themselves in harm's way and experience high emotional and cognitive adversity and traumatic situations (Jones et al., 2020). Performing in high-stress situations can have sometimes enduring effects on human psyche, either conscious or unconscious or both (Morman et al., 2020).

In conducting this study, I sought to provide insight into the perceptions and experiences of firefighters related to seeking mental health treatment services. In 2017, the U.S. emergency call rate for first responders was approximately 50 million events per year (Jones, 2017). In 2018, fire departments in the country received 36,746,500 emergency calls (National Fire Protection Association, 2019). These numbers appear to indicate a high rate of traumatic events occurring in a variety of communities. As a result, first responders have an increased risk of secondary trauma exposure, which could lead to increased mental health illnesses. Secondary trauma occurs when an individual witnesses or listens to stories of another person experiencing trauma (Pellegrini et al., 2022).

Repetitive exposure to daily trauma increases the risk of posttraumatic stress disorder (PTSD) and substance use among firefighters (IAFF Center of Excellence Staff, 2021). Suicide is an increased risk among this population, indicating a need for mental health services (Boffa et al., 2018). Previous researchers have presented qualitative data identifying the barriers that firefighters face when seeking mental health services

(Carpenter et al., 2020; Gulliver et al. 2019; Hom et al., 2016; Stanley et al., 2017). Jones et al.'s (2020) study was one of only a few qualitative studies to address help-seeking behavior among first responders. Jones et al. recommended continued research on first responders' perceptions to improve the mental health model of services delivered to this population. In this qualitative study, I sought to provide insight into firefighters' perceptions and experiences in seeking mental health services, including their perceptions of available resources. The qualitative approach involved exploring rich data collected through individual semistructured interviews.

In this chapter, I will provide a brief overview of the topic and problems related to firefighters' obtainment of mental health services treatment. In addition, I will state the purpose and problem of the study, discuss the theoretical framework as it relates to the research question, and describe the nature of the study. The chapter also includes an overview of the assumptions, scope and delimitations, limitations, and significance of this study for future research. The summary of this chapter will tie in essential details of each topic presented in the chapter.

## Background

To maintain healthy relationships and continue serving their communities, firefighters need to sustain their mental health (Simon & Peters, 2017). In 2017 and 2018, 103 and 82 U.S. firefighters died of suicide, respectively (Heyman et al., 2018). Data collected by Heyman et al. (2018) showed a 20% higher rate of suicide among firefighters than the general population (18/100,000 vs. 13/100,000). The high rate of suicides indicates a need for mental health services within fire departments. Firefighters

appear to struggle from a lack of mental health treatment and services with 37% of first responders suffering from PTSD compared to 3.5% of adults in the general population and 4-22% suffering from anxiety and depression compared to 7% of adults in the general population (Jones et al., 2020). Also, 34-56% of firefighters suffer from binge drinking, and approximately 70% suffer from a sleep disorder, research shows (Jones et al., 2020).

Existing research on firefighters seeking mental health treatment is quantitative with a focus on barriers to seeking care. Articles, such as Carpenter et al.'s (2020) on forgiveness and the impact of stigma and mental health challenges and Krakauer et al.'s (2020) on identifying high levels of stigma among firefighters compared to other public service providers, provide insight on help-seeking barriers. Gulliver et al (2018) identified stigma as the third leading barrier to firefighters seeking mental health treatment. Both internal and external stigma are barriers to help seeking for mental health services. Internal stigma on seeking help affects firefighters' level of depression, suicide ideation, and symptoms of PTSD (Carpenter et al., 2020). Additionally, Krakauer et al. (2020) found that compared to other public service providers, firefighters appeared to have the least amount of knowledge of mental health services and the highest percentage of stigma. External barriers such as firefighters' reputation (within the community and their families and friends) and feelings of shame or embarrassment are primary barriers to seeking help (Johnson et al., 2019). Finally, a structural barrier exists with financial costs for treatment and affordability to take time off work to receive treatment (Johnson et al., 2019). Despite this knowledge of barriers, qualitative research on firefighters' pursuit of

mental health services is lacking. Without knowledge of firefighters' perceptions and experiences, mental health service providers have struggled to devise appropriate treatments for this population (Jones, 2017).

Current literature highlights the problem of repetitive trauma exposure in the mental health well-being of firefighters. The literature shows the prevalence of negative coping skills such as drug and alcohol use, increased suicidal thoughts, and poor sleep among this population (Martin, Vujanovic, et al., 2017). Additionally, stigmas such as poor reputations and appearing weak to others further create barriers to treatment (Johnson et al., 2019). Other barriers to seeking treatment identified in current literature are the cultural competency of clinicians, the resources available to small fire departments, and the cost of treatment including missed time from work (Johnson et al., 2019). Jones (2020) identified a need for qualitative research on preventative and intervention methods that are specifically development for the treatment of this population. This gap in the literature calls for additional qualitative research on the perceptions and experiences of firefighters seeking mental health services.

## Problem Statement

Vicarious or secondary trauma exposure places firefighters at an elevated risk for mental health problems than the general population (Stanley et al., 2017). PTSD, depression, anxiety, and addictions are common mental health problems following untreated trauma exposure (Milligan-Saville et al., 2018). The daily exposure to complete or attempted suicides on the job compounds the trauma exposure of first responders, with firefighters having an increased rate of suicide deaths in 2019 compared to previous years

(Jones, 2020). Furthermore, Heyman et al. (2018) reported that only 40% of suicides represent the data, alluding to a crisis of untreated mental health problems that appears to be a constant variable in the lives of firefighters.

Jones (2017) conducted a meta-analysis that highlighted mental health issues that are commonly overlooked regarding the mental health needs of firefighters and EMTs. The 27 articles on firefighters from the United States, Australia, Brazil, United Kingdom, Germany, Canada, Netherlands, Poland, Scotland, South Africa, and Taiwan included in the study showed high prevalence rates of mental health problems for this population when compared to the general population. Alcohol use had a high prevalence rate (89%) among firefighters. Furthermore, the prevalence of the comorbidities of depression and PTSD among this population ranged between 21% and 95% due to trauma exposure. Jones did not find qualitative studies to explain help-seeking issues and barriers among this population. Later, Jones et al. (2020) conducted a qualitative study on barriers identified among first responders seeking mental health care. Jones et al. used an ethnographic qualitative approach. Barriers to seeking treatment identified in the study showed a fear of weakness, possible confidentiality breach, family burdens, past negative experiences with therapists, and limited access to treatment. Additionally, the author identified a need for further qualitative data collection on firefighters seeking mental health services from their personal experiences.

I examined firefighters' perceptions and experiences in seeking mental health services, which differs from Jones et al.'s (2020) focus on perceptions of mental health problems and help-seeking behaviors. I found five research articles that addressed mental

health problems and help-seeking behaviors among firefighters (Gulliver et al., 2018; Hom et al., 2016; Jones et al., 2020; Kim et al., 2018; Stanley, Boffa, et al., 2017; Stanley, Hom, et al., 2017). These studies support further qualitative investigation of the study phenomenon.

In their mixed-methods study, Gulliver et al. (2018) focused on firefighters' access, attitudes, and preferences in receiving mental health services. Gulliver et al. found that 81% of participants were aware of having access to mental health services, yet stigma-related barriers (such as fear of a breach of confidentiality) were reasons for not recommending internal behavioral health services to colleagues. Kim et al. (2018) surveyed firefighters who perceived obstacles to treatment and stigma for not receiving mental health services. The usage of mental health services among firefighters appeared lower in South Korea than in the United States with an approximate 22% lifetime rate in South Korea and a 43% annual rate in the United States (Kim et al., 2018). Kim et al.'s data emphasize the international scope of the study problem. Stanley, Boffa, et al. (2017) conducted a quantitative study to compare psychiatric symptoms between volunteer and career firefighters. Their findings highlight various types of barriers to treatment for both career and volunteer firefighters but also revealed similarities with stigma among the firefighter population. Stanley, Hom, et al. (2017) conducted a web-based study focused on female firefighters' suicidal thoughts related to their careers. The findings in the study highlight how the struggles of women firefighters with suicidal thoughts and behaviors prior to their careers as firefighters affects behavior and post trauma exposure on the job, identifying a need for pre and post mental health treatment for this population. To better

understand mental health resources for firefighters pre and post trauma exposure, Hom et al. (2016) used a web-based survey to identify thoughts and behaviors associated with how firefighters accessed mental health services. The researchers found that firefighters with a history of suicide attempts often seek treatment but report barriers and concerns stemming from fears of embarrassment and damage to their reputation (Hom et al. 2016).

These studies, outside of Jones (2017 and 2020) and Gulliver et al. (2018), did not involve a consideration of the populations' personal experiences. Additional research is needed from a qualitative lens to further assist firefighters in both help seeking but also in treatment interventions. Studies on firefighters appear limited on the topic of help-seeking and mental health problems. I aimed to bridge the gap in research by conducting in-depth individual interviews with active firefighters to gain rich data.

## Purpose of the Study

The purpose of this qualitative study was to explore firefighters' perceptions and experiences in seeking mental health services while coping with daily trauma exposure. In this study, I used a generic qualitative approach to interpret the health-seeking behaviors of firefighters. With the increased prevalence of mental health problems among firefighters compared to the general population (Jones et al., 2020), it is important to study the perceptions and experiences of daily trauma exposure among this population.

## Research Question

What are the perceptions and experiences of firefighters in seeking mental health services to cope with exposure to trauma on the job?

## Theoretical Framework

I used the theory of planned behavior (TPB) as the theoretical framework for this investigation. There is empirical evidence validating its use to predict human behavior in various areas such as drug use, travel selection, recycling choices, practice of safe sex, and use of technology to protect personal information (Ajzen, 2020; Reysen et al., 2018). Ajzen (2020) developed TPB to predict human behavior and assist in developing interventions to treat various populations. TPB encompasses characteristics such as those of social cognitive theory but has its roots in the theory of reason and action to explain human behavior intention (St Quinton et al., 2021). In 1980, Martin Fishbein and Icek Ajzen developed the theory of reason and action, which focuses on attitudes and subjective norms related to human behavior (Ajzen, 2020). This theory focuses on volition and intentions of behavior (Ajzen, 2020). An extension of this theory emerged with Ajzen (2020) adding behavioral control (the difficulty or ease of the behavior) as a key concept in 1985.

Attitude, social norms, and perceived behavioral control are key concepts of TPB (St Quinton et al., 2021) and underpin the interview questions in this study. Attitudes refer to positive versus negative thinking about an action (Miller, 2017). Norms are subjective to what others think about the individual engaging in behavior related to external influences and social pressures (Miller, 2017). Perceived behavioral control focuses on whether an individual believes they can participate in the behavior, such as having access or means to engage in the activity (Miller, 2017).

Ajzen (2020) stated that the intensity of the intention determines the behavior outcome. There are auxiliary assumptions that drive predictions of TPB: Measurements, Behavior, and Scaling to bridge the gap of observable and non-observable terms within the theory (St Quinton et al., 2021). These auxiliary assumptions do not decrease the validity and empirical evidence of TPB (St Quinton et al., 2021). TPB is considered a popular theory for studying health and behavior as it is easy to comprehend the complexities of human behavior (Miller, 2017).

The concepts of attitude, subjective norms, and perceived behavioral control identified in TPB are relevant to understanding the perceptions and experiences of firefighters seeking mental health services. Firefighters' behavioral beliefs about mental health services, along with post trauma exposure, could determine their behavior of seeking help. Ajzen (2020) noted that the power of a belief to produce positive or negative attitudes contributes to the behavior outcome. The research question for this study focuses on the perceptions and experiences of firefighters, which aligns with attitude and subjective norms related to seeking help to cope with trauma exposure. Subjective norms in TPB underlie injunctive normative beliefs, including the approval of family members, friends, coworkers of the behavior, and descriptive normative beliefs, which identify similar individuals as oneself performing such behaviors (Ajzen, 2020).

Additionally, I explored the use of perceived behavioral control in the study. The research question involved the perceptions of resources, accessibility to care, cooperation of essential individuals in firefighters' lives, and the availability of time and finances to seek mental health services (Ajzen, 2020). Perceived behavioral control may contribute

to the attitude and subjective norms that could determine firefighters' intent and behavioral outcomes related to seeking mental health services to cope with exposure to trauma on the job.

A theory closely related to TPB is the theory of reason and action. My reason for selecting TPB over the theory of reason and action was to include the behavioral control component of an individual's intent (see Ajzen, 2020). The behavioral control component of TPB explains why an individual would select a specific behavior to satisfy the behavior intent. Using the theory of reason and action would have limited the insights possible from exploring participating firefighters' perceptions of their ability to control help-seeking behaviors.

## Nature of the Study

I used a generic qualitative approach in this study. A generic qualitative approach was the most suitable because it allows for flexibility in methodology while maintaining a focus on the social reality of participants (Kennedy, 2016). In generic qualitative studies, the researcher focuses on the social environment of individuals to understand how they function in the reality of their world. (Jahja et al., 2021). Additionally, because they can draw from other qualitative approaches, researchers using the generic approach have more flexibility (Kahlke, 2014). With this flexibility, researchers have a wider latitude to understand individuals' experiences of the world in which they live (Jahja et al., 2021). The generic qualitative approach includes in-depth analysis, storytelling, identification of patterns within the culture of the group, and learning about group

members' experiences to offer a theoretical explanation of the study phenomenon (Jahja et al., 2021),

I conducted semistructured interviews to identify participating firefighters' perceptions and experiences in seeking mental health services to cope with trauma exposure on the job. I used purposive sampling for recruitment and narrowed my sample to active firefighters with a minimum of 2 years on the job for the study. Hom et al. (2016a) found that firefighters with more time in service tend to seek mental health treatment. It is questionable if firefighters with less time in service opt to leave the job because of untreated mental health problems. My goal was to include firefighters with enough experience on the job to report in-depth experiences. Using myself as an instrument for data collection, I systematically analyzed data for interpretation through themes identified in the data and placed them into categories. Data collection and analysis co-occurred throughout the study.

## Definitions

*Firefighter*: An individual trained to respond to fires and various emergencies such as natural disasters, motor vehicle accidents, terrorist attacks, and injury of oneself or others (Johnson et al., 2019).

*First responder*: The first public servant helping professional (police officer, firefighter, rescue worker, EMT, or health care professional) to arrive at the scene of an emergency call (Jones, 2017).

*Help-seeking behavior*: The action(s) of an individual suffering from a health problem who is in search of a resolution to the problem from a health care professional or trusted individual (Aguirre Velasco et al., 2020).

*Mental health*: A state of well-being where an individual can use healthy coping skills to manage daily life stressors (Lindert et al., 2017).

*Mental illness*: Negative changes in thoughts, emotions, and/or behaviors that disrupt an individual's ability to function in home, work, and social environments (American Psychiatric Association, 2018).

*Stigma*: Stereotypes; prejudices; and discriminatory thoughts, behaviors, and attitudes towards an individual that cause them to feel shame, embarrassment, or feelings of being less of a person (American Psychiatric Association, 2020). Stigma can also be internal (i.e., self-stigma).

*Suicidal ideation*: A variety of thoughts centered on one's death or the wish to no longer be alive (Donath et al., 2019).

*Trauma exposure*: Exposure to critical incidents involving a loss, injury, life-threatening events, or death that exceeds one's ordinary coping skills to manage psychological and emotional responses at the time of the incident (MacDermid et al., 2019).

*Treatment-seeking behavior*: An individual's knowledge of the availability of resources, actions related to asking for help, and accessing of mental health services (Jones et al., 2020).

*Vicarious trauma*: Witnessing or hearing stories of a critical incident involving a loss, injury, life-threatening events, or death others, which changes an individual's thought pattern (schema) to a negative view of themselves, others, and the world (Greinacher et al., 2019).

## Assumptions

There are several assumptions that I had in conducting this study that merit discussion for the full transparency of the study. One of the most critical assumptions was that participants would be honest in their responses to the interview questions (see St Quinton et al., 2021). Other assumptions were that participants would represent the population studied and would be interested in the study's topic, thus accounting for their decision to participate in the study (St Quinton et al., 2021). I also assumed that 2 years of experience on the job would be adequate to capture a true representation of the population explored. Finally, I assumed that the interview questions would not influence participants' responses (see St Quinton et al., 2021). Following are other assumptions I had:

- Participants were fully capable of operating a computer application, such as Zoom, for the video interview.
- Data collection was authentic and uninterrupted because participants would not have another individual within ear shot of the conversation during the video interview.
- The collection of data through recorded video would not influence participants' responses.

- The time allotted for each interview would be sufficient for data collection.

These assumptions informed all aspects of the study, including recruitment, the selection of the instrument used for data collection, and data analysis.

## Scope and Delimitations

The scope of this study encompassed the perceptions and experiences of active firefighters related to trauma exposure and help-seeking behaviors. Trauma and help seeking behaviors are subjective to the experiences and perceptions of individuals in the population studied (Greinacher et al., 2019). For example, MacDermid et al. (2019a) identified the importance of resiliency skills for firefighters to endure the mental and physical stress of their work. Repetitive trauma exposures have an impact on workers' compensation claims, suicide attempts, substance use, and the decision to seek help (Johnson et al., 2019; MacDermid et al., 2019a). Narrowing my scope to the experiences and perceptions of trauma exposure and help-seeking behaviors allowed for a deeper understanding of firefighters' mental health challenges and phenomena.

Delimitations or boundaries within the study included excluding retired firefighters and firefighters with less than 2 years on the job. This excluded firefighters in their first year experiences on the job. Therefore, findings are not applicable to the entire population of firefighters. I collected current data of firefighters who have spent time on the job long enough to provide detailed information about their perceptions and experiences in help-seeking. I did not focus on coping strategies to mitigate mental illnesses; types of mental health illnesses incurred while on the job; and relationships

with coworkers, family members, and friends that might by affected by a firefighter's mental illness.

## Limitations

There are several limitations of this study, including the research design that was selected and potential biases that could have influenced the outcomes. Qualitative research is often viewed as interpretive in that data are typically collected in the study population's natural environment (Aspers & Corte, 2019). According to Aspers and Corte (2019), this research method allows flexibility and minimal structure, which can be a limitation and an advantage. The focus of the research remained consistent throughout the study, and the findings hopefully represent the data collected with minimal biases. I achieved these outcomes by using member checking, conducting a field test of the interview questions, following ethical guidelines, and maintaining a Microsoft Excel spreadsheet of categories and themes developed throughout the data collection and analysis process. Another limitation was the transferability of the study due to the small sample size (see Rahman, 2017). To foster transparency, I collected rich contextual data.

Using videoconferencing for interviews has many advantages, such as having a lower cost and being less time-consuming than face-to-face interviews (Krouwel et al., 2019). However, the use of videoconferencing limits the ability of the researcher to respond to a participant in distress. Separate locations allow for more disruptions or distractions in participants' environments (Krouwel et al., 2019). Also, the use of modern technology can be particularly challenging for older adult populations (Krouwel et al., 2019). Because I have experience in teletherapy through phone and video, I possess

clinical therapeutic skills to calm a distressed participant through a media platform. I also reviewed breathing techniques with participants during the introduction section of the interview. The importance of identifying a quiet, uninterrupted location for the interview was highlighted in the emails sent to participants, follow-up phone calls before data collection, and the interview's introduction section. Finally, during the recruitment phase of the study, I explained the requirements for participation. Participants received written communication on expectations of using a media platform for successful participation in the study. Those who could not connect to a media platform such as Zoom or Skype were not eligible to participate in the study.

## Significance

In conducting this study, I aimed to contribute to existing research on treatment-seeking for mental health conditions among firefighters. Knowledge from the study may also inform future research. Additionally, enhanced knowledge of the target behaviors may have an impact on therapeutic practice that results in positive social change. Walden University (n.d.) described positive social change as an impact, shift, or transformation that improves the lives of human beings at the micro, mezzo, and macro levels of their social environments. Understanding the perceptions and experiences of firefighters seeking mental health treatment may empower firefighters by giving them a platform to have their voices heard, inform clinicians on how to tailor treatment to effectively meet the needs of this population, and capture the attention of policy makers whose decisions may affect the resources available to this population. Stakeholders can potentially use

these data to develop intervention models and policies that are specific to the firefighter population.

I identified barriers that affect firefighters seeking mental health treatment. Barriers include the cost for treatment, time away from the job, and the lack of available resources. Many of the structural barriers are tied to policies (Johnson et al, 2019). With more insight on what is needed for optimum behavioral health treatment, policy makers may be more likely to address firefighters' mental health needs in the areas of access, affordability, and availability of resources.

The potential implications for social work practice include moving past the identified stigma barriers outlined in numerous quantitative studies (e.g., Gulliver et al. 2018; Jones et al., 2020;Jung & Chang, 2020) and focusing on what is needed in the skill sets of clinicians treating this population for positive treatment outcomes. Through the collection of detailed perceptions and experiences from firefighters, social work practitioners can gain insight on the impact of current intervention methods and identify gaps needed to develop new intervention models when working with this population. A critical social change for the social work practice could be changing how social workers treat the firefighter population. In summary, the study holds significance because it may affect the seeking and delivery of mental health services as well as the reform of current policies.

## Summary

Firefighters experience recurrent life threatening traumatic events on the job (Boffa et al., 2018). These exposures contribute to increased mental health problems such

as PTSD, addictions, and suicidal ideation or attempts (Jones et al., 2020). A gap in research on the experiences and perceptions of firefighters seeking mental health services exists. Most of the research features quantitative data and focuses on stigma as a significant barrier to treatment. The lack of research on the health-seeking behaviors of firefighters and other first response is an impediment to the development and delivery of treatment for this population (Jones et al., 2020).

Additionally, clinicians may not be culturally competent about the firefighter population, leading to substandard intervention models (Jones et al., 2020). In this study, I sought a better understanding of the experiences and perceptions of firefighters in seeking mental health services. I identified (a) other barriers outside of stigma for seeking help and (b) overlooked areas of interventions to support the development of treatment models. I also gained insight into ways of increasing help-seeking behaviors.

In Chapter 2, I will provide a detailed review of current literature in the field on the topic of firefighters seeking mental health services. Both quantitative and qualitative literature presented provides a comprehensive picture of what researchers understand about this population. The literature review indicates a gap in research, which supports the purpose of this study.

# Chapter 2: Literature Review

## Introduction

In this literature review, I will explore current and past research on the mental health of firefighters and how they access professional treatment. A traumatic event is a threat or an expectation of a threat that can cause severe injury or death to oneself or another person (Pai et al., 2017). A perceived threat can induce distress and mental anguish and lead to symptoms aligned with PTSD (Pai et al., 2017). Firefighters experience daily trauma exposure due to the nature of their jobs (Stanley et al., 2017). Repeated trauma exposure places this population at a more elevated risk for mental health problems than the general population (Stanley et al., 2017). Although prior researchers have presented quantitative data on help-seeking behaviors of firefighters, there exists a gap in the research, from a qualitative lens, on firefighters' perceptions of secondary trauma exposure and help-seeking behaviors (Haugen et al., 2017; Hom et al., 2018; Karaffa & Koch, 2016). In this generic qualitative study, I explored firefighters' perceptions and experiences in seeking mental health services while coping with daily trauma exposure.

Current and prior literature is a crucial component to research (Snyder, 2019). A literature review includes an exploration of current and past research. It also helps to identify gaps for researchers to build upon and develop new theories to contribute to the field (Snyder, 2019). My approach to this literature review began with seeking to better understand mental health issues and the psychosocial effects of trauma exposure, specific to firefighters. I then narrowed my research to behavioral changes in firefighters seeking

treatment to focus on resources, barriers, and coping strategies. My objective for this literature review was to provide an all-inclusive perspective of current literature. Before reviewing the literature, I discuss the literature search strategy and theoretical framework.

## Literature Search Strategy

I used Walden University Library resources to identify literature to include in this study. I began my research with Walden Library. I searched for peer-reviewed articles though several databases in the library such as PsycINFO, SocIndex with Full Text, SAGE Journals, ScienceDirect, Psychology Databases Combined, Academic Search Complete, ProQuest Central, Business Source Complete, and Thoreau Multi-Database Search. I also used Google Scholar and the National Center for Biotechnology Information database to search peer-reviewed journals related to my topic.

I began with a keyword search in these databases. Broad search terms such as *mental health* and *first responders* yielded many articles. I had to narrow my search by adding several words to the search using various combinations: *firefighters*, *access*, *behavioral seeking*, *EAP*, *trauma*, *insurance coverage*, *mental health treatment*, *mental health services*, *behavioral health*, *suicide rates*, *mental disorders*, *mental illness*, *firefighter culture*, *experiences*, *perceptions*, *resources,* and *stigma*. I limited search results to those published within the last 5 years to identify recent research on the topic. Finally, I searched for works cited within the search results to gain an in-depth understanding of the research. Articles dated as early as the 1990s provided in depth knowledge on the history of the problem. However, I primarily sought articles dated from 2016 to the present date for a full understanding of the current issues related to the study

topic. I found over 200 articles on the following topics of firefighters: stigma, access, trauma exposure, suicide, mental illness, culture, and insurance. I reviewed approximately 175 of these articles that appeared related to my study and used 110 of these articles in my study. By using this strategic research approach, I was able to thoroughly review past and current research on firefighters' perceptions and experiences in seeking mental health services.

## Theoretical Framework

The TPB offers a framework for predicting human behavior in various areas. For example, Bhochhibhoya and Branscum (2018) applied TPB to a study of substance use. Jokonya (2017) used TPB to explore human behavior in information systems research. Although a variety of disciplines use this theory, it is notable in the health care field because of its usefulness in developing new intervention methods to treat patients (Si et al., 2019a). Also, the environmental sciences is an area where TPB continues to appear as a theoretical framework in research. Si et al. (2019a) reviewed 531 articles over the past 25 years and discovered the use of TPB in the social sciences and energy, engineering, business, management, agriculture, and economics fields with a growth rate of its use to 62% over the past decade. At this rate, TPB appears to be an effective tool, in a variety of field and disciplines, for explaining human behavior.

The critical aspect of TPB is highlighting the intention of an individual to predict the behavior, which will provide an explanation of the decision made (St Quinton et al., 2021). My goal is to understand the help-seeking decisions made by firefighters. To comprehend this phenomenon, one must first look at the intent behind the behavior,

inclusive of their perceptions and experiences in help-seeking. The following paragraphs explains the intent created by the components of TPB. It is important to note that TPB will not change behaviors, only predict them (St Quinton et al., 2021). Another keynote with this theory is that it does not measure observable terms but uses auxiliary assumptions or external conditions impacting the predictions These assumptions are critical to the development of my interview guide in measuring attitudes, norms, and perceived control. For example, an auxiliary assumption would be there are various categories of stigmas (public, self, and structural) that exist within fire departments. Operating from this external condition validated through past research, the assumptions of the existence of some form of stigma impacts the predictive behavior of firefighters seeking mental health services.

The TPB encompasses three specific concepts that expand upon the theory of reason of action. The theory looks at behavioral attitudes, norms, and perceived control to predict action (Jokonya, 2017). Attitudes refer to positive versus negative thinking about an action (Miller, 2017). Interview questions will include firefighters' perception of how others view their decision to seek or not seek help, as well as how each individual views oneself in reference to their decisions. For example, a firefighter may feel negative about himself such as feelings of worthlessness and weakness for seeking help or could feel he is making a positive step forward in life by seeking help for his mental illness. Norms are subjective to what others think about the individual engaging in a behavior, and if the behavior is something that others are engaging in (Miller, 2017). Other interview questions will focus on the impact of their decision on interpersonal relationships. An

example of subjective norms would be if a firefighter felt shame for seeking mental health services because no one else in the fire department is receiving treatment due to the stress of the job or a specific call. TPB would call this the social influence in human behavior (Yang et al., 2018). Both attitudes and subjective norms connect to the intent of the behavior (Miller, 2017). A firefighter believes he has access to help and can overcome barriers such as stigma to receive help to maintain his current job (Bohon et al, 2016). The perceived behavioral control links to the actual behavior performed by the individual (Miller, 2017). This theory aligns with my study because TPB focuses on human behavior, such as help-seeking, which applies to firefighters seeking mental health services. Another area of the interview will address is the perception of their access and availability of resources to seek help. Firefighters reporting experiences in the study will highlight how their perception of control impacts behavioral selections when struggling with mental health problems.

## Literature Review Related to Key Variables and/or Concepts

Scholars have scrutinized mental illness and shifted its definition from the roots of ancient Greece with philosopher Plato to its current place in psychiatric clinical practice today thanks to Wilhelm Griesinger (Malla et al., 2015). “With the understanding that mental illness is a brain illness, society axiomatically accepts this definition with various stigmas, fears, and misconceptions” (Malla et al., 2015, p. 147). Mental health problems, such as major depressive disorder and substance use disorder, contribute to approximately one-third of disabilities worldwide (Lake & Turner, 2017). Recovery services, such as mental health clinics, are desirable but critical to humanity's overall

health. Therefore, understanding how individuals such as firefighters seek mental health services can provide insightful knowledge to leverage the recovery battle against mental illness.

**Mental Health of Firefighters**

Many firefighters experience increased mental health problems due to continuous trauma exposure on the job (Haddock et al., 2017). Some of the significant increases in mental health disorders include depression, substance use, sleep problems, posttraumatic stress, and suicidal ideation (Johnson et al, 2019). A study using three large U.S. Fire departments, with 61 participants, resulted in the entire sample reporting exposure to suicide, and 41% reporting a lifetime of suicidal ideation (Kimbrel et al., 2016). The National Fallen Firefighters Foundation (2014) reported that firefighters would commit suicide three times more than dying in the line of duty. In 2017, 103 US firefighters died of suicide (Heyman et al., 2018). The data collected by Heyman et al. (2018) showed a 20% higher rate of suicide among firefighters than the general population (18/100,000; general population 13/100,000). Completed suicides and even attempts are difficult to track, due to misdiagnosing of medical professionals ruling suicides as accidents (Bachmann, 2018). According to Tiesman et. al (2021), first responders are at a higher risk of suicide. However, a large percentage of worldwide underreporting is due to stigma, politics, and personal morals and values (Bachmann, 2018). If this is true, then the reported 103 suicides may reflect only a small fraction of the actual number of suicides committed by firefighters in 2017 (Heyman et al., 2018).

Mental health services are critical to the overall well-being of firefighters and their ability to maintain healthy relationships and serve their communities (Simon & Peters, 2017). For firefighters to maintain their ability to engage in healthy relationships, they must address mental health problems causing impairments with their activities of daily living (Simon & Peters, 2017). Job-related trauma exposure contributed to 22% of United States firefighters experiencing PTSD symptoms (Jones, 2017). Martin, Tran, and Buser (2017) conducted a study using pre-existing data from a self-reported survey to identify the correlations of suicidality and other mental health problems. An urban fire department provided 3036 participants for the study (Martin et al., 2017). Results revealed a strong correlation between depression, PTSD, and having a lifetime of suicidal thoughts (Martin et al., 2017). Another study conducted by Stanley et al. (2018) analyzed the effects of anxiety sensitivity and depression on firefighters' suicide risks. The researchers used 831 male firefighters with a mean age of 38 for the study. Results showed an increase in risk for suicide correlating with increased anxiety sensitivity (cognitively and socially) and depression (Stanley et al., 2018). These two studies show the effects of firefighters' exposure to stressful environments on their mental health well-being from an emotional and psychological perspective. There is also a behavioral effect of trauma exposure on this population.

Researchers found that suicidality is only one symptom of mental illness that firefighters struggle with due to trauma exposure. Substance use appears to be a significant problem with firefighters' trauma exposure, with reports of 58% of professional firefighters in the U.S., engaging in binge drinking (Jones, 2017). Over the

years, researchers agreed that substance use is a negative coping skill firefighters use to manage their occupational stress due to an increase in mental illness symptomatology (Bartlett et al; 2018; Gulliver et al. 2018; Jahnke et al. 2016; and Martin et al. 2017. Martin et al. (2017) used a self-report survey to study the correlation between alcohol use and suicidal thoughts among firefighters. A sample size of 2883 male firefighters yielded a positive correlation between alcoholism and suicidal thoughts (Martin et al., 2017). However, adding the variables of depression and PTSD with suicide to the correlation of alcoholism contributing to suicidal risks, alcoholism became indirectly related to suicidal risks within the sample population (Martin et al., 2017). Another study conducted by Gulliver et al. (2018) focused on firefighters' tobacco and alcohol use within the first 3 years of employment. A total of 322 firefighters from 7 different urban departments participated in the study. There was a requirement of a baseline of no psychiatric disorders on Axis I psychopathology for every participant in the study. The authors measured the baseline via face-to-face interviews with a doctoral-level clinical psychologist, while participants were still in the academy. The researchers provided a wealth of information on the role of alcoholism-related to PTSD and depression due to stress and occupational trauma. Results from the study indicated that increased depression also increased both tobacco and alcohol consumption (Gulliver et al., 2018). This data highlights the effects of trauma exposure and a lack of healthy coping skills within the first 3 years of a firefighter's career.

From a historical perspective, firefighters struggled for many years with mental health problems (Jones et al., 2020). The elements of high stress and repeated trauma

exposure place this population at risk for suicide and substance with increased depression and anxiety. It is critical to understand specific perceptions and experiences these firefighters endure in seeking mental health services to combat the fight against their mental illnesses. This author could not find articles identifying firefighters' views of their definition of mental illness.

**Trauma Exposure Among Firefighters**

Understanding trauma and the various type of trauma is vital to this study to fully comprehend the perceptions and experiences of participants. The definition of *trauma* is an unexpected, abnormal event that is disruptive to one's life and supersedes the ability to cope and return to normal daily activities (Ellis & Knight, 2018). Trauma is subjective and so disruptive that finding life balance is difficult. Some individuals may refer this to primary trauma as they are experiencing the traumatic event (Ellis & Knight, 2018). Secondary trauma differs from primary trauma because the individual assisting the trauma survivor is not part of the actual event. Secondary trauma refers to the stress induced from helping survivors of a traumatic event, repetitive exposure to helping others to include receiving details of the trauma but not experiencing it yourself (Greinacher et al., 2019). Symptoms include but are not limited to feeling hyperarousal, depressed, anxiety; all like symptomology of a PTSD diagnosis. Vicarious trauma, however, differs from the latter in the cognitive shift in schema of one's worldview due to helping trauma survivors and impacts the empathetic ability to help (Greinacher et al., 2019). Although these terms are interchangeable (vicarious and secondary trauma), for the purpose of my

study, it is important to identify the distinction between all three terms for adequate data analysis.

Due to the nature of their occupation, firefighters experience a constant exposer of traumatic events . Firefighters respond to medical and life-threatening situations such as suicides, drownings, child injuries, and deaths of both children and adults (as cited by North et al., 2002 in Jahnke et al., 2016). Repeated trauma exposure increases mental health problems such as sleep disturbances, emotional dysregulation, cognitive distortions, nightmares, flashbacks, and maladaptive coping mechanisms (Jahnke et al., 2016). A qualitative study of 34 fire departments across the United States focused on the effects of repeated trauma exposure on firefighters (Jahnke et al., 2016). Participants comprised 295 career firefighters, 48 volunteer firefighters, and 80 mixed with both categories. Participants were predominantly male, White, and had an average age range of 38-41 years. The researchers used focus groups and interviews to capture rich data of firefighters' traumatic experiences. Results indicated a variety of stressful events brought on symptoms such as rumination of images, relationship issues, and desensitization when responding to calls (Jahnke et al., 2016).

Another recent study focused on the relationship between the stress-induced by firefighters' occupation, their mental health symptoms, and recovery strategies. Sawhney et al. (2017) conducted a qualitative study of 20 firefighters using semistructured telephone interviews and quantitative analysis from previous research using a sample size of 268 firefighters. Sawhney (2017) found a positive relationship between occupational stress and mental health. Additionally, if firefighters engage in low physical impact

recovery actions such as game nights, barbeques, or gatherings to bond and talk, they are more likely to recover from the hard physical and mental pressures of the job. Firefighters need to speak with coworkers and supervisors about their experiences to manage increased stress and anxiety (Sawhney et al., 2017).

Studies from other countries such as Australia reported similar data like the United States with firefighters' mental health heavily impacted by their occupation. For example, Milligan-Saville et al. (2018) studied emergency service workers in Australia to identify the impact of trauma exposure on the development of PTSD and other psychological problems. They surveyed 459 volunteer firefighters and found that approximately 10% of them suffered from PTSD, along with others exposed to high-risk levels of trauma at risk of developing PTSD (Milligan-Saville et al., 2018).

Studies indicating how trauma exposure affects firefighters' mental health make it evident that there is a need for comprehension and intervention with this population (Bartlett et al. (2018) and Jones et al., 2020). Understanding the experiences these firefighters endure to seek help for their mental health is crucial in ensuring firefighters can access and receive treatment to continue serving communities.

**The Culture of Firefighters**

In the United States, firefighters comprise both volunteers (65%) and career men and women (Johnson et al., 2019). According to Data USA (n.d.), males represented 95.8% of this population in 2018. They live with one another inside the firehouse for 24-48 hours during a shift, creating a family-like environment (Gulliver et al., 2016). Culture plays a vital role in perceptions and experiences of trauma exposure on the job

among this population. If you ask a group of firefighters why they risk their lives daily, you may find each one of them giving the same answer to the question due to the culture of the fire service. Culture is defined by a pattern of assumptions of one's attitude and behaviors as it is adopted by the collective group to maintain a specific belief about how one should live and operate in social and professional environments (Jung & Chang, 2020). The heroic aspect of firefighters is defined by the culture of the population to self-sacrifice for their communities. Another cultural belief identified by Jung and Change (2020) is the aggressive demeanor expected of firefighters. Along with heroism is the risk of firefighters' lives by any means necessary to save someone and the more aggressive the more heroic it appears (Jung & Chang, 2020). This belief directly impacts thoughts and attitudes about what is considered weak versus strength in aspects of physical, psychological, and emotional well-being of firefighters. Particularly when firefighters are off duty and expected to resume normal activities with family members and friends post trauma exposure (Jones et al., 2020). Additionally, firefighters' culture is proud of traditions which is a barrier to change, even if the change is necessary for the health of its members (Jung & Chang, 2020). Finally, with the communal living environment of firefighters there is a culture of authority and hierarchy that coincides with behavioral control within the group. For example, more senior firefighters (time in service) are regarded with higher respect and claim certain seats at a table when eating with the group (Jung & Chang, 2020). These individuals have power to influence the behaviors of others in the group. This example of power imbalances and perceptions of control is directly intertwined with firefighters' culture of the service.

**Support Strategies for Firefighters and Other First Responders**

An embedded cultural construct is the firefighters' support system. Social support is the perception of being a part of group or being an essential component of an environmental system that is much larger than oneself (Stanley et al., 2019). Firefighters with higher levels of social support may have a protection against the development of mental illness such as PTSD (Stanley et al., 2019).

The social support construct provides a resiliency level to help firefighters manage symptoms such as the development of PTSD due to daily trauma exposure (Lee, 2019). There appears to be a strong bond of trust among firefighters within the department, which creates an isolative barrier to anyone who does not belong to the population (Henderson et al., 2016). If utilized as a reinforcement to seek mental health services, this bond can provide a robust support system for firefighters. However, research shows that this bond often contributes to firefighters' fear of seeking mental health services because of possible changes in their careers and appearing weak by coworkers (Johnson et al., 2019). Many individuals refer to firefighters' culture as being "macho," often carrying a hero complex of invincibility, causing a suppression of emotions that increases stress symptoms (Lee, 2019). With the idea of being tough in the face of danger, understanding how firefighters process repeated trauma exposure will provide insight to help-seeking behaviors within this unique population.

Crowe et al. (2017) researched first responders and the general population concept of resiliency, using focus groups. The author held four focus groups divided into two groups. The first group consisted of first responders of law enforcement, firefighters, and

emergency personnel, and the second group represented the general population comprising of university staff (Crowe et al., 2017). There were 7 participants in the first responder group and 10 participants in the public population group. The researchers indicated that both groups of participants valued social support; however, first responders did not identify professional help as an option for resiliency. Instead, first responders appeared to overlook or minimize the importance of utilizing professional assistance in the community to overcome the stressors associated with the line of work (Crowe et al., 2017). As a result, some firefighters may resort to negative coping strategies to maintain an appearance that they manage their mental health well in front of their supervisors and peers.

Family is another aspect of the influence of social bonds with coping strategies. The ability to balance work and personal life can either impede or enhance the recovery process of firefighters' occupational stress (Morman et al, 2020). Just as Crowe et al. (2017) suggested, married firefighters have an opportunity to relieve stress by talking to their spouses after a long hard day at work. Morman et al. (2020) conducted a study in Texas with 428 male firefighters who were actively employed and married. The authors used a Likert-type survey scale to measure the impact of relationships (friendships and marriage) on managing occupational stress. The authors focused on work quality life and job satisfaction. However, results indicated a positive association with marriage and same-sex friendships, an unintended correlation with marriage emerged (Morman et al., 2020). Just as Crowe et al. (2017) identified how firefighters would hide their stress from their supervisors and peers, Morman et al. (2020) reported similar behavior in their study

with firefighters' relationships with their wives. The authors found that firefighters' stress could increase by sharing their negative experiences with their wives. As a result, the wives may become emotionally overwhelmed, and experience increased fear and anxiety, causing firefighters to add additional stress to their days (Morman et al., 2020). What could be a healthy outlet for coping with stress could quickly turn into other stress components at home for many firefighters.

**Treatment-Seeking Behavior Among Firefighters and Other First Responders**

In this qualitative study, treatment seeking or help-seeking behavior is the process of an individual searching for external resources to cope with mental health problems (Aguirre Velasco et al., 2020). These external resources can be formal through professional health services or informal through family members, coworkers, and friends (Aguirre Velasco et al., 2020). My study focuses on formal help seeking but data collection with the understanding that informal treatment seeking behaviors may influence seeking professional help.

Professionally, less than 40% of the adult general population seek mental health services when experiencing psychological problems (Jones et al., 2020). Scholars believe the percentage of first responders seeking treatment could be lower than the general population due to culture and self-image (Lewis-Schroeder et al., 2018). Government officials are also noticing the problem of treatment seeking within the first responder population. Duff et al. (2020) reported a gap in research on addressing first responders seeking treatment and utilizing current treatment resources. Duff (2020) found through literature review the same reasons reported by Jones et al (2020) and many other scholars

that first responders' present barriers to seeking professional treatment as stigma, cultural barriers of appearing weak, fear of confidentiality, fear of a negative impact on one's career, and not knowing where to go for help. Professionally, there is an overarching issue with first responders seeking mental health services and a need for additional vital information on how to better support the first responder population.

Seeking treatment to address the trauma, post-exposure, is critical considering the established correlation between trauma exposure and suicide (Harborview Injury Prevention & Research Center, 2019). Gulliver et al. (2018) used a mixed-methods study to research firefighters' access, attitudes, and preferences in receiving mental health services. The researchers distributed surveys through SurveyMonkey and conducted 20 focus groups in the U.S. from a sample size of 2156 firefighters registered with the International Association of Fire Fighters (Gulliver et al., 2018). Of the 2156 participants, 81% reported that they perceived access to mental health services and the associated stigma and a lack of competent clinicians as barriers to accessing treatment (Gulliver et al., 2018).

Stanley et al. (2017) conducted a quantitative study to compare psychiatric symptoms between volunteer and career firefighters. The study revealed a significant difference in common traits between the two groups and identified cost and access to treatment as barriers to help-seeking behaviors among volunteer firefighters (Stanley et al., 2017). The study consisted of 525 firefighters in the United States and used descriptive statistics, Pearson's r correlations, ANCOVA, and logistic regression for data analysis.

Hom et al. (2016) used a web-based survey to identify thoughts and behaviors associated with how firefighters accessed mental health services. The researchers surveyed 483 (current and retired) firefighters who thought, planned, or attempted suicide during their careers. Researchers found that participants were seeking treatment for their suicidal thoughts at higher rates than the general population of adults (Hom et al., 2016). Additionally, there are two barriers to seeking treatment identified in the study as a concern: reputations and embarrassment, along with firefighters in rural areas being less likely to access services due to costs (Hom et al., 2016). Finally, Researchers noted that the less time as a firefighter, the less the individual sought mental health services.

Stigma is a primary reason individual do not seek mental health services (Hom et al., 2016). In recent studies such as Isaac and Buchanan (2021), suicide rates continue to increase as firefighters are perceived as weak or selfish for having suicidal thoughts. Although this study took place in Canada, the stigma reported is very similar to U.S. firefighters. Isaac and Buchanan (2021) used a mixed methods design to study the stress of 254 firefighters and discovered understanding firefighter cultural is essential to help-seeking behavior. Gulliver et al. (2018) reported stigma rated in the top third of reasons why firefighters do not seek mental health services. Stigma is an area that needs continuous focus for researchers and clinicians treating firefighters.

Additionally, understanding how stigma impacts help-seeking behaviors among firefighters will help identify those at risk for not seeking help when mental illness develops (Carpenter et al., 2019). Haugen et al. (2017) conducted a meta-analysis on barriers to treatment for firefighters. They revealed challenges with scheduling

appointments, a lack of awareness of services, fear of confidentiality, and a desire to maintain their careers as primary barriers to seeking mental health treatment. The researchers reviewed fourteen studies in this meta-analysis. It is important to note that many of the studies focused on police officers, even though the firefighter population was inclusive of each article. Of the 14 identified studies, nearly 85% of them took place in the United States (Haugen et al., 2017). The authors stated that identifying current peer-reviewed studies on this topic was difficult.

Carpenter et al. (2019) looked at stigma as it relates to forgiveness and seeking mental health services. These researchers allowed participants to self-select for a 90-minute psychoeducational group on stigma, followed by a questionnaire. A total of 72 participants identified as active or retired firefighters with an average age of 42years old. Results supported the researcher's hypothesis that self-forgiveness decreases self-stigma and internalized stigma (Carpenter et al., 2019). As researchers continue to study stigma and how it relates to firefighters and first responders, new enlightening knowledge is shared to help support this unique population who makes many sacrifices for communities and family members.

In summary, treatment seeking behaviors are linked to both culture and stigma identified for not only firefighters but first responders in general. The gap in research on professional treatment seeking behaviors is acknowledged by both researchers and government officials. Furthermore, the availability of resources feeds into the perceptions of having access to treatment which drives behaviors of treatment seeking within the population.

**Available Resources for Mental Health Treatment**

I found that research in this area showed limited resources for firefighters seeking mental health treatment for post-trauma exposure. Although fire departments continue to develop new mental health treatment programs, it is questionable if firefighters are fully aware of available resources.

Accessing mental health services through company insurance, employee assistance programs (EAPs), and workers' compensation is critical to a population that suffers from an escalation of suicide rates (Lanza et al., 2018). Firefighters do not have a foundational understanding of their insurance coverage, which creates an education barrier to accessing this resource (Jones et al., 2020). This barrier limits firefighters' from accessing resources outside of their fire department when struggling with mental health problems (Jones et al., 2020). Additionally, for EAPs to be a useful resource, fire departments must have healthy working relationships with community health providers that implement empirical intervention methods to treat this population (Henderson et al., 2016). Unfortunately, there are no recent studies on firefighters accessing EAPs (Jones et al., 2020). Additionally, Jones et al. (2020) interviewed a firefighter EAPs director from Arkansas and found the program using protocols dated back 20 years, indicating a lack of valid intervention methods for firefighters today  For example, a debriefing method such as critical incident stress debriefing is not an empirically supported intervention, yet it is still used with firefighters today to reduce risks of PTSD (Jones et al., 2020).

A question often overlooked with the mental health of first responders is, do first responders have access to mental health services when they are ready to receive help due

to job related mental health injuries? The question is complicated, as workers' compensation for a mental health job injury, such as PTSD, varies across states. Therefore, not all first responders suffering from mental illnesses such as PTSD are eligible for medical coverage under the workers' compensation program (Lanza et al., 2018). If first responders lack economic resources to access mental health services, one can expect a continuation of increased suicide rates and firefighters attempting to manage both diagnosed and undiagnosed mental illnesses without treatment. For example, first responders in Ohio continue to fight for workers' compensation for injuries other than physical injuries such as PTSD (Fire and Rescue Group, 2020). Firefighters in other states are fighting for legislation to protect their first responders' access to workers' compensation for mental illness injuries. The International Association of Fire Fighters continues to provide awareness, advocacy, and resources for firefighters to include EMS in the United States and Canada to protect its union members' rights and benefits (International Association of Fire Fighters website, 2020).

From the perspective of research, it appears that firefighters understand their access to mental health treatment. With the number of programs and resources available to firefighters, one would wonder why this population struggles with mental illness. Fire departments have several streams of access to mental health such as EAPs, chaplains, psychologists, community mental health agencies, and critical incident stress management teams (Henderson et al., 2016). However, there appear to be limitations to access, just as identified by Henderson et al. (2016); Jones et al. (2020); and Lanza et al.

(2018). Additionally, Gulliver et al. (2018) and Johnson et al. (2019) discussed the lack of competent mental health providers.

It is important to note that career and volunteer firefighters have different experiences accessing resources (Stanley et al., 2017). It is unknown to this researcher if volunteer firefighters have different pathways to seeking mental health services versus career firefighters. Despite that unknown factor, volunteer firefighters have increased mental health conditions compared to career firefighters in areas such as depression, alcoholism, PTSD symptoms, insomnia, and suicidal thoughts (Stanley et al., 2017). Additionally, volunteer firefighters have increased structural barriers to mental health treatment due the cost of services, transportation to facilities, and available resources in their communities. Many of these differences center on the fact that volunteer firefighters have a second job outside the fire department, which contributes to trauma symptomology, coping skills, and availability of time to access treatment (Stanley et al., 2017). However, fire departments continue to work towards increasing resources for volunteer firefighters. For example, volunteer firefighters receive internal department support through the Share the Load program, which provides behavioral health resources such as the Helpletter newsletter, posters advertising the National Fire/EMS Helpline, family guide, and a suicide awareness and prevention program (NVFC, 2020). In January of 2020, the National Volunteer Fire Council released a directory of behavioral health community resources for volunteer firefighters. This directory lists culturally competent mental health care providers for volunteer firefighters (NVFC, 2020). Alongside the importance of access to treatment is having mental health providers trained

to understand the culture and symptoms of trauma experienced by firefighters (Johnson et al., 2019).

## Summary and Conclusions

First responders are at risk of increased psychological, emotional, and behavioral damage due to the trauma exposure on the job (Lanza et al., 2018). Compared to the general population, the first responders' prevalence rate of PTSD is approximately 24% higher, creating a need for access to mental health services. One group that needs attention is firefighters. There is a need for additional research on firefighters' perceptions and experiences in seeking mental health services. Gulliver et al. (2018) discovered that behavioral health services are not available to all firefighter departments, even though 81% of the population surveyed believed they had access to such services. To create access through social change, clinicians and researchers must first understand first responders' perceptions and experiences seeking mental health services to develop more accessible avenues to meet their needs.

There is a relationship between increased mental illness with occupational trauma exposure of firefighters in their line of work (Jahnke et al., 2016). Additionally, there appear to be various barriers to treatment, including competent clinicians, affordability, stigma, and social support (Carpenter et al., 2019; Hom et al., 2016; Stanley et al., 2017). Seeking treatment to address the trauma, post-exposure, is critical considering the correlation between trauma exposure and suicide (Harborview Injury Prevention & Research Center, 2019). Per Kimbrel et al. (2016), there is a positive correlation between the exposure of deaths to suicidal behavior. Through this literature review, I found a need

for further qualitative research on the perception and experiences of firefighters seeking mental health services through their lens, not external individuals' perspective. Exploring the perceptions of firefighter's experiences in seeking mental health services could illuminate issues affecting those who seek mental health services.

Although prior researchers presented quantitative data on help-seeking behaviors of firefighters, their focus leaves a qualitative gap in the research exploring firefighters' perceptions of secondary trauma exposure and help-seeking behaviors (Haugen et al., 2017; Hom et al., 2018; and Karaffa and Koch, 2016,). Jones (2017) reported minimal qualitative studies of this population that seek to explore firefighters' perceptions of seeking treatment from trauma exposure on the job, which leaves an aperture in the current research. Likewise, Jones et al. (p. 52, 2020) reported implications for further research to focus on firefighters' perspective "in order to better mitigate barriers and facilitate help-seeking." There is a need for further exploration of firefighters' perceptions and experiences in seeking mental health services through the personal lens of their interpretation of the issue. Revealing both negative and positive perceptions of their experiences could help researchers understand the variables surrounding mental illness and the healing journey. My study provides a deeper understanding of firefighters' help-seeking behaviors from the viewpoints of their perceptions and experiences.

The next chapter will provide information on my research design and methodology. I will show how I recruited participants, collected, and analyzed data, disseminated results, and addressed limitation and biases. Finally, I will address ethical considerations with attention to safety and confidentiality.

# Chapter 3: Research Method

## Introduction

In this qualitative study, I explored the perceptions and experiences of firefighters regarding seeking mental health services while coping with daily trauma exposure. I used a generic qualitative approach to explore the mental health-seeking behaviors of firefighters. With the increased mental health problems among firefighters, it is imperative to study the daily trauma exposure of this population (Jones et al., 2020).

In this chapter, I will provide a comprehensive overview of the methodology used to collect and analyze the study's data, including a review of the qualitative research question used for the research and the steps taken to recruit participants. Additionally, information on instrumentation, data sources, and data collection will help the reader connect with the data analysis plan presented in the chapter. I also discuss issues of trustworthiness and my role as the researcher.

## Research Design and Rationale

The research question was, What are the perceptions and experiences of firefighters in seeking mental health services to cope with exposure to trauma on the job? To answer the research question, I used a generic qualitative approach. A qualitative approach allows for the exploration of individuals' subjective experiences and perceptions not captured through quantitative methods (Daniel, 2016). Although quantitative methods can offer quicker data collection, easier generalizability, control of participants, and replicability, qualitative research provide a means of exploring humans' thoughts and behaviors related to their experiences and external social environments

(Daniel, 2016). For example, it made sense not to employ a quantitative design as I was not attempting to measure phenomenon in a numerical manner. Using a qualitative method allowed for the collection of rich, in-depth data that would have been unobtainable with the use of other methodologies (Jones et al., 2020).

A generic qualitative design was preferable to other approaches due to the focus of the study. A phenomenological approach centers on the cognitive processing of individuals' experiences (Percy et al., 2015). However, in this study I aimed to identify participating firefighters' own perceptions and experiences related to their outer world of functioning (see Percy et al., 2015). My research focused on the subjective opinions of firefighters' experiences and decision-making processes in seeking help to address post trauma exposure on the job (see Kennedy, 2016). Additionally, I conducted semistructured interviews, which allowed me, as the researcher, to uncover sensitive perceptions and experiences identified by participants.

**Alignment of the Study Method to Constructivism**

Qualitative research aligns with the constructivism paradigm in that the research is subjective to allow the researcher to develop meaning regarding the study phenomenon (Kaushik & Walsh, 2019). I used an interpretivist lens (ontology) to allow participants to have a voice on their perception and experiences (epistemology) in relation to seeking mental health services. Ontology refers to a researcher's interpretation of knowledge, which could be subjective or objective based on how one views the external world around them (Walach, 2020). Epistemology is about the formation of one's knowledge (Wang, 2020). This is critical to constructivism as the researcher discovers new knowledge

within the individual's world (Sapkota & Paudyal, 2021). Axiology refers to one's ethics and belief system, both of which shape their social and moral lives (Sapkota & Paudyal, 2021).

Qualitative researchers explore social phenomenon to answer two distinct questions: why? and how? (Mohajan, 2018). They tend to study people's perceptions, feelings, and experiences through various observations, to collect rich, narrative data (Rahman, 2017). Qualitative research is also often known as a form of social action because it involves exploration of the phenomena of how and why individuals interact within their interpretations of societal rules, issues, and policies, which affects their social connection with the world (Mohajan, 2018). Subsequently, the qualitative researcher decodes or interprets these social experiences to illuminate underlying problems, possible resolutions, and emerging phenomena that may contribute to new theories of the social world (Rahman, 2017).

Gehman et al. (2018), Mohajan (2018), and Rahman (2017) agree that qualitative research is heterogeneous. Researchers study people and organizations through diverse methods to describe, decode, and translate data (Rahman, 2017). The qualitative approach is unique in pulling on both the researcher and the participant's strengths to understand a phenomenon. From the early 1900s to the 2000s, qualitative research shifted and changed to fit an ever-evolving social world. The traditional age of qualitative research (1900-1945) consisted of an objective description of data analysis, while the golden age (1950-1970) procured ethnography and grounded theory with a highlight of multi-coding methods (Mohajan, 2018). Digital data analysis software emerged from

1970 to 1986.Then, reflexivity became a point of contention for qualitative researchers, and the interpretive lens a priority in data analysis in this period. By the early 1990s, researchers began to understand the importance of narratives with theories and could link research to the development of policies by the early 2000s. The 2000s are critical to qualitative research in recognition of the methodological approach in published journals and the criticality of maintaining and defending its evidence-based practice (Mohajan, 2018). The history of how researchers moved qualitative research from an objective description of social phenomenon to an interpretive lens shows just how powerful this research method tool is for researchers to understand the social world in which individuals live.

**Generic Qualitative Approach**

In a generic qualitative approach, the researcher is free to explore experiences and perceptions without the restrictions identified in other philosophical approaches such as grounded theory, phenomenological, and ethnography (Kahlke, 2014). This critical component of the generic qualitative approach allows the researcher to tap into the other methodologies' strengths while maintaining the flexibility to remain open in data collection (Kahlke, 2014). Because I intended to understand firefighters' perceptions and experiences seeking mental health treatment services, selecting a generic qualitative approach allowed me to use an interpretive lens to gather rich, detailed information on help-seeking behaviors (Rahman, 2017). Qualitative research is unique in its approach to allow theory to emerge from data collected in the natural setting of participants to understand the phenomenon of human behavior and thought (Daniel, 2016. My research

aimed to gather perceptions and experiences of firefighters seeking mental health services through interviews, allowing participants to describe their perceptions and experiences in a narrative format.

## Role of the Researcher

The research question drives the study to include the researcher's role in data collection (Busetto et al., 2020). It is critical to remember that my role as a researcher places me in a position of power and authority. Additionally, I was the instrument in collecting data during the interview process by observing nonverbal data and administering the interview questions (Paradis et al., 2016). Therefore, it was vital to protect participants physically, psychologically, and emotionally (DeJonckheere & Vaughn, 2019). Throughout the study, I refrained from coercive, demeaning, and misleading questions to obtain data. This type of negative behavior creates biases within the study (DeJonckheere & Vaughn, 2019). Consequentially, participants may endure unintentional harm. As a critical instrument in data collection, I posed specific threats to the outcome due to the participant-researcher relationship and the researcher's interpretation of the context and meaning of data collected (Roller, 2017). Mitigating these biases increased the credibility of the research.

### Mitigation of Researcher Bias

Biases related to the researcher as the instrument in a study requires specific skill sets to overcome challenges (Roller, 2017). These skills include communication, rapport building, and the ability to identify inconsistencies within the research. Managing personal interpretations and meaning of data requires reflective thinking and member

checking to verify accurate representation of the data (Moser & Korstjens, 2018). I used member checking to ensure the credibility of the interpretation of the qualitative data collected. After each interview, participants received a .pdf transcript of their interview via email to review and correct any data misinterpretations (Korstjens & Moser, 2018). Additionally, I used a funnel approach with the interview guide. This approach involves four stages (Roller, 2017):

1. Introduction: The interviewer or moderator introduces him/herself, briefly explains the purpose of the research, the use of audio/video recording, participant's confidentiality, etc., and allows the participant(s) to comment or ask questions.
2. General information related to the topic: This stage provides background and context to the topic broadly defined, giving the researcher a necessary perspective to pursue individual questioning.
3. Awareness, attitudes &/or behavior related to issues: At this stage, the interview or discussion begins to hone-in on the research's ultimate objective.
4. Attitudes specific to the targeted objective & constructive suggestions for improvement: Aided by the relevant background and context provided in Stages 1-3, the funnel approach's final stage involves the researcher delving into the core content of the interview or discussion. (p.18)

Using this funnel approach kept me focused on the topic while building a rapport with participants and strategically flexing my questions to gather in-depth, rich data needed for the study. Flexing questions involved staying in tune with emotional

responses of participants while staying focused on gathering deeper information on the topic. I remained open in my communication style to allow participants to verbally express their experiences. I also added follow-up questions if needed for further explanations.

Reflexivity in my study was paramount in managing biases. Using reflexivity involved understanding my personal experiences and understanding of how these experiences could affect the research (Raheim et al., 2016). I have a background in working with firefighters in the mental health field in Kansas City, Missouri. I am a licensed clinical social worker and provide psychotherapy to treat military and first responders suffering from trauma and addictions in the Kansas City Metro Area and abroad. I treat this population inside the United States in inpatient and outpatient settings. Over 6 years, I treated hundreds of first responders. I value first responders' right to access mental health services without restrictions and feel this population is underserviced due to multiple barriers to treatment. Over the years, I have personally witnessed multiple first responders denied treatment and participate in multiple peer-to-peer review boards with insurance companies rendering denial of treatment outcomes. I have attended meetings with firefighters' regional board representatives, insurance companies legal and clinical teams along with hospital executive officers to witness the debate over if a first responder should receive inpatient treatment for PTSD, suicidal ideation, stress, and anxiety. Unfortunately, I have also treated first responders suffering from stigma on the job, appearing weak for showing emotions after a difficult day, and supported family members of those who committed suicide because of stigma and lack of

treatment approval. My worldview aligns with social constructivism where an individual's reality is interpreted through their personal experiences. By nature of my career and both personal and professional values, I am often pulled into an advocacy role and believe in empowering the voices of oppressed populations. Understanding that my personal experiences could influence my lens in data collection and analysis, it was critical to remain consistent with interview questions by following the interview guide, member check to ensure my personal experiences were not changing the interpretation of the data and maintain reflexivity as a self-check and balance throughout the data collection and analysis process.

For ethics and validity purposes, I recruited participants whom I have never treated. To achieve this goal, I recruited participants nationally in United States via social media and screen applicants prior to scheduling interviews and use journaling and bracketing to control for biases. If an applicant was a former client, I contacted the applicant and explained why he/she was unable to participate in the study. As a researcher conducting interviews, I have an ethical obligation to build a trust relationship between myself and participants (Guillemin et al., 2018).

Reflexivity was critical for the rigor, trustworthiness, and credibility of this research (see Johnson et al., 2020). Rigor and reflexivity are vital to a generic qualitative approach (Kennedy, 2016). Reflexivity occurred throughout the entire research process to ensure personal biases and precognitions remained minimized and did not influence my decision-making process (Johnson et al., 2020). My goal was to present transparency

in data collection and analysis through journal keeping and revealing personal biases throughout data collection and analysis processes (Johnson et al., 2020).

## Methodology

### Participation and Selection Logic

My sample consisted of firefighters recruited through social media platforms such as LinkedIn and Facebook. I recruited participants by posting flyers on Facebook, LinkedIn, and utilizing the Walden Participation Pool (see Appendix A). An essential component in data collection was determining sample size and reaching data saturation. It was vital to collect data until the researcher observed a repetition of themes and codes within the data to reach saturation (Moser & Korstjens, 2018). Therefore, no required set number of participants. However, Moser and Korstjens (2018) estimate that with different types of study, one can estimate a range of saturation as follows: "ethnographic research should require 25–50 interviews and observations, including about four-to-six focus group discussions, while phenomenological studies require fewer than ten interviews, grounded theory studies 20–30 interviews and content analysis 15–20 interviews or three-to-four focus group discussions" (p.11). However, there are times when data saturation cannot be reached due to studying a particular population (Johnson et al., 2020). In this case, results are still viewed as valuable information to contribute to the field of study.

Typically, qualitative studies have 1-30 participants (Bengtsson, 2016). My research is a generic qualitative study that pulls from all four study types. Therefore, I used an average range of study types to plan for my generic research. I used a purposive

sampling method to recruit a sample size of 10-15 participants. Ultimately, a sample size of 12 was recruited and I was able to reach saturation with this number. Purposive sampling allows the researcher to select the most appropriate participants for the study (Moser & Korstjens, 2018). Criteria for the sample size included males and females currently employed as firefighters with a minimum of 2 years on the job, who have not received behavioral health treatment from the researcher. Screening for eligibility took place via email.

**Instrumentation**

I created a qualitative interview guide to explore the firefighters' experiences and perceptions in seeking mental health treatment services. The interview guide (see Appendix B) of this chapter includes questions about firefighters' perceptions and experiences in seeking mental health services, internal and external influences, motivation, and attitude in help-seeking behaviors. I created this guide to align with my research question and theoretical framework. The interview guide aligns with the tenets of TPB: attitude, subjective norms, and behavioral control. The interview guide contains questions centered on the culture of firefighters, their daily job, social interactions, and belief system. Due to the current world pandemic of COVID-19, these semistructured interviews occurred over a video media platform. Semistructured interviews focused on crucial informants of a population of interest using a guide of leading questions followed by sub-questions with the flexibility to personalize questions with each interviewee (DeJonckheere & Vaughn, 2019). The semistructured interview allowed for open-ended questions to explore sensitive topics while collecting data on personal perceptions and

experiences of firefighters seeking mental health treatment services (DeJonckheere & Vaughn, 2019).

### *Content Validity*

It was vital to ensure that the interview guide poses questions that would capture data to answer the research question and lead participants to expound on their perceptions and experiences. A field test of the interview protocol was used for content validity. I field tested the interview question on two volunteers who are not included as participants in my study, one with a peer (another PhD candidate student) and another with a former firefighter volunteer (McGrath et al., 2019). This field test served as a guide for using appropriate language and finalizing the interview questions with. A copy of the videotape and written transcript of the two interviews was sent to my dissertation chair to approve the interview guide and provide feedback.

## Procedures for Recruitment, Participation, and Data Collection

The primary data source consisted of semistructured interviews. Individuals interested in participating in the study sent an email to the address located on the flyer and expressed their interest in participating in the study. I responded with an explanation of the study and eligibility criteria requesting a response to the following questions:

1. Are you an active firefighter?
2. Have your served for at least 2 years on the job?

Firefighters that could answer yes to both questions received follow-up instructions for participation in the study. Firefighters who did not meet eligibility criteria received a "thank you for your interest in the study" email along with an explanation of why they

are not able to participate in the study. I scheduled individual interviews with firefighters for the study to take place via a video platform. Each interview was approximately 60-90 minutes to allow rapport building and flexibility of questions (McGrath et al., 2019). Focus areas for the interviews included exploring perceptions and experiences of firefighters seeking mental health treatment. Each participant electronically signed and returned the informed consent prior to the interview date. I contacted each participant via email and phone to confirm participation in the study and explained the structure of the interview questions and the purpose of my research (DeJonckheere & Vaughn, 2019). Upon meeting via the recorded session, I reviewed the Informed Consent, and the participant verified their signature.

Data collection included video recording via the media platform Zoom. I stored the qualitative data electronically on my personal computer, secured with Webroot Antivirus, and password protected for 5 years.

**Data Analysis Plan**

A Microsoft Excel spreadsheet contained coding categories and themes for the qualitative analysis (see Bengtsson, 2016). My goal was to collect experiential data with depths of rich information obtained through semistructured interviews with firefighters. The first step in the coding process was to read the data and identify meaning units. The meaning units contained a collection of related sentences. I coded these meaning units to increase reliability (Bengtsson, 2016). Recognizing patters that emerge from the data took place using a thematic analysis (Roberts et al., 2019). This type of analysis allowed me to describe and interpret the meaning of the data simultaneously (Roberts et al.,

2019). Continuation of analysis of the script produced new categories and sub-codes through exploratory methods to capture data outside of the analysis model (Bengtsson, 2016).

Since codes do not have to represent each other, I focused on the utility of creating labels for categories and themes (Bengtsson, 2016). The categories represented syncretized codes of a thematic coding framework based on planned behavior theory and the problem (Bengtsson, 2016). I stored data that was unrelated to the research questions on a separate electronic Microsoft Excel spreadsheet easily accessible if needed (Percy et al., 2015).

Data collection and analysis co-occurred. I considered discrepancies of data as insight into the complexity of the problems with firefighters' perceptions and experiences in seeking mental health services, which warrants further investigation of the problem using a different methodology for cross-comparison analysis. I also addressed discrepancies through the second coding cycle to accurately interpret units (Bengtsson, 2016).

## Issues of Trustworthiness

To increase the trustworthiness of my study, I accounted for personal biases through reflexivity, kept a detailed record of data collection, provided transparency in data interpretation with a focus on consistency, and used transcripts to support data summary. I also searched for a peer review of my findings and used member checking to ensure the accuracy of data interpretation (Noble & Smith, 2015). After the data analysis, I emailed participants a PDF copy of the interview to ensure a fair representation of the

information (DeJonckheere & Vaughn, 2019). Data collected in my research can provide further insight into firefighters' perceptions and experiences in seeking mental health services treatment. Future studies can use this data to cross-reference with quantitative analysis to further develop insight into the problem and greater transferability.

Trustworthiness requires the researcher to focus on four areas during the data collection and analysis process: Credibility, Dependability, Transferability, and Confirmability. Credibility refers to ensuring that all relevant information from data collection and analysis are a part of the study and that the research findings are accurate (Bengtsson, 2016). I established credibility through member checking and kept a detailed journal of the data collection and analysis for review (Korstjens & Moser, 2018). Transferability refers to the ability of results to be applicable in other settings (Bengtsson, 2016). I established transferability by providing thick/rich contextual data from participants in the study through the interview process of data collection and analysis of data (Korstjens & Moser, 2018). Dependability refers to stabilizing the information, which occurred through written memos of changes made for relabeling or recoding data to create an audit trail of the process (Bengtsson, 2016). Confirmability refers to the researcher's use of data, and not their thoughts about the information, to inform their interpretation of findings (Korstjens & Moser, 2018). I ensured confirmability through the data collection and analysis process transparency with extensive record-keeping for audit trails (Korstjens & Moser, 2018). Finally, for reflexivity, I kept a diary of my subjective perspectives of interviews and thoughts and feelings during the transcription process, creating of data codes, and analysis process (Korstjens & Moser, 2018).

## Ethical Procedures

I collected sensitive information on personal experiences and perceptions of firefighters seeking mental health services. It was crucial to acquire accurate, raw data and maintain trust between the researcher and participants. Furthermore, the researcher's ethical conduct builds this trusting bond between researchers and participants in the study (Johnson et al., 2020). Ethical considerations for my study included obtaining written Informed Consent to record, collecting and publishing data of individuals' participation in the research and coding the participants' names to protect their identities (Arifin, 2018). Additionally, I remained cognizant of being nonjudgmental during data collection and remaining silent on statements that present a personal emotional effect (Reid et al., 2018). As a licensed mental health clinician, it was critical that I did not confuse my role as the researcher with my professional experience as a trauma therapist. To maintain focus and stay aligned with the researcher role, I was careful to adhere to the interview guide during each interview. Due to my study's sensitive topic, I provided a referral for free or sliding scale counseling for participants upon request to an agency other than my current place of employment.

Before data collection, I obtained permission to recruit and conduct research through the Walden Institutional Review Board (IRB). I completed the four steps required for IRB approval, including completion of Form A (Description of Data Sources and Partner Sites) and working with my committee for final approval (*Academic Guides: Research Ethics: Research Ethics Review Process by IRB*, 2020). Step 1 of the processes requires completion of the university research review phase. During Step 2 of the

approval process, I worked with a research ethics support specialist in preparation for the official ethics review (*Academic Guides: Research Ethics: Research Ethics Review Process by IRB*, 2020). Step 3 commences post-proposal approval, and updates of changes made to the study occur during this step (*Academic Guides: Research Ethics: Research Ethics Review Process by IRB*, 2020). Finally, Step 4 is the final review of ethics, and once I received approval via email from the IRB (approval no. 11-30-21-0532231), I began the data collection (*Academic Guides: Research Ethics: Research Ethics Review Process by IRB*, 2020)

Participants received both written and oral information about the study and had an opportunity to ask questions (Bengtsson, 2016). Participants were guaranteed confidentiality and the option to withdraw from the study at any time without being penalized (Bengtsson, 2016). Participants need to understand the limitations of confidentiality. For example, disclosing the planning of harm to self or others could not be kept confidential because, as the researcher, and a licensed clinician, I am a mandated reporter by the laws of my profession. Some limitations were within electronic communication via email due to cyber hackers (Rahman, 2017). I made every effort to maintain confidentiality, but I could not guarantee absolute confidentiality for the reasons mentioned.

Due to the sensitive topic of the study, I provided a list of telehealth professional mental health providers to all participants. Participants received this contact information at the end of the interview along with the 1-800-suicide hotline and text line numbers. It was critical that each participant had immediate access to mental health services post the

interview to minimize possible impacts of the interview triggering past traumatic experiences.

I recruited participants who were unknown to me as a clinical therapist. If a firefighter requested participation in the study and was a former patient, I rejected the application to explain both verbally and in writing via email. As a licensed clinical social worker, I am required to uphold the National Association of Social Workers (NASW) Code of Ethics. This code includes but is not limited to understanding the dignity and worth of a person, behaving in a trustworthy manner, and strengthening human relationships (NASW, 2017). I ensured that all participants receive dignity and respectful treatment throughout the research process by balancing decisions with the NASW Code of Ethics. There are 17 ethical standards identified in the NASW Code of Ethics I adhere to daily (NASW, 2017). Any participant asking to withdraw from the study was able to do so freely (Bengtsson, 2016). Participation in this study was voluntary. Therefore, participants could have withdrawn from the study any time during the process. I thanked that participant for their time and reassured confidentiality.

Portable data collection storing was inside of my home inside a locked file cabinet with an ADT security system on the house. Electronic data storing on my personal computer has password protection and uses Webroot security. I could not guarantee 100% confidentiality with online hackers' potential during media use such as Zoom, teleconferences, and emails (Rahman, 2017). I assigned each participant a code label for identification purposes throughout the study to maintain identity confidentiality.

## Summary

In this chapter, I identified my research design and rationale, role, methodology, and issues of trustworthiness. Qualitative research is a unique way to understand human behavior (Daniel, 2016). The word phenomenon excites qualitative researchers to explore individuals in a social context, which requires sensitivity, rigor, trust, and a tremendous amount of reflexivity to produce a credible study that empowers special populations (Daniel, 2016). Research must be ethically sound from early recruitment through finalizing results. Furthermore, presenting a robust data collection and analysis plan contributes to the study's overall validity (Korstjens & Moser, 2018).

# Chapter 4: Results

## Introduction

In this study, I explored the perceptions and experiences of firefighters related to seeking mental health treatment services. Firefighters are one of the collective groups of first responders placed in harm's way and exposed to traumatic events that affect their mental well-being (Jones et al., 2020). Krakauer et al. (2020) reported that firefighters seeking mental health services are highly stigmatized. A critical gap in the empirical knowledge base is that most studies on firefighters and mental health help-seeking have been quantitative (e.g., Hom et al., (2016); Kim et al. (2018); Stanley, Boffa, et al., (2017). Consequently, their voices are absent, and how they seek help and perceive mental health services are unknown. A gap exists in knowledge of the specific language and terminologies that they use.

I sought to address this gap in the literature by exploring the perceptions and experiences of firefighters regarding seeking mental health treatment services. I begin this chapter by describing the field test that I used to prepare for data collection. Then, I describe the study's setting and the participants' demographics. Additionally, this chapter includes discussion of discrepancies in data collection and coding, evidence of the trustworthiness of the data, and a summary of results.

## Pilot Study

A former firefighter volunteered to participate in a mock interview that served as a field test for the study. This mock interview took place over the Zoom videoconferencing application. I used the interview guide I had prepared. I recorded the

interview and sent to my dissertation chair to evaluate interview methods, including the proper use of follow-up questions. My chair guided me on asking follow-up questions to obtain richer data for the study. The field test is not a part of data collection for this study. Its purpose was to assist me in preparing for data collection. However, in conducting a field test, I identified repetitive questions in the interview guide. These questions centered on how the participant viewed family members' or coworkers' influence on their pursuit of mental health services. As a result, Questions17-18 appeared redundant, and I deleted them from the original interview guide. Another addition adopted through the field focused on rapport building. My dissertation chair suggested that I ask participants what drew them to the fire service. I finalized the interview guide to reflect feedback from my chair and pilot study results.

## Setting

The environmental conditions for the interview remained stable as described in Chapter 3, with the use of Zoom and a separate audio recording device for most of the data collection. One participant with a poor internet connection experienced a slight delay with the video platform. As a result, I asked repetitive questions. There was an appearance of frustration from the participant throughout the interview. Another participant could not work his audio device on the computer, so the interview continued as a telephone call. Two participants refused to use their video for the discussion, so these two interviews proceeded without use of Zoom's camera feature. Ultimately, this made it difficult to establish rapport with these participants. The two participants who refused to turn on their cameras expressed fear of being a known participant in the study. One

participant stated that he was hiding in his car while at work to speak with me and reinforced that no one could know that he participated in the study. My environmental setting remained constant throughout the data collection. I used the same recording device and computer in the same office space for each interview.

## Demographics

I used social media platforms such as LinkedIn, Facebook, Twitter, and Instagram; the Walden Participant Pool; and other social connections to recruit participants for the study. I connected with family members and friends across the United States and requested assistance with recruitment. A total of 16 firefighters responded and volunteered to participate in the study. However, only 12 participants completed interviews used for data collection. One participant was ineligible for the study because he was no longer an active firefighter. Three participants did not show up for their interviews. All the participants were male and White. Their ages ranged from 23 to 52 years, with time in the fire service ranging from 2 to 30 years. Seventy-five percent (*n* =5) of participants were married, and 25% (*n* =3) served in the military before their fire service careers. Only one participant had a background as a volunteer firefighter, and over 50% (*n* = 7) of participants resided in Missouri. The sample appeared well rounded in the job/title category with a mix of firefighter roles. Diversity in terms of collecting rich data from various ranks and positions, including different work shifts, was vital. However, the sample was not diverse in terms of ethnicity or gender. Table 1 shows the demographics of the 12 participants in the study.

**Table 1**

*Participant Demographics*

| Participant pseudonym | Age | Years in service | Rank/job | Marital status | Location (state) | Military service | Career (C) or volunteer (V) status of position |
|---|---|---|---|---|---|---|---|
| John | 52 | 22 | Driver/rig operator (pumper) | Divorced | Missouri | Navy | C |
| Nick | 41 | 17 | Administrative captain | Married | Tennessee | No | C |
| Shaun | 42 | 27 | Assistant chief of training operations | Married | Missouri | No | C |
| Bill | 23 | 2 | EMT | Single | Virginia | No | C |
| Derrick | 49 | 30 | Deputy chief | Married | Maryland | No | C |
| Mike | 36 | 16 | Lieutenant | Married | Texas | No | C |
| Jason | 28 | 11 | EMT | Engaged | Massachusetts | Army | V, /C |
| George | 47 | 17 | Engineer paramedic | Married | Missouri | Navy | C |
| Frank | 35 | 13 | EMT | Married | Missouri | No | C |
| Sam | 28 | 3 | Firefighter | Married | Missouri | No | C |
| Lonnie | 42 | 17 | Captain | Married | Missouri | No | C |
| Greg | 43 | 19 | Captain | Married | Missouri | No | C |

## Data Collection

Each participant selected dates and times that were agreeable with me for an interview using Zoom. Although there was 90 minutes allotted for each interview, most interviews only lasted 60 minutes. I assigned pseudonyms during data collection to protect participants' identities. I followed the updated interview guide for each interview.

A variation from Chapter 3 of planned data collection includes the use of asking friends and family members to repost the flyer on their social media pages. Once the fliers appeared on the researcher's social media platforms (e.g., Instagram, Facebook, and LinkedIn), I requested others to share the post to recruit from various states across the United States. This strategy appeared helpful in gaining a diverse participation pool outside of Missouri. Another variation with recruitment was delivering flyers to local fire stations. The only other deviation from the process discussed in Chapter 3 was the

interview guide changes. These changes diminished redundancy in asking questions during the interview.

An unusual circumstance encountered during data collection was scheduling Zoom rooms. I planned for the Zoom room in advance and sent the log-in link to each participant. However, the Zoom room would change at the scheduled interview, and the participant could not access the same room as the researcher. This problem occurred with several participants. I rectified this problem by contacting each participant via email an hour before the scheduled interview to verify the room link.

## Data Analysis

Twelve male firefighters participated in the study. Interviews via videoconference averaged between 40 - 60 minutes in length. The 12th participant achieved data saturation. Thematic data analysis consisted of reading the 12 interview transcripts and identifying meaning units for an inductive coding process. Utilizing a spreadsheet made this process easier to maneuver between coded themes from each interview. After the first three interviews, a repetitive follow-up question emerged centered on firefighters' culture. This "buzzword," as described by multiple firefighters, appeared to be critical in their decision to seek professional mental health treatment. Themes were aligned with the tenets of the TPB: attitude, subjective norms, and behavioral control, which drive intention to the behavioral outcome (Ajzen, 2020). For example, an interview question asked, "What do you enjoy most about your job?" aligned with the "attitude" tenet of TPB. An initial meaning unit such as "not to be cliche, but it is helping people" is one of 144 meaning units identified in phase 1 of coding using an inductive process. The second

phase of coding entailed identifying descriptive codes from the meaning units. For example, “helping others” emerged as an initial code identified repetitively in the 12 interviews. I identified 50 descriptive codes for the codebook. Phase 3 of coding involved reading the transcripts line by line to identify deeper meanings of the initial codes. By using this method, I was able to break the 50 descriptive codes into subcodes to more deeply explore the meaning of the data.

An example is the code "help others" with the subcodes identified as: “feel like you solved their problem; gratitude and the thankfulness; make a positive difference in somebody's day; provided the value as a human being; ability to impress upon people." These subcodes provided rich, deep data on firefighters’ perceptions and experiences seeking mental health treatment services. In phase 4 of coding, categorization and theme identification took place. Some of the codes were combined to develop a category during this phase. For example, the code “help others” combined with "Camaraderie" produced a category of "Fire Service Impact."

Through data analysis, the following five themes emerged: (a) trauma exposure, (b) fire service culture, (c) perceptions of available resources, (d) financial burden, and (e) the role of interpersonal relationships in seeking help. Refer to Table 2 for a summary of the themes and their definitions. These themes generated general dimensions (see Figure 1).

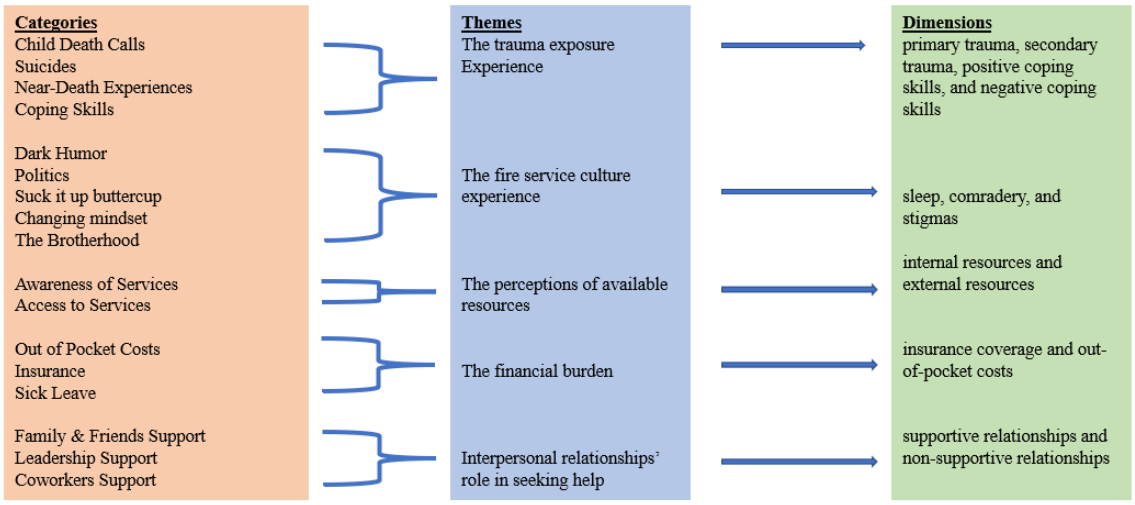
**Table 2**

*Themes and Corresponding Definitions*

| Theme | Definition |
|---|---|
| Trauma exposure | Various types of trauma exposure present a need to seek mental health services. This exposure includes the following dimensions: primary trauma, secondary trauma, positive coping skills, and negative coping skills. |
| Fire service culture | Perceptions and experiences of internal fire service include dimensions: camaraderie, stigmas, and support. |
| Perceptions of available resources | Awareness and access to resources that address fire service members' needs include the following dimensions: internal resources and external resources. |
| Financial burden | The out-of-pocket costs of seeking mental health services which include the following dimensions: insurance coverage and out-of-pocket costs. |
| The role of interpersonal relationships in seeking help | Family members and coworkers' impact on firefighters seeking help which includes the following dimensions: supportive relationships and non-supportive relationships. |

**Figure 1**

*Alignment of Coding Categories to Themes and Theme Dimensions*




I placed two discrepant cases identified in the data into a separate codebook section. This data illuminated a need for further studies. Two firefighters relied on their

spouses as therapists for support and direction on accessing mental health services. Having a therapist as a spouse was significant to electing to seek mental health services. However, most firefighters in the study are not married to a therapist. Another area placed in discrepant cases was work shifts. They varied across participants and could be linked to developing mental health problems in interpersonal relationships. Development of mental illness is not the focus of my study. Post-trauma exposure and mental illness onset are areas for future research.

## Evidence of Trustworthiness

As mentioned in Chapter 3, member checking after the interviews helped establish credibility within 2 weeks of each interview. I sent each participant a pdf interview transcript and requested feedback. Out of the 12 participants, one provided additional information on the culture of firefighters. The remaining eleven participants responded with no additions or corrections to the transcripts.

Even though the sample size includes various firefighters across the United States, there are transferability limitations due to the small sample size. The homogenous sample and saturation level of 12 participants support the transferability of this study with limitations of the geographical locations of participants. Future studies with this population should expand on geographical locations for increased transferability with a larger sample size. Using an audit trail of the data coding process helped with the dependability of data analysis. I stored the audit trail with the codebook on a Microsoft Excel spreadsheet, annotating a breakdown of how the data were broken into codes, categories, and themes. The audit trail contains a data sheet on each interviewee,

capturing their specific words corresponding to questions within the interview guide. I constantly compared data codes with original text transcripts to interpret data accurately.

After each interview, I kept a Word document diary of personal subjective views as an emotional processing outlet. This process appeared to help manage biases and contamination of data. I had recurrent thought processes centered on firefighters' stigma, fear, and pressures to maintain this heroic, invincible image to their coworkers, family members, and friends. As a trauma therapist, I wanted to challenge their irrational thoughts about appearing weak for struggling with mental illness. It is natural for me to challenge cognitive distortions when speaking to clients. Therefore, I constantly reminded myself of the researcher role I needed to remain in during the interviews. The word weak appeared linked to common stigmas in the culture. According to Si et al. (2019, p. 2), "stigma has been identified as a mark of shame, disgrace, or disapproval which results in an individual being rejected, discriminated against, or excluded from participating in a range of areas within society." Therefore, any signs of an inability to manage one's response to a trauma exposure appeared as a disgrace to the fire service by their peers. Appearing weak is the stigma firefighters appear to face regularly due to their unspoken expectation of being invincible to pain. Another cognitive bias was the financial cost of treatment that appeared outrageous and unfair, considering these firefighters have insurance coverages. The ability to emotionally process my responses post each interview through journaling helped me maintain biases by keeping my personal opinions separate from the data collected.

## Results

Answers to the following research question represents the data analysis: What are the perceptions and experiences in seeking mental health treatment as a firefighter? Results indicated that firefighters' trauma exposure and coping skills present a need to seek mental health treatment services. Additionally, elements of the fire service culture, available resources, financial costs, and interpersonal support systems play essential roles in their decision to seek professional help.

### Theme 1: Trauma Exposure

I asked participants to describe when they experienced stress or a traumatic event on the job and how they processed that experience. Firefighters reported repetitive trauma exposures on the job. “Kids calls,” or calls involving children and adolescents, appeared more psychologically challenging than calls concerning adult victims. For example, Lonnie stated, “Whenever I run those kid calls, it hits me the most. I ran a call with a 5-year-old who got caught in the blinds and basically hung himself and died.” Lonnie was not alone in describing calls involving children. Bill said, “…a mom runs out holding this ashen gray baby…a 5-day-old baby. My partner sets him down on the floor to do CPR. That image of that kid sitting on the floor will never go away.” Recurring images are not the only part of running kids calls that are difficult, according to Frank, who said, "When we're doing CPR on infants and children, just the screams of the mothers…those got to cut you to the bone. I'll never forget those sounds. I mean, I've got hundreds and hundreds and hundreds of those, unfortunately.”

A high number of participants (n=7) described difficult calls involving children. However, this was not the only type of trauma exposure that participants found difficult to manage. The primary exposure involved life-threatening events and running calls on their loved ones. The secondary exposure entailed helping save lives on the job, observing their coworkers struggle with exposure, and listening to the stories of their coworkers' trauma exposure. Finding ways to cope with this exposure is critical to seeking treatment. Participants described positive and negative coping skills, which led to their decision to seek professional help.

### *Primary Trauma*

Trauma is very subjective, and an individual can experience trauma in two ways, primary or secondary. Primary trauma is when an individual feels their life is threatened or experiences injury or fear of being injured, resulting in the sense of loss of power and control (Kleber, 2019). By helping trauma victims/survivors, secondary trauma is prevalent among helping professionals due to the trauma exposure (Ogińska-Bulik et al., 2021). Secondary trauma can also occur just by hearing survivors' traumatic stories (Ogińska-Bulik et al., 2021).

Participants in the study described experiences centered on both primary and secondary trauma experiences. Derrick described 2 traumatic life threatening experiences on the job. Derrick stated, "I had one where I was caught in a dust explosion. And then, I had an accident in 2016 while going to a call... a young girl crossed over the highway, and I t-boned her- at about sixty miles an hour." These traumatic experiences led Derrick to believe he could lose his life at that moment. As a result, Derrick later discussed how

he coped with the stress, anxiety, and nightmares following those two experiences. Jason described feeling powerless on the call, where he surprisingly lost a close friend. He said:

> In January 2017, I responded to a single-car motor vehicle accident into a tree with entrapment. I used the jaws of life. I popped the driver's side door. I went down to assess the patient... I realized it was one of my friends. (Jason)

A total of four participants described primary trauma events while on the job. The remaining eight participants described secondary trauma exposure. It is critical to note that the four participants traumatized while on the job also experienced secondary exposure during these events.

***Secondary Trauma***

Secondary trauma exposure reported by participants ranged from suicide calls, car wrecks, and house fires involving deaths to the kids call and the witnessing of dismembered bodies. Nick described two specific structure fires that still haunt him today. He described one of those fires involving the death of nearly the entire family, with the only survivor being a father he went to high school with. Frank described arriving at a family home and shocked that the call involved children under seven and their parents. Frank said, "They freaked out because they heard a gunshot in the backyard. When we went out, the husband had shot himself on the deck; the dog was eating his brains in the backyard." This secondary trauma exposure became repetitive in the line of duty. As a result, participants described how they managed to overcome those difficult experiences both positively and negatively.

### *Positive Coping Skills*

Participants reported coping skills to help manage stress and other symptoms of mental illness. Positive coping skills centered on talking to a close family member and friend. One participant reported that journaling his thoughts were constructive. Participant Derrick spoke about how he is currently using positive coping skills:

> "I'm still learning skills through my current therapist on how to deal with these situations. The problem is that our normal coping mechanisms aren't working anymore for me and for other people. So, I've learned a lot. I journal a lot. I do yoga. I do some things that I just never thought I would ever do. (Derrick)

Two participants described debriefing with coworkers as a positive way of dealing with their negative thoughts and emotions. Participant George said listening to music and exercising to center himself after a difficult day helped with resiliency. George described how to handle difficult days by stating, "I self-check myself, exercise to build that resiliency, and build up the endorphins."

### *Negative Coping Skills*

Participants also reported unhealthy coping skills. These coping skills involved excessive drinking, avoiding the problem, using dark humor, yelling at family members, and suicide attempts. For example, Derrick spoke of using dark humor to mask his emotional response to the trauma and increased drinking of alcohol to cope prior to him seeking professional mental health services. Frank described how his struggle to cope led to alcoholism and a suicide attempt involving two guns. He reported negative thoughts as, "My life is over. I've screwed everything up so bad." Frank discussed how his wife

wrestled two guns out of his hands. These negative coping skills appeared difficult for participants to discuss as several (n=3) became tearful while sharing their experiences.

**Theme 2: Fire Service Culture**

The fire service has a unique organizational culture. This culture entails their core beliefs, values, norms, and assumptions of what a firefighter is and how a firefighter should operate within the fire service (Jung & Chang, 2020). Disrupted sleep schedules, how to deal with the stressors of repeated trauma exposure, and the use of dark humor to release endorphins are at the core of the fire service culture (Caruso, 2021). It is critical to understand how culture impacts firefighters' perceptions and experiences in seeking mental health treatment services. With firefighters' constant exposure to trauma, it is important to identify where they feel safe. Caruso (2021) found firefighters reporting the kitchen table being a safe place to talk about the day. This is where the sharing of camaraderie takes place in some firehouses. Another cultural component of this special population is adjusting to the sleep schedule (Caruso, 2021). These servicemembers experience various sleep schedules outside of the normal 9 to 5 job. With the combination of these cultural components of the fire service, stigma appeared linked within each component. There is a is culturally embedded expectation to maintain a status quo of what is a firefighter and how a firefighter should behave within the fire service.

Culture emerged as a critical topic of interest among participants in the study. All participants ($n$ = 12) mentioned culture within their perceptions and experiences in seeking mental health treatment services. As active firefighters, participants mentioned

culture in the sense of adapting to different sleep schedules, feeling like they belong to a brotherhood (camaraderie), and stigma if one showed any signs of weakness within the firehouse. In addition, participants reported feeling a shift or changed within the culture focusing on acceptance of professional mental health services.

### *Sleep*

Participants ($n$ = 12) all discussed a strenuous sleep schedule as they worked various shifts with an average of 5 hours of sleep. Additionally, disrupted sleep cycles were a repetitive phrase among participants. They reported difficulty falling asleep, staying asleep, being hypervigilant about the alarm/bell, and drinking excessive amounts of caffeine to function. Culturally, these participants spoke of a lack of sleep being the "norm" and this was something they had to adjust to as a firefighter. Lack of adequate sleep combined with trauma symptoms of nightmares and anxiety appeared to contribute to the need for professional mental health services.

### *Camaraderie*

Another common word that emerged in the data is "camaraderie." Participants spoke of the "brotherhood," while others referred to their firehouses as their family. Participants spoke of strong bonds within their departments. George said, "your captain is a mother or father figure. Then, you have your brothers and sisters in the family. You're one big family, but it seems like it's the core family and other stations are like your cousins and uncles." However, two firefighters felt internal stress due to politics impacting their ability to bond with their coworkers. For example, Greg stated, "The tradition of the firehouses is to have a cigar or chewing tobacco after a fire, and guys

would come around and bond. Eradicating that tobacco policy did away with that bonding." Greg described how this bonding event would be an outlet to discuss the difficulties of a bad call. He reported feeling disappointed in policies impacting the camaraderie within his firehouse. The ability to bond post-trauma exposure was critical to 2 participants as they did not seek professional treatment because they felt their symptoms were managed through talking to peers.

***Stigma***

One of the most highly discussed topics within the fire service culture was the stigma. Participants discussed stigma within the ranks of the fire department as well as among their peers. As a result, firefighters used dark humor to mask difficult emotions out of fear of being ridiculed for appearing weak compared to their competitive brothers. Participants repeatedly used the term "suck it up buttercup" when asked to describe the firehouse culture towards seeking professional mental health treatment services. The buttercup label emerged throughout the data as firefighters ($n$ = 10) used this specific label to express their concerns about stigma within the fire service. Derrick said, "The culture makes you afraid that if you say something, you're going to be ostracized or looked at differently or looked at as weak." He discussed the fear of asking for help not to appear weaker than his peers. Jason described the culture as an egotistical group of macho men who believe they are the best at what they do. He went on to say, "I guess the firefighter culture is sucking it up; buttercup, move on. You got a job to do that was their emergency, not yours." Although the cultural experience appeared harsh in dealing with trauma, participants reported that the fire service culture is shifting to a more

supportive outlook on seeking professional treatment. Greg said, “I'd say compared to 2 to 3 years ago, we are leaps and bounds from where we started. I think that those cultural walls are starting to come down a lot.” He went on to say, “Just because you seek therapy or help doesn't mean that you're weak.” Six participants agreed with Greg on the cultural shift within the fire service.

**Theme 3: Perception of Available Resources**

When asked about awareness of available resources post-trauma exposures, ten participants reported understanding of available resources, and two participants reported having no resources available through their departments. Nine participants appeared to be aware of peer support programs and EAPs. Peer support mentioned by most firefighters appeared to link to EAP services. However, firefighters questioned its confidentiality. If they opted to seek help past the peer support level, participants expressed fear of its impact on their employment, the confidentiality of seeking professional help, and competent clinicians available to treat them. For example, Bill said, “People don't trust the EAP system because stuff gets reported back to their employer.” Bill is not alone in his perspective of trust with EAP. Nick presented fear in allowing anyone to know he sought out professional services through EAP by stating the following:

> Nobody knows that I went to EAP. It almost feels like its weakness. In our jobs, there are a bunch of alpha males. When you tell someone what your weakness is, I think it kind of puts you in a bad spot. I can't remember if I were a Lieutenant or a Captain at the time, but I really and truly felt like I could not and I still can't, let anybody know. Nobody knows I'm even in this interview right now (Nick).

### *Internal Resources*

According to 3 participants, peer support has been a new resource in the past 3 years. As a new resource in their departments, it explains the confusion with access to services and how the program works. For example, Lonnie said, “We have a peer support team. The problem with my specific department is that nobody knows who those people are, and nobody knows how to get ahold of those people. The information's out there; you must search to find it.” Although there are problems surrounding accessing resources, two participants found their departments could successfully educate firefighters on how to access these services or have a solid process setup for post-trauma exposure. For example, Nick said, “We have a very good employee plan where there are onsite visits with a health care professional and EAP representative.” Nick also mentioned the availability of video appointments and annual physicals inclusive of their mental health wellness. Mike reported calling the chaplain in the middle of the night for emotional support. Having this type of resource available appeared critical to his department.

### *External Resources*

A total of 10 participants identified 30+ days of programs with the Fire Center of Excellence and other local community programs designed to treat first responders as external resources. Individual therapy within the local community through EAP was also an external resource mentioned by participants. Those seeking help through these programs reported positive outcomes and were grateful for the resource. However, participants stated finding competent clinicians is a barrier to successful treatment and understanding how to navigate the system for help. Shaun stated, “My department didn't

have an EAP. So, I did not seek out professional help. Not because I didn't think it was available, but because navigating the health care system is difficult." Shaun went on to say, "People don't trust the EAP system because stuff gets reported to their employer." Statements like Shaun's show the difficulty in navigating available resources for firefighters suffering from mental illnesses. While systems are set up and ready to support, understanding how to access and process through those systems appear strenuous. Although Shaun did not have EAP at the time of his crisis, he reported current changes within his department to address the issue as the following:

> We have an EAP system now that's been embedded, and I know the reports only talk about numbers. The EAP was called 5 times this quarter. No names are associated with it because that was a big thing for me…confidentiality (Shaun).

According to three participants, identifying competent clinicians became a barrier to seeking treatment. These participants discussed contacting EAP with vetted clinicians who can render services specific to their cultural needs. However, complaints of services offered to participants are competent clinicians and the availability of services immediately. Three participants mentioned that most firefighters wait until they hit crisis mode to seek help. At that point, there is an immediate need for mental health services. However, there is a limitation of immediate availability of services as firefighters end up waiting weeks before actually being able to see a clinician. Greg summarized his concern as the following:

> We need a therapist that understands dealing with stress, dealing with trauma, and dealing with why we get into what we do. I've been through EAP twice, and none

> of those instances of a therapist give me faith in mental health. They were all horrible. They just didn't want to get to the root of what was happening (Greg).

Mike said, “The mental health professional that I sought help with didn't have any practical experience in dealing with traumatic stress or things like that. I was surprised that there was no structure to it.” Understanding the availability of external resources did not appear to be a problem among participants. Their primary complaint is access and competency.

**Theme 4: Financial Burden**

Financial stress emerged within the data as participants reported mixed reviews on the cost of mental health treatment services. I found that while some fire departments offer free mental health services (*n*= 2), other participants reported a financial strain in seeking professional mental health services due to a lack of insurance coverage and an out-of-pocket fee of $70-$100 per session.

***Insurance Coverage***

Participants reported utilizing EAP for outpatient services and their commercial insurance through the department for inpatient and outpatient mental health treatment services. The average days covered under EAP reported were 3-5 sessions. According to the participants, there was no fee to use this service, and all 12 participants verbalized awareness of this option for treatment. Lonnie mentioned workers’ compensation as an option but stated it was difficult to navigate. Another resource mentioned by one participant is the Fire Center of Excellence’s 30+ day program. According to Derrick, there is not an out of pocket cost for the Fire Center of Excellence program. Bill

described a wellness center available to firefighters in his department for both physical and mental health treatment for free. Participants appeared to know the insurance coverage available to them. However, outside of EAP, each firefighter described different perceptions of what insurance would cover and if it were feasible to access those services.

### *Out-of-Pocket Costs*

Three participants, who received professional mental health treatment, reported financial burdens. Sam stated, “My therapist was $70 for an hour-long session to talk. He recommended we meet multiple times a week, which can be a financial constraint, especially if a new firefighter is not making that much money.” Additionally, participants reported that even though they had insurance coverage, it did not cover mental health treatment services needed to address their specific needs. This lack of coverage left some participants in distress with large hospital bills. Lonnie stated, “I went to treatment and had to take sick time. Then afterward, insurance doesn't cover it all, and it wasn't considered work comp, so I'm stuck with a $1,500 bill plus whenever I come out.” Financial burdens appeared to negatively impact firefighters’ experiences in seeking mental health services due to the fear of the cost of treatment and a loss of pay during treatment time inside a mental health facility. Lonnie stated how another firefighter inside the hospital with him received docked pay for seeking help. This firefighter did not have sick time. Therefore, each inpatient day of mental health treatment created a financial burden on his family. Lonnie stated, “They've started to do better with making it more acceptable to seek mental health treatment, but we still need policies that make it

feasible.” The financial burden of seeking mental health services appeared to add stress to seeking treatment. Participants reported feeling that policy makers need to review sick time and the number of individual therapy sessions offered through EAP before firefighters must pay out-of-pocket treatment fees.

**Theme 5: Role of Interpersonal Relationships in Help Seeking**

***Supportive Relationships***

All 12 participants reported having some support in seeking or not seeking professional mental health treatment services. The 2 participants that did not seek professional help reported fear, guilt, shame, and feeling that there was nothing more that could have been done to change the situation of what happened on the call. Out of these two participants, one reported his wife being in social services and having a solid support system at home. Shaun said, “She understands being on a call and being distracted at times.” The other participant reported that talking to his peer support member was a better option than seeking professional treatment. Bills said, “When people have that informal conversation with a coworker or friend, they kind of let their guard down just because it's somebody they already know.”

Reasons for seeking treatment were consistent among the remaining ten participants. John used the word “encouraging” when asked about family members supporting his decision to seek professional help. The 10 participants that sought professional mental health services reported it being the most difficult decision they had to make. Participants described the family as being the primary drive to seek treatment. Derrick said, “On the 30th of September 2021, I attempted to take my life and ended up

in the hospital. If I didn't get help, I probably wouldn't be here for my family. My son's the one who probably saved my life." Derrick described how his son noticed he was not the same the day he attempted to take his life. His son contacted his wife, who contacted the police to find Derrick and stop him from committing suicide. Derrick is not alone in reporting how family members were catalysts for participants to seek professional help. Similarly, John stated, "Family encouraged the need to talk to someone, and that helped."

Problems such as disrupted relationships with spouses, children, peers, and other family members impacted their decision to seek help. Nick said, "It was getting so bad that I was verbally abusive to my family. I sat down, had a little talk with my wife, and basically just said, I've got to figure something out." Whether a participant decided to seek help or not, supportive relationships and the fear of losing those relationships appeared to have a strong connection in the decision-making process. Derrick stated, "My family's my support system now. I have several friends that I work with that I have as a support system." The family appeared to be the force working behind the decision to seek professional mental health treatment services. Participants spoke of their difficulties being vulnerable during the treatment process but reported feeling lighter emotionally with improved family relationships. They used words such as "freeing" and "amazing" when describing their experiences in seeking treatment. Consequently, they appeared happy with the positive impact of seeking professional help on their interpersonal relationships.

***Nonsupportive Relationships***

I asked participants to describe non-supportive relationships in their decision to seek professional mental health services. Three participants stated they did not receive negative responses or experience non-support in seeking professional help. However, three participants reported negative responses to seeking help. For example, Lonnie said, “I know some of them (peers) viewed it as weakness, as a cop-out, basically I'm just not worthy of being on the job. If it affected me that badly, I need to find something else to do.” Lonnie is not alone in this perceived negative stance on seeking treatment. Sam stated, “Guys who've had many years on the job say, "Well, I saw traumatizing things too when I was firefighting years ago, and I never sought help, but why does this person get resources to seek help?” Six participants did not tell coworkers they sought help or were hesitant to share with certain family members that they needed professional help. George said he kept his treatment private due to the stigma in the culture. He stated, "We're changing that culture and stigma. It is much easier to maintain a high level of confidentiality within our peer support team.” Jason said he could not tell his family (outside his wife) that he sought professional mental health services because he felt they would not understand. Mike said he shared as little as possible with his family because he wanted to protect them from the negative impact of the trauma. Mike went on to state:

> I haven't had anybody directly approach me and try and make a mockery of me or, I guess, put me down because of it But there are always, whether real or perceived, feelings of people looking at you differently because you pursued a

> mental health checkup or a program or anything like that. It shouldn't be that way. It really shouldn't. I wish it were the exact opposite (Mike).

Mike was speaking about the lack of support he felt at work. Non-supportive relationships involved both family members being unaware of their support needed and perceived stigma from coworkers.

## Summary

In summary, 12 firefighters participated in the study on firefighters' perceptions and experiences in seeking mental health treatment services. Five themes emerged in the data: (a) trauma exposure, (b) fire service culture, (c) perceptions of available resources, (d) financial burden, and (e) the role of interpersonal relationships in seeking help. Through individual interviews, data revealed repetitive trauma exposure calling for a need for mental health treatment services. However, deciding whether to seek help or not centered on perceptions of support, stigma, access to treatment, availability of services, and financial costs. Firefighters reported mixed reviews on EAP, from being a helpful resource with vetted clinicians to lacking culturally competent clinicians, missing EAP representatives, and fear of this service lacking confidentiality. Peer support mentioned by most firefighters centered on questioning its confidentiality and fear of a loss of employment.

Furthermore, the financial cost of services emerged as a stressor in seeking professional help. However, those seeking professional mental health services reported it beneficial for their overall mental health and interpersonal relationships—those who did

not seek services reported having available resources and encouraged their peers to seek professional help.

All fire departments did not appear to have the same resources and identified different procedures for accessing mental health services. Therefore, their experiences varied in seeking treatment with educational awareness and access. Furthermore, perceptions of availability differed as well. Some firefighters acknowledged growth in resources, while others reported concerns with a lack of resources or awareness of them. Areas that appeared repetitive across participants were the cultural competency of therapists, the financial burdens of accessing care, and family members' impact on deciding to seek professional help. The next chapter will interpret the study's findings and compare results with existing literature in the field.

# Chapter 5: Discussion, Conclusions, and Recommendations

## Introduction

In this study, I explored the perceptions and experiences of firefighters related to seeking mental health treatment services. This population is repeatedly exposed to trauma on the job, which could adversely affect their overall mental health and well-being (Isaac and Buchanan, 2021). I aimed to provide a platform for participating firefighters to speak about their personal experiences in seeking professional mental health services in hopes of better understanding this population's mental health service needs.

The key findings of this study revealed a need for firefighters to receive professional mental health services. This population's primary and secondary trauma exposure requires the implementation of healthy coping skills to maintain individual mental health and well-being. However, 10 out of 12 participants in the study identified several roadblocks to seeking care, which indicates the need for improved processes within the fire department system to access mental health care. These roadblocks entailed stigma about mental illness within the fire department, limited understanding of how to access available resources, lack of access to competent mental health care professionals, and the affordability of treatment. Although participants acknowledged problems in seeking professional mental health services, they also identified programs that sufficiently bridge the gap in seeking professional help. The EAP and the peer support program were among the most prominent programs mentioned by participants in the study. It is also noteworthy that family support in seeking professional mental health services appeared essential in participants' decision-making. Participant responses

indicate a need for firefighters to have both family and professional help in the line of duty.

## Interpretation of the Findings

The findings of this research study are consistent with prior research on the topic of trauma exposure, substance use, and suicidal thoughts. Depression, anxiety, PTSD symptoms, and suicidal ideation are common mental health problems that firefighters struggle with, as identified by Jones (2017), Martin et al. (2017), and Stanley et al. (2018). These same mental health problems were self-reported by firefighters in my study. Such mental health problems are not surprising given that all 12 participants reported experiencing ongoing stress on the job. Simply anticipating the sound of the alarm/bell can contribute to insomnia and poor sleep. Researchers such as Kramer et al. (2021) identified that stress anticipation can negatively impact the physical and psychological well-being of individuals. Mental health problems such as increased depression and anxiety directly links to stress anticipation whether there is an identified source of stress (Kramer et al., 2021). Physical ailments such as hypertension and increased heart rate also links to stress anticipation and can alter an individual's cognitive functioning, such as inducing ruminating thoughts (Pulopulos et al. 2020). Exposure to repeated trauma is also stressful. Five participants were not comfortable addressing their reactions postexposure. Currently, the International Association of Fire Fighters provides training for active-duty firefighters on identifying behavioral health red flags and the impact of increased stress on the job through a program called the Peer Support Program (Johnson et al., 2020). The program consists of firefighter colleagues who serve as

support persons after a critical incident (Johnson et al., 2020). It helps firefighters connect with a peer trained in handling behavioral health problems, to talk about their mental health symptoms. This program provides comfort at the peer level for firefighters to address their mental health needs and not face these problems alone.

Coping with trauma is important to have a well-balanced life (Viana et al., 2020). Understanding how to cope with trauma appeared difficult for the firefighters in the study. The findings in the study highlight firefighters' use of maladaptive coping skills to cope with posttrauma exposure, a finding that is consistent with other research (Viana et al., 2020). Eight participants expressed feeling depressed due to trauma exposure, five indicated that they used alcohol to cope, and six acknowledged having suicidal thoughts or attempts. One interesting finding is that sleep problems were highly prevalent among the first responders in the research study. Jones et al. (2020) identified binge drinking, posttraumatic stress, anxiety, depression, and sleep problems in an analysis of 28 articles, dating as far back as 2004, that focused on firefighters' response to trauma exposure. Compared to Jones's (2017) systematic review on the mental health of firefighters, my study revealed an increase in sleep problems, with 100% of participants reporting some sleep disturbance due to the work shift/schedule. A bit more than half (59%) of career firefighters reported sleep deprivation in Jones's (2017) systematic review. Although the sample size in my study is much smaller than the systematic review, the results show minimal change in the issue. The results of my study suggest that the sound of the alarm/bell could contribute to poor sleep, compounded with the work shift schedule, which is a problem not identified as a cause contributing to sleep deprivation by Jones

(2017). The author identified a link between mental health symptoms such as depression and suicidal thoughts to sleep deprivation. However, Heydari et al. (2022) reported similar results to my study of high stress being linked to the alarms/bells of the firehouse in their qualitative study. These authors reported that firefighters' anxiety levels appear linked to alarm stress, sleep stress, and waking up feeling stressed in general.

Repetitive trauma exposure was a common experience for all firefighters. This in turn caused stress. Martin et al.'s (2017) study of routine trauma exposure in almost all firefighter or EMS participants throughout their careers confirmed this finding. However, the one difference identified in my study findings was the difference between the stress of responding to community calls and office work stress among firefighters. Firefighters in high-ranking positions in the fire department reported feeling increased stress when making decisions to send team members inside burning buildings knowing there is a possibility of severe injury or even death. Compounded stress appeared prevalent among participants from various perspectives of the job. Duran et al. (2018) identified a range of stressors other than trauma exposure among firefighters contributing to their physiological health, such as heavy workloads, poor organization, communication, politics, and conflicts in the fire department. Although participants in my study did not discuss the job's physical demands, two participants reported having problems with departmental politics. They felt overwhelmed with expectations in their roles within the fire department. This problem appeared critical to their mental health as well.

All participants in the study Sleep identified trauma exposure and fear of addressing symptoms as significant stressors for. Not only did Caruso (2021) identify the

issue with sleep among firefighters impacting their mental health, but they also found dark humor to cope with trauma exposure. My study confirmed these findings with the report of firefighters attempting to address difficult calls by using black or dark humor to mask the shock and pain of the trauma. These maladaptive coping skills served as early warning signs for the need to seek services, linking them to stigma within fire departments. In Jones et al.'s (2020) study on firefighters' barriers and facilitators to seeking mental health care among first responders, the culture of not appearing weak to their peers and superiors was still a common belief. Moreover, these authors identified a need for cultural change as a barrier to treatment and were not alone in their findings. The fire culture of preserving one's reputation and avoiding embarrassment is a barrier to seeking treatment (Johnson et al., 2020). Isaac and Buchanan (2021) also identified a need for a cultural shift in reducing stigma among firefighters. The findings in my study not only confirm the need for cultural change but highlight current cultural changes in how firefighters view seeking professional mental health services despite the stigma involved with seeking help.

Like Isaac and Buchanan (2021), firefighters in my study verbalized positive attitudes toward seeking professional mental health treatment services. Seeking professional help or viewing it as an option to cope is a topic that both Crowe et al. (2017) and Jones et al. (2020) touch on in their studies of firefighters' help-seeking behaviors. Although Crowe et al. (2017) reported firefighters minimizing the importance of seeking professional mental health services, this was not the case in my qualitative study. Instead, participants recognized the importance of seeking help, and 83% (n=10)

of them sought professional mental health services. Additionally, they recommended it to their peers. If services were unavailable, participants provided feedback on the lack of knowledge and access to services in their departments.

My findings also showed the use of alcohol as another negative coping skill to address trauma exposure. Jones et al. (2020) reported binge drinking as a maladaptive coping skill in 34%-56% of firefighters. Only five firefighters in my study mentioned binge drinking to cope, equivalent to 41.6%. However, my findings differ from other studies on the topic of help-seeking through casual conversation as it relates to their use of alcohol to cope. Seven participants identified talking to someone, whether a family member, friend, or professional, as a coping skill post-trauma exposure. Other studies did not appear to highlight this critical detail of post-trauma exposure.

The ability to cope with trauma appeared linked to firefighters' perceptions and experiences in seeking mental health treatment services. Whether a firefighter used negative or positive coping skills, firefighter culture appeared to play a role in their decision on how to manage trauma symptoms. There is a stereotypical view of firefighters as heroic and aggressive, and consequently, they have internalized these cultural messages to the point that they define their strengths and weakness on the ability to save others and endure trauma on the job (Jung & Chang, 2020). Participants in my study repeatedly spoke of the term "suck it up buttercup" to evoke strength when a firefighter appeared to suffer from an illness, specifically revolving around mental illness. It also appears that participants have adopted the belief that mental health is a form of weakness. However, this may gradually be changing as some participants reported that

seeking professional mental health treatment is slowly becoming more accepted by their leadership and peers. This shift was reported by one firefighter as a significant change in the past few years. Mental health programs designed to address firefighters' needs are emerging in local communities and fire departments embedded liaisons to assist with accessing care.

While there appears to be an improvement in providing access to care and increased use of professional mental health services, the cost of treatment appeared problematic to participants in the study. Many times, the costs are covered through private insurance. However, this is not the case for all firefighters. For example, Jones et al. (2020) found there is a lack of knowledge of insurance coverage among firefighters which creates a financial burden in seeking help. My study confirmed these findings. Johnson et al. (2020) discusses in their study of enhancing mental health treatment for firefighters' structural barriers, such as costs and obtaining time off to seek help. Participants in my study described unexpected out-of-pocket costs for hospital stays (i.e., 30-plus days programs) and outpatient treatment services when they did seek professional help.

Another barrier to seeking help is the lack of access to mental health services. Like the findings from Jones et al. (2020) and Gulliver et al. (2018), many participants reported that not all fire departments have access to mental health services and lack education on how to access these services. My study revealed a lack of available services in some geographical areas. However, these same participants reported a current change where EAP or peer support is now embedded within their departments. Yet, there still

appears to be a lack of knowledge on accessing these programs, which calls for further education.

Accessing treatment not only involves education and costs. A key component in seeking treatment is identifying competent clinicians that understand the fire service culture. The lack of competency of clinicians is not a new barrier identified by researchers with firefighters seeking professional help. Gulliver et al. (2018) reported this problem in their study of firefighters' access, attitudes, and preferences in receiving mental health services. Johnson et al. (2020) and Jones et al. (2020) highlighted this issue again in their research on barriers and facilitators to seeking mental health care among first responders. Caruso (2021) and Isaac and Buchanan (2021) all agreed that competent clinicians are essential in treating firefighters and building trust so that firefighters buy into treatment. My qualitative study's findings show trust in mental health professionals as a significant factor in their perceptions and experiences in seeking help. Participants in the study reported a lack of competent clinicians to address their specific needs.

Firefighters in this qualitative study discussed their perceptions and experiences in seeking mental health treatment involving professional and family support. Participants described social support as a prominent component of their journey to seek help and identify competent clinicians or not seek help at all. Studies such as Morman et al. (2020) and Crowe et al. (2017) show they try to hide their symptoms from their peers and supervisors by consuming alcohol and engaging in self-harm behaviors. My study identified a different perspective on the role of family members and friends of firefighters. Findings in my qualitative study suggest that close relationships with family

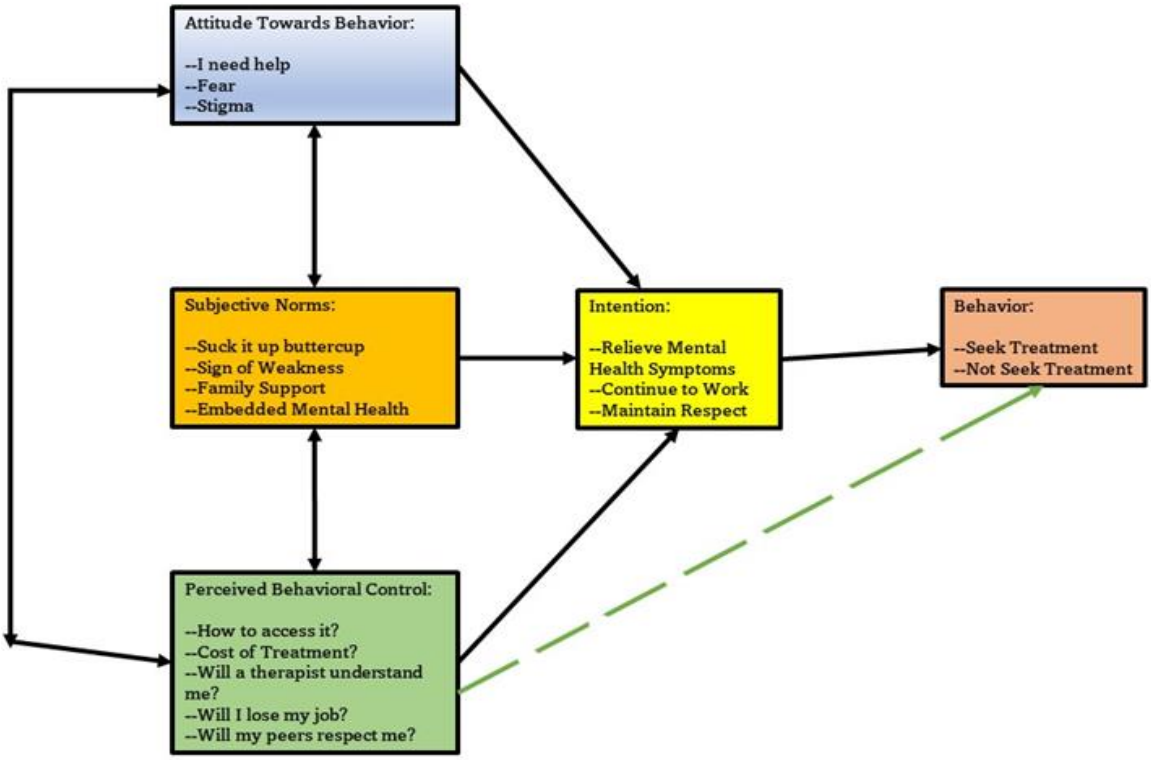
members and peers are essential in motivating firefighters to seek help. While hiding symptoms were present early after trauma exposure, 83% (n=10) of participants that sought help reported some family or peer support encouragement in their experience. This indicates the importance of family and peer support in firefighters' recovery process.

## Theoretical Framework

The TPB measures attitudes, norms, and perceived control of an individual's behavior while highlighting the intent behind such behavior during decision-making (St Quinton et al., 2021). The belief in perceived control with a positive attitude accepted by the subjective norm creates a substantial likelihood of an individual performing the desired behavior (Bosnjak et al., 2020). Figure 2 shows the TPB applied to attitudes, norms, and perceived behavioral control among the 12 firefighters in the study.

**Figure 2**

*Application of Study Findings to the Theory of Planned Behavior*




## Attitudes

Findings in the study suggest that firefighters have conflicting attitudes in seeking mental health treatment services. While ten out of 12 participants sought professional services, they presented mixed emotions in arriving at their decisions. From their perspectives, the decision to seek treatment or not was challenging due to external factors such as fear, stigma, and support. Furthermore, participants reported believing they needed to seek professional help or talk to someone about what they were experiencing after finishing a tough call involving death or near-death experiences. Findings suggest

that firefighters' attitudes towards seeking mental health treatment services center on the understanding a need for someone other than themselves to help them process their trauma exposures.

**Norms**

Social norms are perceived peer pressures from others in one of the following three categories: injunctive, subjective, and descriptive (Banerjee & Ho, 2019). Injunctive norms are an individual's family members or associates' attitude toward an approved or disapproved behavior (Banerjee & Ho, 2019). Subjective norms focus on the degree of approval by others if an individual engages in a behavior (Banerjee & Ho, 2019). Finally, descriptive norms center on what is normal behavior in one's social community (Banerjee & Ho, 2019). Findings in this qualitative study suggest that stigma (injunctive norm) and culture (subjective and descriptive norms) continue to impact firefighters' decision to seek treatment. Cultural norms (what others think about the behavior) appeared as a barrier to seeking treatment. Participants spoke of not wanting to appear weak in the eyes of their peers, indicating a social influence in their decision to seek help. Participants spoke of a cultural shift to embrace seeking mental health treatment services. This shift combats traditional views within the fire department toward mental health. In the past, the term "suck it up, buttercup" appeared as a warning against seeking treatment. Today, participants reported programs explicitly developed for firefighters to access immediate treatment embedded with their departments. Another critical area in my findings is the family support role in seeking help. All 12 participants spoke of family support encouraging seeking treatment. This support is typically from

spouses/significant others and their children. Further research could help develop other avenues for firefighters to access treatment with the onset of mental health symptoms instead of waiting for symptoms to be detrimental to their mental health.

**Perceived Behavioral Control**

A component of TBP is the perceived behavioral control of an individual to act (Miller, 2017). Perceived behavioral control is an individual's belief that one can perform the behavior or have the capability of fully executing the behavior (Banerjee & Ho, 2019). Findings in my study suggest that firefighters perceive roadblocks to seeking mental health treatment services. The roadblocks include but are not limited to firefighters feeling they do not have access to treatment in some fire departments, not understanding their access to treatment in other fire departments, and inability to afford access to treatment. Developing easier processes and procedures for firefighters to access mental health care services could improve their perceived behavioral control in seeking professional mental health services.

In electing to use TBP in this study, exploring attitudes, norms, and perceived behavioral control assisted with understanding firefighters' perceptions and experiences in seeking mental health treatment services. The intent behind firefighters' behaviors explained their decisions to seek treatment or not after an exposure to trauma on the job. The findings of this study suggest that firefighters intend to seek help for their mental health symptoms but do not always understand how to access that help. As a result, some firefighters result to drinking alcohol or using other maladaptive coping skills until they are forced to seek professional help. Other firefighters appeared to fear falling into the

category of being an alcoholic and becoming suicidal. Nevertheless, the intent behind the behavior to seek help centered on relieving their symptoms and continuing their work within the community.

## Limitations of the Study

My study consisted of 12 participants from six states, with over 50% (n=7) of participants residing in Missouri. Because of the small sample size and the fact that I recruited participants from one state, there are limitations to this study being transferable to the general population. Additionally, the sample size consisted of white males, and the results may not be applicable to the experiences of females and minorities in the fire service. According to Fahy et al. (2022), 9% of females served in the U.S. fire department in 2020 and approximately 23% of firefighters in 2020 were minorities. While my study provides insight into the perspectives and experiences of firefighters seeking mental health treatment services, including diversity in the study could provide deeper insight into the fire service world of seeking treatment. Another limitation of the study is the research design. The use of video interviews with audio recordings only neglected the nonverbal emotional response of participants. To fully understand this population's experiences, it is critical to have the cognitive perception and the emotional component which an online video experience could not fully capture.

## Recommendations

The findings in this qualitative study contribute to bridging the current gap in the literature on qualitative data on this population's perceptions and experiences in seeking mental health treatment services. Other researchers, such as Jones (2017), found that only

32% to 55% of firefighters who seek treatment receive services. My study aimed to provide additional data behind the statistical numbers in hopes of highlighting problems with firefighters seeking professional help. Findings in this study identified fire service culture, available resources, financial costs, and interpersonal support systems as essential variables in firefighters' decision to seek professional help. I recommend further qualitative research on firefighters seeking treatment to help improve the mental health model of services delivered to this population. Improvements to the mental health model are just one aspect of social change needed within this unique population.

Based on this study's findings, it is highly recommended that future studies on firefighters include other genders and different racial/ethnic minority groups. It is also essential to understand if there is a difference between genders in their experiences of seeking treatment. The U.S. Fire Administration (2019) recognizes differences between men and women firefighters around mental health and stigma in the fire service culture. For example, women tend to face compounded obstacles to seeking care such as gender-based discrimination (U.S. Fire Administration, 2019). Therefore, the inclusion of women and different racial/minority firefighters could provide a more in-depth perspective of their help-seeking journey experiences. Furthermore, it is critical to note that different ethnic minority groups in the fire service may perceive stress on the job differently (Arbona et al., 2017). Researchers in the past, such as Gulliver et al. (2018), Jones et al. (2020), and Stanley et al. (2018), report qualitative findings on firefighters' behaviors, thoughts, and attitudes toward seeking mental health treatment. Still, their studies are all comprised of predominately white male firefighters and proposed future

studies inclusive of a focus on diversity because gender and ethnicity could produce varied results in experiences in seeking mental health treatment services. An example of this is Arbona et al. (2017) research on Black and Latino firefighters. These authors identified coping skills such as alcohol abuse to manage perceived stress on the job and using family support systems in treatment as critical information for treatment development models (Arbona et al., 2017). Black and Latino firefighters coping skills information compared to current literature should be taken into consideration for the implementation of treatment models used with firefighters of different racial/ethnic minority groups.

## Implications

### Social Change

A part of this qualitative study that is the foundation of why this researcher selected the population of firefighters is the need for social change in the lives of first responders who risk their lives daily to ensure the safety of communities. While communities benefit from the ability to call 911 and receive immediate help, it is crucial to recognize the mental health needs of first responders. The ability to provide mental health treatment specifically designed for the culture of first responders may ensure that these individuals can continue to provide services to communities. One element of social change in this study is providing a unique population of firefighters with a platform for to voice their perceptions and experiences about the ease or difficulty in seeking mental health treatment services. One of the goals of this study is to hopefully grab stakeholders' attention to problems surrounding firefighters' mental health. The description of

firefighters' perceptions and experiences in seeking mental health treatment services in their own words contributes to a cultural social change. According to de la Sablonnière (2017), social-cultural change threatens the identity of the collective group. If firefighters' idealism of machoism is linked to not seeking help and "suck it up, buttercup" is a phrase used to make firefighters appear weak for expressing their need for mental health services, those 10 participants that sought mental health treatment services just shifted the identity of the heroic firefighter. This new identity, strength in seeking mental health services, is inclusive of help-seeking as heroic. Therefore, the cultural shift is for the greater good of all firefighters as it fights against the stigma of seeking professional mental health treatment, which is a component of social change (Fusch et al., 2018).

Stakeholders promoting progress and balance through policy development is another component of social change (Fusch et al., 2018). The findings in this qualitative study highlight the financial burdens of seeking help and the ease of access to current mental health programs as red flags for social change. Stakeholders looking at policies for such programs should consider firefighters' perceptions and experiences so that new policies or revisions of current policies address their service members' overall mental health needs.

**Practice**

Practice implications center on culturally competent clinicians/ therapists in the mental health field. Johnson et al. (2020) recommended that mental health providers working with special populations like firefighters have training in the complexities of the culture in which they work. Findings in my study support Johnson et al. (2020)

recommendations as competent clinicians appeared as a barrier to treatment. Isaac and Buchanan (2021) took this concept a step further. They recommended that therapists build relationships with the fire departments for educational training on the firefighter culture and educate firefighters on resources available to them for treatment. Findings in my study support Isaac and Buchanan (2021) research on extinguishing stigma among firefighters. According to participants in my study, the ability to find clinicians who understand the firefighter culture appears to be essential to successful buy-ins to treatment. Participants spoke of feeling more comfortable talking with clinicians who understand their environment, living arrangements in the firehouse, language, and overall, what it means to be a firefighter.

## Conclusion

This study aimed to explore and understand the perceptions and experiences of firefighters seeking mental health treatment services. Firefighters are a particular population exposed to trauma repeatedly on the job (Johnson et al., 2020). There is a rise in suicides among this population (Heyman et al., 2018), an increase in mental health problems that exceed the general population (Johnson et al., 2019), and stigma being a primary roadblock to seeking help (Hom et al. (2016) in Carpenter et al., 2020). Nevertheless, firefighters are often overlooked regarding the residue or aftermath of their work. As an advocate of mental health, it is critical to ensure the voices of first responders are not absent in research in reference to what is needed to improve their mental health needs. Results in this qualitative study indicate a need for improved access

to treatment, education on available resources for treatment, support with the financial costs of treatment, and training competent clinicians on the culture of firefighters.

Additionally, it is noteworthy to highlight the support role of family members and peers of firefighters. These individuals appear to be motivational forces in the decision-making process of seeking professional help. In conclusion, the study of firefighters' perceptions and experiences in seeking mental health treatment services highlighted the need for further qualitative studies focused on treatment-seeking behavior.

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Appendix A: Recruitment Flyer

# Appendix B: Interview Guide

**Introduction**

- Thank you for volunteering
- Purpose
- The interview will be audio and video recorded (signed agreement review)
- Feel free to speak freely as this is confidential unless you tell me you are going to harm yourself or someone else.
- You are free to discontinue the interview at any time without penalty
- Questions?

**Demographic Questions**

1. What is your age and gender?
2. Are you a volunteer firefighter or a career firefighter?
3. How long have you been in the fire service?
4. What type of unit are you employed with?
5. What is the size of your unit?
6. What is your rank?
7. What is your job title?
8. Can you explain your work shift/hours?

**Interview Questions**

1. What do you enjoy most about your job? (attitude)
2. What do you enjoy least about your job? (attitude)
3. How would you describe the stress of your job? (attitude)

4. Can you tell me about a time when you experienced stress or a traumatic event on the job?
5. How were you able to get through that experience? (perceived behavioral control)
6. Can you describe options available for you at that time for psychological and emotional support? (perceived behavioral control)
7. How do you cope with demanding days on the job? (perceived behavioral control)
8. Have you sought professional mental health treatment for stress or trauma related to your job? (If yes, go to questions 9-17) (If no, go to questions 18-27)

**Seeking-Help Questions**

9. Can you describe how you felt about reaching out for help? (attitude)
10. What influenced your decision to seek help? (subjective norms/ perceived behavioral control)
11. How do you think your peers view your decision to seek help? (subjective norms)
12. What type of support did you receive from co-workers, family members, and friends in your decision to seek help? (subjective norms)
13. Can you describe any negative responses from co-workers, family members, and friends in your decision to seek help? (subjective norms)
14. What was beneficial about seeking help? (perceived behavioral control)

15. What was difficult about seeking help? (perceived behavioral control)
16. How did others (family members, coworkers, friends) influence your decision to seek help? (subjective norms)
17. What, if anything, encouraged you to seek help? (subjective norms/ perceived behavioral control)
18. What, if anything, may discourage you from seeking help? (subjective norms/perceived behavioral control)
19. What policies or regulations do you believe impact your decision to seek mental health services? (attitude/ perceived behavioral control)
20. How might these policies make it easier for you, or your colleagues to seek help? (attitude/ perceived behavioral control)

**Not-Seeking-Help Questions**

21. Can you describe how you felt about not reaching out for help? (attitude)
22. What influenced your decision to not seek help? (subjective norms)
23. How do you think your peers view your decision to not seek help? (subjective norms)
24. Since you did not seek professional help, how else do you cope with the stress of your job? (attitude/ perceived behavioral control)
25. Can you describe the impact of not seeking help post a traumatic/stress event on your life? (perceived behavioral control)
26. How did the stress/trauma impact your job performance? (subjective norms/perceived behavioral control)

27. What impact did it have in your relationships (coworkers, family, friends)? (attitude/ subjective norms)
28. How did others (family members, coworkers, friends) influence your decision to not seek help? (subjective norms)
29. What, if anything, may encourage you to seek help? (perceived behavioral control)
30. What, if anything, discouraged you from seeking help? (perceived behavioral control)
31. What policies or regulations do you believe may impact your decision to seek mental health services? (attitude/ perceived behavioral control)
32. How might these policies make it easier for you, or your colleagues to seek help? (attitude/ perceived behavioral control)

**Summary**

Again, thank you for your time and participation. You will receive a copy of your transcript within two weeks of the conclusion of this interview. Should you have any questions, please feel free to contact me via email or phone.