MENTAL HEALTH FIRST AID (MHFA) TRAINING OF FIRST RESPONDERS

by

Rebecca Leigh Bandy

Liberty University

A Dissertation Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

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ABSTRACT

This study aimed to address the gap in the mental health training of first responders. Mental health issues have increased and continue to increase each year and is leading to more emergency calls being made about individuals with mental illnesses or in a mental health crisis. With this increase in calls related to mental health, first responders are not prepared to handle these calls. This study examined the effectiveness of a mental health training program, Mental Health First Aid (MHFA), on first responders' knowledge, stigmas, comfort level, confidence level, ability to identify mental health symptoms, and benefits for first responders and those with a mental illness that they help. This study used a mixed method of both qualitative and quantitative data and pre-post surveys. A total of 21 firefighters, EMTs/EMS, or dual trained first responders that worked in VA and had not taken any MHFA training before participated. The findings of the study highlight the importance of MHFA training for first responders, the benefits of the training on first responders and those they help, and bring awareness to the gap in their training.

Keywords: MHFA, Mental Health First Aid, mental health training, first responders, firefighters, EMTs, EMS, dual trained, mental health crisis, mental illness.

Copyright Page

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TABLE OF CONTENTS

List of Tables

List of Figures

CHAPTER 1: INTRODUCTION TO THE STUDY

Introduction

Mental illness has been recognized by the World Health Organization (WHO) as a global health issue that causes morbidity and mortality (Emond et al., 2015; Emond et al., 2019). Nearly 50% of adults in the United States are estimated to experience a mental illness at some point in their life (Kessler et al., 2007). Whereas 20% of adults are diagnosed with a mental illness, only 17% are classified as having optimal mental health (CDC, 2013, as cited in Bhatta, 2018), with a large proportion going undiagnosed and untreated (National Institute of Mental Health [NIMH], 2020).

Less than half of individuals who suffer from a mental illness will receive proper and adequate care (NIMH, 2020); such lack of treatment is due in part to misinformation about mental health, which increases the stigmas, fears, and treatment barriers for individuals (Jorm, 2000). Lack of treatment leads to more mental health crises, and first responders are responding to more calls involving mental illnesses than ever before; however, they are not well trained in how to handle these types of calls (Emond et al., 2015; Emond et al., 2019; Ford-Jones & Chaufan, 2017; Ford-Jones & Daly, 2020). This study proposes to examine the need for mental health training in first responders and the effectiveness of such training. This chapter will present an introduction to this study, including its problem, purpose, research questions, assumptions and limitations, and theoretical foundations. Moreover, definitions of terms used and the significance of the study is presented.

Background

Law enforcement officers are typically the first on the scene in most emergency calls, as they are tasked with making sure a scene is safe for other first responders to assist with victims (Czarnecki et al., 2018). As a result, there is an overlap between law enforcement and mental health crises situations, with an estimated 7% of emergency call responses being mental illness-related (Deane et al., 1999). *The Washington Post* (2020) reported that since 2015, 1585 of the 5764 shootings in the US by law enforcement were deaths of individuals with a mental illness. This finding represents 27% of the shootings, or more than one in four, involving an individual with mental illness. Once law enforcement officers arrive on the scene and deem it safe, they often turn individuals in a mental health crisis over to other first responders (CTV News London, 2015). These first responders include, firefighters and emergency medical technicians (EMTs) that transport the person for screening mental health services, inpatient hospitalization, and/or provide referrals to other community providers (CTV News London, 2015).

There is limited research on firefighters and EMTs/Emergency Medical Services (EMS) and the mental health crises training they receive (Baier et al., 2019; Emond et al., 2019; Hector & Khey, 2018; Hoge & Hirschman, 1984; Ford-Jones & Chaufan, 2017; Ford-Jones & Daly, 2020). First responders respond to both life-threatening and non-life-threatening calls, as well as to those classified as mental health crises or situations (Ford-Jones & Chaufan, 2017). Ford-Jones and Daly (2020) reported that first responders are increasingly responding to mental health-related calls. First responders also respond to medical calls where mental illness may be present (Ford-Jones & Chaufan, 2017). First responders are important in the transition of care for people who need mental health help

by providing assistance and transportation to mental health care locations or resources in the community as needed (Ford-Jones & Chaufan, 2017).

In spite of the necessity to respond to people with mental health needs, first responders in the United States have limited and insufficient mental health training (Donelly et al., 2017 as cited in Ford-Jones & Daly, 2020; Emond et al., 2019; Ford-Jones & Chaufan, 2017; Friedman et al., 2020). Mental health training is often left out of training programs altogether or is much less extensive than the physical, medical, or medical-trauma training of first responders (Donelly et al., 2017 as cited in Ford-Jones & Daly, 2020; Emond et al., 2019; Ford-Jones & Chaufan, 2017; Friedman et al., 2020). Many first responders and first responder educators believe that mental health training is equally important as the anatomy, physiology, and pathology training received (Ford-Jones & Daly, 2020). However, the speed of their education and training leaves little time for mental health training in these programs (Ford-Jones & Daly, 2020). Many first responders wish they had more mental health training instead of relying solely on trial-and-error experience and firsthand experience (Ford-Jones & Chaufan, 2017; Ford-Jones & Daly, 2020). Further, first responders have stated that having more mental health training will improve the skills and care that they can provide (Ford-Jones & Chaufan, 2017; Ford-Jones & Daly, 2020).

Outside of the typical academy, there are mental training programs available for first responders. These include Mental Health First Aid (Mental Health First Aid; 2022), which is designed for treating adults and youth and has several different modules. MHFA was chosen for this study because it is the only training program that has a specific module for first responders (Mental Health First Aid, 2022). MHFA was also chosen

because it is supported by several of the EMS Councils in Virginia and the National Association of Emergency Medical Technicians (NAEMT; National Association of Emergency Medical Technicians, 2022).

MHFA is a public training program designed to provide education regarding warning signs for mental illnesses (Hector & Khey, 2018; Kitchener & Jorm, 2002, 2006; Mental Health First Aid for Public Safety, 2022; Mental Health First Aid USA, 2022.; Mental Health First Aid, 2022; Mohatt et al., 2017; Morgan et al., 2018; Svensson et al., 2015). MHFA can help individuals acquire the skills, knowledge, and resources to assist individuals in a mental health crisis until the proper care can be reached or the crisis is over (Hector & Khey, 2018; Kitchener & Jorm, 2002, 2006; Mental Health First Aid for Public Safety, 2022; Mental Health First Aid USA, 2022.; Mental Health First Aid, 2022; Mohatt et al., 2017; Morgan et al., 2018; Svensson et al., 2015). The modules of MHFA for first responders include MHFA for Public Safety (2022) for law enforcement officers and MHFA for Fire and EMS (Mental Health First Aid, 2022). Both of these are focused on first responders' mental health and how their mental health corresponds to their jobs in providing care to those who are in a mental health crisis or who have a mental health disorder (Mental Health First Aid, 2022).

The original MHFA is designed to bring awareness of mental health to the community (Mental Health First Aid, 2022), and there are modules for different professions. Military Mental Health First Aid (MMHFA) consists of mental health training for those who interact with service members or veterans with mental illnesses (Mental Health First Aid, 2022; Mohatt et al., 2017). Youth Mental Health First Aid (YMHFA) is a mental health training program tailored for adults who interact with

adolescents regularly (Childs et al., 2020; Mental Health First Aid, 2022; Morgan et al., 2018). YMHFA includes education regarding common mental health disorders among teens and children (Childs et al., 2020; Mental Health First Aid, 2022; Morgan et al., 2018). The different modules of MHFA assist individuals in their respective fields of work, while also helping the professional or community member use the information in their personal lives.

There are eight dimensions of wellness: social, emotional, spiritual, intellectual, physical, environmental, financial, and occupational (Substance Abuse and Mental Health Services Administration [SAMHSA], 2016). Swarbrick and Yudof (2015) stated that these eight dimensions are a part of an individual's wellness and if the eight dimensions are not balanced a person's wellness can be negatively affected, which in turn has a negative impact on an individual's quality of life and longevity. Baier et al. (2019) and Engel (1977) stressed the importance of a biopsychosocial approach to caring for individuals. Such an approach is helpful because all these dimensions are linked together; one dimension has an effect on all others (Baier et al., 2019; Engel, 1977). If one dimension, such as emotional, is not balanced, then they all become unbalanced; it throws life and wellness off balance. MHFA training teaches the importance of having a balance between the eight dimensions as a way to preserve the mental health of first responders (Mental Health First Aid Training, 2022). This can be done through self-care so that first responders are in the best mental space to help other individuals (Mental Health First Aid Training, 2022).

In addition to research on the importance of biopsychosocial and spiritual training for those who help those in crisis, the Bible provides examples of caring and helping

others and the importance of training. The examples provided are all from the English Standard Version (2011) of the Bible except where noted. Proverbs 3:27 (New International Version [NIV], 2011) states, “Don’t withhold good from someone who deserves it, when it is in your power to do so.” In Philippians 2:4 (Common English Bible [CEB], 2011), the Bible states, “Instead of each person watching out for their own good, watch out for what is better for others.” The implication to first responders is that if they get proper mental health training, they will have the ability and power to help and care for people who otherwise may not get help for various reasons. These reasons include that they may not understand they need help, that help is available for them, or that getting help would be in their best interest.

These examples from the Bible can be applied to first responders, who need training to best help people who need their help. First responders are not given the training needed to help individuals with mental illnesses. God stresses the importance of training in the ability to help others when he trained his disciples in the Bible. Mental health training of first responders needs to be studied because in the Bible God sees helping others and training as being important, and the one cannot help someone to the extent they may need it without receiving the proper training to do so. Below is a Biblical overview of what God says about training and helping others.

God provided several examples in the Bible of the ways in which we can help people in need, such as those who are in a mental health crisis or who are suffering from a mental illness. God asked for people who He could send to help others who would do so without being truly rewarded for it most of the time (Isaiah 6:8; Matthew 10:8). A first responders’ job is to put their life on the line (John 15:13). Some first responders put

others first by volunteering to do that job (Philippians 2:4). Their role answers God's plea for assistance for those in mental health crises or who suffer from a mental illness (Isaiah 6:8).

By sending first responders who volunteer to help people every day, God is sending help to those who have crushed spirits, are brokenhearted, and who can use someone to help them end those troubles and get the care they need (Psalm 34:17-20). First responders help people who are weak and need help casting out the wicked thoughts, voices, and feelings that are in their heads (Psalm 82:3-4) and serpents (Luke 10:19) that are part of the devil's schemes (Matthew 10:8; Ephesians 6:10-11) to try and get them to turn away from God by possibly harming themselves in a manner that could lead to suicide.

When people hear the term, *peacemaker*, they often think of police or law enforcement officers (Matthew 5:9; Ephesians 6:10-11). First responders are also peacemakers because they help quiet the demon and serpent voices or thoughts in people's minds that are causing harm to them, and in this way, they are able to bring them peace (Psalm 82:3-4; Matthew 5:9; Luke 10:19; Ephesians 6:10-11).

First responders can help shine light into the darkness of those who are in a mental health crisis or who are suffering from a mental illness to make things seem not so bad (Matthew 5:16; Luke 1:79). First responders can also help bear the burdens of those in a mental health crisis or suffering from a mental illness and help them to get better (Psalm 138:7; Proverbs 27:17; Galatians 6:2). First responders can do this by being kind and forgiving of the actions, speech, and behaviors of those who are in a mental health crisis or who are mentally ill (Psalm 138:7; Ephesians 4:32). To carry out their

responsibilities, first responders must be slow to speak and anger so that they can hear people, try to understand what they are going through, and help them to feel they are not so alone (James 1:19).

In the Bible, there are illustrations provided by God for how we are to help one another, love one another, as well as the importance of training and respecting others. Specific examples are found in the stories of Esther, Job, and the Good Samaritan. In the book of Esther, God shows how he placed Esther as a Jew at court to help her people, the Jews. God places us where we are needed or in positions to help someone when He feels it is very beneficial to one or both individuals. God places first responders in positions to help people in their hour of need and often in the worst day or time in their life when they desperately need help. This book of the Bible shows that Esther was initially afraid of helping her people because of what it might mean for her (Esther 4:11). God shows that even though we may be afraid to help someone because of possible outcomes or challenges that we might face in doing so, we should still help because it could be the one thing that saves that person's life and gets them the help that they need. This is pertinent to this study because first responders may feel scared or be inadequately prepared to interact with someone who is in a mental health crisis.

Job 2:7-13 provides the story of Job and three of his friends who came to help him when he was sad and depressed after everything had been taken away from him. They wanted to comfort him and make him feel better and show him support (Job 2:11-13). They did not say anything to him, but they sat with him and were there for him (Job 2:11-13). Sometimes simply having the companionship or support of someone is all that is needed to help people get through a difficult time. First responders are often tasked with

being supportive companions during difficult times for those in medical and mental health emergencies. Sometimes first responders show support and help by holding someone's hand, talking them through what is going on, or having a simple conversation with the individual about everyday matters. All of these actions can make individuals in the midst of trauma feel better and show them there is someone that can help them, support them, and care for them.

Luke 10:25-37 provides the story of the Good Samaritan, in which God provides an example of how to help a person in need. In this story, the Good Samaritan encountered a man who was injured, and he stopped to help him; he took him to an inn where he paid for the man's room and board (Luke 10:25-37). The Good Samaritan behaves in a manner similar to what first responders do when they receive calls to help people who are injured or suffering, and they help these individuals get the care they need for their injuries or mental health. God teaches us to not only love our neighbor in this story but to also have compassion (Luke 10:25-37; Colossians 3:12). The Samaritan showed sensitivity to the needs of his neighbor, although his neighbor was different from himself (Luke 10:25-37; Ephesians 4:32; 1 Peter 3:8).

Through this story, God is telling us to not look past or ignore those in need, but to look at their needs and help them, like the Samaritan did (Luke 10:25-37). The Good Samaritan responded to the man in need in the same way as he would want someone else to treat him during a time when he was in need or if he were in that person's situation (Matthew 7:12). Often when first responders are off work and come across someone who needs help, they do not ignore them; they help them. First responders help people, their neighbors, no matter what they need or what circumstances led them to each other.

In Matthew 10, Jesus trained his disciples. In the example of Jesus training the 12 apostles to spread his word and teach others about Him, Jesus shows the importance of training someone to do their job (Matthew 10). First responders receive training when they get a new piece of equipment, a new medication to use, or a new protocol or policy is implemented. The same should apply to the training of first responders about mental health issues. First responders need training when new things come out about mental health and mental illnesses. They must be taught how to respond, handle, deescalate those situations with individuals who are sometimes volatile because of their mental health. The mental health training of first responders is of the utmost importance because first responders are not specifically trained in mental health; their training with respect to mental health is limited compared to what they learn about the physical health of a person.

In John 4: 1-26, there is a story of a Samarian woman that Jesus met at the well. In this story, Jesus shows respect for someone, even though she was from a different culture (John 4:1-26). First responders are often tasked with caring for individuals who need mental or medical help, but who may be different in many ways. First responders are taught to show respect to individuals no matter the circumstances.

The examples from the Bible were provided to show the importance of training so that trainees are able to offer the best help to someone. God views helping people and having the training to do so as critically important. In the context of first responders, they cannot help someone to the best of their ability if they do not receive the proper training to do so. First responders receive a great deal of medical training to assist individuals in medical emergencies. However, it is possible that first responders do not receive

sufficient training to assist people with mental health concerns or who are in a mental health crisis. Supporting these first responders to get the treating they need is supporting the biblical way. This leads into the problem statement and the need for mental health training of first responders.

Problem Statement

Mental health issues have become more prevalent and continue to increase each year (Edmond et al., 2015; NAMI, 2020). As a result, more emergency calls are made concerning individuals with a mental illness or who are experiencing a mental health crisis (Cacciatore et al., 2011). The Virginia Department of Behavioral Health and Developmental Services (2021) reports about 20% of their population are involved in an emergency call about a mental health crisis. With the increase in these calls, first responders should know how to deescalate and respond to these types of situations, as well as how to adequately address acute the mental health needs of individuals, which may be wide-ranging. In training to become a first responder, education is primarily centered around the physical health of the patient, with very little time devoted to mental health (Ford-Jones & Chaufan, 2017; Ford-Jones & Daly, 2020; Friedman et al., 2020). First responders are tasked with getting external, supplemental mental health training, if it is available in their area, or relying on first-hand experience or trial-and-error. In order to be prepared to assist people with mental health issues, firefighters and EMTs must access supplemental mental health trainings, such as MHFA (Ford-Jones & Chaufan, 2017; Ford-Jones & Daly, 2020). The mental health training of first responders is important and needs to be addressed in all localities and in their education.

There is limited research on firefighters and EMTs/EMS and the mental health crisis training received (Baier et al., 2019; Emond et al., 2019; Ford-Jones & Chaufan, 2017; Ford-Jones & Daly, 2020; Hector & Khey, 2018; Hoge & Hirschman, 1984). In a review of the literature, Emond et al (2019) indicated that 10 of the 14 studies reviewed reported a need for more mental health training for first responders. There is also limited training for firefighters and EMTs when it comes to mental health training (Edmond et al., 2019; Ford-Jones & Chaufan, 2017; Ford-Jones & Daly, 2020; Friedman et al., 2020). One existing training program is the MHFA training program, in which first responders are trained in how to respond, handle, and deescalate a situation involving an individual in a mental health crisis or who is suffering from a mental illness.

However, as indicated by Forthal et al. (2021), there is limited evidence to support whether MHFA improves the trainees' ability to help those with a mental illness. In particular, attitudes toward mental health and confidence in responding would affect the care provided by first responders with insufficient training (Forthal et al., 2021). Therefore, the main areas needing further research are the extent to which MHFA corrects erroneous beliefs and stigmas regarding people with mental illness that might be a barrier to having confidence in responding and thus responding effectively. More research is also needed in discovering the benefits of MHFA training to first responders and those they help. The problem is that mental health related emergency calls are increasing and there is a gap in the mental health training of first responders on how to handle these situations and calls, as is supported by current literature.

Purpose of the Study

The purpose of this mixed method study was to examine the effectiveness of a mental health training on first responders' knowledge, beliefs, stigmas, comfort level, confidence, ability to identify mental health symptoms, and the benefits of MHFA for first responders and those with a mental illness they help. First responders took the MHFA training, along with a pre- and post-training survey, which was used to assess the components (i.e., beliefs, stigmas, comfort level, confidence, ability to identify mental health issues, knowledge, and the benefits of MHFA for first responders and those with a mental illness they help) that the training specifically targets. The study examined levels of perception and knowledge, as well as other components prior to training and how these may have altered after training.

Research Question(s) and Hypotheses

Research Questions

Quantitative Questions

RQ1: What influence does MHFA training have on first responders' mental health literacy?

RQ 2: Will the knowledge of first responders about mental health and mental illnesses improve as a result of the training they receive, as measured by pre- and post-training scores?

RQ 3: Will first responders' stigma levels in assisting someone in a mental health emergency decrease after attending a MHFA training compared to before the training?

RQ 4: Will first responders' comfort levels in assisting someone in a mental health emergency increase after attending a MHFA training compared to before the training?

RQ 5: Will first responders' confidence increase with assisting someone in a mental health emergency increase after attending a MHFA training compared to before the training?

RQ 6: Will first responders increase in their ability to identify mental illness after attending a MHFA training compared to before the training?

Qualitative Questions

RQ 7: How do first responders describe their experience with MHFA training?

RQ 8: How do first responders describe the benefits seen from being trained in MHFA, both to themselves and the individuals they serve?

Hypotheses

Hypothesis 1: First responders will show significant increase in scores on the Mental Health Literacy Scale after training when compared to pretraining.

Hypothesis 2: First responders will show significant increase in scores on the knowledge subscale of the Mental Health Literacy Scale after training when compared to pretraining.

Hypothesis 3: First responders will show significant decrease in scores on the stigma subscale of the Mental Health Literacy Scale after training when compared to pretraining.

Hypothesis 4: First responders will show significant increase in scores on the Comfort Scale after training when compared to pretraining.

Hypothesis 5: First responders will show significant increase in scores on the Confidence Scale after training when compared to pretraining.

Hypothesis 6: First responders will show significant increase in scores on the identification ability subscale of the Mental Health Literacy Scale after training when compared to pretraining.

Assumptions and Limitations of the Study

The first assumption of the study was that first responders are not adequately trained to deal with mental health related issues in their typical training and that the training is needed. Additionally, it was assumed that participants would respond as honestly and as in-depth as they could to questions. Limitations included that the survey items were self-reported, and therefore the study runs the risk of biased responses and the possibility for human error. The study was also purposely delimited to first responders in VA, which may affect the generalizability of the results to first responders in other regions of the country.

Theoretical Foundations of the Study

Two theories serve as a framework to offer a deeper understanding of this study: mental health literacy and social reference theory. Mental health literacy addresses the beliefs that an individual has about mental health disorders that assist them in recognizing, managing, and preventing mental health disorders (Jorm et al., 1997; Jorm, 2000). Mental health literacy includes the ability to recognize certain mental health disorders or mental health crisis situations. It encompasses the understanding of risk factors and causes of certain mental health disorders, of self-help options or treatments,

of professional help and resources available, and how to get mental health information. Mental health literacy includes attitudes that help to direct an individual to seek mental health help (Jorm et al., 1997; Jorm, 2000). MHFA incorporates mental health literacy into its training so that first responders are better equipped to provide critical timely aid to individuals in need.

Social reference theory holds that perceptions come from references, which when manipulated can alter an individual's perceptions (Zhang, 2013; Zhao & Zhang, 2020). The theory stresses that a person's perceptions can be manipulated by their references (Norviltis & Zhang, 2009; Zhao & Zhang, 2020). Everyone has different responses to the same social contexts or environments, called social facts (Zhao & Zhang, 2020). As a result, each individual interprets social facts differently (Zhao & Zhang, 2020). These different interpretations exist because of the differences in references, or influencing information, each individual has (Zhao & Zhang, 2020). As a result of individuals having different perceptions of the same social facts, conflicts can occur (Zhang, 2013; Zhao & Zhang, 2020). Social reference theory suggests that in order to change a person's perception one much change or manipulate their references used to create that perception (Zhang, 2013; Zhao & Zhang, 2020). Moreover, according to the theory, a perception is built on a reference; without a reference a perception cannot exist (Zhang, 2013; Zhao & Zhang, 2020). MHFA training works to alter an individual's negative perceptions about mental health, mental illness, and individuals who have a mental illness by changing the reference that originally created these negative perceptions in favor of positive perceptions.

The constructs of focus for the biblical foundation for this study are the illustrations that God gives in the Bible for how we are to help others, love one another, respect others, and the importance of training; these illustrations are provided through various Bible verses and Bible stories, including Ester, Job, the Good Samaritan, Jesus leading his disciples, and the Samaritan women at the well.

Definition of Terms

The following is a list of definitions of terms that are used in this study.

Attitudes: Attitudes are emotions an individual has that are related to a specific person, scenario, or object, that are associated with past experiences or teachings. According to the APA Dictionary, an attitude is "any subjective belief or evaluation associated with an object" (VandenBoss, 2007, p. 83).

Comfort level: Comfort level refers to a point in which an individual feels safe and at ease within a given scenario, place, or situation. Within the context of this study, it refers to first responders feeling comfortable assisting individuals with mental illness or in the midst of a mental health crisis.

Confidence level: Confidence level refers to a point in which individuals believe in themselves and their ability to respond to and handle situations. Within the context of this study, confidence refers to first responders' confidence in themselves in assisting individuals with mental illness or in a mental health crisis.

Crisis intervention team (CIT) training: CIT training is a training program that was originally used to reduce the number of officer and citizen injuries but has since become a process of diverting people with a mental illness or in a mental health crisis away from the criminal justice system (Rogers, MacNiel et al., 2019; Rodgers, Thomas et

al., 2019). This training teaches officers how to best handle situations in which mental illness or individuals with a mental illness are involved (Mental Health First Aid Public Safety, 2022). The training teaches first responders, excluding law enforcement officers, about various mental health problems, ways to deescalate a situation, and the community resources for mental health treatment that are available (Ohio First Responders Get Intervention Training, 2019).

First responders: First Responders are those in occupations that are responsible for responding to emergency events, including law enforcement officers, firefighters, and EMTs. However, this study will focus on firefighters and EMTs, as the study was designed to address their need for mental health training.

Identification ability: The ability for individuals to correctly identify and recognize a mental illness or mental health crisis (Jorm, 2000).

Mental health first aid (MHFA): MHFA is a public training program designed to increase individuals' awareness of the warning signs of mental illnesses and provide them with the skills, knowledge, and resources to help an individual get the care they need in the moment until the proper care can be provided or the crisis is over (Mental Health First Aid, 2022). There are specific modules of MHFA for first responders, such as the MHFA for Public Safety (2022) and MHFA for Fire and EMS (Mental Health First Aid, 2022). These trainings are focused on the mental health of first responders and individuals with mental illnesses encountered on the job (Mental Health First Aid, 2022). YMHFA is a training program specifically about the mental health of youth and is for those who interact with youth (Childs et al., 2020; Mental Health First Aid, 2022;

Morgan et al., 2018). MMHFA is a training program specifically about the mental health of service members and veterans (Baier et al., 2019; Mental Health First Aid; 2022).

Mental illness: Mental illness is defined as a disturbance in an individual's cognitions, emotions, or behaviors that are indicative of a dysfunction in a person's psychological, biological, or developmental processes and mental functioning (American Psychiatric Association [APA], 2020).

Perceptions: Perceptions are based on the references or influencing information an individual uses as a guide that leads to their behaviors or reactions toward an individual or situation (Zhang, 2013; Zhao & Zhang, 2020). References manipulate perceptions, as references changes perceptions change (Zhang, 2013; Zhao & Zhang, 2020).

Stigma: In the context of this study, stigma refers to stigma regarding mental health. Stigma includes negative perceptions and misperceptions toward individuals with a mental illness or in a mental health crisis; such misperceptions or biased beliefs or perceptions can lead to discrimination, in which a person with a mental illness is treated badly as a result of their illness (Mental Health First Aid Training, 2022). Stigma can keep people from getting help for their mental health needs (Mental Health First Aid Training, 2022).

Significance of the Study

The significance of the study stemmed from its aim to address the gap in the mental health training of first responders. With the increase in mental health calls, first responders are ill-prepared to face the crisis situations that involve individuals with mental illnesses (Roberts & Henderson, 2009). Through evaluating first responders' level

of comfort, confidence, and mental health literacy, including knowledge of mental health, ability to identify mental health disorders, stigma, before and after they take the training, this study could highlight the importance of MHFA training for first responders (Forthal et al., 2021). It will also show the perceived benefits of mental health training of first responders to first responders and their jobs (Forthal et al., 202; Happell et al., 2015).

The findings of this study could also bring awareness to the gap in the level of training first responders currently receive about mental health and improvements that may be made to their current training (Emond et al., 2019; Ford-Jones & Chaufan, 2017; Ford-Jones & Daly, 2020; Forthal et al., 2021; Friedman et al., 2020; Happell et al., 2015; Maslowski et al., 2019;). This awareness includes the benefits MHFA training may have on first responders and those they help who have a mental illness or are in a mental health crisis (Maslowski et al., 2019; Forthal et al., 2021; Happell et al., 2015; Ford-Jones & Chaufan, 2017; Ford-Jones & Daly, 2020; Friedman et al., 2020; Emond et al., 2019). Hopefully the findings of this study can be applied to other state fire and EMS departments and perhaps even law enforcement departments as well. Also, the findings may be able to show the importance of mental health training, especially MHFA training, for everyone not only first responders.

Summary

As a result of the increase in mental health calls (CDC, 2013, as cited in Bhatta, 2018; Kessler et al., 2007; NAMI, 2020; Virginia Department of Behavioral Health and Developmental Services, 2021), it is more vital than ever that first responders are adequately prepared for their encounters with individuals with mental illnesses or who are in a mental health crisis. MHFA is a training that provides first responders with

awareness of mental health conditions. First responders who are trained in MHFA will have a better capacity to help individuals in need by shifting their beliefs, stigmas, and perceptions about mental illnesses and individuals with a mental illness (Childs et al., 2020; Happell et al., 2015; Kitchner & Jorm, 2002; Mohatt et al., 2017; Morgan et al., 2018; Svensson et al., 2015).

After training, first responders will be more knowledgeable about mental health and mental illnesses, and as a result, have more confidence and feel greater comfort in responding to calls that may be mental health related. According to the theoretical framework of this study, the benefits of MHFA training occur due to social reference theory and mental health literacy (Jorm, 2000; Jorm et al., 1997; Norviltis & Zhang, 2009; Zhang, 2013; Zhao & Zhang, 2020). In the next chapter, the current research regarding mental health training of first responders will be reviewed.

CHAPTER 2: LITERATURE REVIEW

Overview

This chapter provides a review of the literature on first responders and their mental health training. The academic literature includes the various types of mental illnesses and training, as well as the secondary, supplemental training programs of CIT training, MHFA for Fire and EMS, MMHFA, YMHFA, MHFA for Public Safety, and mobile crisis teams (MCT). The main focus of this study is MHFA training, specifically MHFA training of Fire and EMS. This review includes the current state of research, theoretical knowledge, and practical knowledge at the time of this writing on MHFA training of Fire and EMS. A review of the biblical literature on this topic encompasses people and their love for others, help for others, and respect for others, as well as training. These topics will be explored through Bible verses and the Bible stories of Job, Esther, the Samarian women at the well, the Good Samaritan, and Jesus' training of the disciples. This chapter will begin with a description of how the research was found, followed by a review of the research literature, and ending with the biblical foundations of the study.

Description of Search Strategy

The Jerry Falwell Library database and Google Scholar were searched using many different key words. These key words included "mental health training of first responders," "mental health training of emergency medical technicians (EMTs)," "mental health training of paramedics," "mental health training of firefighters," "mental health training of law enforcement." Other key words were "CIT training of first responders," "CIT training of EMTs," "CIT training of paramedics," "CIT training of firefighters," " CIT training of law enforcement," "crisis intervention team training of first responders,"

and “crisis intervention team training of EMTs.” Searches were also conducted using the key words, “crisis intervention team training of paramedics,” “crisis intervention team training of firefighters,” “crisis intervention team training of law enforcement;” “first responder mental health training,” and “EMT mental health training.” In order to search for MHFA trainings, the following key words were used: “firefighter mental health training,” “paramedics mental health training,” “mobile crisis teams,” “mental health first aid training firefighters,” “mental health first aid training emergency medical technicians,” “mental health first aid training first responders,” “mental health first aid training,” “public safety mental health first aid training,” and “mental health first aid public safety training”. Bible verses were found by using topical Bible study books, Google, and the topical index in the back of the Bible for words that are similar and coincide with “first responders,” “law enforcement,” “firefighters,” “paramedics,” “EMTs,” “mental illness,” “mental health,” “crisis.” In addition, the following key words were useful in discovering pertinent biblical stories for the background of this study: “helping people,” and “training” with words, such as “training,” “helping,” “helper, ” “peacemaker, ” “burdens,” “love, ” “respect, ” and “learning.”

Review of Literature

This section provides a review of the literature on the mental health training of first responders. An overview of the research and literature on mental illness, training, and the most current training programs of first responders at the time of the study are included. This will also include the first responder mental health training of MHFA of Fire and EMS.

Mental Illness

Mental illness is classified as a disturbance in a person's cognitions, emotions, and behaviors that are indicative of a dysfunction in a person's psychological, biological, or developmental processes and mental functioning (APA, 2020). As discussed previously, the number of individuals in the US reporting having experienced a mental illness at some point in their life is staggering, with nearly 50% of adults having had such experience (Kessler et al., 2007; NAMI, 2020). Each year, approximately 20% of adults are diagnosed with a mental illness, whereas 17% of adults are reported to have optimal mental health (CDC, 2013, as cited in, Bhatta, 2018), with many going undiagnosed and untreated. With each passing year, mental illnesses have become more prevalent, and as a result, have become a major world-wide concern (Edmond et al., 2015; Edmond et al., 2019; NAMI, 2020). WHO recognizes mental illness as being a global issue that leads to morbidity and mortality (Edmond et al., 2015; Edmond et al., 2019).

With the documented need for treatment among individuals likely to experience a mental illness in their lifetime, a discussion of barriers that may keep individuals from receiving mental health care is warranted. Bauer et al. (2018) conducted a study with 324 participants to determine the barriers that were perceived to keep an individual from seeking mental health help. They also investigated the level of these barriers among different populations. The barriers used in the study included telephone contact problems, travel problems, issues involving distance of traveling, communication difficulties, glitches in the system, and other life commitments (Bauer et al., 2018). The study's findings showed that individuals who have a mental illness face more barriers when receiving care than those who are disabled, minorities, or elderly (Bauer et al., 2018).

Two of the barriers they face in accessing treatment are travel distance and communication difficulties (Bauer et al., 2018). Finally, glitches in the system and other life commitments were the highest-ranking barriers for these individuals (Bauer et al., 2018).

Vogt et al. (2014) also conducted a study about barriers to receiving mental health treatment. Their study examined individuals' own negative beliefs about mental health treatment and the stigmas other individuals have about mental illness. They administered several questionnaires that had been in existence, as well as ones they modified for the study to 640 U.S. veterans. (Vogt et al., 2014). These included the Endorsed and Anticipated Stigma Inventory, the 17-item PTSD Checklist-Military version, the 7-item Beck Depression Inventory-Primary Care, CAGE, 2001 Veterans Health Study, and the 13-item Marlowe-Crowne Social Desirability Scale (Vogt et al., 2014). The CAGE is comprised of the first letter of the four questions asked (i.e., cutting down, annoyance by criticism, guilty feeling, and eye-openers; Vogt et al., 2014).

The results showed that due to one's occupation, individuals, especially veterans, can develop stigmas about mental illnesses and the idea of receiving mental health treatment (Vogt et al., 2014). Vogt et al. (2014) found that 33.3% participants reported having a primary concern that colleagues would stigmatize them for seeking mental health care. More than half believed that "their career options would be limited" (p. 331) if they were to seek care, and nearly half were concerned that "co-workers would "think they were not capable of doing their jobs" (p. 331). The study also found that 5.1% had negative understandings about mental illness, 7.5% had negative understandings about mental health treatment, and 24.3% had negative understandings about seeking mental

health treatment (Vogt et al., 2014). Moreover, on individual items, over 25% stated than "that it would be difficult to maintain a normal relationship with someone with mental health problems and that people with mental health problems often use their problems as an excuse" (p. 310).

First Responders and Mental Health Related Calls

The increase in mental illnesses experienced by individuals each year has created an increase in mental health related crisis calls for first responders (Cacciatore et al., 2011; Ford-Jones & Chaufan, 2017; Ford-Jones & Daly, 2020). Approximately 7% of the emergency calls that law enforcement responds to are mental health or mental illness related (Deane et al., 1999). Other first responders, such as firefighters and EMTs, are increasingly responding to mental health-related calls in addition to normal accidents, fires, and other medical emergencies (Cacciatore et al., 2011; CBC News, 2012; CTV News London, 2015; Ford-Jones & Chaufan, 2017; Ford-Jones & Daly, 2020). EMTs and EMS are seeing an increase in the number of mental health calls they are responding to (Ford-Jones & Chaufan, 2017).

In 1980, an estimated 15% to 40% of calls for EMTs in urban areas of Georgia were mental health-related (Hampton, 1980, as cited in Hoge & Hirschman, 1984). In 2012, CBC News reported that 40% of EMT/EMS calls are mental health related. CTV News London (2015) reported that mental health related calls have increased from 5% to every call having some aspect that is related to mental health. In VA, approximately 20% of the population had been in a mental health crisis that resulted in first responders being called (VA Department of Behavioral Health and Developmental Services, 2021).

EMTs/EMS typically provide care to people while on the scene of an emergency call or while transporting a patient (Ford-Jones & Chaufan, 2017). This care can include intubations, cardiac emergencies, giving medications, trauma response, minor injuries, major injuries, and whatever other medical care a person needs before they can be transported or while being transported to a hospital. However, first responders more frequently have to provide care for individuals who are in a mental health crisis due to an increase in individuals with mental illness, barriers to treatment, and lack of people getting help (Ford-Jones & Chaufan, 2017).

Roberts and Henderson (2009) surveyed 74 first responders, examining their beliefs about their role assisting individuals with a mental illness, their education and training on mental illness, and their interactions with these individuals. Some first responders reported that they did not believe mental health- related calls were part of their job or within their job parameters. They believed they were only responsible for transporting these individuals so they could receive the proper care (Roberts & Henderson, 2009). Some first responders in the study also believed that they needed more training about mental illnesses because they did not think they were adequately prepared to deal with an individual with a mental illness (Roberts & Henderson, 2009). They reported they needed to know more in order to appropriately handle these types of calls and situations (Roberts & Henderson, 2009).

With the increase in mental-health-related emergency calls, first responders are being called on to take on new roles. Cacciatore et al. (2011) conducted a study about crisis response teams, which are comprised of social workers and first responders working together. The study conducted a review of current research on social workers in

fire departments and inquired into the knowledge and skills needed of social workers (Cacciatore et al., 2011). The results of this study showed that firefighters must take on new roles compared to the ones they had previously; these new roles include responding to mental health related calls and being trained as EMTs to accommodate these new roles (Cacciatore et al., 2011).

Ford-Jones and Chaufan (2017) conducted a study on the new roles of first responders as well, focusing on paramedics. Their study presented various debates about mental health calls among paramedics and suggested solutions, in addition to discussing the roles of paramedics (Ford-Jones & Chaufan, 2017). The results of the study showed that paramedics are responding to calls that are both life threatening and that can involve not only an individual's physical health but also mental health (Ford-Jones & Chaufan, 2017). Their study also showed that there is a need for training about mental health for paramedics as well (Ford-Jones & Chaufan, 2017). This study also showed the increase in mental health related calls that paramedics are responding to, which warrant mental health training (Ford-Jones & Chaufan, 2017).

Overall, first responders are having to respond to an increasing number of mental-health-related calls, for which they are generally unprepared; because such training is not adequately covered in formal training they receive. Baier et al (2019) conducted a study of 42 military veterans to show the gaps in the mental health training of first responders, professionals, and family who have contact with veterans, service members, and trauma survivors. Baier et al. conducted six focus groups for their study. Their findings highlighted the gap of knowledge about mental illnesses, which creates barriers for their ability to provide care (Baier et al., 2019).

The results also showed that there is a lack of military knowledge in those providing care and that others often fail to relate to and understand individuals and their mental health struggles (Baier et al., 2019). The results also showed a lack of understanding of the biological, psychological, and social factors that play an important role in the health and wellbeing of individuals (Baier et al., 2019). Moreover, the study's findings showed a lack of screening and referral tools and resources for these individuals (Baier et al., 2019).

Emond et al. (2019) conducted a meta-analysis to show the current research on how paramedics manage an individual with a mental illness using 14 current literature articles that met inclusion criteria. The results showed that there is a need for education and training for paramedics on how to manage individuals with a mental illness, as well as attitudes towards individuals with a mental illness (Emond et al., 2019). The results showed that the paramedics' perceptions regarding their roles need to be addressed (Emond et al., 2019).

Ford-Jones and Daly (2020) also conducted a study to bring awareness to the increasing demand for paramedics to respond to mental-health-related calls and the lack of training for responding to these calls. They interviewed 46 participants (i.e., 31 front-line paramedics, five paramedic service managers, five paramedic college program educators, and five physicians or managers in hospitals) and observed them while on duty. The results of the study showed that the interviewees expressed a lack of mental health training with little focus on mental health in their formal education and inconsistent training between education facilities where they received their education (Ford-Jones & Daly, 2020).

Moreover, the physical, medical, and trauma training they received vastly overshadowed their mental-health training (Ford-Jones & Daly, 2020). The results also showed that participants reported that any mental-health knowledge they had was gained through experiences of dealing with individuals with mental illness on the job (Ford-Jones & Daly, 2020). The results also showed that some participants view mental-health training as important as their anatomy, physiology, and pathophysiology training (Ford-Jones & Daly, 2020).

Similarly, Hoge and Hirschman (1984) conducted a study to evaluate, develop, and implement a mental health training program for EMTs, which could be taught in two separate 4-hour training sessions. The study included 36 participants who were college level EMT students who had received most of their medical training (Hoge & Hirschman, 1984). They were each given the two 4-hour training sessions followed by a post-skills test to gather evaluate the training (Hoge & Hirschman, 1984). The results showed that the mental health training could be effective even when taught in brief training sessions (Hoge & Hirschman, 1984). The results also showed that the mental-health training of EMTs is important for them and their handling of patients (Hoge & Hirschman, 1984).

As seen in this research, the mental health training of first responders is not only of vital importance for the civilians that they help, but also for the first responders themselves. According to Cacciatore et al. (2011), firefighters and EMTs need to know how to respond to not only the typical fires they encounter but also more traumatic and crisis type of calls, such as child abuse, domestic violence, death, accidents, and so many more in which mental health may be a prominent factor (Cacciatore et al., 2011). The increased prevalence of mental illnesses and mental-health-related emergency calls that

EMTs and EMS respond to indicates the need for mental health training of first responders.

Training

First responders need to be prepared to respond to mental illness and mental health-related calls, especially with the growing number of these types of calls. In the academies or during their formal education, first responders get minimal training in mental health, mental illness, or mental health crises (Baier et al., 2019; Ford-Jones & Daly, 2020; Friedman et al., 2020; National Highway Traffic Safety Administration's Office of EMS, 2018). This can be seen when looking at the National Emergency Medical Services Educational Standards: Emergency Medical Technician Instructional Guide, which shows the level of training or instruction that EMTs and EMS receive on different topics; there is minimal time dedicated to mental health and mental illnesses (National Highway Traffic Safety Administration's Office of EMS, 2018).

Mental health training for firefighters and EMTs is often limited, insufficient, and overshadowed by the physical, medical, and trauma training (Donnelly et al., 2017, as cited in Ford-Jones & Daly, 2020; Emond et a., 2019; Ford-Jones & Daly, 2020; Friedman et al., 2020). The speed at which first responders are pushed through training leaves less time for mental health-related training in their education programs (Ford-Jones & Daly, 2020). Ford-Jones and Daly (2020) conducted a qualitative study, interviewing 46 paramedics and people who work with them (i.e., 31 front-line paramedics, five paramedic service managers, five paramedic college program educators, and five physicians or managers in hospitals) to determine the education paramedics receive about mental illnesses, mental health training, and mental health related calls.

The participants emphasized the perception that they were getting limited and insufficient mental health training and that such training was overshadowed by the medical and physical training they were receiving. Roberts and Henderson (2009) completed a quantitative survey of 74 career paramedics that found that 50% of their study participants did not feel adequately trained for mental-health-related calls. Of the participants in their study, 75.9% reported less than 5 years of experience and 48.9% of those with over 5 years of experience did not feel adequately trained to respond to mental health related calls (Roberts & Henderson, 2009).

Such limited training has led many first responders to feel that they need more mental health training (Ford-Jones & Chaufan, 2017; Ford-Jones & Daly, 2020) to be adequately prepared to respond to mental health related calls (Ford-Jones & Daly, 2020). The conclusions of several researchers are that first responders are forced to rely on their limited training from the academy or their overall experience with mental illnesses or trial-and-error efforts to help people who are mentally ill in the course of their duties. Without proper training, first responders may have attitudes, perceptions, stigmas, lack of knowledge, and fears that interfere with their effectively responding to a mental health related call (Baier et al., 2019; Emond et al., 2015; Roberts & Henderson, 2009).

Emond et al. (2015) completed a pre- and post-test study of 25 undergraduate paramedic students and found that receiving mental health training decreased participants' perceptions that individuals with a mental illness are dangerous and violent. If allowed to go unchallenged by proper training, such perceptions may interfere with first responders' ability to provide care to individuals with a mental illness. Roberts and Henderson (2009) reported that 98.6% of first responders who participated in their study

believed that mental health treatment is not their main priority, rather transporting the patient is. Life threatening injuries and illness are their main priority and mental health is their second priority (Roberts & Henderson, 2009).

Training related to stigma about mental health issues is important not only because of the benefit of such training to the individuals first responders are called on to assist, but also in terms of first responders' own willingness to seek care for their own mental health issues, such as trauma in the course of one's duty (Vogt et al., 2014). Certain people (e.g., first responders, military personnel, men) perceive that seeking mental health help makes them appear weak and as though they cannot handle their job.

These types of stigma and beliefs about seeking mental health treatment, especially amongst service members, were reported by Vogt et al. (2014). Vogt et al. found that 33.3% of the participants reported having a primary concern that coworkers would stigmatize them for seeking mental health care. More than half believed that seeking care would limit their career options, whereas nearly half thought they would be perceived by coworkers as unable to carry out their responsibilities (Vogt er al., 2014).

Baier et al (2019) conducted a focus group of 42 professionals who work with military veterans to identify barriers common to veterans accessing mental health care. The 42 professionals were EMTs, law enforcement officers, firefighters, speech pathologists, occupational therapists, physical therapists, and nurses (Baier et al., 2019). Each focus group contained between six and 10 participants who were first responders or medical professionals (Baier et al., 2019). Baier et al. evaluated the education needs of individuals who work with or have contact with veterans as it pertains to their mental health needs and barriers. They found that treatment providers often lack an

understanding of an individual's occupation (Baier et al., 2019). In their focus group, the lack of knowledge about military culture was brought up as a barrier for seeking mental health help 52 times. For some veterans, help is not received due to a lack of access to treatment; there is no nearby facility or provider (Bauer et al., 2005). A lack of knowledge about mental health is common among certain occupation populations, and this lack of knowledge creates barriers to getting mental health help (Baier et al., 2019). In Baier et al.'s study, lack of mental health illness knowledge as it pertains to veterans and their job and the level of care that is received was brought up 278 times in the focus groups. This lack of knowledge could lead to negative attitudes, which include stigma regarding individuals with a mental illness (Emond et al., 2015).

The limited amount of mental health training first responders receive via formal education, in addition to the increase in mental health-related emergency calls, has led some first responders to turn to secondary, supplemental training programs to help fill in the gap of mental illness and mental health training (Baier et al., 2019; Childs et al., 2020).

Secondary, Supplemental Training

Due to the insufficient mental health training that is provided in their formal education, first responders have turned to secondary, supplemental training programs (Baier et al., 2019; Kitchener & Jorm, 2002; Kitchener & Jorm, 2006; Mental Health First Aid USA, 2022; Mental Health First Aid, 2022; Ohio First Responders Get Intervention Training, 2019). These secondary, supplemental trainings include CIT and MHFA and its variations (Childs et al., 2020; Kitchener & Jorm, 2002; Kitchener & Jorm, 2006; Mental Health First Aid, 2022; Mental Health First Aid USA, 2022; Mohatt

et al., 2017; Morgan et al., 2018; Ohio First Responders Get Intervention Training, 2019; Watson et al., 2019). These supplemental training programs are available throughout the United States to supplement the mental health training of first responders. The specific training for this research is MHFA. In the next section, the literature on MHFA is presented.

MHFA Overview

MHFA is a public training program that teaches the warning signs of mental illnesses and gives trainees the skills, knowledge, and resources to help individuals get the immediate care they need until they can receive the proper care or until the crisis is over (Hector & Khey, 2018; Kitchener & Jorm, 2002; Kitchener & Jorm, 2006; Mental Health First Aid, 2022; Mental Health First Aid for Public Safety, 2022; Mental Health First Aid USA, 2022; Mohatt et al., 2017; Morgan et al., 2018; Svensson et al., 2015). MHFA originated in Australia in 2000 by Kitchner and Jorm, a mental health professor and researcher (Hector & Khey, 2018; Kitchner & Jorm, 2002; Kitchener & Jorm, 2006; Morgan et al., 2018; Svensson et al., 2015). The training became available in the US in 2008 and has been adapted to include a wide variety of modules for different population needs (Mental Health First Aid USA, 2022). The training program is 8-12 hours, depending on the program and the country in which it is facilitated, and includes providing information about stigma, mental health knowledge, and a five-step action plan (Hector & Khey, 2018; Kitchener & Jorm, 2002, 2006; Morgan et al., 2018; Svensson et al., 2015). The five-step action plan includes providing training for dealing with panic attacks and overdoses, assessing for risk of suicide or harm, listening nonjudgmentally, giving reassurance and information, encouraging appropriate professional help, as well as

self-help and other support (Hector & Khey, 2018; Kitchener & Jorm, 2002; Kitchener & Jorm, 2006; Mental Health First Aid USA, 2022; Svensson et al., 2015).

The training provides trainees the skills, knowledge, and resources to assist an individual with a mental illness (Hector & Khey, 2018; Mental Health First Aid for Public Safety, 2022). MHFA training includes roleplaying and simulations to practice and learn skills (Mental Health First Aid USA, 2022). It also includes sections on trauma survivors, psychosis, and how to respond to overdoses (Kitchener & Jorm, 2002, 2006; Morgan et al., 2018).

In 2015, an act called the Mental Health First Aid Act was introduced to help fund MHFA training programs (Petruzzelli, 2015, as cited in Bhatta, 2018). This act gave $20 million in grants to fund MHFA training programs all over the US (Bhatta, 2018). Since this act went into law in 2015, Congress has provided on an annual basis $15 million in funding for MHFA training and $4 million specifically for MMHFA training (National Council for Behavioral Health, 2015, as cited in Bhatta, 2018). The goal of this funding was to make MHFA training as common as CPR training within the next 10 years (Bhatta, 2018). As of 2014, 21 states have passed legislation or introduced legislation related to MHFA (National Council for Behavioral Health, 2014, as cited in Bhatta, 2018). Other goals included using MHFA training to decrease gun violence through the education of mental health illnesses and to provide MHFA training to first responders (Bhatta, 2018).

MHFA Modules

There are various modules within MHFA that teach specific content related to mental health as it relates to the occupation of the trainees or of individuals in a mental

health crisis (Childs et al., 2020; Mental Health First Aid, 2022; Mental Health First Aid for Public Safety, 2022; Mental Health First Aid USA, 2022; Mohatt et al., 2017; Morgan et al., 2018). The special training programs within MHFA include MMHFA, MHFA for Public Safety, MHFA for Fire and EMS, and YMHFA (Childs et al., 2020; Mental Health First Aid, 2022; Mental Health First Aid for Public Safety, 2022; Mental Health First Aid USA, 2022; Mohatt et al., 2017; Morgan et al., 2018).

MMHFA is a mental health training program that educates individuals about mental illnesses that are common among service members or veterans, key symptoms they may display, and how to help them in a crisis (Mohatt et al., 2017). Trainees can include first responders who are likely to respond to veterans or service members in need and therefore need to know how to recognize common mental health illnesses among these service members and veterans. Whereas MMHFA provides MHFA as other modules do, it focuses more on providing first aid to veterans and service members (Baier et al., 2019; Mohatt et al., 2017). MMHFA is aimed at increasing the mental health education of military and civilians and preparing individuals to help service members and veterans in a mental health crisis (Mohatt et al., 2017). MMHFA comes into play for first responders who help veterans and service members who have PTSD, traumatic brain injuries (TBIs), suicidal thoughts, and many other mental illnesses caused by the psychological trauma of serving our country (Baier et al., 2019).

YMHFA is a mental health training program that is tailored for adults who have regular interactions with adolescents and includes common mental health disorders among teens and children, such as eating disorders (Childs et al., 2020; Mental Health First Aid; 2022; Morgan et al., 2018). YMHFA has the same core components as MHFA

but is more focused on providing help to teens and children (Childs et al., 2020; Mental Health First Aid; 2022; Morgan et al., 2018). This course has a modified training and five-step action plan that includes looking for warning signs, asking how the individual is, listening to them, and helping them connect with an adult; offering friendship is important (Childs et al., 2020; Hart et al., 2016).

There are specific training programs of MHFA for first responders, such as the MHFA for Public Safety (2022) for law enforcement officers, and MHFA for Fire and EMS (Mental Health First Aid, 2022). Both of these programs focus on the mental health of these first responders and how it corresponds to their jobs (Mental Health First Aid, 2022).

MHFA for Public Safety trains law enforcement officers to see the warning signs for mental illnesses in their department members and colleagues. Moreover, the training is aimed to provide them with the skills, knowledge, and resources they need to help those individuals get immediate care until the proper care can be reached through transport or until the crisis is over (Mental Health First Aid, 2022; Mental Health First Aid for Public Safety, 2022; Mental Health First Aid USA, 2022).

Efficacy of MHFA

MHFA and its modules have benefits that are different in some ways from other mental health training programs. Several studies have examined the benefits and changes that can occur to the trainees of MHFA and its modules. Childs et al. (2020) conducted a study on the MHFA module of YMHFA and its effectiveness, universalness, and the extent to which trainees are satisfied with it. The study administered YMHFA training to 1,709 individuals who encounter youth regularly through their profession; they were

given a pre- and post-training survey to evaluate the effects of the training (Childs et al., 2020). The results showed that YMHFA is effective, has a high satisfaction rate, and both the effectiveness and satisfaction are consistent among the different occupations involving youth (Childs et al., 2020).

MHFA has been likened to CPR training for the brain or for mental health and mental illness (Mental Health First Aid, 2020; Bhatta, 2018). This comparison is due to the lifesaving help that both offer to a person until further help can be reached (Happell et al., 2015; Mental Health First Aid, 2020). The goal is for MHFA to eventually become as common a training as CPR is so that first responders can give lifesaving help until professionals or other help can be reached (Bhatta, 2018; Happell et al., 2015; Mental Health First Aid, 2020). Several police departments, schools, and fire departments have begun to make MHFA mandatory for their staff, but to date a very limited number have done this (Mental Health First Aid Enacted Laws, 2018).

In other areas, MHFA is mandatory for juvenile detention officers, social workers, child welfare personnel, and foster caregivers (National Council of Behavioral Heath, 2014, as cited in Bhatta, 2018). Many individuals who have participated in MHFA and its special training programs have reported knowing little about mental illnesses or mental health prior to participating in these training programs (Baier et al., 2019). First responders and trainees have also reported a change in their stigmas, perceptions, attitudes, and beliefs in and about mental health and those with mental illness (Childs et al., 2020; Happell et al., 2015; Kitchner & Jorm, 2002; Mohatt et al., 2017; Morgan et al., 2018; Svensson et al., 2015). First responders and trainees have also reported an increase in their confidence in being able to help an individual and the amount of help they can

provide others, as well as a decrease in social distancing (Childs et al., 2020; Kitchner & Jorm, 2002; Mohatt et al., 2017; Morgan et al., 2018; Svensson et al., 2015). MHFA has been shown to increase trainees' ability to identify mental health illnesses as well (Mohatt et al., 2017; Morgan et al., 2018)

Forthal et al. (2021) conducted a review of the current research on MHFA, including the helping behaviors of trainees and the impact of their helping behaviors on individuals in a mental health crisis. The study consisted of a systematic review of nine studies (Forthal et al., 2021). These nine studies found that MHFA had a wide range of effects on the trainees and their skills, but no effect on their helpfulness or on the mental health of those who received help from trainees (Forthal et al., 2021). Three of the nine studies found that there was a significant increase in the use of skills learned from MHFA when trainers were responding to a call post-training (Forthal et al., 2021). Four of the nine studies examined recipients' report of the help received from MHFA trainees, but conclusions could not be drawn from the limited data (Forthal et al., 2021). With the exception of one study that indicated participants received an increase in information about mental health disorders (i.e., mental health conditions), recipients of MHFA did not report an increase in help from trainees (Forthal et al., 2021). These results showed that there is insufficient research on whether MHFA improves trainees' skills, knowledge, and ability to better assist those in mental health crises (Forthal et al., 2021).

Happell et al. (2015) conducted a study on MHFA and its purpose, effectiveness, and the limitations of its being used for education in health professions, specifically in nursing. It also provided the implications of using it as a substitute for core mental health studies. The authors conducted a database search for articles about the topic that met the

criteria and conducted a review of the literature. They did not report the number of articles the search yielded. Results showed that MHFA training has multiple benefits, including increased awareness and knowledge about mental health, mental health disorders, crisis situations, and treatment. Trainees also reported an increased ability to engage in conversations about mental health as a result of improved vocabulary (Happell et al., 2015), increased confidence in their ability to help others, and a decrease in stigmas that are linked to mental health disorders. They were also able to devise more effective plans to help others. However, the training level of nurses in MHFA or even mental health is not sufficient for someone in a medical profession (Happell et al., 2015). Happell et al. concluded that MHFA is more appropriate for a first responder level of training.

Kitchner and Jorm (2002) conducted a study to describe the MHFA training course and to report data on its effects. The study consisted of 166 participants who completed a survey immediately before and after receiving MHFA training and then completed a follow-up survey 6 months after the training (Kitchner & Jorm, 2002). The results showed an improved ability to recognize mental health disorders among trainees (Kitchner & Jorm, 2002). The results also showed changes in beliefs and stigmas about mental illnesses and individuals who suffer from a mental illness, and a decrease in trainees' social distance from individuals with mental health symptoms (Kitchner & Jorm, 2002). Moreover, trainees demonstrated an increase in confidence and in helping behaviors (Kitchner & Jorm, 2002).

Kitchner and Jorm (2006) also conducted a study in which they reviewed previous studies on MHFA training. They reviewed three published studies on MHFA with the

public in a city, in a workplace, and in a rural area (Kitchner & Jorm, 2006). The results showed that MHFA positively changed the knowledge, attitudes, and behaviors of participants (Kitchner & Jorm, 2006). The result also showed that MHFA training had mental health benefits on the participants as well (Kitchner & Jorm, 2006). A majority of the trainees were middle aged women who work with people a great deal, and they reported significant benefits 5 to 6 months after receiving the MHFA training (Kitchner & Jorm, 2006).

Maslowski et al. (2019) conducted a review of current literature on MHFA and the effects it has on trainees' mental health knowledge/mental health literacy, attitudes, helping behaviors, as well as trainees' behaviors when helping those with a mental illness. The meta-analysis analyzed 16 studies that met the inclusion criteria for the study (Maslowski et al., 2019). The inclusion criteria were that articles were limited to adult and youth MHFA training, were in English, were peer-reviewed, were intervention studies, yet dissertations/theses were included as well (Maslowski et al., 2019). The results showed that the initial quantitative evidence was limited to studies that examined the effects of MHFA training on the trainees, and these showed a lack of positive outcomes (Maslowski et al., 2019).

In addition, confidence levels in trainees were found to be higher than the actual help that was provided by the trainees. The results also showed that there were small changes in attitudes after the training and that confidence and behaviors did not increase over time with experiences, as would have been expected. The training had a small effect on the trainees' own mental health (Maslowski et al., 2019). Whereas results also showed that MHFA trainees seem to benefit from the training and that MHFA is an effective

intervention for assisting those with mental health disorders and those in a mental health crisis, behavioral changes in the trainees after MHFA training needs to be studied further (Maslowski et al., 2019). Additionally, further research needs to be conducted from the perspective of those who receive the help from first responders who received the MHFA training (Maslowski et al., 2019).

Morgan et al. (2018) also conducted a review of current research about the effectiveness of MHFA on improving knowledge about mental health, stigmas associated with mental health, and helping behaviors. The study included 18 studies that met the inclusion criteria (Morgan et al., 2018). The results showed that MHFA led to improved mental health knowledge of trainees (Morgan et al., 2018). The results also showed an improved recognition of mental health disorders by trainees and changed beliefs as well (Morgan et al., 2018). The results also showed improved confidence up to 6 months after receiving training by the trainees (Morgan et al., 2018).

Mental health training can cause a lot of changes in those who receive the training. Emond et al (2015) did a study to explore the perceptions of trainees about mental health before and after completing mental health training in a paramedic's course. The study consisted of 12 participants who complete both the pre- and post-training surveys (Emond et al., 2015). The results showed that prior to the mental health training they received, the participants had common misperceptions, myths, and misconceptions of individuals with a mental illness, which were altered as a result of completing the mental health training section of their training programs (Emond et al., 2015).

MHFA training of Fire and EMS

This research study focuses on the special training program or module of MHFA. MHFA trains them to recognize the warning signs for mental illnesses in their department members and colleagues and provides them the skills, knowledge, and resources to help those individuals receive the care they need until proper care can be reached, through transport, or until the crisis is over (Mental Health First Aid, 2022; Mental Health First Aid USA, 2022). It educates about the warning signs of mental illnesses in individuals they may encounter when responding to calls and provides them the skills, knowledge, and resources to help these individuals as well (Mental Health First Aid, 2022; Mental Health First Aid USA, 2022).

Current Research

There is limited research on the Fire and EMS training within MHFA training. Svensson et al. (2015) conducted a study on the MHFA training of first responders. Although they did not use the Fire and EMS module of the MHFA training for their study, they explored the experiences of first responders who participated in MHFA. Twenty-four participants who were from employment agencies, social insurance agencies, religious services, health care, and rescue services participated in focus groups 6 and 8 months after receiving MHFA training; they were individually interviewed as well (Svensson et al., 2015). The results showed that first responders who participated in the study wished there was a program specifically tailored for them (Svensson et al., 2015). The results also showed that first responders thought the training was useful and increased their awareness, knowledge, and understanding of mental health (Svensson et al., 2015). Moreover, the training appeared to have some impact on the attitudes,

approach, skills, and confidence of the first responders when encountering mental health calls (Svensson et al., 2015).

MHFA Training of Fire and EMS Practical Knowledge

MHFA is designed to assist first responders in learning about mental health and the ways in which they can help individuals until they are transported to the right mental health resources or the crisis is over and resource lists are provided (Childs et al., 2020; Kitchener & Jorm, 2002; Kitchener & Jorm, 2006; Mental Health First Aid, 2022; Mental Health First Aid for Public Safety, 2022; Mental Health First Aid USA, 2022; Mohatt et al., 2017). In MHFA trainings, first responders learn to recognize signs and symptoms of mental illnesses to better understand what they are dealing with and how to respond and act accordingly to improve their own safety and the safety of the patients they are helping (Kitchener & Jorm, 2002; Kitchener & Jorm, 2006; Mental Health First Aid, 2022; Mental Health First Aid for Public Safety, 2022; Mental Health First Aid USA, 2022; Mohatt et al., 2017).

The training provides a starting point so that the trainee is able to help someone with a mental illness or who is in a mental health crisis and determine the best way to help them (Kitchener & Jorm, 2002; Kitchener & Jorm, 2006; Mental Health First Aid, 2022; Mental Health First Aid for Public Safety, 2022; Mental Health First Aid USA, 2022; Mohatt et al., 2017). Like MHFA for veterans and service members (Baier et al., 2019; Bauer et al., 2005; Mohatt et al., 2017), MHFA training of Fire and EMS helps Fire and EMT first responders learn about their own mental health in addition to the mental health of others and their colleagues.

Gap in the Literature on MHFA training

Several studies have documented the effects of the MHFA training on comfort, confidence, knowledge, benefits of MHFA training for first responders and those with a mental illness they are helping, identification of mental health disorders, and stigma (Baier et al, 2019; Childs et al., 2020; Emond et al., 2015; Happell et al., 2015; Kitchner & Jorm, 2002; Kitchner & Jorm, 2006; Maslowski et al., 2019; Mental Health First Aid, 2022; Mental Health First Aid for Public Safety, 2022; Mental Health First Aid USA, 2022; Mohatt et al., 2017; Morgan et al., 2018; Svensson et al., 2015).

The limitations of existing literature regarding the benefits of training include the use of objective measures assessing improvement in the skills of trainees and the impact on recipients with mental health issues post training. in addition, research regarding the effects of MHFA in improving a trainee's ability to help individuals with a mental illness is limited (Forthal et al., 2021). There is also limited research to support the benefits of MHFA training on the first responders and on the recipients of their services (Forthal et al., 2021; Maslowski et al., 2019).

Even though mental health-related calls and mental illnesses are constantly rising, there is limited research on the mental health crisis training of first responders (Baier et al., 2019; Hector & Khey, 2018; Hoge & Hirschman, 1984; Ford-Jones & Chaufan, 2017; Ford-Jones & Daly, 2020). What limited research there is shows that there is insufficient mental health training for first responders due to lack of time and overshadowing (Baier et al., 2019; Childs et al., 2020; Donnelly et al., 2017, as cited in Ford-Jones & Daly, 2020; Emond et al., 2019; Ford-Jones & Chaufan, 2017; Ford-Jones & Daly, 2020; Friedman et al., 2020; National Highway Traffic Emergency Administration's Office of EMS, 2018; Roberts & Henderson, 2009). As a result of the limited training, first

responders are forced to rely on secondary, supplemental trainings, including MHFA and CIT (Biaer er al., 2019; Childs et al., 2020; Kitchner & Jorm, 2002; Kitchner & Jorm, 2006; Mental Health First Aid, 2022; Mental Health First Aid USA, 2022; Mohatt et al., 2017; Morgan et al., 2018; Ohio First Responders Get Intervention Training, 2019; Watson et al., 2019). There is also limited research on specifically the MHFA module of Fire and EMTs/EMS (Svensson et al., 2015).

The current study will address the gap in the literature by using a mixed methods approach to examine the effectiveness of MHFA training on first responders. It proposes to use a pre- post-training survey to examine the effect of the training on participants' knowledge, beliefs, stigma, comfort level, confidence level, and ability to identify mental health symptoms. It will also assess the trainees' perceptions of the benefits of MHFA for first responders and those with a mental illness who will be receiving their help.

Biblical Foundations of the Study

This section provides a review of the biblical literature that provides a context to first responders and the important work they do; it will encompass their need for mental health awareness of themselves and others through mental health training. Except where indicated, the *English Standard Version* (EVS*;* 2011) of the Bible is used throughout the section to illustrate the biblical lessons pertinent to this topic. The Bible is full of lessons that are given to us by God. Some of these lessons include how to treat other people, such as with love, help, and respect. These lessons also include the importance of training. 2 Timothy 3:16-17 states, "All Scripture is breathed out by God and profitable for teaching, for reproof, for correction, and for training in righteousness, that the man of God may be complete, equipped for every good work." The Bible is a learning tool for Christians who

strive to be the best children of God (2 Timothy 3:16-17). Bible verses and stories from the Bible can be applied to first responders and help underscore the need for the study.

Love

God teaches Christians about love and loving one another through many different verses and stories. When first responders choose the path to become a first responder, they decide to put their lives on the line and put others before themselves to help people in physical and psychological emergencies (Isaiah 6:8; John 15:13; Philippians 2:4). 1 Corinthians 16:14 states, “Let all that you do be done in love.” When first responders choose to help others, they are doing it out of their love of people and love for helping others.

Luke 10, verses 25-37 tells the story of the Good Samaritan. In the story, a man who had been robbed and was injured was left beside the road to Jericho (Luke 10:30). This man had been ignored by others who passed him by until the Good Samaritan saw him and stopped (Luke 10: 31-33). The good Samaritan helped the man by tending to his wounds and helping him get to an inn (Luke 10:33-34). The good Samaritan paid for the man to have a room at the inn and asked the innkeeper to take care of him (Luke 10:35).

Through the illustration of the Good Samaritan, God teaches us how to help others (Luke 10:25-37). This illustration also shows us how to have compassion, be kind, be tender hearted, and be sensitive to the needs of our neighbors as God says to do in Ephesians 4:32, Colossians 3:12, and 1 Peter 3:8. This compassion and sensitivity to the needs of others can be applied to the work that first responders do. In order to effectively carry out their responsibilities, they need to understand how to respond and talk to a person who is mentally ill or in a mental health crisis. This is where the importance of

adequate training in mental health and mental illness comes in. This chapter of Luke leads us into a discussion of helping people.

Help

God teaches Christians about helping one another other through many different verses and stories in the Bible. In the Bible, God asks for people that He could send to help others (Matthew 10:8; Isaiah 6:8). First responders answer this call from God to be God's helpers and help others who are in mental and medical crises (Matthew 10:8; Isaiah 6:8). First responders answer God's call to help people in their time of need. They help people who are brokenhearted, have crushed spirits, have too heavy a burden to bear on their own, need help, need support, need a light in the darkness, and need peace amongst chaos (Psalm 34:17-20, Psalm 82:3-4, Psalm 138:7, Proverbs 27:17, Proverbs 31:8-9, Isaiah 1:17, Matthew 5:9, Matthew 5:16, Matthew 10:8, Luke 1:79, Luke 10:19, Galatians 6:2, Ephesians 6:10-11). Matthew 5:9 states, "Blessed are the peacemakers, for they shall be called sons of God." First responders are peacemakers; they bring peace to those they help in times of great chaos and uncertainty and help to quiet the voices that some individuals have that are too much for them to handle (Matthew 5:9; Luke 10:19). Ephesians 6:10-22 states, "Finally, be strong in the Lord and in the strength of his might. Put on the whole armor of God, that you may be able to stand against the schemes of the devil." First responders put on special armor, which could be compared to God's armor in that it makes them strong, able to stand against bad things, and rescue those who need help standing against the bad things (Psalm 82:3-4; Ephesians 6:10-11).

In Esther 4, God uses Esther to show that everyone has their place in the world. Esther was visited by Mordecai at the palace after she gave him clothes that were

appropriate for the palace (Esther 4:1-5). She sent Haman to speak to Mordecai to see why he came to the palace (Esther 4:5-7). Mordecai gave Haman information about what had happened to him, gave him money that Haman owed the king, a copy of a decree indicating the destruction of the Jews, and asked Haman to ask Esther to go and speak to the king on the behalf of her people, the Jews (Esther 4:6-9). Haman returned to Esther and told her everything that Mordecai had told him and asked of her (Esther 4:9). Esther sent Haman back to speak to Mordecai and tell him that she was unable go to the king without being asked, as by law she would be killed, unless the king saved her. She said she had not been asked to go to the king in a month (Esther 4:10-11). Mordecai sent Haman back to speak to Esther telling her to not think about herself and not to keep silent, for the Jews will get help from another palace, and she will perish if she does not help (Esther 4:13-14). Esther sent Haman back to speak to Mordecai telling him to gather all the Jews in Susa and to stay together on her behalf but not to eat or drink anything for 3 days and nights and that she would go to the king even if it was against the law and she may die (Esther 4:15-16). For first responders, and for Esther, their place is to help other people in their time of need (Esther 4). Esther 4:11 states,

> All the king's servants and the people of the king's provinces know that if any man or woman goes to the king inside the inner court without being called, there is but one law—to be put to death, except the one to whom the king holds out the golden scepter so that he may live. But as for me, I have not been called to come into the king these thirty days.

God shows that even though first responders may be afraid to help individuals with mental illnesses—in the same way as Esther was scared to help her people because of the risk to herself of doing so—these people still need help because it may be their only source of help.

God also uses the story of Job and his three friends to show how beneficial it can be to help someone in a mental health crisis. In the story of Job, everything was taken away from him by Satan because of his physical suffering of sores (Job 2:7). Job took a piece of pottery while sitting in the ashes of his belongings to cut himself with because he was sad and depressed (Job 2:8). When Job's friends learned about everything that had happened to him, they came to see him and comfort him (Job 2:11). When they came upon him, they did not recognize Job, which caused them to weep, tear their clothes, and cover themselves with dirt (Job 2:12). They then went and sat with Job for 7 days and 7 nights without saying a word because of Job's great suffering (Job 2:13). In the story, Job was sad and depressed after losing everything; he was going through a rough time and appeared to be a mental health crisis (Job 2:7-8).

First responders help those like Job who are experiencing a mental health crisis by trying to comfort them and make them feel safe, better, and showing them that they have support from someone. This support is available to them—to get them the help and care they need—in the same way as Job's friends tried to do for Job (Job 2:13). In the story of Job, his friends were simply with him; they did not say anything to him. They were there with him in companionable silence for support, comfort, and to talk when Job wanted to talk (Job 2:13). Sometimes first responders help just by being with the person in a mental health crisis and being silent until that person is ready to talk. By being there, first responders are letting them know they have someone who cares, is willing to help, and willing to listen.

As mentioned previously, God uses the story of the good Samaritan to teach us to help people in need (Luke 10:25-37). In the story of the good Samaritan, a man who was

robbed and injured was found by the Samaritan after being ignored by other people passing on the road (Luke 10:30-31). The good Samaritan helped to take care of the man's wounds, took him to an inn where he could stay and receive food, and asked the inn keeper to take care of him (Luke 10:33-35). First responders get calls about people who are hurt or need help, and they do whatever they can to help them get the proper care. Sometimes first responders stumble upon a person in need, like the good Samaritan did, and they do not ignore them just because they did not get a formal call about this person (Luke 10:25-37).

First responders still help them no matter what circumstances led them to meeting each other; they help them in whatever way they can, including sharing what they have and offering these individuals what fits the needs of these individuals (Luke 10:25-37; Philippians 2:4; Hebrews 13:16; 1 John 3:17). First responders also need to show sensitivity to the needs of individuals, like the good Samaritan did, because each individual is different and will require different things of a first responder (Luke 10:25-37; Ephesians 4:32; 1 Peter 3:8).

Respect

God teaches Christians about respect and respecting each other through many different verses and stories in the Bible. First responders are often faced with many challenges when it comes to responding to calls involving emergencies, whether medical or mental. "Be kind to one another, tenderhearted, forgiving one another, as God in Christ forgave you." (Ephesians 4:32). During their calls, first responders need to be kind to those who need their help and to forgive these individuals for the actions, speech, and behaviors that may occur during their time with them (Ephesians 4:32). Those who are in

a medical emergency or in a mental health crisis cannot always control what they say or do because of the illness they are suffering from and because of the situations surrounding them.

Simply because a person says mean a thing to a first responder does not indicate that they meant it. It also does not mean that the first responders should retaliate and disrespect these individuals simply because they are treating first responders badly in the moment of their distress. First responders need to remember that although the individuals they are helping may not entirely be in control of their actions, speech, and behaviors at that moment, the first responders must have command over their responses. “Know this, my beloved brothers: let every person be quick to hear, slow to speak, slow to anger;” (ESV, 2011, James 1:19). First responders need to be slow to anger and slow to speak so that they can help the person get the care and help that they need (ESV, 2011, James 1:19).

In addition, God uses the story of a Samarian women at the well to show respect for someone, even if they are different or have a need (John 4:1-26). It is a reminder to help those in need whatever their needs are. In the story of the Samarian women at the well, Jesus left Judea and was on his way to Galilee when he passed through Samaria with his disciples (John 4:1-5). Jesus stopped at a well for some water (John 4:6). At the well was a Samarian woman gathering water. When Jesus asked for a drink of water from her (John 4:7), the Samarian women was confused because she was Samarian and he was a Jew and Jews did not have anything to do with Samarians (John 4:9). “The Samaritan women said to him, ‘How is it that you, a Jew, ask for a drink from me, a woman of Samaria?’ [For Jews have no dealings with Samaritans.]” (John 4:9). Jesus used this

opportunity to spread the Gospel and the word of God to this Samarian woman, and they discussed the Savior and God (John 4:10-26).

First responders are often tasked with helping individuals who need of help, but who are also different from them in many respects. These differences can be related to a disability, race, age, gender, mental illness or crisis, and many other differences. No matter what the differences are, first responders must respect these individuals and make accommodations for these differences if they can; in that way these difference will not become a problem. There is a saying in the South that people get the respect they earn. If first responders show respect to individuals, then they in turn will be rewarded with respect. “You will earn the trust and respect of others if you work for good; if you work for evil, you are making a mistake.” (Proverbs 14:22 Good News Translation [GNT], 1992). In this verse, the Bible states that you will earn the respect and trust of other people if you do good work. Again, if first responders do good work and treat the people they are helping with respect no matter what their differences are, they in turn will be treated with respect as well.

Training

God teaches Christians in the Bible what they should and should not do with respect to training. God teaches Christians about training through many different verses and stories in the Bible. “Assemble the people, the men, the women, the children, and the stranger who is in your town, so that they may hear and learn and fear the Lord your God, and be careful to follow all the words of this law.” (*New American Standard Bible*, [NASB], 2020, Deuteronomy 31:12). According to Deuteronomy 31:12 (NASB, 2020) there are four elements to learning through training; to hear the training, learn from the

training, fear the Lord, and observe the training. “Blessed is the one who finds wisdom, and the one who gets understanding,” (Proverbs 3:13). The Bible also states that those who gain wisdom, learning, and understanding are blessed; all of which can be gained by using the four elements of learning through training (ESV, 2011, Proverbs 3:13; NASB, 2020, Deuteronomy 31:12).

First responders gain understanding through the learning they do when receiving training for mental illnesses and mental health. First responders who feel they are adequately trained and prepared to help someone suffering from a mental illness or in a mental health crisis are likely to feel confident and be more effective in helping that person. Training also improves their skills and the safety of both the first responders and those they are serving.

In the Bible, God says that people should be trained so that they are fully prepared and able to help people and that this can be done by obtaining and improving their skills and knowledge (Exodus 35:31; 2 Timothy 3:16-17). In Exodus 35:31, the Bible says, “And he has filled him with the Spirit of God, with skill, with intelligence, with knowledge, and with all craftsmanship.” In 2 Timothy 3:16-17, the Bible says, “All Scripture is breathed out by God and profitable for teaching, for reproof, for correction, and for training in righteousness, that the man of God may be complete, equipped for every good work.” First responders go through a great deal of training so that they can be fully prepared to help people; by doing so, they improve their skillsets as firefighters and EMTs.

In Matthew 10, God uses Jesus’ training of the disciples to show the importance of training someone to do their job to the best of their ability, skill level, and safety. First

responders receive a great deal training when they are in the academy to help them do their jobs to the best of their ability and to do so safely. First responders always need more training to handle new equipment, awareness of new drugs, new diagnoses, new protocols, or policies. First responders also need to continually increase their knowledge and understanding of different areas of being a first responder. First responders need training to increase their knowledge and training about mental health and mental illnesses as well. The training of first responders in mental health and mental illnesses is vital; whereas first responders are specifically trained to provide help for physical injury, they should also be trained to provide aid for people with mental health issues, especially as the number of mental health related calls rise.

Summary

This chapter provided a review of the literature on the mental health training of first responders. The review included biblical literature in addition to academic literature on primary training, as well as the secondary, supplemental training program of MHFA, in which first responders can learn about mental health. The literature on MHFA that was reviewed included the current state of research, theoretical knowledge, and practical knowledge at the time of this study. The biblical aspects of this chapter include examples of the spirit in which first responders should serve individuals who need their aid. These examples were shown through the Bible stories of Job, Esther, the Samarian women at the well, the Good Samaritan, and Jesus' training of the disciples. Their examples are inspirational, showing the importance of first responders helping individuals while showing love and respect for them. Training was also included to show its importance and how it can be applied to first responders and their need for mental health training.

The next chapter will provide the method by which this study will be carried out, including the research design, participants, and data collection and analysis procedures.

CHAPTER 3: RESEARCH METHOD

Overview

This chapter will present the methods by which this study will be conducted. Below a description of the procedures for this study will be discussed. This will include the research questions and hypotheses for the study, the design of the study, overview of the participants, procedures of the study, instruments and measurements used for the study, variables of the study, data analysis of the study data, and delimitations, assumptions, and limitations of the study.

Research Questions and Hypotheses

Research Questions

Quantitative Questions

RQ1: What influence does MHFA training have on first responders' mental health literacy?

RQ 2: Will the knowledge of first responders about mental health and mental illnesses improve as a result of the training they receive, as measured by pre- and post-training scores?

RQ 3: Will first responders' stigma levels in assisting someone in a mental health emergency decrease after attending a MHFA training compared to before the training?

RQ 4: Will first responders' comfort levels in assisting someone in a mental health emergency increase after attending a MHFA training compared to before the training?

RQ 5: Will first responders' confidence increase with assisting someone in a mental health emergency increase after attending a MHFA training compared to before the training?

RQ 6: Will first responders increase in their ability to identify mental illness after attending a MHFA training compared to before the training?

Qualitative Questions

RQ 7: How do first responders describe their experience with MHFA training?

RQ 8: How do first responders describe the benefits seen from being trained in MHFA, both to themselves and the individuals they serve?

Hypotheses

Hypothesis 1: First responders will show significant increase in scores on the Mental Health Literacy Scale after training when compared to pretraining.

Hypothesis 2: First responders will show significant increase in scores on the knowledge subscale of the Mental Health Literacy Scale after training when compared to pretraining.

Hypothesis 3: First responders will show significant decrease in scores on the stigma subscale of the Mental Health Literacy Scale after training when compared to pretraining.

Hypothesis 4: First responders will show significant increase in scores on the Comfort Scale after training when compared to pretraining.

Hypothesis 5: First responders will show significant increase in scores on the Confidence Scale after training when compared to pretraining.

Hypothesis 6: First responders will show significant increase in scores on the identification ability subscale of the Mental Health Literacy Scale after training when compared to pretraining.

Research Design

The specific design used in this study was a mixed method, pre-postsurvey study. The study used mixed methods because it included the gathering of qualitative and quantitative data. The study was a survey study because it used surveys or questionnaires to gather data pre- and post-training. The study used a one-group pretest-posttest quasi-experimental design utilizing a mixed methods approach. Quasi-experimental designs compare one group before and after an intervention using survey scores to measure the effectiveness of the intervention. They are useful in their ability to control an experiment to determine if a treatment or intervention had its hypothesized effect (Cosby & Bates, 2015). Qualitative data were also collected via open-ended survey questions after the intervention. Qualitative research is appropriate when the variables of a topic are known and can be quantified and measured. In addition, whereas qualitative research is broad and exploratory, quantitative studies are exact and focus on a small number of specific variables (Sage, 2016). In the case of first responders and MHFA, most of the current research is quantitative, and the under-researched variables are known and specific. Studies have shown that more research is needed on the benefits of MHFA training on first responders' skills, knowledge, ability to assist, and other benefits; and the benefits of

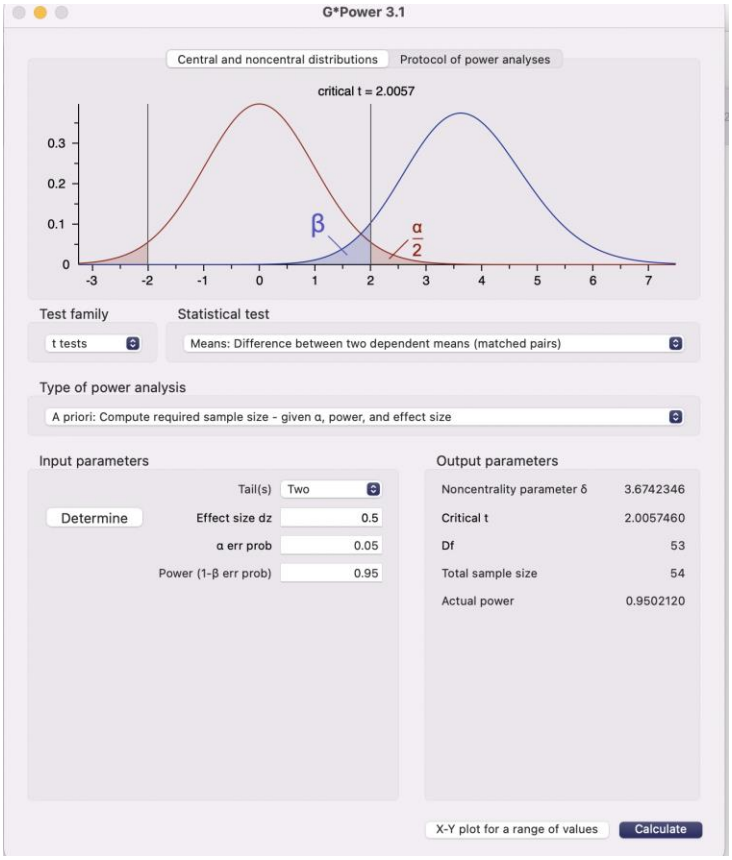
MHFA on those that the first responders help (Forthal et al., 2021; Maslowski et al., 2019).

Participants

The participants were dual trained firefighters and EMTs or EMTs/EMS, in VA, who at the beginning of this study had not participated or taken MHFA modules of any kind. The participants were not limited with respect to race or gender. To be eligible to participate in the study, they were required to be 18 years of age or older. Flyers (attached in Appendix A) were distributed to fire departments and EMS councils to distribute to their personnel for those who wish to participate. Permission to recruit through flyers from the fire departments and EMS councils were obtained prior to beginning the study. In order to calculate an adequate sample size that would give the study sufficient power to detect a significant result if there is one, G* power was used. For a two-tailed paired *t*-test, in which alpha = .05 and power = .95, the sample size needed for power is 54 (See Figure 1). A paired *t* test was used to compare each participant's scores from pretraining to post. There was only one group of participants.

Figure 1

*G*Power Analysis of Sample Size Needed for Study*



Study Procedures

The researcher reached out to fire departments and EMS councils to see whether they would be willing to help with recruitment for the study. The researcher initially reached out to two MHFA instructors and obtained their permission (Appendix A) to conduct the MHFA training for participants. One fire department and five EMS councils gave their permission (Appendix B) to distribute fliers (Appendix C) and emails (Appendix D) to potential participants to give information about the study, what the study involved, the nature of participation, and a way to contact the researcher to participate in the study. After receiving IRB approval, an email with the flier was sent to fire

departments and EMS councils that agreed to assist with recruitment for them to distribute to their staff to obtain participants. Participants who contacted the researcher received a Screening Questionnaire (Appendix E) via email. The Screening Questionnaire was used to determine if they met the requirements for participation. Respondents sent it back to researcher, who then informed them of their eligibility to participate. Those who met the requirements of the study were given access to a survey link to begin the study, the first page of which provided information about the nature of the study and informed consent (Appendix F).

They were informed of the purpose of the study, the nature of their participation, the risks and benefits. They were told that by continuing to take the survey they will have given their consent to participate in the study. Participants next access a Participant Code (Appendix G), which consisted of participants' providing their first, middle, and last initials and date of birth. This code, filled out on both surveys, helped the researcher pair the participants' pre- and post-training survey responses. They next accessed the Demographic Survey (Appendix H), followed by the MHFA Training Survey (Appendix I), which included the Mental Health Literacy Scale along with other items of the survey.

Once participants completed the pre-training survey they arrived at the final page of the survey, which gave them a code to submit to the researcher (see Appendix J for last page of survey) showing they completed the survey. This final page stated: Pre-training survey takers: "Thank you for taking the survey. Please email a code SURVEYDONE to the researcher (an email was provided).

Participants completed the MHFA training given by a certified instructor. MHFA training takes approximately 8 hours total to complete, including approximately 2 hours

of self-paced pre-training online coursework that is completed on the participants own time over several days (if they choose) before the date of the training and 6 hours of live Zoom training on a single day. The training provided information about the most common mental illnesses, mental health knowledge and stigma, community mental health resources, and a five-step action plan that uses the acronym ALGEE (Hector & Khey, 2018; Kitchener & Jorm, 2002; Kitchener & Jorm, 2006; Mental Health First Aid USA, 2022; Mental Health First Aid Training, 2022; Svensson et al., 2015). This acronym stands for A = assess risk for suicide or self-harm; L= listen nonjudgementally; G = give reassurance and information; E = encourage professional help; E = encourage self-help and other support (Mental Health First Aid USA, 2022; Mental Health First Aid Training, 2022).

The five-step action plan provides training for dealing with panic attacks, overdoses, and other mental health related issues, teaches how to assess for risk of suicide or self-harm, how to listen nonjudgmentally, give reassurance and information, how to encourage the individual to seek appropriate professional help, as well as self-help and other support (Hector & Khey, 2018; Kitchener & Jorm, 2002; Kitchener & Jorm, 2006; Mental Health First Aid USA, 2022; Mental Health First Aid Training, 2022; Svensson et al., 2015).

The training was aimed to provide trainees with the skills, knowledge, and resources to assist an individual with a mental illness (Hector & Khey, 2018; Mental Health First Aid for Public Safety, 2022). The MHFA training includes roleplaying and simulations to practice and learn skills (Mental Health First Aid USA, 2022). The training also provides first responders with information about how their own mental

health corresponds to their jobs (Mental Health First Aid, 2022). The training teaches trainees the warning signs of mental illnesses in their department members and colleagues and gives them the skills, knowledge, and resources to help those individuals get the immediate care they need until the proper care can be reached through transport or the crisis is over (Mental Health First Aid, 2022; Mental Health First Aid for Public Safety, 2022; Mental Health First Aid USA, 2022). At the end of the training, the Zoom instructor placed into the chat the link to the post-training survey (Appendix I). The link could only be obtained after completion of the training.

As mentioned previously, participants had the option to enter their name in a raffle for a $50 gift card upon completion of the post-training survey. Participants received a link to the post-training survey from the trainer that was identical to the pre-training survey, as described above, with the exception of no demographic questions on the post-training survey. After the completion of the post-training survey, participants arrived at the final page of the survey, which gave them the instructions for entering the $50 gift card raffle. They then saw a message that read: “Thank you for your participation in the survey. To enter a raffle to win a $50 gift card, please email the researcher that you have completed the survey with your name and email address.”

Instrumentation and Measurement

The instruments that used were part of a pre- and post- training survey. The pre-training survey included a demographic survey and MHFA survey, and the post-training survey was the MHFA survey only.

Demographic Questions

Items 1 and 2 were fill-in-the-blank questions about age and gender. Item 3 was a multiple-choice question about occupation. Item 4 was a fill-in-the-blank question about length of time working job. Item 5 was a multiple-choice question about ethnicity. Items 6-11 were yes and no questions to capture participants' perceptions about whether their mental health training was sufficient, whether they had had experience with mental health illness outside of their job, knew of community resources available, or had experienced mental health issues themselves.

MHFA Training Survey

The MHFA Training Survey included the Mental Health Literacy Scale to capture the perceptions, beliefs, stigmas, and knowledge about mental health that has good reliability and validity (O'Connor & Casey, 2015). Some items needed to be adapted to U.S. residents. This included the questions specific to Australia that were changed to US (O'Connor & Casey, 2015). The adaptations also included removing four identification of mental health disorders questions that were not covered by the training and adding four identification of mental disorders question that that were covered by the training. The

MHFA Training Survey also included measuring the participants' confidence and comfort levels as well as the benefits of MHFA training.

Mental Health Literacy Scale (MHLS)

For the purpose of this study, the MHLS by O'Connor and Casey (2015) was used in this study with permission given by O'Connor (Appendix K). For the purposes of this study, four items that pertained to mental health issues not covered by the training were excluded from the scale. They were items related to agoraphobia, social phobia, dysthymia, and personality disorders. Items are rated on a 4-point Likert scale, in which 1 = *very unlikely* and 4 = *very likely*. These four items were removed and additional items were substituted immediately after this scale. Therefore, the first four items (rather than eight) were about the respondent's ability to identify mental illnesses. Items 5 and 6 had to do with beliefs regarding gender and mental illnesses. Items were rated on a 4-point Likert scale, in which 1 = *very unlikely* and 4 = *very likely*. Items 7 and 8 measured knowledge regarding symptom management of mental illnesses and were measured on a 4-point Likert scale, in which 1 = *very unhelpful* and 4 = *very helpful*. Item 9 had to do with therapy types and was measured on a 4-point Likert scale, in which 1 = *very unlikely* and 4 = *very likely*. Items 10 and 11 had to do with breaking confidentiality. Items were rated on a 4-point Likert scale, in which 1 = *very unlikely* and 4 = *very likely*. Items 12-15 measured confidence with regard to information. Items were rated on a 5-point Likert scale, in which 1= *strongly disagree* and 5 = *strongly agree*. Items 16-24 measured stigmas about mental illnesses. Items were rated on a 5-point Likert scale, in which 1 = *strongly disagree* and 5 = *strongly agree*. Items 25-31 measured comfort with interacting

with an individual with a mental illness. Items were rated on a 5-point Likert scale, in which 1 = *definitely unwilling* and 5 = *definitely willing*.

Validity and Reliability. Wei et al. (2016) conducted a meta-analysis of instruments that measure mental health knowledge. Two of the studies were conducted on the Mental Health Literacy Scale and the internal consistency, which is a measure of reliability, was found to be superior to all other of the 16 scales reviewed. MHLS was the only one that was found to have excellent internal consistency. The MHLS was also the only one that was found to have excellent structural validity as well as excellent content validity.

Additional Items Regarding Identification of Mental Health Disorders

Three additional items were included in the survey because the MHFA course covers them and they were not included in the MHLS. They were items related to PTSD, psychosis, and eating disorders. Items 32-34 measured the respondent's ability to identify these additional three mental illnesses. Items were rated on a 4-point Likert scale, in which 1 = *very unlikely* and 4 = *very likely*.

Validity and Reliability. The items that were used to measure aspects of the training the MHLS did not include were related to PTSD, psychosis, and eating disorders. These items were developed to match the other items on the MHLS and thus should be reliable and valid based on testing of the MHLS (Wei et al., 2016).

Single-Items Measuring Comfort and Confidence

The other researcher-developed items are used to measure comfort and confidence. Items 1 and 2 measured comfort level. Items were rated on a 11-point Likert scale, in which 0 = *not at all comfortable* and 10 = *extremely comfortable*. Items 3 and 4

measured confidence level. Items were rated on an 11-point Likert scale, in which 0 = *not at all confident* and 10 = *extremely confident*. These used an 11-point scale, from 0-10, with a mid-point in which respondents could respond as neutral to the question.

Validity and Reliability. The addition of a midpoint in which participants can declare their neutrality on a question has been shown to have higher validity than 10-point response scales. Scherpenzeel and Saris in 1995 (as cited in Scherpenzeel, 2002) showed that 11-point scales have the most validity and reliability compared to other scales. A 11-point scale of this nature was shown to be one of the most common measurement tools used in research conducted through surveys for many different areas of study (Courser & Layrakas, 2012). Scales with 0-10 points and a middle point of 5 have been shown to have the least amount of missing data compared to 10-point scales (Courser & Layrakas, 2012).

Open-Ended Questions

Open-ended questions were used to measure the benefits of MHFA. Participants responded to 4 questions that asked them to describe their experience of the MHFA training, the benefits of being trained in MHFA, the benefits to themselves as a fire fighter or EMS in being trained in MHFA, and how they thought individuals receiving first aid would benefit from their being trained in MHFA.

Operationalization of Variables

The variables of this study were mental health literacy, knowledge, stigma, comfort, confidence, and identification ability.

Mental Health Literacy

Mental health literacy is a ratio variable and was operationalized by the total score of the Mental Health Literacy Scale.

Knowledge

Knowledge is a ratio variable and was operationalized by the score of the knowledge portion of the Mental Health Literacy Scale. The knowledge portion consisted of 11 items of the Mental Health Literacy Scale that inquired about the participants' knowledge of mental health resources, types of therapy, confidentiality, gender-related mental health knowledge, and emotional knowledge (O'Connor & Casey, 2015).

Stigma

Stigma was a ratio variable and was operationalized by the stigma portion of the Mental Health Literacy Scale. The stigma portion consisted of 16 items of the Mental Health Literacy Scale that inquired into common stigmas associated with mental illness and individuals who suffer from a mental illness (O'Connor & Casey, 2015).

Comfort

Comfort was a ratio variable and was operationalized by the sum of two items developed by the researcher. One question had to do with the comfort level of the participant to help an individual in the midst of a mental health crisis and the other to listen empathically to an individual who was in a mental health crisis.

Confidence

Confidence was a ratio variable and was operationalized by two items in the researcher-created survey. One question had to do with the confidence level of the

participant to manage a person in a mental health crisis and the other had to do with their degree of confidence in asking a person if they were considering killing themselves.

Identification

Identification was a ratio variable and was operationalized by the identification portion of the Mental Health Literacy Scale and the additional identification items of the researcher-created survey. The identification portion consisted of 4 items of the Mental Health Literacy Scale and 3 items created by the researcher that inquired into the identification ability of participants of different mental illnesses discussed in the MHFA training (O'Connor & Casey, 2015). These mental illnesses included PTSD, psychosis, eating disorders, drug dependence, bipolar disorder, major depressive disorder, and generalized anxiety disorder (O'Connor & Casey, 2015). The researched developed items were PTSD, psychosis, and eating disorders. The original items from the Mental Health Literacy Scale are drug dependence, bipolar disorder, major depressive disorder, and generalized anxiety disorder (O'Connor & Casey, 2015).

Data Analysis

Quantitative Data Analysis

Statistical Package for the Social Sciences (SPSS) was used to test the hypotheses of this study. Data were downloaded from Qualtrics platform in Excel form and imported into the SPSS Version 28. Data were inspected for missing data. It was determined that if a participant had too much missing data, the case would not be used. If data were available to test some hypotheses and not others, the data would be used to test the hypotheses in which there were sufficient data available. Preliminary analyses were conducted to determine whether the data met the assumptions of the data analysis

procedures. The researcher examined skew and kurtosis and whether the data met the criteria for normality for paired *t* tests. In addition, reliability was tested on the instruments used in the study. For the testing of the hypotheses, paired *t* tests were conducted to determine whether participants made significant progress in the areas tested by the study. Paired *t* tests are the appropriate types of statistical analysis to test the hypotheses of this study. Researchers use paired *t* tests when attempting to measure the effects of an intervention on specific outcome variables on a single group of participants. Those variables are measured by specific items on the survey.

The data analysis procedures for each hypothesis were as follows. For H1: First responders will show significant increase in scores on the Mental Health Literacy Scale after training when compared to pretraining. A total score of the Mental Health Literacy Scale portion of the survey (Items 1-31) pre- and post-training was used for a paired *t* test. For H2: First responders will show significant increase in scores on the knowledge subscale of the Mental Health Literacy Scale after training when compared to pretraining. A total score of 11 items (Items 5-15) of the Mental Health Literacy Scale pre- and post-training was used as the dependent variable to conduct a paired *t* test. For H3: First responders will show significant decrease in scores on the stigma subscale of the Mental Health Literacy Scale after training compared to pretraining. The total score of 16 items (Items 16-31) of the Mental Health Literacy Scale pre- and post-training was used for a paired *t* test. For H4: First responders will show significant increase in scores on the Comfort Scale after training when compared to pretraining. A total score of the Comfort Scale portion of the Single-or Double Item Scale (Items 1 and 2) pre- and post-training was used for a paired *t* test. For H5: First responders will show significant increase in

scores on the Confidence Scale after training when compared to pretraining. A total score of the Confidence Scale portion of the Single-or Double Item Scale (Items 3 and 4) pre- and post-training was used for a paired *t* test. For H6: First responders will show significant increase in scores on the identification ability subscale of the Mental Health Literacy Scale after training when compared to pretraining. A total score of 4 items (Items 1-4) of the Mental Health Literacy Scale and 3 items (Items 32-34) created by the researcher pre- and post-training was used for a paired *t* test.

Qualitative Data Analysis

The researcher analyzed the qualitative data with thematic analysis, using procedures that Braun and Clarke (2006) recommend. First, the researcher became familiar with the data by looking at the qualitative responses from the survey. The researcher then highlighted statements that were similar and organized them or coded them into potential themes. Once the researcher had the themes or codes with three or more participants, she then placed them under themes and labeled them. Themes that clustered together were placed into categories, and the researcher also divided themes into subthemes if they were supported by the data. Once the responses were put into codes and under themes, a report of the themes was written (Braun & Clark, 2006).

Delimitations, Assumptions, and Limitations

Delimitations

The delimitations of the study are that participants include firefighters, EMTs/EMS, or dual trained in both, that participants work in Virginia, and that they participate only in MHFA training for this study. These aspects affect the extent to which results can be generalized to other first responders in other regions of the county.

Assumptions

The assumptions of the study are that there is limited mental health training in the academy, MHFA training is beneficial, mental health training is needed for fire and EMS, participants will answer honestly and in-depth as they can.

Limitations

The limitations of the study are that certain survey items were developed by the researcher and need to be tested to determine their validity and reliability. In addition, all the survey items are self-report, and therefore, the study ran the risk of biased responses and the possibility for human error.

Summary

In this chapter, the methodology by which this study was conducted was presented. This included the research questions and hypothesis for the study, the participants and their characteristics, the procedures for the study, and the instruments and measurements used in the study. In addition, the chapter presented the operationalization of the variables of the study, as well as the data analysis procedures that were conducted, and the delimitations, assumptions, and limitations of the study. The next chapter will present the quantitative and qualitative results of the analyses conducted to test the hypotheses and address the research questions.

CHAPTER 4: RESULTS

Overview

The purpose of this mixed-methods study was to examine the effectiveness of MHFA training on first responders' knowledge, stigma, comfort level, confidence level, ability to identify mental health symptoms, and the benefits of MHFA to first responders and those they help.

Summary of Data Collection Process

After receiving IRB approval, an email with the flyer was sent to fire departments and EMS councils that agreed to participate with recruitment. These fire departments, EMS councils, and MHFA instructors then distributed the flyer to potential participants on behalf of the researcher. Those who wished to participate in the study emailed the researcher, and they were emailed a Screening Questionnaire to see if they qualified to participate. If they did, they were sent the pre-training survey link to go to and complete the survey. Once participants completed the pre-training survey and emailed the code to the researcher, the researcher sent them the information about how to sign-up for the MHFA training. Once signed-up and registered for training, participants had to complete 2 hours of pre-training online coursework before the date of the training. On the day of the training, if they completed all the pre-course work, they participated in a 6-hour Zoom meeting with the instructors to become trained in MHFA. At the end of the training, the instructors emailed the researcher a list of contact information of those who completed the training, and the researcher emailed the post-training survey link to the participants. Once the participants finished the post-training survey, they had the

opportunity to email the researcher with their contact information to be entered into a raffle for a $50 gift card.

Descriptive Results

The demographics of the sample that were collected in this study included age, gender, training received, length of time working in capacity trained for, and race. The average age of participants was 38 (*SD* = 13.80). Eight were between the ages of 19-29, two were between the ages of 30-39; seven were between the ages of 40-49, and four were 50 and over. Of the 21 participants, ten identified as male, ten as female, and one as nonbinary. As for the training participants received, 11 were trained as EMT/EMS, one was trained as a firefighter, and nine were trained as both EMT/EMS and firefighter. The average time working in the capacity they were trained was 13.4 years (*SD* =13.33), with the least time being four months and the most being 42 years. For the race of the 21 participants, 16 identified as Caucasian, one identified as African American or Black, one identified as Latino, Latina, or Hispanic, one identified as Native Hawaiian or Other Pacific Islander, one identified as Asian, and one identified as Other. Table 1 shows the demographic characteristics of participants.

Table 1

Participants' Demographic Characteristics

Variable	*n*	%
Age		
19-29	8	
30-39	2	9.52
40-49	7	
50 and over	4	
Gender		
Male	10	47.61
Female	10	47.61
Other	1	4.76
Race/Ethnicity		
Caucasian	16	76.19
African American/Black	1	4.76
Latino/a, Hispanic	1	4.76
Native Hawaiian or other Pacific Islander	1	4.76
Asian	1	4.76
Other	1	4.76
Type of training received		
EMT/EMS	11	52.38
Firefighter	1	4.76
Both EMT/EMS and firefighter	9	42.86
Years of training		
EMT/EMS in years		
.33	1	4.76
1.00	5	23.80
1.33	1	4.76
7.00	1	4.76
22.00	1	4.76
23.00	1	4.76
Firefighter in years		
7.00	1	4.76
Both EMT/EMS and firefighter		
6.00	1	4.76
8.00	1	4.76
18.00	1	4.76
22.00	1	4.76
26.00	1	4.76
28.00	2	9.52
35.00	1	4.76
42.00	1	4.76

Study Findings

A total of eight research questions were used for this study. There were six quantitative and two qualitative research questions. Results are reported by research question.

Preliminary Testing

Before testing the hypotheses of the study, the data were explored to determine whether each variable met the assumptions of a *t-test*. The assumptions of a *t-test, which was the test that was used to test all of the hypotheses, include* the assumption of normality. To test whether the data met the assumptions of normality, two tests were performed: Kolmogorov-Smirnov and Shapiro-Wilk. The data are deemed to violate the assumptions of normality if they show significance according to these two tests. Looking at both tests, it was determined to conduct *t* tests with the Identification Scale, the Mental Health Literacy Scale, Confidence, and Comfort Scale. The Knowledge and Stigma scales were significant on both tests; therefore, nonparametric statistics were deemed more appropriate to test the hypotheses involving these variables. Table 2 shows the results of the tests conducted to determine whether the variables met the assumptions of normality.

Table 2

Tests of Normality of the Study Variables

Study variables	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	*df*	Sig.	Statistic	*df*	Sig.
Pre-test variables						
Pre-Identification	.199	21	.029	.928	21	.124
Pre-Knowledge	.215	21	.013	.896	21	.029
Pre-Stigma	.207	21	.019	.883	21	.017
Pre-Comfort	.149	21	.200	.903	21	.041
Pre-Confidence	.144	21	.200	.941	21	.233
Pre-Mental Health Literacy Scale	.117	21	.200	.976	21	.856
Post-test variables						
Post-Identification.	.182	21	.069	.910	21	.055
Post-knowledge	.239	21	.003	.925	21	.107
Post-Stigma	.199	21	.030	.897	21	.031
Post-Comfort	.167	21	.129	.875	21	.012
Post-Confidence	.178	21	.081	.901	21	.037
Post-Mental Health Literacy Scale	.169	21	.121	.930	21	.138

Quantitative Research Findings

Research Question 1: What influence does MHFA training have on first responders' mental health literacy?

A paired *t* test was conducted to compare the post-training mental health literacy score to the pre-test score. The post-training mental health literacy score ($M = 136.19$; $SD = 5.06$) was significantly higher than the pre-training mental health literacy score ($M = 126.86$; $SD = 10.09$), $t(20) = 4.11$, $p < .001$. Thus, the null hypothesis can be rejected, and it can be concluded that MHFA has a significant influence on mental health literacy.

Research Question 2: Will the knowledge of first responders about mental health and mental illnesses improve due to the training they receive, as measured by pre- and post-training scores?

For the knowledge variable, the data did not meet the assumption of normality for parametric statics (see Table 2). Therefore, nonparametric statistics tests of the Wilcoxon Signed Rank Test were performed. To test this hypothesis, a total score of the knowledge portion of the Mental Health Literacy Scale of the survey (Items 5-15) pre- and post-training was used for a nonparametric test. The post-training score of the knowledge portion of the Mental Health Literacy Scale was not significantly higher compared with the pre-training score, $N = 21$, $Z = 55$, $p = 775$. Therefore, the null hypothesis was accepted.

Research Question 3: Will first responders' stigma levels in assisting someone in a mental health emergency decrease after attending an MHFA training compared to before the training?

For the stigma variable, the data did not meet the assumption of normality for parametric statistics. Therefore, nonparametric statistics tests of the Wilcoxon Signed Rank Test were performed. To test this hypothesis, the stigma of mental illness subscale (16 items; Items 16-31) of the Mental Health Literacy Scale pre- and post-training was used for a nonparametric test. The post-training stigma portion of the Mental Health Literacy Scale was not significantly higher than the pre-training score, $N = 21$, $Z = 94$, $p = .399$. Therefore, the null hypothesis was accepted.

Research Question 4: Will first responders' comfort levels in assisting someone in a mental health emergency increase after attending an MHFA training compared to before the training?

A paired *t* test was conducted using the total score of the Comfort Scale portion of the Single-or Double Item Scale (Items 1 and 2). The Comfort post-training score (*M* =18.10; *SD* = 1.81) was significantly higher than the Comfort pre-training score (*M* =15.24; *SD* =4.34), $t(20) = 3.22$, $p = .004$. Thus, the null hypothesis can be rejected, and it can be concluded that MHFA has a significant influence on the comfort of first responders in helping individuals with a mental illness.

Research Question 5: Will first responders' confidence increase with assisting someone in a mental health emergency increase after attending a MHFA training compared to before the training?

A paired *t* test was conducted to compare post-training Confidence score to the pre-test score using the total score of the Confidence Scale portion of the Single-or Double Item Scale (Items 3 and 4). The post-training Confidence score ($M = 18.10$; $SD = 1.81$) was significantly higher than the pre-training score ($M = 15.24$; $SD = 4.34$), $t(20) = 4.78$, $p < .001$. Thus, the null hypothesis can be rejected, and it can be concluded that MHFA has a significant influence on the confidence of first responders in helping individuals with a mental illness.

Research Question 6: Will first responders increase their ability to identify mental illness after attending a MHFA training compared to before the training?

A paired *t* test was conducted to compare the post-training identification ability scores to the pre-test score using four items (Items 1-4) of the Mental Health Literacy

Scale and three items (Items 32-34) created by the researcher to measure ability to identify mental health issues. The post-training identification ability score (M = 24.90; SD = 2.55) was significantly higher than the pre-training scores (M = 23.19; SD = 2.34), $t(20) = 3.78$, $p = .001$. Thus, the null hypothesis can be rejected and it can be concluded that MHFA has a significant influence on the identification of mental illnesses by first responders.

Qualitative Research Findings

Research Question 7: How do first responders describe their experience with MHFA?

This question was addressed by the open-ended Question 39 of both the pre- and post-training surveys.

Pre-Training Themes. Two main themes emerged from an analysis of the qualitative questions on the pre-training survey to address for RQ 7. These themes included a lack of mental health training prior to MHFA and individuals reporting some prior exposure to the mental health needs of first responders.

Theme 1: Lack of Mental Health Training Prior to MHFA Training. Seven first responders reported having a lack of mental health training prior to taking this course. For example, Participant 2 said, “I don’t have any training except how to give medication to someone that is over excited.” Participant 3 said the following:

> The basic training given in EMS classes, from EMT to paramedic, touch on mental health issues but do not go into deep details. Fire service training, less so. Roanoke Fire-EMS (I retired after 26 years there) has a peer support group that assists members there and other jurisdictions, and the folks involved in that

> process provide some basic training to Fire/EMS responders. Otherwise, it has been, OK, you're a medic, go get 'em.

Participant 5 said, “I have training in critical incident stress management but no mental health first aid training.” Participant 6 said, “I have not had previous mental health first aid training. The only formal training I have received for behavioral emergencies was in my initial certification classes.” Participant 8 said as well they had, “no prior training.” Participant 16 said,

> I have had no MHFA training other than that included in basic EMT curriculum. This consisted of trying to get a patient to agree to go to the hospital and asking if they wanted to harm themselves or anyone else. There was no additional information on what to do if they said they did want to cause harm other than, take them to the hospital.

Participant 18 said, “Besides what they teach in EMT class, pretty much nothing.” Participant 19 said, “I have no prior experience for the most part.” Participant 20 said, “I have no experience.”

Theme 2: Some Prior Exposure to Mental health Training. Several first responders reported having some prior exposure to mental health training prior to taking this course. In the following statement Participant 7 wrote about taking a course because of a member committed suicide:

> I have never taken the Mental Health First Aid course; however, I have taken an 8-hour course about mental health for first responders put on by my agency in response to a member committing suicide. In addition to that specific, targeted training, there is a portion of class dedicated to the mental health of first

> responders in every level of training I've received. So that would be a lecture on mental health in fire school, EMT, and paramedic. Total, this equates to probably about another 8 hours of mental health "awareness."

Participant 12 wrote: "I have some experience in how to interact when talking about mental health but not in the same way we consider as a part of first aid." Participant 13 reported having received some exposure as follows,

> I was a member of the Peer Support Team at a previous department. I attended regular training for this team. I have also been presenting a mental health talk at fire and EMS conferences for the last several years that is focused on recognizing mental health issues in first responders and working to remove the stigma that is often associated with mental health.

Participant 15 wrote having also had some exposure:

> I received a Certified Advanced Chaplain' certificate/credential through a 100-hour program. This program included multiple metal health related classes as well as grief and stress courses. This program was mainly through the ICISF [International Critical Incident Stress Foundation].

Participant 17 said, "Have received mental health training through my psychology degree and working in the field with clients that have experienced trauma." Participant 19 said, "I've attended stuff like mandatory trainings on mental health awareness, but no MHFA training." Participant 21 said, "I attended a class at a conference in May. I enjoyed the class and the instructor was very knowledgeable and seemed to care and have a passion for helping those deal with issues."

Post-Training Themes. Two themes emerged from the data analysis of the responses to the post training survey for RQ 7: Content expanded my knowledge: Useful, needed, informative and quality of training and instructors is good.

Theme 1: Content Expanded My Knowledge: useful, needed, informative. Twelve first responders reported that the course content expanded their knowledge. The reported finding the content of the course useful, needed and informative. Participant 1 said, "Very good training a whole new experience." Participant 2 said, "It was an amazing day. It opened my eyes on how to be more compassionate and talk to people." Participant 3 said, "It was an educational experience . . . . This is a class or a variation of it, that is needed for all fire, police, EMS, and healthcare workers." Participant 8 said, "I feel more confident in handling patients with signs of distress when I am acting as an EMT." Participant 10 said, "I think it was worth it." Participant 11 said, "It's useful." Participant 12 said the content, especially the scenarios, were useful: "The scenarios provided were very useful in determining the best approaches." Participant 14 said, there was "lots of information." Participant 15 said, "The level of detail was spot on." Participant 16 said it "was very helpful to learn how to approach a variety of MH [mental health] situations." Participant 18 said, "I learned a lot and I feel much better handling any mental health situation." Participant 19 said, "It was a lot of information. I think a lot of it was just empathy and being patient and willing to listen." Participant 20 said, "I learned a great deal about mental health challenges, stigmas, and misconceptions associated with them. I have learned how to support others and myself when dealing with

mental health challenges." Participant 21 said, "I learned . . . . [and] I feel more confident in helping those around me."

Theme 2: Quality of Training and Instructors is good. Seven first responders reported that both the quality of the training and the instructors were good. Participant 4 said, "The training was easy to understand and delivered very well." Participant 5 said, "I found the class informative and the instructors knowledgeable." Participant 9 said, "Very great and collaborative course." Participant 11 said, "Very great and collaborative course." Participant 12 said that the "teachers were very helpful." Participant 14 said, "great teachers, and great dialogue within the class." Participant 15 said, "The instructors and format were great." Participant 17 said,

> I enjoyed the class. The instructors were very knowledgeable, and it was evident that they were passionate about the subject matter. The class moved along efficiently, and the material was alternated enough between lecture and interactive activities that it kept my attention.

Research Question 8: How do first responders describe the benefits seen from being trained in MHFA both to themselves and the individuals they serve?

An analysis of the responses to Questions 40-42 of the pre- and post-training survey addressed Research Question 8.

Pre-Training Theme. One main theme emerged from an analysis to the qualitative questions on the pre-training survey for RQ 8: Motivation to take the course.

Theme 1: Motivation to Take the Course. Five subthemes emerged from the responses to the items on the survey regarding first responders' motivation to take the

course: Help patients better, more empathetic, helping them to be less anxious, early access to help, and help myself and peers.

Subtheme 1: Help Patients Better. Several first responders reported that helping patients better was a motivation for taking the course. For example, Participant 1 said they were motivated to take the course to offer "better treatment." Participant 2 said that they took the course in order to, "be able to speak to someone and calm them down and may not have to use drugs to do that." Participant 2 also was motivated, "to help my community more when they need it the most." Participant 3 said he was motivated by being able to recognize the signs and symptoms of a mental health crisis and to offer "support." Participant 4 said, "to help identify those who are at risk." Participant 6 said, "If I have more 'tool' in the tool box, it will make me a better provider to my patients and possible a better leader for my coworkers." Participant 5 said, "Furthering my understanding of mental health problems and being more effective in my ability to help other people both coworkers and my patients." Participant 6 also said elsewhere, "My goal is to provide the best care possible to my patients." Participant 6 added elsewhere,

> I think that gaining more of an understanding of behavioral emergencies and improving my assessment abilities will help my patients a great deal. When I was a new EMS provider, [with] any patient with mental health issues the first thought was to involve law enforcement.

Participant 7 said, "Mental health crisis is a common call for us. The more strategies I have to help someone experiencing one, the better I'll be able to serve." Participant 8 said, "I want to be able to respond appropriately to patients who are experiencing signs of psychological distress or who are diagnosed with certain mental

health disorders so that I can be a better resource for them." Participant 8 also said, "I think that this training will help me to pay more attention to the patients receiving first aid and to keep an eye out for signs of psychological distress or possible self-harm." Participant 8 said in response to another question, "I think that my patients would greatly benefit from a provider who is educated in dealing with mental health crises so that I can respond in a way that is better for everyone involved." Participant 9 said, "Learning how to manage mental health crises." Participant 9 said in response to another question they were motivated to, "assist my community better." Participant 10 said they were motivated to take the training to "better understand how to help others when they are in need of assistance." Participant 10 added in response to another question, "I think it will better help my assistance, I will be able to give them better help because I will have more knowledge." Participant 10 also said, "Some of the calls that we respond to are mental health related. It is very important that we understand how to best help them." Participant 11 said that they were motivated to learn, "how to deal with people who may be going through a mental health crisis." Participant 11 added in response to another question, "I would be able to give them tips or help out more when there is a patient that needs help." Participant 12 said, "Being able to better able patients in psychiatric emergencies on a 911 call and knowing how best to interact with and help them in such a way they feel safe and comfortable with me."

Participant 13 said, "We also respond to numerous mental health emergencies and having this type of training will help to us to respond more effectively to these types of emergencies." Participant 14 said, "Being able to assist and communicate better with people that have mental disabilities in everyday life . . . . that we run into on the street for

calls for service." Participant 15 said, "We are normally called to serve in high stress situations. Every scene is very different and we never know exactly what we will encounter on scene. Again, being prepared through training is a huge first step." Participant 16 said they were motivated to, "better work with patients seeking help or those having a mental issue and needing help but not recognizing it themselves." Participant 16 also said in response to another question, "We see 'behavioral emergencies' as well as attempted suicides fairly regularly and this would help me to better help the patients." Participant 18 said, "I think it will really help how we can help patients and how we approach providing care for them." Participant 18 also said, " I think it will greatly benefit how we handle patients. I believe that it will allow me to help them more and be more comfortable." Participant 18 also said in response to another question that the training would "help with how I handle situations. I think it will really help me feel confident in being able to provide care for mental health situations." Participant 19 said they were motivated to take the course to, "probably be . . . better able to help people with mental health issues, because a lot of people who call 911 have one." Participant 20 said, "Being able to recognize when someone needs help with mental help and help them." Participant 20 also said in response to another question, "They will get better quality support." Participant 21 said, "Being able to help and assist others that are having struggles," and "It will also help with anyone I am in contact with to be able to offer guidance or resources."

Subtheme 2: More Empathetic. Seven first responders reported that their motivation for taking the course was they were hoping to be more empathetic with patients who had mental health issues. Participant 1 said it would give them a better,

"understanding for an of an increasing patient populating." Participant 2 also said, "that they would have a better understanding of what the person is going through." The understanding part of the response implies a greater empathy because the responder will have a better understanding of what patients are going through. Participant 1 also mentioned the course would give them a "chance to further my training in the field and to help me personally living with two family members with bipolar." Having two family members would increase someone's need to be empathetic with people suffering from mental health issues. Participant 4 said their motivation to take the course was, "Empathy and compassion." Participant 11 said their motivation was, "learning how to be empathetic and understanding toward people with mental health issues that are in crisis." Participant 13 said, "I will be a more empathetic care provider for those suffering from a mental health emergency." Participant 18 said, "I think that it will allow me to become more aware of issues." Participant 19 said, "I'll probably be able to better understand them and work to get them a better patient outcome."

Subtheme 3: Helping Them to Be Less Anxious. Seven first responders reported that helping patients to be less anxious was their motivation for taking the course. Participant 1 said they were motivated, "to help the patient fell and calm and relaxed as we can." Participant 3 said they wanted to be able to, "Lessen anxiety and fears associated with opening up and seeking help." Participant 6 said, "As my exposure to behavioral emergencies increased, I found that by deescalating agitated patients and by having an more empathetic approach I was able to gain trust and able to provide transport and further evaluation to the patient in need." Participant 12 said, "It provides an extra level of comfort and comfort interacting with patients that could potentially otherwise be

lacking." Participant 14 said, "Hopefully to [help patients] be more comfortable and less anxious. Make them feel like they are with a trustworthy individual/crew that truly cares about their wellbeing." Participant 15 said, "It should bring them comfort knowing that we are trained and experienced in this area. In addition, care providers should be presenting a comforting presence to the individuals needing care." Participant 21 said, "They will feel that they have someone who has the knowledge and guidance to be able to help, they would feel more secure having a resource that has been trained in Mental Health First Aid."

Subtheme 4: Early Access to Help. Three first responders reported early access to help as their motivation for taking the course. Participant 3 said they were hoping to be able to provide "early access to help. We preach early access to AEDs but do nothing for the people needing help with these issues." Participant 16 said, "I can help identify the issues faster, which means getting help for the patient faster. More training for me also means I can provide the receiving hospital with a better picture of the patient they are receiving." Participant 5 said, "Hopefully I will be better at communicating with them and thus creating a better outcome in their medical care." The reference to outcome implies earlier access to help.

Subtheme 5: Help Myself and Peers. Ten first responders reported helping themselves and their peers provided motivation for them to take the course. Participant 3 said they were motivated to increase "Self-awareness, tolerance, and understanding of situations beyond people's control." Participant 3 was in part motivated to understand their own potential symptoms. Participant 4 said they were motivated so, "I can learn to identify my own potential problems as well and learn resources to use." Participant 5

said, “It would give me a way to further help my peers and hopefully myself by better understanding mental health issues.” Participant 5 also said they were motivated in “furthering my understanding of mental health problems and being more effective in my ability to help other people and coworkers.” Participant 6 said, “My goal is to provide . . . assistance to my coworkers.” Participant 7 said, “I have seen friends and coworkers have mental breakdowns after not exhibiting outward symptoms. I’d like to know more about what is a healthy coping mechanism and when it’s time to seek help.” Participant 9 said, “I will have a more rounded background in mental health services,” implying the training would be helpful to the first responder. Participant 13 said, “It is important to be able to recognize a mental health emergency in ourselves and our coworkers.” Participant 17 said, “Our field comes with high risks of mental health issues. It is nice to be able to identify symptoms or warnings for myself and coworkers and be proactive in seeking help.” Participant 20 said, “Anyone can suffer from mental health challenges—not just our patients, but also our coworkers. Being able to recognize when someone is facing such challenge and support[ing] them would be very helpful.” Participant 21 said, “Training will help me recognize when employees in my organization are having issues and help me be able to help them.” Participant 20 said, “Anyone can suffer from mental health challenges . . . but also our coworkers.” Participant 17 said, “As a mom with a child with mental health issues, and working closely with co-workers within the firehouse, I hope it will prove beneficial.”

Post-Training Themes. Four themes emerged from the data analysis of the responses to the post training survey for RQ 8: Better identification of signs and

symptoms, Responding appropriately, Benefits to recipients' care, and Recommendations for improvement.

Theme 1: Better Identification of Signs and Symptoms. Several first responders reported they were better able to identify the signs and symptoms of mental illness after taking the course. Participant 1 said, "Help see and understand signs symptoms and how to act." Participant 3 said simply, "Recognition." Participant 5 said, "Having a better understanding of the way people are affected by stress and mental health issues." Participant 5 also said, "Being able to identify any mental health issues in my coworkers." Participant 6 said, "Expanded understanding of mental health emergencies." Participant 7 said, "I think someone who is not trained to respond to calls would find the information useful in making the decision whether or not to intervene." Participant 8 said, "I think that I have gained some useful information on mental health and mental health crises." Participant 13 said, "It is important to be trained in this so that we are better able to recognize that someone around us is dealing with a mental health issue." Participant 14 said, "Being able to recognize when someone is having a mental crisis and hopefully being able to assist." Participant 15 said, "Can be useful in our everyday lives." Participant 16 said, "We learned the importance of specific language." Participant 17 said, "Mental health disorders are very common so having the skills to recognize [them is important]" Participant 19 said the course provided, "Increasing empathy and awareness." Participant 20 said, "This training is invaluable. It helped me learn how to recognize signs and symptoms of mental health challenge." Participant 17 stated,

> EMS and Fire are more likely to encounter high stress situations and have experiences that lead to mental health disorders. While it is improving, the

> negative stigmas surrounding mental health disorders are still alive in the firehouse setting. Being trained as a mental health first aider will make it easier to recognize coworkers and friends that may be struggling and engage these individuals and connect them to help before they enter crisis mode.

Participant 19 stated, “We encounter mental illness on a regular basis, so any knowledge about MHFA is useful.” Participant 21 said, “I can recognize when someone maybe having a problem.”

Theme 2: Responding Appropriately. Several first responders reported that they felt they would be better at responding appropriately after taking the course. Participant 2 said, “I now know how to talk and truly listen to someone better.” Participant 3 said, “reaction during responses for folks experiencing issues.” Participant 4 said, “The course can help people who have little knowledge of mental health treatment organize themselves to offer help while referring a person in need to more resources.” Participant 7 said, “For a firefighter or EMT that has not had any training in how to respond to coworker's mental health crisis, it may also give the confidence to approach a peer and initiate a conversation.” Participant 8 said they learned, “how to handle them appropriately without making the situation worse, putting myself in harm’s way, or overstepping my boundaries as an EMT.” Participant 9 said that they, “Know how to deescalate a situation.” Participant 10 said, “I think it’ll better help me assist with my patients, people I meet in public.” Participant 11 said, “You’ll be able to help people in mental crisis.” Participant 12 said, “Better approaches to assisting patients with psychiatric issues, particularly as a first responder.” Participant 13 said, “engage people struggling is a real asset. Especially since these people will likely be both friends and

coworkers." Participant 18 said, "It gives you a better understanding of how to handle mental health situations." Participant 20 said, "provided me with concrete framework of supporting anyone experience mental health challenge. Also, it helped me be more compassionate towards anyone experience mental health challenge." Participant 21 said, "It makes me feel better equipped to help those at work and home."

Participant 1 said, "Help with approaching a patient." Participant 2 said, "That I can listen better than I could before and show more compassion." Participant 6 said, "Better care for patients." Participant 8 stated, "I feel like I am more comfortable with the idea of receiving a mental welfare call and how to approach the patient." Participant 9 also said after the training they can "better serve my community." Participant 10 said, "I will better be able to assist my patients." Participant 11's statement was in agreement that the course helped them "being able to help someone that you were called for experiencing a mental health crisis," Participant 12 stated, "Better able to handle myself in high pressure situations involving psychiatric patients." Participant 13 mentioned responding appropriately "to help not just my patients but also my coworkers to get access to the appropriate resources for their situation." Participant 14 said, "We run into mental health incidents all the time. Being trained in something like this could be really beneficial to the person that is having a crisis." Participant 15 said what they learned, "can assist both first responders and our community." Participant 16 said, "We often get calls for psychiatric/behavior issues, now I know better how to approach them." Participant 18 stated, "We can learn how to better care for a patient!" Participant 20 also

said, “I have a plan for supporting anyone experiencing mental health challenges—myself, my colleagues, and community that I serve.”

Theme 3: Benefits to Recipients’ Care. First responders reported three subthemes of benefits the training will have to the recipients of care: Improved attitudes like empathy and caring, early intervention, and other benefits to recipients of care.

Subtheme 1: Improved Attitudes Like Empathy and Caring. Nine first responders reported improved attitudes, like empathy and caring, as a benefit to recipients’ care. Participant 1 said, “Maybe they can relax more.” Participant 3 said the course helped, “a responder able to work with empathy and nonjudgmental treatment.” Participant 6 said, “Improved empathy.” Participant 8 also said,

> I think that they [recipients] will benefit from my increased comfort asking questions about suicidal thoughts, plans of action, self-harm etc. Before this course I was more hesitant to ask these sorts of questions and would try to avoid it when I could.

Participant 12 said with respect to those who received the care, “They’ll hopefully be able to relate to me more and be more willing to talk to me and build rapport.” Participant 13 said, “I will be able to listen empathetically.” Participant 14 said, “Hopefully they benefit by knowing they have someone in their corner who is there to listen and not judge or break any sort of confidentiality if it is not warranted.” Participant 19 said, “I think they'll receive increased empathy and understanding.” Participants 20, “I

will be able to support them through compassionate, nonjudgmental listening, give them hope, and direct them to resources for further help."

Subtheme 2: Early Intervention. Several first responders reported early intervention as a benefit to recipients' care. Participant 2 said, "Hopefully that they will now have more options and help than they did before." Participant 5 said, "Being able to identify any mental health issues in my coworkers earlier to get them help." Participant 5 also said, "Early detection can mean earlier treatment." Participant 13 said, "I will be able to listen empathetically but also know when the individual needs more help than I am able to provide at the first aid level and being able to help them access those resources early." Participant 15 said, "Early intervention will be a huge benefit." Participant 17 said,

> The sooner individuals struggling with mental health issues are able to connect to the right help, the sooner they can start working towards getting back to a healthy life. If more people are educated in how to recognize, approach, and connect with individuals struggling with mental health disorders, the more likely they are to get help before their issues escalate.

Subtheme 3: Other Benefits to Recipients of Care. Seven first responders reported other benefits to recipients' care. Participant 4 said, "The course helped strengthen my knowledge on the subject." Participant 9 said that they now "know how to respond to a greater variety of mental health emergencies." Participant 10 said, "I will be able to better assist them in their struggles and helping them out of it." Participant 11 said they would "be able to communicate better with the patient and not provoke the patient using or doing the wrong things." Participant 16 said, "I can better approach and talk with people

having a MH issue." Participant 18 said, "I think it will make them feel better about how I would handle things." Participant 21 said, "They will be guided to resources and receive support and help."

Theme 4: Recommendations for Improvement. First responders reported recommendations for improvements. Participant 7 spoke a great deal about how there needed to be improvement in the training so that they would be better able to help coworkers:

> As for helping coworkers around the station, I don't feel like it was specific enough to fire and EMS and the special challenges of having coworkers who are also roommates. We also operate in a very hierarchical structure, and there's no discussion of how to approach a senior member or a leader who has command over you about their concerning behaviors."

Participant 7 also talked about how it is insufficient to simply encourage recipients of care to seek professional help:

> It's possible that I now will feel more confident than I did before in approaching a peer about a mental health concern, which could potentially avoid tragedy. My concern is that the last step of all these trainings is "encourage them to seek professional help," but there's no discussion of how to actually go about doing that. Healthcare is extremely tricky to navigate. Just saying, "seek help" is a bad direction. I don't think that's a short coming of the program, as much as a short coming of the or healthcare system, but it would definitely benefit these programs to be regionalized. Our proctors went above and beyond and provided their local resources and encouraged us to find lists for our own localities. However, I would

have liked to actually talk to a representative of a local resource or shown what happens when one of the numbers is called. My barrier to helping more people with mounting mental health issues is not knowing how to get them to the resources they need.

Pre and Post Theme: Stigma

The theme Stigma emerged from the data analysis of the responses to both the pre- and post-training surveys. In the pre-training survey, Participant 7 said, “Hopefully it [the training] will help break the stigma of mental health and also allow people to police themselves and see the signs in others to intervene before a crisis.” In the post-training survey, Participant 17 said, “While it is improving, the negative stigmas surrounding mental health disorders are still alive in the firehouse setting.” Participant 21 stated, “I learned a great deal about mental health challenges, stigmas and misconceptions associated with them. I have learned how to support others and myself when dealing with mental health challenges.

Summary

This study was a mixed method, pre- and post-survey, design. This chapter presented the results of the study, including the participant characteristics and results of hypothesis testing. Both quantitative and qualitative results were presented. The quantitative results showed that first responders all made significant progress from pre to post survey in the domains of mental health literacy, comfort, confidence, and

identification, whereas participants' gains on stigma and knowledge from pre- to post-test were not significant.

The results of the qualitative data analysis procedures showed three main themes and five subthemes in the pretraining survey and six main themes and three subthemes in the post-training survey. The themes for the pre-training survey were lack of mental health training prior to MHFA, prior exposure to mental health training, and motivation to take the course. Motivation to take the course had the four subthemes: Help patients better, more empathetic, helping them to be less anxious, early access to help, and help myself and peers.

The themes for the post-training survey were content expanded my knowledge: useful, needed, informative; quality of training and instructors good; better identification of signs and symptoms; responding appropriately; benefits to recipients' care; and recommendations for improvement. Benefits to recipients' care had the three subthemes: Improved attitudes like empathy and care, early intervention, and other benefits to recipients of care. There was also a common theme of stigma between pre- and post-training surveys. From these data, it appears that the training was effective in improving outcomes for first responders and those improvements were perceived by participants. In the next chapter, findings will be discussed and the implications, limitations, and recommendations for future research will be provided.

CHAPTER 5: DISCUSSION

Overview

The purpose of this mixed-methods study was to examine the effectiveness of MHFA training on first responders' knowledge, stigma, ability to identify mental health symptoms, their comfort and confidence level in responding to those in the midst of a mental health crisis, and the benefits of MHFA on first responders and those they help. This chapter will present a summary and discussion of findings, along with implications, limitations, recommendations for future research, and a summary of the study.

Summary of Findings

The quantitative findings of the current study showed that MHFA training had a significant influence on first responders' mental health literacy, their comfort and confidence in assisting individuals in the midst of a mental health crisis, and their ability to identify mental health issues. An unexpected finding was that MHFA training did not have a significant influence on the knowledge and stigma of first responders.

Concerning the qualitative findings of the study, three main themes and five subthemes in the pre-training survey and six main themes and three subthemes in the post-training survey emerged from analysis. The themes for the pre-training survey were lack of mental health training prior to MHFA, prior exposure to mental health training, and motivation to take the course. Motivation to take the course had four subthemes: help

patients better, more empathetic, helping them to be less anxious, early access to help, and help myself and peers.

The themes for the post-training survey were content expanded my knowledge: useful, needed, informative; quality of training and instructors good; better identification of signs and symptoms; responding appropriately; benefits to recipients' care; and recommendations for improvement. Benefits to recipients' care had the three subthemes: improved attitudes like empathy and care, early intervention, and other benefits to recipients of care. Stigma also emerged as theme from responses to both the pre- and post-training surveys.

Discussion of Findings

Results of Hypothesis Testing

Mental Health Literacy

The results of the study showed that participants' mental health literacy scores increased from pre- to post-training surveys. This indicates that first responders significantly increased their mental health literacy scores due to the MHFA training. The mental health literacy score is a combined score of knowledge, stigma, confidence, comfort, and identification. These results concerning these different areas will be described individually and discussed within the context of corresponding literature.

Knowledge

The results of the study showed that participants did not report a significant improvement of their knowledge of mental health illnesses after taking the MHFA training. This indicates that there was not much of a change in their knowledge between pre- and post-training surveys. This was an unexpected result because many first

responders in past studies reported not knowing much about mental illnesses or mental health before participating in MHFA training (Baier et al., 2019). Other research has shown that an increase or change in knowledge among first responders is among the benefits of MHFA training (Happell et al., 2015; Kitchner & Jorm, 2006, Morgan et al., 2018; Svensson et al., 2015). One reason why participants did not report a significant change in knowledge from pre- to post-training is because several of the participants had some knowledge of mental health and mental illnesses prior to taking the MHFA training and surveys. Several participants stated in the theme that emerged to the open-ended questions that they had prior exposure to mental health training.

Stigma

The results of the study also showed that participants' stigma toward mental illness did not decrease significantly after taking the MHFA training. This finding was also unexpected; in previous research, MHFA trainees often report a change or decrease in their stigma about mental health and those with mental illness (Childs et al., 2020; Happell et al., 2015; Kitchner & Jorm, 2002; Mohatt et al., 2017; Morgan et al., 2018; Svensson et al., 2015). Stigma was a theme in both the pre- and post-survey responses to the open-ended questions as well. These results showed that several of the first responders had some limited mental health knowledge from some prior exposure to MFHA training, which appears to have had an influence on stigma and the lack of significance regarding participants' change in stigma between pre- and post-training survey.

Comfort Level

In the results of the study, participants reported a significant increase in their comfort level with helping someone in a mental health crisis between pre- and post-training surveys. First responders reported a significant difference in the level of comfort they felt in helping individuals with a mental illness after the MHFA training than they did before they took the training. Previous research shows that MHFA training decreases the social distancing of first responders, therefore their comfort level is increased (Kitchner & Jorm, 2002).

Confidence Level

The results of the study showed that participants' confidence level in helping someone in a mental health crisis increased between pre- and post-training surveys. This led to the conclusion that the MHFA training had a significant influence on the how confident first responders felt in helping individuals with a mental illness. This finding supports previous research that found first responders reported increased confidence after taking MHFA training (Happell et al., 2015; Kitchner & Jorm, 2002; Maslowski et al., 2019; Morgan et al., 2018; Svensson et al., 2015).

Identification

The results of the study found that participants' ability to identify mental illnesses increased from the pre-training to the post-training survey. This indicates that MHFA has a significant influence on the ability of first responders to identify various forms of mental illnesses. This finding supports previous research, which shows that after talking a MHFA course, trainees' have a significantly greater ability to identify mental health

illnesses than they did before taking the training (Kitchner & Jorm, 2002; Mohatt et al., 2017; Morgan et al., 2018).

Key Themes

Experience

In response to the open-ended questions in the pre-survey regarding previous experience, two main themes emerged: First responders reported they had a lack of mental health knowledge prior to taking the MHFA training, and several others reported they had some prior exposure to training in the mental health needs of first responders. From responses to the post-survey, first responders reported that the training expanded their knowledge, was useful, needed, and informative, and the quality of training and instructors is good. These findings support previous research showing that many first responders find the MHFA training to be useful and informative (Svensson et al., 2015).

Benefits

Four main themes emerged from the responses to the post-training survey regarding benefits: better identification of signs and symptoms, responding appropriately, benefits to recipients' care, and recommendations for improvement. These findings are congruent with previous research that shows that first responders report that they want and can benefit from a specific MHFA program designed solely for them (Svensson et al., 2015). This corresponds to the study results in that participants also reported having a specific MHFA program for first responders as a recommendation for improvement. Previous research shows that trainees seem to benefit from MHFA training in that it is an effective intervention to help prepare first responders to provide better support to

individuals in a mental health crisis or who suffer from a mental illness (Maslowski et al., 2019).

Biblical Review

Compassion/Empathy

Many first responders reported that the training helped to increase their empathy and compassion for their patients, they had better understanding of the actions and words of their patients, and they were better able to help them feel calm. These results correspond to Ephesians 4:32: "Be kind to one another, tenderhearted, forgiving one another, as God in Christ forgave you." In keeping with this passage, first responders need to be kind and have compassion for those they are helping, while also forgiving them for anything the patients in a mental health crisis might say or do. The training prepared them for providing help with compassion and empathy.

Listen

Many first responders reported that the training helped to increase their listening skills. As a result of the training, they were able to be better listeners and could listen empathetically to their patients. The results correspond to James 1:19: "Know this, my beloved brothers: let every person be quick to hear, slow to speak, slow to anger;" In keeping with this passage, first responders need to listen to their patients more and become better listeners.

Training

Many first responders reported learning a great deal from MHFA training and gaining a better understanding of mental illnesses. These results correspond to Proverbs 3:13 (ESV, 2011): "Blessed is the one who finds wisdom, and the one who gets

understanding," In keeping with this passage, first responders gain wisdom with the knowledge they receive from different trainings, in this case MHFA. According to Matthew 10, first responders are always needing more training to learn how to use new equipment, administer new medications, and learn new policies or protocols. Training is important, as God shows in this section of Matthew. No matter what area one is working in, training and knowledge are important.

Patients

Many first responders reported being able to better help their patients and being a better provider after taking MHFA training. The results correspond to Luke 10:19: "Behold, I have given you authority to tread on serpents and scorpions, and over all the power of the enemy and nothing shall hurt you." The results also correspond to Matthew 5:9: "Blessed are the peacemakers, for they shall be called sons of God." The results also correspond to Psalm 82:3-4: "Give justice to the weak and the fatherless; maintain the right of the afflicted and the destitute. Rescue the weak and the needy; deliver them form the hand of the wicked." In keeping with these passages, first responders reported responding appropriately, better helping their patients, calming them, and being a better provider. First responders are peacemakers, and they bring peace to those they help in times of chaos and uncertainty and help to quiet the voices that some patients have that are too much to handle.

Implications

The implications of the findings of the current study are that MHFA training assists in in preparing first responders to perform their duties better when it comes to all calls, but specifically with respect to mental health-related calls. MHFA training can help

prepare them for how to respond to people in a mental health crisis: how to deescalate, identify, talk, help, feel more comfortable, feel more confident, and listen empathically to them. MHFA training can also help first responders in their everyday lives, when they are off duty, and when they are not responding to a call. It can help them identify the warning signs in their peers and staff, as well as themselves and family members. The training can assist them in leading individuals to get the proper mental health care that they need. Moreover, MHFA training can help them identify mental health issues before it is too late. Early detection and intervention is important with mental health issues. It can also help first responders better perform their Christian duties and take actions based on lessons learned from the Bible on treating others with love, help, and respect and the importance of training.

Limitations

The limitations of the study are that certain survey items were developed by the researcher and need to be further tested to determine their validity and reliability. In addition, all the survey items are self-reported, and therefore the study runs the risk of biased responses and the possibility for human error. There was also a lack of a control group to compare the results to, as well as a lack of random assignment of participants into groups.

Recommendations for Future Research

It is the recommendation of this researcher that future research measures the effects of MHFA after multiple training sessions. The study could be replicated having more participants take the training and the pre- and post-surveys. In addition, to overcome the regional limitation of having only surveyed first responders in VA, the

training should be given to participants in other states and regions of the country. It could also be recommended that the participants with low knowledge be put through MHFA training. It could also be recommended that the participants with high stigma be put through MHFA training as well. Another recommendation is to have a randomized controlled trial of this study with a control group.

Summary

This study was a mixed method, pre- and post-survey, design. This chapter presented a summary of the findings, discussion of the findings, implications, limitations, and recommendations for future research. The quantitative results showed that first responders made significant progress from pre- to post-survey in the domains of mental health literacy, comfort, confidence, and identification, whereas participants' gains on stigma and knowledge from pre- to post-test were not significant.

The results of the qualitative data analysis showed three main themes and five subthemes in the pretraining survey and six main themes and three subthemes in the post-training survey. The themes for the pre-training survey were lack of mental health training prior to MHFA, prior exposure to mental health training, and motivation to take the course. Motivation to take the course had the four subthemes: Help patients better, more empathetic, helping them to be less anxious, early access to help, and help myself and peers.

The themes for the post-training survey were content expanded my knowledge: useful, needed, informative; quality of training and instructors good; better identification of signs and symptoms; responding appropriately; benefits to recipients' care; and recommendations for improvement. Benefits to recipients' care included that first

responders had improved attitudes, such as empathy and care and that the training could result in early intervention. There was also a common theme of stigma between pre- and post-training surveys. First responders commented that although negative stigmas toward mental health still exist, these attitudes are improving. From these findings, it appears that the training was effective in improving outcomes for first responders and those improvements were perceived by participants.

Implications of the study include that MHFA training of first responders can help them perform their duties better when it comes to all calls and specifically mental health-related calls. MHFA training can prepare first responders to deliver more appropriate care for patients in a mental health crisis by teaching them how to de-escalate, identify, talk, help, and listen empathically. Moreover, first responders reported feeling more comfortable and more confident in providing care. The training helps first responders be more equipped to lead individuals to the proper mental health care they need. The course also helped them identify the warning signs in their peers and staff, as well as themselves. Importantly, the MHFA training was overall helpful in preparing first responders to identify mental health issues before it is too late, as early detection and intervention are important with mental health issues. The training also appeared to help first responders carry out their duties in a way that is congruent with lessons learned from the Bible: by treating others with love, help, and respect and in participating in training.

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APPENDIX A: INSTRUCTOR PERMISSION EMAILS

[External] RE: Mental Health First Aid Training of Firefighters and EMTs Dissertation/Research Study

Sheila Lythgoe [redacted]

[redacted]

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Thank you both, I would love to help with the process. Rebecca, let's connect and see what we can provide!

Sheila

[redacted] | **Sheila Lythgoe, MS**

[redacted]

From: Caroline S. Mullins [redacted]
Sent: Wednesday, March 16, 2022 8:16 AM
To: Bandy, Rebecca Leigh [redacted]
Cc: Sheila Lythgoe [redacted]
Subject: RE: Mental Health First Aid Training of Firefighters and EMTs Dissertation/Research Study

Good morning Rebecca,

I've copied Sheila Lythgoe as she handles Mental Health First Aid trainings in the Roanoke and Salem area. I think this is a wonderful idea and hope that it works out for all involved!

Sheila, if you need any support in these potential trainings let me know! I'd be happy to get involved!

Caroline

[External] MHFA Survey

Mary Beth Henry [redacted]
Thu 6/15/2023 7:52 PM
To: Bandy, Rebecca Leigh [redacted]

[redacted]

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Rebecca,

I'm an MHFA Instructor, so I'm not sure if I can help with your survey/research or not, but please let me know if I can.

Marybeth Henry :-)

[redacted]

APPENDIX B: PERMISSION TO RECRUIT EMAILS

Re: [External] RE: Mental Health Training of EMTs/EMS Dissertation Research Study From Liberty University Student

Valeriano, Vincent [redacted]
Tue 5/17/2022 3:15 PM
To: Bandy, Rebecca Leigh [redacted]
Hi Rebecca,

I apologize for the delay, I had to do some digging on if we are able to release providers' contact info. You can submit a TR-62 data request form and request a list of the individuals you would like to target sending this information to.

Thank you for doing research on this important topic!

Best,

Vincent P. Valeriano, MPH, CHES
[redacted]

[External] Mental Health Training Information

This message has a digital signature, but it wasn't verified because the S/MIME control isn't currently supported for your browser or platform.

F

Faessel, Shawn M CIV USN (USA) [redacted]

To: Bandy, Rebecca Leigh

Cc: Wilkes, Scott F CIV (USA) [redacted]

Tue 4/12/2022 11:23 AM

Ms. Bandy,

If you need any assistance in getting volunteers, I may be able to help. I am the Peer Support Team Coordinator for a duel Fire & EMS Fire Department. Let me know if I can be of any assistance.

Have a great day,

Shawn M. Faessel

[redacted]

[External] Mental Health Study

Christopher Hudspeth [redacted]
Sat 4/9/2022 8:19 AM
To: Bandy, Rebecca Leigh [redacted]

[redacted]

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Good morning , I would love to help with your study. Please feel free to call or email so we can get started. Thank you

Christopher Hudspeth

[redacted]

[External] I've been a PTSD EMS provider for years

Tim Dunn [redacted]
Thu 4/7/2022 8:52 PM
To: Bandy, Rebecca Leigh [redacted]

[redacted]

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Hey Rebecca,

I'm a Captain and paramedic with Franklin Fire and Rescue. I'd love to help with your survey and help point our people in the right direction.

Thank you for your help,

Tim

Get Outlook for Android

From: Cathy Cockrell [redacted]
Sent: Wednesday, April 6, 2022 7:47:45 AM
To: Bandy, Rebecca Leigh [redacted]
Subject: [External] RE: Mental Health Training of EMTs/EMS Dissertation Research Study From Liberty University Student

[redacted]

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

If you send me a link to your survey, we can post it on our social media and list serve and ask for participants for people who have taken the class.

APPENDIX C: PARTICIPATION RECRUITMENT FLYER

Research Participants Needed

Do you feel under trained for mental health calls or want more free mental health training? Please consider participating in the study discussed below!

Mental Health First Aid (MHFA) Training of First Responders

- Are you a firefighter, EMT/EMS, or both?
- Are you 18 years old or older?
- Have you had no prior Mental Health First Aid (MHFA) training?
- Are you a first responder in Virginia?

If you answered **yes** to each of the questions listed above, you may be eligible to participate in a research study.

The purpose of this research study is to examine the effectiveness of Mental Health First Aid (MHFA) training on first responders' knowledge, stigmas, comfort level, confidence level, ability to identify mental health symptoms, and the benefits of MHFA on first responders and those they help.

Participants will be asked to complete a pre-training survey (that includes a demographic survey), complete 2 hours of online course work, complete 6 hours of Zoom training, and complete a post-training survey.

Benefits may include improved mental health literacy, improved mental health knowledge, improved stigma, improved comfort level, improved confidence level, and improved identification.

Participants will have the opportunity to enter a raffle for a $50 gift card.

If you would like to participate, please contact the researcher at the email address provided below.

A consent document is provided as the first page of the pre-training survey.

Rebecca Bandy, a doctoral candidate in the Department of Psychology School of Behavioral Sciences at Liberty University, is conducting this study.

Please contact Rebecca Bandy at [redacted] for more information.

Liberty University IRB – 1971 University Blvd., Green Hall 2845, Lynchburg, VA 24515

APPENDIX D: PARTICIPANT RECRUITMENT EMAIL

Dear Whom It May Concern:

As a graduate student in the School of Behavioral Sciences at Liberty University, I am conducting research as part of the requirements for a doctoral, PhD degree. The purpose of my research is to examine the effectiveness of Mental Health First Aid (MHFA) training on first responders' knowledge, stigmas, comfort level, confidence level, ability to identify mental health symptoms, and the benefits of MHFA training on first responders and those they help; and I am writing to invite eligible participants to join my study.

Participants must be 18 years of age or older; a firefighter, EMT/EMS, or dual trained; work in Virginia, and have no previous MHFA training. Participants, if willing, will be asked to a pre-training survey that includes a demographic survey (5-10 minutes), training coursework (2 hours), Zoom training (6 hours), post-training survey (5-10 minutes), and various points of email contact with the researcher (5-10 minutes). Identifying information will be requested as part of this study, but the information will remain confidential.

To participate, please contact me at rlbandy@liberty.edu for more information and to take the screening survey.

A consent document is provided as the first page of the pre-training survey link. The consent document contains additional information about my research. If you choose to participate, after you have read the consent form, please type your name and date in the form, then proceed to the survey.

Participants will have the chance to enter into a raffle for a $50 gift card at the completion of the post-training survey.

Sincerely,

Rebecca Bandy
Doctoral Candidate
[redacted]

APPENDIX E: SCREENING QUESTIONNAIRE

- What training did you receive?
    a. EMT/EMS
    b. Firefighter
    c. Both

- Have you had any previous Mental Health First Aid training?
    a. Yes
    b. No

- What is your age? _____

- Are you a first responder in the state of Virginia?
    a. Yes
    b. No

APPENDIX F: INFORMED CONSENT

Consent

Title of the Project: Mental Health First Aid (MHFA) Training of First Responders
Principal Investigator: Rebecca Bandy, Doctoral Candidate, Department of Psychology, School of Behavioral Sciences, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be an EMT/EMS, firefighter, or dual trained; work in Virginia; have no previous MHFA training; and are 18 years old or older. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of the study is to examine the effectiveness of Mental Health First Aid (MHFA) training on first responders' knowledge, stigma, comfort level, confidence level, ability to identify mental health symptoms, and the benefits of MHFA on first responders and those they help.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:

1. Complete a pre-training survey (that includes a demographic survey) (5-10 minutes).
2. Complete training course work (2 hours).
3. Complete Zoom training (6 hours).
4. Complete post-training survey (5-10 minutes).
5. Various email communications with researcher throughout (5-10 minutes)

How could you or others benefit from this study?

The direct benefits participants may receive from taking part in this study include improved mental health literacy, improved mental health knowledge, improved sigma toward mental health and mental illnesses, improved comfort level when working with individuals with a mental illness, improved confidence level when working with individuals with a mental illness, and improved identification of mental health problems.

Benefits to society include improving the care civilians receive from first responders and improving mental health training of first responders.

What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

The risks involved in this study include minimal psychological and emotional risks during the training in regard to some of the topics covered in the training. To reduce risk, the participants

will have the option to step away from an area of the training that is difficult for them or causes psychological and emotional distress.

How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

Participant responses will be kept confidential by replacing names with codes.

Data will be stored on a password-locked computer and hard copy data will be stored in a locked drawer. After three years, all electronic records will be deleted, and all hard copy records will be shredded.

How will you be compensated for being part of the study?

Participants may be compensated for participating in this study. At the conclusion of the post-training survey participants will have the opportunity to enter into a raffle for a $50 gift card. Participants will be asked to email the researcher with their contact information to be entered into the raffle.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Rebecca Bandy. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at rlbandy@liberty.edu. You may also contact the researcher's faculty sponsor, Rachel Piferi, at rpiferi@liberty.edu.

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA, 24515; our phone number is 434-592-5530, and our email address is irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent
By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above. *I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.* _____ Printed Subject Name _____ Signature & Date

APPENDIX G: PARTICIPANT CODE

Please enter a code consisting of first initial, middle initial, last name initial and date of birth. (With date of birth use two digits for month, two digits for day, and two digits for years without slashes or hyphens: strictly numbers). _____

Example: RLB071294

After giving the code above, please continue on to the Demographic Survey.

If you have already taken the Demographic Survey or completed the pre-survey, please proceed to the MHFA Training Survey.

APPENDIX H: DEMOGRAPHIC SURVEY

Demographic Survey

What is your age?

_____

What is your gender?

_____

What training did you receive?

- o EMT/EMS
- o Firefighter
- o Both

How long have you been working in the capacity for which you are trained for?

_____

What is your race?

- o Caucasian
- o African American or Black
- o Latino, Latina, Hispanic
- o Middle Eastern
- o East Indian
- o Native American or Alaska Native
- o Native Hawaiian or Other Pacific Islander
- o Asian
- o Other _____

Have you had any previous mental health training?

- o Yes
- o No

Was your previous mental health training sufficient?

- o Yes
- o No

Do you have any experience with mental illnesses outside of your job?

- o Yes
- o No

Do you know of community resources that are available for mental health and mental illnesses?

- o Yes
- o No

Do you have mental health issues?

- o Yes

- o No

Do your family members that have mental health issues?

- o Yes
- o No

APPENDIX I: MHFA TRAINING SURVEY

Mental Health Literacy Scale

The purpose of these questions is to gain an understanding of your knowledge of various aspects to do with mental health. When responding, we are interested in your degree of knowledge. Therefore, when choosing your response, consider that:

Very unlikely = I am certain that it is NOT likely
Unlikely = I think it is unlikely but am not certain
Likely = I think it is likely but am not certain
Very Likely = I am certain that it IS very likely

For the purposes of the study, the researcher will refer to the portion of the Mental Health Literacy Scale that measures the ability of participants to identify mental health disorders **identification ability subscale** (Items 1-4).

1. If someone experienced excessive worry about a number of events or activities where this level of concern was not warranted, had difficulty controlling this worry and had physical symptoms such as having tense muscles and feeling fatigued then to what extent do you think it is likely they have **Generalised Anxiety Disorder**

Very unlikely Unlikely Likely Very Likely

2. If someone experienced a low mood for two or more weeks, had a loss of pleasure or interest in their normal activities and experienced changes in their appetite and sleep then to what extent do you think it is likely they have Major Depressive Disorder

Very unlikely Unlikely Likely Very Likely

3. To what extent do you think it is likely that the diagnosis of Bipolar Disorder includes experiencing periods of elevated (i.e., high) and periods of depressed (i.e., low) mood

Very unlikely Unlikely Likely Very Likely

4. To what extent do you think it is likely that the diagnosis of Drug Dependence includes physical and psychological tolerance of the drug (i.e., require more of the drug to get the same effect)

Very unlikely Unlikely Likely Very Likely

For the purposes of the study, the researcher will refer to the portion of the Mental Health Literacy Scale that measures the ability of participants to identify mental health disorders **knowledge of mental illness subscale**. (Items 5-11)

5. To what extent do you think it is likely that in general in the US, women are MORE likely to experience a mental illness of any kind compared to men

Very unlikely Unlikely Likely Very Likely

6. To what extent do you think it is likely that in general, in the US**,** men are MORE likely to experience an anxiety disorder compared to women

Very unlikely Unlikely Likely Very Likely

When choosing your response, consider that:

- Very Unhelpful = I am certain that it is NOT helpful
- Unhelpful = I think it is unhelpful but am not certain
- Helpful = I think it is helpful but am not certain
- Very Helpful = I am certain that it IS very helpful

7. To what extent do you think it would be helpful for someone to improve their quality of sleep if they were having difficulties managing their emotions (e.g., becoming very anxious or depressed)

Very unhelpful Unhelpful Helpful Very helpful

8. To what extent do you think it would be helpful for someone to avoid all activities or situations that made them feel anxious if they were having difficulties managing their emotions

Very unhelpful Unhelpful Helpful Very Helpful

When choosing your response, consider that:

- Very unlikely = I am certain that it is NOT likely
- Unlikely = I think it is unlikely but am not certain
- Likely = I think it is likely but am not certain
- Very Likely = I am certain that it IS very likely

9. To what extent do you think it is likely that Cognitive Behaviour Therapy (CBT) is a therapy based on challenging negative thoughts and increasing helpful behaviours

Very unlikely Unlikely Likely Very Likely

10. Mental health professionals are bound by confidentiality; however there are certain conditions under which this does not apply.

    To what extent do you think it is likely that the following is a condition that would allow a mental health professional to **break confidentiality**:

    If you are at immediate risk of harm to yourself or others

Very unlikely Unlikely Likely Very Likely

11. Mental health professionals are bound by confidentiality; however there are certain conditions under which this does not apply.

    To what extent do you think it is likely that the following is a condition that would allow a mental health professional to **break confidentiality**:

    if your problem is not life-threatening and they want to assist others to better support you

Very unlikely Unlikely Likely Very Likely

Items 5-11 Total score of knowledge subscale _____

Knowledge of mental health resources

Please indicate to what extent you agree with the following statements:

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
12. I am confident that I know where to seek information about mental illness					
13. I am confident using the computer or telephone to seek information about mental illness					
14. I am confident attending face to face appointments to seek information about mental illness (e.g., seeing the GP)					
15. I am confident I have access to resources (e.g., GP, internet, friends) that I can use to seek information about mental illness					

For the purposes of the study, the researcher will refer to the portion of the Mental Health Literacy Scale that measures the extent to which participants are prone to stigma: **stigma of mental illness subscale**. (Items 16-31)

Please indicate to what extent you agree with the following statements:

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
16. People with a mental illness could snap out if it if they wanted					
17. A mental illness is a sign of personal weakness					

18. A mental illness is not a real medical illness					
19. People with a mental illness are dangerous					
20. It is best to avoid people with a mental illness so that you don't develop this problem					
21. If I had a mental illness I would not tell anyone					
22. Seeing a mental health professional means you are not strong enough to manage your own difficulties					
23. If I had a mental illness, I would not seek help from a mental health professional					
24. I believe treatment for a mental illness, provided by a mental health professional, would not be effective					

Please indicate to what extent you agree with the following statements:

	Definitely unwilling	Probably unwilling	Neither unwilling or willing	Probably willing	Definitely willing
25. How willing would you be to move next door to someone with a mental illness?					
26. How willing would you be to spend an evening socialising with someone with a mental illness?					
27. How willing would you be to make friends with someone with a mental illness?					

	Definitely unwilling	Probably unwilling	Neither unwilling or willing	Probably willing	Definitely willing

28. How willing would you be to have someone with a mental illness start working closely with you on a job?					
29. How willing would you be to have someone with a mental illness marry into your family?					
30. How willing would you be to vote for a politician if you knew they had suffered a mental illness?					
31. How willing would you be to employ someone if you knew they had a mental illness?					

Scoring

Total score is produced by summing all items (see reverse scored items below).

Questions with a 4-point scale are rated 1- very unlikely/unhelpful, 4 – very likely/helpful and for 5-point scale 1 – strongly disagree/definitely unwilling, 5 – strongly agree/definitely willing

Reverse scored items: 10, 12, 15, 20-28

Maximum score – 160

Minimum score – 35

Additional Items About Identification of Mental Health Disorders

32. To what extent do you think it is likely that individuals with a diagnosis of **PTSD** may self-harm, have psychosis, have substance use issues, and suicidal behaviors?

Very unlikely Unlikely Likely Very Likely

33. To what extent do you think it is likely that individuals with **psychosis** may exhibit severe disturbances in thinking, emotions, and behaviors?

Very unlikely Unlikely Likely Very Likely

34. To what extent do you think it is likely that **eating disorders** may lead to medical emergencies and suicidal thoughts and behaviors?

Very unlikely Unlikely Likely Very Likely

Single-or Double Item Scales

Comfort

1. How comfortable do you feel in assisting an individual who is in the midst of mental health crisis?

Not at all comfortable — Neither uncomfortable or comfortable — Extremely comfortable

0	1	2	3	4	5	6	7	8	9	10

2. How comfortable do you feel listening with empathy to someone who is in a mental health crisis?

Not at all comfortable — Neither uncomfortable or comfortable — Extremely comfortable

0	1	2	3	4	5	6	7	8	9	10

Confident

3. How confident do you feel in appropriately managing an individual who is in the midst of a mental health crisis?

Not at all confident — Neither unconfident or confident — Extremely confident

0	1	2	3	4	5	6	7	8	9	10

4. How confident do you feel in asking someone if they are considering killing themselves?

Not at all confident — Neither unconfident or confident — Extremely confident

0	1	2	3	4	5	6	7	8	9	10

Open-ended Items

1. Could you describe your experience of the MHFA training?

2. What benefits do you see in being trained in MHFA?

3. What benefits do you see for yourself as a Fire fighter or EMS in being trained MHFA?

4. How do you think the individuals receiving first aid will benefit from your being trained in MHFA?

APPENDIX J: FINAL PAGE OF SURVEY PRE-TRAINING

Pre-training survey takers:

Thank you for taking the survey. Please email this code: **SURVEYDONE** to the researcher at [redacted].

APPENDIX K: FINAL PAGE OF SURVEY POST-TRAINING

Post-training survey takers:

Thank you for participating in the survey. To enter a raffle to win a $50 gift card please email the researcher at [redacted] that you have completed the survey and your name and email address.

APPENDIX L: PERMISSION TO USE MENTAL HEALTH LITERACY SCALE AND PUBLISH IT IN DISSERTATION

[External] Re: Request for use of Mental Health Literacy Scale (MHLS)

Matt O'Connor [redacted]
Sun 10/23/2022 8:41 PM
To: Bandy, Rebecca Leigh [redacted]

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Thank you very much for your interest in the MHLS, it is always a pleasure to hear from a researcher with a similar interest in this area. You are welcome to use the MHLS for your research

For the questions relating to Australia, we have been suggesting that researchers look at population level data for their country and modify the answer accordingly. In addition, given the changes in the DSM 5, we are suggesting that you modify:
Q5 to: To what extent do you think it is likely that **Persistent Depressive Disorder** (Dysthymia) is a disorder
Q8 to: To what extent do you think it is likely that the diagnosis of **Substance Abuse Disorder** can include physical and psychological tolerance of the drug (i.e., require more of the drug to get the same effect)

Please keep me updated on your research as we would be interested to hear how it progresses

On Mon, 24 Oct 2022 at 04:00, Bandy, Rebecca Leigh [redacted] wrote:
Good evening Dr. O'Connor,

My name is Rebecca Bandy and I am a student at Liberty University in the PhD in Psychology doctoral program. I am currently in the process of completing my proposal for my dissertation on "Mental Health First Aid (MHFA) Training of First Responders". In doing research on mental health training of first responders I came across your Mental Health Literacy Scale. I am writing you to request permission for me to use it in my dissertation study with a few modifications to make it fit my study in the United States and for the MHFA training program. These changes include changing the questions that have Australia to United States and removing a four questions about mental health disorders that are not covered in the MHFA training. Please let me know if I can provide any additional information to aid in your decision.

Thank you for your consideration and time.

Rebecca Bandy

Re: [External] Re: Request for use of Mental Health Literacy Scale (MHLS)

Matt O'Connor [redacted]
Sun 2/18/2024 3:19 AM
To: Bandy, Rebecca Leigh [redacted]

You are welcome to publish it in your dissertation but not outside of this