

Post-Traumatic Stress Disorder in the Fire Service: Are we doing enough?

John Murrell

Memphis Fire Department, Memphis, TN

CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, expressions, or writings of another.

Signed: 

Abstract

The Memphis Fire Department (MFD) is a full career fire/EMS service for the citizens of the City of Memphis. MFD firefighters are exposed to incidents that could adversely affect the mental health. This repeated exposure can, over time, impact the firefighter, their family, and their work performance. Post-Traumatic Stress Disorder (PTSD) symptoms can develop requiring the need for assistance by the firefighter. MFD does not currently have a formal process to appropriately respond to the mental health needs of their members. The purpose of this applied research project (ARP) is to identify the components of a behavioral health team and establish a standard operating procedure (SOP) for a response. This ARP utilized the action research method to answer the following questions: (1) Why do firefighters not seek treatment for PTSD? (2) Is the employee assistance program still viable in the fire service? And (3) Would a dedicated mental health team offer a solution? The research procedures utilized were a literature review, a survey sent to MFD personnel, a survey sent to outside departments, and a written interview. Results of the research revealed that members are experiencing PTSD symptoms and not seeking treatment. MFD members reported a rate of exposure to traumatic events at 91% and 74% not seeking treatment. Research into outside departments found that the majority of departments do not have a formal response plan for PTSD. Several components were identified that would lead to a successful mental health plan for MFD. Recommendations are to change the culture of MFD, reevaluate current methods for traumatic incident response, evaluate the response team credentials, and develop then implement a PTSD plan to support the mental health of MFD members.

TABLE OF CONTENTS

Certification Statement.....	2
Abstract.....	3
Table of Contents.....	4
Introduction.....	5
Background and Significance.....	5
Literature Review.....	7
Procedures.....	15
Results.....	17
Discussion.....	23
Recommendations.....	25
Reference List.....	27
Appendix A.....	30
Appendix B.....	32
Appendix C.....	33
Appendix D.....	36

INTRODUCTION

Fire service employees respond to incidents on a daily basis that are often the result of the loss of life or property in a traumatic fashion. Over time these calls take a toll on the mental health of the responders resulting in behavioral health issues such as post-traumatic stress disorder (PTSD). Despite the extensive job-related training, the recognition of behavioral health symptoms is still not addressed by many departments including the Memphis Fire Department (MFD).

The problem is the fire service could do a better job preparing for PTSD. The purpose of this applied research project (ARP) is to develop a PTSD program for the Memphis Fire Department. This research utilized a combination of evaluative and action research methods. Specific research methods include a literature review, personal interviews, a survey of MFD members, a survey of other departments programs, and development of a protocol and budget for the PTSD program. This ARP will provide answers to the following questions:

Why do firefighters not seek treatment for PTSD?

Is the employee assistance program still viable in the fire service?

Would a dedicated mental health team offer a solution?

BACKGROUND AND SIGNIFICANCE

The City of Memphis (CoM) is located in the southwest corner of Tennessee and is the largest city with a population of 670,000 (City-data.com, n.d.). The metropolitan area of Memphis includes Tennessee counties of Shelby, Tipton, and Fayette along with Tate, Marshall, Desoto, and Tunica in Mississippi and Crittenden County Arkansas (City-data.com, n.d.). Memphis is a major distribution hub with major railroads (Union Pacific and Burlington Northern Santa Fe), an international airport contains the world headquarters of FedEx, and barge

access on the Mississippi River. Memphis has a vast diversity population including Caucasian, /4trauma center (Regional One) along with two level 2 trauma centers. As the “Home of the Blues” and Elvis Presley, Memphis attracts over 1 million visitors a year (City-data.com, n.d.).

MFD has 1600 active firefighters, 400 prevention members, and 200 ancillary personnel that serve the stakeholders daily (the City of Memphis, n.d.). MFD has 56 fire stations that house 56 Engines, 17 Trucks, 10 Battalion Chiefs, and 34 ambulances that respond to over 180,000 calls annually (the City of Memphis, n.d.). MFD utilizes cross-trained personnel to provide Advance Life Support (ALS) paramedic response and fire protection. Specialized rescue is conducted with the aircraft rescue (ARFF), and three special operations rescue trucks (SORT) to provide hazardous material and technical rescue. MFD is a full career department that operates a three-shift rotation with 24 hours on every other day for three days then 96 hours off.

MFD responds to calls using computer-aided dispatch (CAD) that categorizes calls and send appropriate equipment. For example, the ALS company will respond to a medical emergency to aid quicker then transportation is accomplished by the responding ambulance. In the past five years, MFD has seen an increase in especially traumatic incidents that have impacted members. MFD had two line of duty deaths (LODD) within a six-month period in which the incident was witnessed, and aid was immediate. In 2016 two separate house fires resulted in the death of 18 citizens in which 8 were children under the age of 10. The author of this ARP was involved in a building explosion resulting in entrapment and several months off duty.

The current method for dealing with these types of incidents is to require a critical incident stress debriefing (CISD) after the incident. However, in cases where members are hospitalized or otherwise off duty, they are not required to attend, and no formal CISD is

rescheduled. Beyond this initial CISD, the only recourse for those members still experiencing behavioral issues is the Employee Assistance Program (EAP). EAP can offer some counseling, but this often comes at the expense of the member's sick leave accrual.

As PTSD is relatively new in the fire service the On the Job Injury (OJI) process is still in progress and limits the availability to those seeking treatment. The OJI process is now an evaluation from a city chosen evaluator (J. Norman, personal communication, July 10, 2018). The evaluator makes a recommendation to the city not for treatment but for a medical discharge (J. Norman, personal communication, July 10, 2018). This still leaves those who have PTSD without the needed resources to treat their behavioral health needs. The recent increase in traumatic events and members coming forward revealed that MFD needed a better system to take care of members behavioral health needs.

This research project directly supports the National Fire Academy's (NFA) Executive Development course goals of leading effectively and integrating management and leadership techniques (RO123, 2016). Additionally, the research supports the United States Fire Administration's (USFA) goal of improving service capabilities for response and recovery (United States Fire Administration [USFA], 2010-2014). Finally, this research directly supports the National Fallen Firefighters Foundation (NFFF) Life Safety Initiative 13 for counseling and psychological support (Everyone Goes Home, 2005-2017).

LITERATURE REVIEW

To gain an understanding of the problem existing literature by professionals and peer-reviewed articles relating to behavioral health and fire service members. Included in the review

is literature about methods for training and preventing behavioral issues in fire services members.

As a profession, firefighters, are considered one of the most stressful and dangerous jobs worldwide (Morrison, 2015). The repeated exposure to traumatic events and loss of life impact the mental health of firefighters (Richards, 1994). Events such as 9/11 further impact mental health as firefighters observe coworkers subsume to occupational disease and injury and compare their current physical state (Department of Psychology Florida State University [FSU], 2018). The impact on mental health compared to civilian workers increases 67% PTSD development (FSU, 2018). Providing an environment where the firefighters experience a sense of involvement integral to success has shown to improve PTSD symptoms (FSU, 2018).

Firefighters are seen by the public as impervious to the event and hero-like in their actions to save persons and property (Mittal et al., 2013). The stigma associated with the admittance of a mental disease is often weakness and discriminatory practices against those with a mental disease (Brown, 2017). The past decades have seen a strong advocacy campaign to educate the public about the mental disease and dispel myths such as dangerous to themselves or others (FSU, 2018). An individual with a mental disease may further withdraw due to self-stigma in which internalization of the perceived stigma becomes their reality (FSU, 2018). The internalization can lead to other problems such as chemical dependency, anger management, family turmoil, and loss of employment (Larsen, Fleming, & Resick, 2018).

PTSD is described as a mental health issue triggered by involvement or witnessing a traumatic event or events (Skeffington, Rees, Mazzucchelli, & Kane, 2016). PTSD is not a new disease but rather a new classification of symptoms that are new to the fire service (Tull, 2018). While previously associated primarily with soldiers operating in war zones, PTSD is the largest

increase in mental health for firefighters (Skeffington et al., 2016). Due to the job firefighters perform they are exposed daily to possible PTSD events (Brown, 2017). Events that involve children, multiple victims and terror-related attacks result in PTSD rates equal to military combat veterans (Skeffington et al., 2016).

PTSD symptoms typically develop within three months of an incident but may not surface for months or years later (Brown, 2017). Predicting who is vulnerable to PTSD is accomplished by the observance of these common characteristics:

- Intrusive memories

- Avoidance of reminders of the incident

- Anxiety

- Depression

- Anger

- Withdrawal

- Insomnia/Nightmares

- Flashbacks (Rauch & Rothbaum, 2016).

These symptoms may appear all at once or individual over time and have a cumulative effect on the person (Brown, 2017). The increased awareness of these symptoms and PTSD has prompted organizations to reexamine their response to traumatic incidents (Brown, 2017). The manifestation of these symptoms is different for each as well as each gender making a diagnosis-specific rather than a generalization (FSU, 2018).

In conjunction with the typical symptoms, research has identified factors specific to firefighters and PTSD as follows:

- Treatment for another disorder

Entering the fire service at a young age

Experiencing another stressful event after a traumatic exposure (divorce, family death, serious illness)

Feeling overwhelmed by the constant exposure to traumatic events

Feeling a loss of control over ones' life (Brown, 2017).

The close family atmosphere in the fire service is helpful and a hinderance at the same time for those experiencing PTSD (Lamplugh, 2016). Peer support is available, but the perception of being strong makes asking for assistance reluctant for most (FSU, 2018).

Increased awareness has prompted organization such as the International Association of Firefighters (IAFF) to develop legislation to assist firefighters with PTSD (Morrison, 2015). The IAFF has also established a fulltime treatment facility that specifically deals with PTSD and emergency response to provide a more focused treatment plan (IAFF Recovery Center website, n.d.). The treatment center offers outlets for all disorders and disease including assistance when returning to the firefighter's hometown (IAFF Recovery Center website, n.d.). The unique response each firefighter has to an incident requires a focused response to assist with reintegration (Brown, 2017). The NFFF is assisting in the way the fire service perceives mental health from ostracizing to inclusion and recovery (Everyone Goes Home, 2005-2017).

The increased awareness of PTSD in the fire service has exposed the issue that many departments do not have programs for mental health (Lamplugh, 2016). The Employee Assistance Program (EAP) is often the only outlet for a firefighter experiencing PTSD (Brown, 2017). EAP was established to assist employers and employees with personal issues that affect work performance (Office of Disability Employment Policy, n.d.). EAP focuses on drug and alcohol, divorce, life support, and wellness such as smoking cessation (Office of Disability

Employment Policy, n.d.). Mental health-related concerns are referred out and then left to the individual to follow through with treatment (Office of Disability Employment Policy, n.d.). The lack of oversight has shown to increase the feeling of weakness and increase the prevalence of PTSD symptoms (Brown, 2017).

The utilization of EAP is decreasing among the fire service for unknown reasons but sheds light on the need for alternative treatment (Albrecht, 2014). The perception that EAP is an employer-centered resource gives some the perception that seeking assistance will negatively impact their career (Albrecht, 2014). This avoidance has been directly related to an increase in self-reliance or increased chemical dependency (Brown, 2017). Recent data estimates that 23%-40% of firefighters reporting mental health issues had not sought treatment (Rauch & Rothbaum, 2016). Those that did seek assistance through EAP have a 50% dropout rate from treatment after two visits (Albrecht, 2014). The number one reason for ceasing treatment was a feeling of a lack of support during the process (Brown, 2017).

Another common method of intervention for the fire service is a Critical Incident Stress Debriefing (CISD) after a traumatic incident. The CISD is a group event that involves those involved in the incident, peer support, and a clinical therapist (Morrison, 2015). The events are discussed and the feelings of those that wish to respond (Morrison, 2015). These sessions are generally requested by the commanding officer on the scene or if an individual request a debriefing. However, the open forum may prevent some, to be honest about their feelings due to perceived weakness of the group (Lamplugh, 2016).

Fire departments need to refocus the mental health assistance to provide trained providers in PTSD and emergency response (Rauch & Rothbaum, 2016). Modifications also need to include response to the employee at their location or web-based consult (Rauch & Rothbaum,

2016). Increased training for the company officer, who is in direct contact with the employees, also needs to identify PTSD symptoms (Brown, 2017) quickly. The Chief of the department needs to guide a culture change to show that the organization cares about the mental health of the members (Skeffington et al., 2016). Additionally, the Chief needs to be committed to assisting those with mental health issues and open to alternative treatment modalities (Rauch & Rothbaum, 2016).

Peer support teams have shown to be not only effective but efficient in assisting with PTSD (Vijayalakshmy, Hebert, Green, & Ingram, 2011). The peer support allows members to speak with someone who understands the job and the feelings associated with an incident (Vijayalakshmy et al., 2011). The selection for peer support should be in conjunction with a PTSD therapist to preserve the integrity of the program (Vijayalakshmy et al., 2011). Education should include training on confidentiality, suicide prevention, local resources, and discretion before being allowed to intervene (Brown, 2017). This team should be utilized as a support and not for any formal counseling of the participant (Vijayalakshmy et al., 2011).

In coordination with a peer support team an integrated mental health professional team is essential in providing the best care (Vijayalakshmy et al., 2011). The professional team is comprised of nurses, physicians, and psychiatrists that can provide all-around care for the member (Vijayalakshmy et al., 2011). This provides the ability to examine, diagnosis, and treat PTSD and other health concerns in a collaborative environment (Vijayalakshmy et al., 2011). Aiding with overall health has shown to improve PTSD symptoms and decrease the rate in the future (Vijayalakshmy et al., 2011). Lifestyle changes along with medications and continuous follow-up care are provided in a comprehensive format that is easier for the participant (Skeffington et al., 2016).

PTSD is not a stand-alone disease and is often compounded by other symptoms such as depression (Larsen et al., 2018). The initial treatment for PTSD may alleviate those symptoms associated with the incident but underlying conditions can be overlooked or not treated (Larsen et al., 2018). To provide the best treatment for PTSD, the availability of treatment needs to extend past the initial intervention (Skeffington et al., 2016). The continued availability of resources is paramount in the stabilization of those with a mental health issue (Skeffington et al., 2016). Ongoing efforts should be made to continually provide a stable platform for members newly diagnosed and those with residual issues (Brown, 2017).

Continued support for those with mental health disease has shown to decrease the rate of reexperience by 15%-35% (Rauch & Rothbaum, 2016). 60% of those treated and offered continued support reported having no residual effects of the PTSD experience (Vijayalakshmy et al., 2011). Those that only received treatment until the symptoms of PTSD lessened reported insomnia issues along with increased irritability (Lamplugh, 2016). The Fire Chief in establishing a comprehensive policy for mental health provides stability for the organization and promotes responder health (Brown, 2017). Sharp declines in sick leave use and disciplinary issues are reported when a support system is in place and available at all times (Skeffington et al., 2016).

The NFFF has developed initiatives to help support a systematic approach to firefighter behavioral health. Specifically, initiative 13 insists on access to psychological support for the firefighter and their family (Everyone Goes Home, 2005-2017). NFFF provides programs that make peer support aware of resources so they can guide others for assistance (Everyone Goes Home, 2005-2017). Another key aspect is that everyone reacts differently and therefore require a different approach to treatment and recovery (Everyone Goes Home, 2005-2017).

The literature reviewed revealed that responding to emergencies can and will take a toll on the psychological health of firefighters. The information indicated that due to the stressful job and repeated exposure that responders are at an elevated risk of developing PTSD. However, even with this information, many departments do not have a program in place to address the mental health needs of department personnel. The culture change begins with the Fire Chief in developing and supporting programs to target mental health. Additionally, a culture of acceptance rather than isolation needs to be promoted by the Fire Chief. The literature reviewed highlighted this as a way to combat the normally hesitant reaction to seeking help, especially mental health.

The literature reviewed outlined several concepts that are currently utilized by fire departments to address mental health in the fire service. Programs such as peer support teams, CISD, EAP, and mental health professionals were recommended. The literature also identified how these correlates to the NFFF safety initiatives.

The information obtained through the literature review influenced the research by presenting the need for a comprehensive mental health plan. The different responses to a traumatic event dictate the need for different treatment avenues for department members. The research highlighted several different options in developing a comprehensive mental health plan for responders. This researcher needs to determine which response would benefit the members of MFD and if other departments are successfully utilizing any comparable programs or methods. The literature review led to further research on comprehensive mental health programs for fire service personnel.

PROCEDURES

This applied research project utilized the action research methodology with the final goal of addressing the problem that the Memphis Fire Department does not have a PTSD program in place for the mental health of its employees. This researcher utilized literature review, two surveys, and personal interviews to gather information related to this ARP. The following question was developed to help guide the research related to MFD's problem:

Why do firefighters not seek treatment for PTSD?

Is the employee assistance program still viable in the fire service?

Would a dedicated mental health team offer a solution?

The literature review was initiated during the Executive Leadership course in June 2018 utilizing the Learning Resource Center (LRC) located on campus in Emmitsburg, Maryland. This researcher used the keywords "PTSD," "mental health," and "treatment options" which produced various articles and journals related to the subject. Further research was conducted using the National Emergency Training Center's (NETC) online library utilizing the same keywords. The literature review process provided many sources of information such as magazines, books, journals, and newspaper articles.

This researcher utilized the internet, specifically the search engine "Google," with the above keywords to find additional information on mental health and the fire service. The search, conducted from June 2018 to August 2018, gave further insight into treatment options and availability of programs throughout the nation. The information discovered assisted in the formulation of the survey and interview questions along with information for answering the previously listed research questions.

As with any research, there were several limitations related to the literature review. In keeping with peer-reviewed journals, the information was current, but it was difficult to ensure that the author provided unbiased information. The availability of mental health and PTSD specific to the fire service was a second limiting factor. The multiple credible resources provided the needed information but lacked the specific application to the fire service. Finally, as an ever-evolving subject, the treatment options are being revised as more research is conducted.

Two surveys were created by this researcher with the assistance of the online service SurveyMonkey® (Appendix A & B). The intended audience was fire service professionals in the Memphis area as well as across the United States. The audience was comprised of all personnel levels from private to chief officers to gain an overall picture of mental health in the fire service. This audience was unique in knowing current department policies and treatment options as well as personal experience with treatment. On August 6, 2018, a request was sent to the MFD Director to distribute the survey to the department (Appendix A), and approval was granted on August 7, 2018. A second survey was sent to randomly selected departments in the United States (Appendix B) with contacts known to this researcher.

The departmental survey was distributed via department email to all members of the MFD including suppression, logistical, clerical, administrative, support, investigations, and medical personnel. The total number of emails sent was 2116 and responses were received from 387 representing 18.2% of the department. The survey was open from August 6, 2018, until September 10, 2018. The survey consisted of 10 questions and can be found in Appendix A. The survey questions were intended to identify exposure to stressful events, use of the EPA, and alternatives to using EAP. The goal of the survey was to address research questions 1 and 2 of firefighters not seeking treatment and if EAP is substantial enough for treatment needs. There

were some limitations to the survey that impacted the results. First, trying to identify a representative group of the MFD was a difficult task. Secondly, the multiple-choice format was a balance of eliciting participation without limiting the options for respondents to choose from.

The agency survey was sent to 25 random departments across the United States to contacts known to this researcher. Out of the 25 requests for information 21 responses were received for 84% participation. The survey was open from August 1, 2018, until September 1, 2018. The survey consisted of 5 questions and can be found in Appendix B. The goal of the survey was to address research questions 2 and 3. The survey was intended to gain insight into how similar departments handle PTSD and if there was an established protocol for these incidents. There were two specific limitations to this survey. The first was the response dependent on the department having an established protocol. The second limitation was to what extent the personnel at these departments reported PTSD symptoms to their supervisor.

A written interview was conducted with Mark Weiss, Ph.D. Dr. Weiss specializes in depression, grief, PTSD, anxiety, and excessive stress counseling. Dr. Weiss was chosen for his expertise in PTSD and 50 years of successful treatment with behavioral health issues. Dr. Weiss has treated military and civilian persons for PTSD and offers unique treatment options other than the traditional methods. The various treatment options offer insight into why the problem exists rather than treating symptoms. The interview questions can be found in Appendix C and were conducted with Dr. Weiss on September 1, 2018. The limitations to this interview are the opinion of only one person and not specific to the fire service.

RESULTS

The results of this applied research project were assembled from the literature review, an MFD departmental survey, a survey sent to like departments in the United States, and a written

interview with Dr. Mark Weiss. The combined research intended to address the three research questions:

Why do firefighters not seek treatment for PTSD?

Is the employee assistance program still viable in the fire service?

Would a dedicated mental health team offer a solution?

Research question 1 asked: Why do firefighters not seek treatment for PTSD? Research Question 2 asked: Is the employee assistance program still viable in the fire service. The survey (Appendix A) sent to MFD personnel was intended to help address these research questions.

Survey question #2 asked: Have you been involved in an incident that required CSID? This question intended to identify exposure to stressful events on the job. The question asked the respondent to choose between yes or no. A total of 387 responses were gathered results found that 91% of MFD has been involved in a CISM required incident. Survey question #3 asked: Do you think the CISM was sufficient enough for the incident. This question intended to determine the need for additional mental health assistance. Of the 352 yes answers to survey question #2 (91%), 54% choose no, that the CISM was not enough. Results can be seen in table #1.

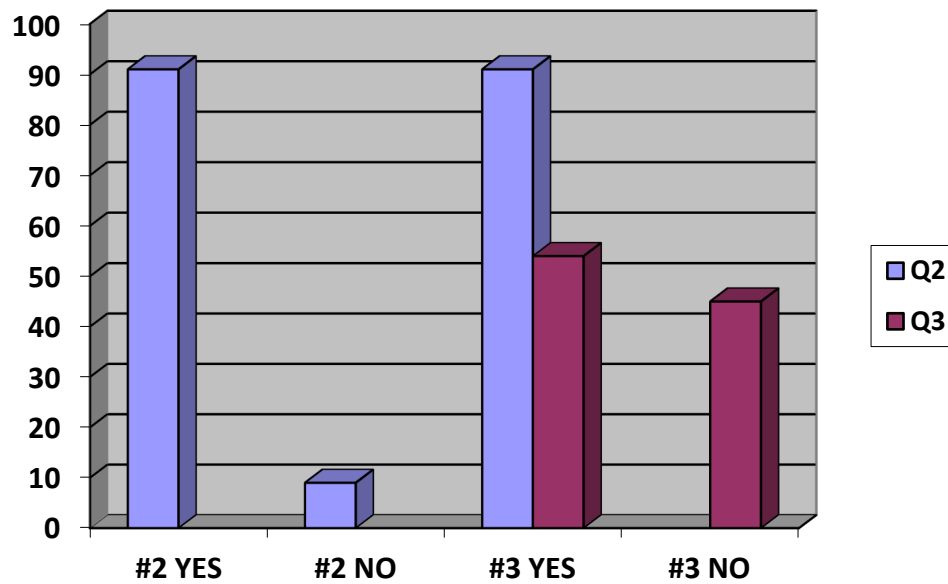
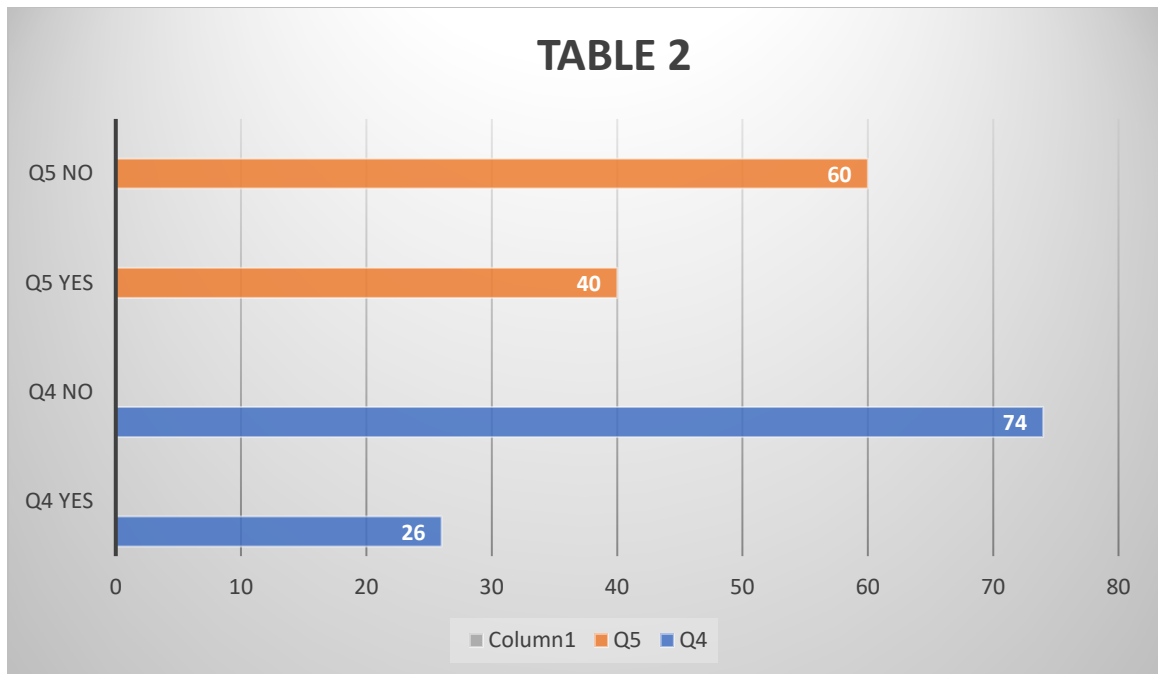
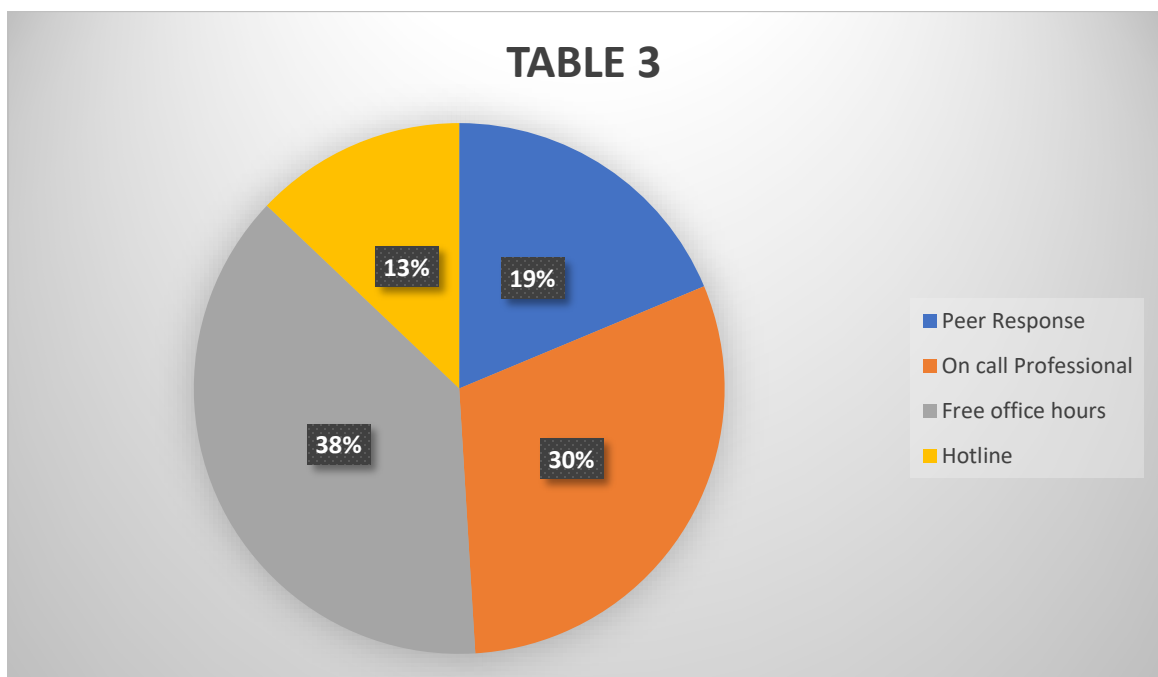


TABLE 1

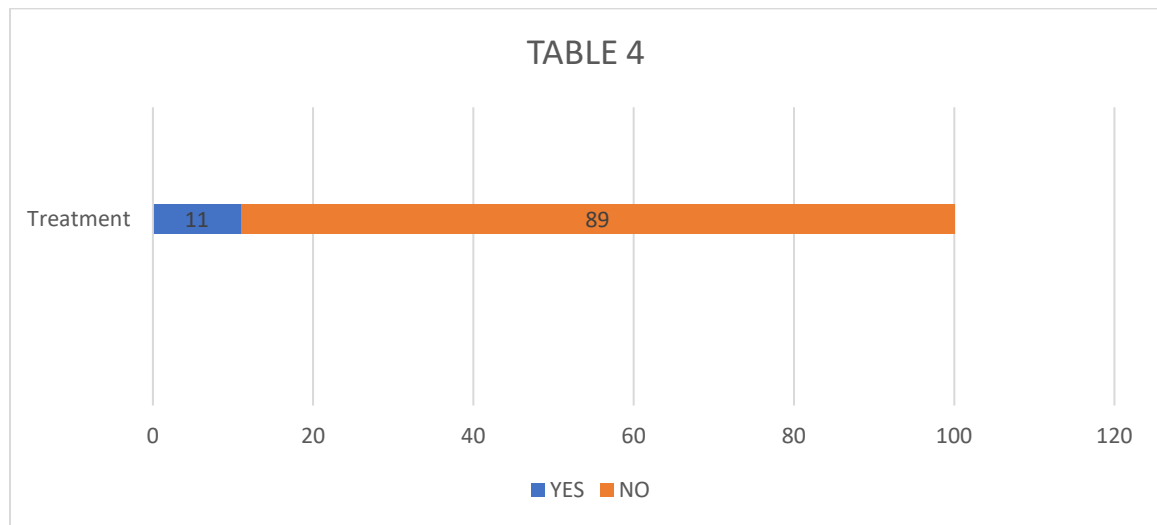
Survey question #4 asked: Have you ever utilized the Employee Assistance Program? This question intended to determine the rate at which MFD seeks mental health assistance. The questions asked the respondents to answer either yes or no. Out of the 387 responses, 74% answered no they had not utilized EAP. Question #5 asked: Did EAP offer you the resources that you needed? This questions intended to determine if EAP is still a viable option for MFD personnel. The question asked respondents to answer either yes or no. 60% of MFD personnel chose no for EAP providing the needed resources. The results can be seen in table #2.



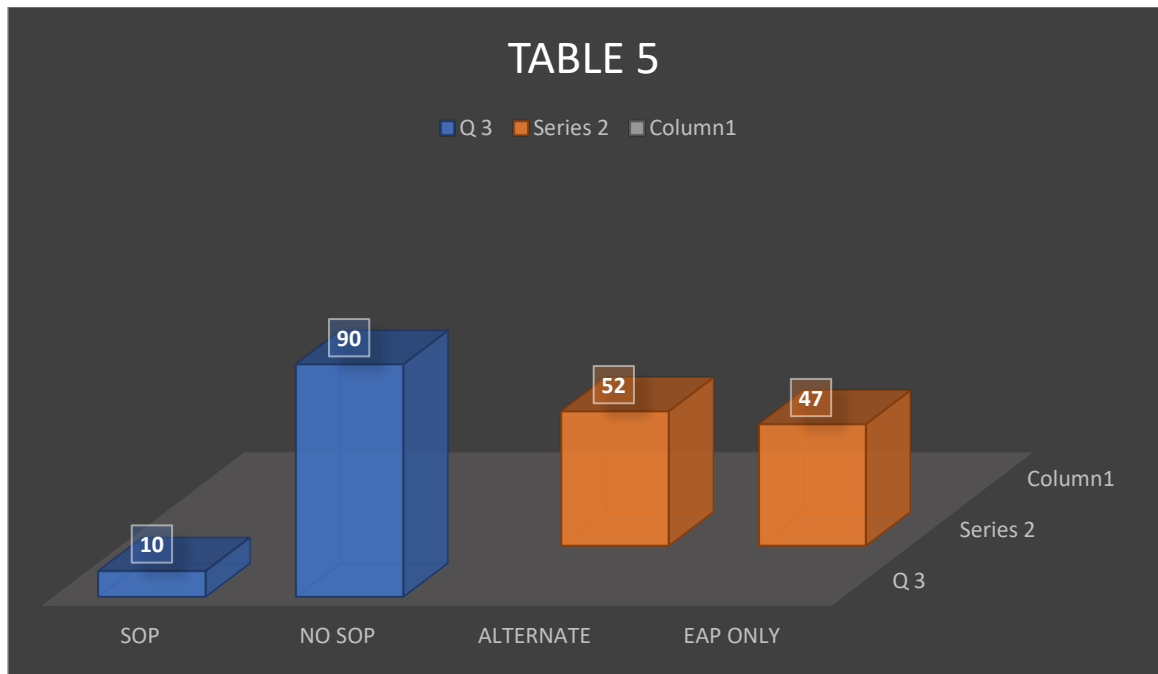
Survey question #7 asked: Which option do you think would work better. The respondents had a choice of peer team, on-call professional, free office hours, and a hotline. The results showed that an on-call professional and free office hours were the preferred options. The results can be seen in table #3.



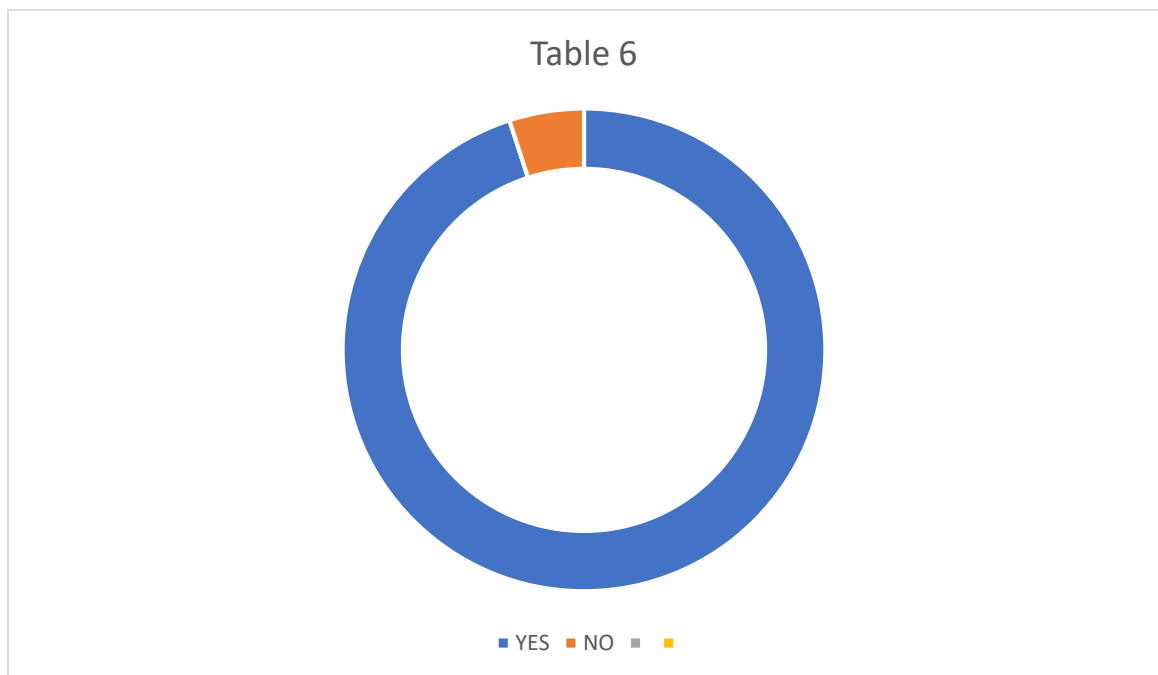
Survey question #10 asked: Have you sought treatment for PTSD or any mental health problem. The overwhelming majority of MFD respondents, 89%, selected no to this survey question. In perspective, of the 387 respondents to the survey, 344 members have not sought treatment for a mental health problem. The results can be seen in table #4.



Expanding on research question #2 about EAP, research question #3 asked: Would a dedicated mental health team offer a solution? The agency survey (Appendix B) was intended to answer these questions. The survey was sent to 25 departments across the nation in order to better understand treatment alternatives from like departments. Agency survey question #3 asked: Does your department have a specific PTSD SOP? The results were that 90% of the departments had no specific SOP to address PTSD. Agency question #4 asked: Does your department have options other than EAP? The survey displayed an almost half divide in assistance programs with 52% having options other than EAP. Results can be seen in table #5.



Agency survey question #5 asked: Would a response team of peers, nurses, physicians, and psychiatrist be a viable option for your department? The overwhelming majority responded yes on this question. The results can be seen in table #6.



DISCUSSION

The research intended to address the problem statement of the fire service can do a better job preparing for PTSD. The purpose of this ARP is to develop a PTSD SOP for the Memphis Fire Department. A literature review was conducted to find related documents to answer the problem and research questions. The original research conducted included two surveys and a written interview. The different techniques and methods resulted in data gathered to address the research questions and allow for comparison and discussion.

The literature review identified the fire service as an occupation with an extremely high degree of stress. The degree that fire service personnel are exposed to traumatic events repeatedly was also highlighted in the literature review. The results of the personnel survey (Appendix A) seemed to reinforce this as well. The survey also identified the need for a PTSD program for MFD as 91% have been involved in an incident and 74% have not sought treatment. Dr. Weiss stated that it is rare to find someone who is trained in trauma rehabilitation that conducts the CISM after such an event (Appendix C). This further supports the need for a PTSD program not only for MFD but other departments as well.

PTSD is not a new issue for the fire service but rather an issue that is gaining national attention. The department survey (Appendix B) showed that 90% did not have a dedicated SOP for a member who reported having PTSD. Studies have indicated that as much as 40% of firefighters meet the criteria for being diagnosed with PTSD (Brown, 2017). The lack of an SOP for MFD and the statistical rate for PTSD is justification for this ARP.

The stigma around PTSD negatively affects the fire service and their members as shown with 89% of those surveyed not seeking treatment (Appendix A). Dr. Weiss surmised that this is a combination of a feeling of weakness and fear of what they may find inside themselves

(Appendix C). Dr. Weiss further explained that in his past treatment of PTSD he encountered a soldier that had been hospitalized for ten years. This hospitalization was due to PTSD and not receiving the correct therapy but rather being treated with medications only. After a time, and with the proper therapy, this soldier exited the hospital and lead a productive life (Appendix C). This shows that with the proper procedures and SOP that MFD can assist those with PTSD.

The surveys (Appendix A & B) both show that EAP is not utilized by personnel, not effective and the only avenue for 47% of the departments. CISD was shown to help some while it left others needing a more involved form of treatment (Appendix A). Overwhelmingly both surveys supported the formation of a response team of peers, nurses, doctors, and therapist as the ultimate PTSD program goal (Appendix A & B). In the formation of this team, MFD would create an environment that allowed for open communication and a safe environment for personnel. Furthermore, it would show how MFD is committed to mental health from all levels of the department from a private to the Fire Director.

The literature outlined several factors that lead to PTSD such as trauma exposure, family history, depression, and anxiety (Larsen et al., 2018). The nature of the work in the fire service has shown to increase the rate of exposure and increase the risk for PTSD (Morrison, 2015). Dr. Weiss stated that the exposure is much like that in the Military in which repeated trauma is shared with a small group (Appendix C). The literature further supports the necessity for a formal plan to assist those experiencing mental health issues.

This researcher reviewed the information from the literature review, surveys, and personnel interview. The researcher found the information to be logical and accurate given the limitations previously stated. The information was carefully evaluated and served as the basis for this ARP and the development of an SOP for MFD. As indicated by the personnel survey

(Appendix A) 90% did not seek treatment for a trauma exposure incident. This statistic reinforced the need for MFD to have a formal SOP for the mental health of the members.

Recommendations

The intended purpose of this applied research project was to address the problem of MFD not having an SOP in place for PTSD. The purpose was to identify components of a mental health program to benefit the members of the MFD experiencing mental health issues. The action research method selected for this ARP resulted in an SOP being developed. The high rate of members not seeking treatment and half of the surveyed departments not having a PTSD SOP reaffirmed the importance of this ARP. As a result of the research the following recommendations should be considered by MFD:

- Work with all levels of the department to create a culture of acceptance and support to encourage communication and seeking of treatment. Creating a positive environment and support from the Chief down will assist in getting members to seek treatment rather than ignoring the signs of PTSD.
- Reevaluate the use of EAP and CISD as the current practice of support after a traumatic event. MFD may consider discontinuing these practices if alternatives receive a better response.
- Evaluate the current CISD team credentials to ensure getting the specific trauma-related therapy needed for MFD personnel.
- Establish a PTSD response team made of members specializing in trauma therapy to be made available to MFD members.
- Evaluate the effectiveness of the proposed SOP developed as a result of this ARP and determine the implementation process timeline.

Future researchers should be able to replicate the results without difficulty. The limitations in regards to this research should also be considered in future research efforts. Innovative therapy techniques, scientific studies, and data are constantly being compiled on trauma exposure and PTSD. The effectiveness of a formal PTSD program should be researched in more depth to provide the best available methods to fire service personnel.

The exposure to traumatic and stressful situations cannot be stopped for those in the fire service. However, steps can be taken to ensure that the availability of mental health support to those that need assistance. In implementing the recommendations, the MFD, other departments, and future researches can better assist those experiencing PTSD in the fire service.

References

- Albrecht, S. (2014, February 07). Why don't employees use EAP services? Psychology Today. Retrieved from <https://www.psychologytoday.com/us/blog/the-act-violence/201402/why-dont-employees-use-eap-services>
- Brown, A. (2017, May 12). First responder and mental health. Psychology Today. Retrieved from <https://www.psychologytoday.com/us/blog/towards-recovery/201705/first-responders-and-mental-health>
- Department of Psychology Florida State University. (2018). Perceptions of belongingness and social support attenuate PTSD symptom of severity among firefighters. Retrieved from <http://dx.doi.org/10.1037/ser0000240>
- Everyone Goes Home. (2005-2017). <https://www.everyonegoeshome.com/16-initiatives/>
- The Flood Mitigation City of Memphis. (n.d.). <http://www.memphistn.gov/Government/FireServices.aspx>
- IAFF Recovery Center website. (n.d.). <https://www.iaffrecoverycenter.com/>
- Lamplugh, M. (2016, January 19). I'm a firefighter with PTSD...Now what? Fire Engineering. Retrieved from <https://www.fireengineering.com/articles/2016/01/im-a-firefighter-with-PTSD-now-what.html>
- Larsen, S., Fleming, C., & Resick, P. (2018, July 02). Residual symptoms following empirically supported treatment for PTSD. Psychological Trauma: Theory, research, practice, and policy. <https://doi.org/10.1037/tra0000384>
- Memphis Tennessee demographics City-data.com. (n.d.). <http://www.city-data.com/city/Memphis-Tennessee.html>

Mittal, D., Drummond, K., Blevins, D., Curran, G., Corrigan, P., & Sullivan, G. (2013, June). Stigma associated with PTSD: Perceptions of treatment seeking combat veterans. *Psychiatric Rehabilitation Journal*, 36(2), 86-92.

<https://doi.org/http://dx.doi.org.lopes.idm.oclc.org/10.1037/h0094976>

Morrison, P. (2015). Post-Traumatic stress in the Fire Service. *Firehouse Magazine*, 58-63. Retrieved from www.firehouse.com

Office of Disability Employment Policy. (n.d.). www.dol.gov/odep

Rauch, S., & Rothbaum, B. (2016, September). Innovations in exposure therapy for PTSD treatment. *Practice Innovations*, 1(3), 189-196.

<https://doi.org/http://dx.doi.org.lopes.idm.oclc.org/10.1037/pri0000027>

Richards, D. (1994). Traumatic stress at work: A public health model. *British Journal of Guidance & Counseling*, 22(1), 51-64.

<https://doi.org/http://dx.doi.org.lopes.idm.oclc.org/10.1080/03069889400760061>

RO123 Executive Development. (2016). In *National Fire Academy (Comp.)*, RO123 Executive Development course syllabus (5th ed.). Emmitsburg, MD: National Fire Academy.

Skeffington, P., Rees, C., Mazzucchelli, T., & Kane, R. (2016, July 06). The primary prevention of PTSD in firefighters. *PLoS One*, 11(7), 1-22.

<https://doi.org/10.1371/journal.pone.0155873>

Tull, M. (2018). Rates of PTSD in firefighters. Retrieved from <https://www.verywellmind.com/rates-of-ptsd-in-firefighters-2797428>

United States Fire Administration. (2010-2014). America's Fire and Emergency Services Leader Strategic Plan. Retrieved from www.usfa.fema.gov/downloads/pdf/strategic_plan.pdf

Vijayalakshmy, P., Hebert, C., Green, S., & Ingram, C. (2011, September). Integrated multidisciplinary treatment teams; a mental health model for outpatient settings in the military. *Military medicine*, 176(9), 986-990. Retrieved from <http://eds.a.ebscohost.com.lopez.idm.oclc.org/eds/detail/detail?vid=21&sid=3ec37248-796d-4f8a-8d8e-f4193c7d888f%40sessionmgr4006&bdata=JnNpdGU9ZWRzLWxpdmUmc2NvcGU9c2l0ZQ%3d%3d#AN=66252509&db=a9h>

Wilmoth, J. (2014, May June). Trouble in mind. *NFPA Journal*. Retrieved from <https://www.nfpa.org/news-and-research/publications/nfpa-journal/2014/may-june-2014/features/special-report-firefighter-behavioral-health>

Appendix A

(survey sent to MFD personnel on August 7, 2018)

1. How many years of service do you have?

Less than 5

5-10

11-20

more than 20

2. Have you been involved in an incident that required CSID?

Yes

No

3. Do you think the CISC was sufficient enough for the incident?

Yes

No

4. Have you ever utilized the Employee Assistance Program?

Yes

No

5. Did EAP offer you the resources that you needed?

Yes

No

6. Do you think that there should be more options for mental health?

Yes

No

Appendix A cont.

7. Which option do think would work better?

Peer response team

On call professional

Office hours free to members

hotline

8. Have you felt overwhelmed by an incident?

Yes

No

9. Have you been diagnosed with PTSD?

Yes

No

10. Have you sought treatment for PTSD or any mental health problem?

Yes

No

Appendix B

(survey sent to departments nationwide)

1. Has your department experienced any PTSD claims?

Yes

No

2. If yes have any of these claims resulted in the member not returning to work?

Yes

No

NA

3. Does your department have a specific PTSD SOP?

Yes

No

4. Does your department have options other than EAP?

Yes

No

5. Would a response team of peers, nurses, physicians, and psychiatrist be a viable option for your department?

Yes

No

Appendix C

(Written interview with Dr. Weiss on September 01, 2018)

1. What is your education/experience as it relates to behavioral health and PTSD?
 - a. I have 40 years of experience in the treatment of PTSD, marital counseling, and family counseling. I have conducted workshops on the reduction of traumatic experiences in the military and first responders. I also have been a professor at the University of Oregon and University of South Carolina.
2. What, if any, issues have you seen in first responders?
 - a. I have treated first responders for various of conditions from substance abuse to marital and financial problems. Stress-related issues seem to especially aggravate these situations and spill over to family and work.
3. Studies have shown that first responder PTSD rate is equal to those in the military. Do you see a correlation between the two?
 - a. The exposure to traumatic events and the close quarters shared with other individuals are the same. Also, the repeated exposure is very similar as well as the feeling of weakness for admitting a mental health problem.
4. How important is a PTSD trained therapist in the treatment of firefighters exhibiting PTSD symptoms?
 - a. This is probably the single most important aspect of therapy treatment. Having a therapist that understands trauma and how the response to these events is different for each.
5. Can a firefighter diagnose with PTSD make a full recovery?

- a. Yes. I treated a military individual that had been hospitalized for ten years for PTSD. Through a series of therapy sessions and innovative treatments, we achieved a break through, and he went on to lead a very productive life.
6. What is your opinion on critical incident stress debrief and the employee assistance programs about treating PTSD?
 - a. It is rare to find someone in these roles that are trained in trauma recognition and treatment. Most are family counselors and deal with the stress around the home.
7. What alternatives to CISD and EAP would be better for a firefighter with PTSD?
 - a. There is a multitude of possibilities for the treatment of PTSD and first responders. The focus of any treatment should be treating the overall health not just focus on a certain aspect of the issue. A therapist with the current knowledge of best practices for trauma and whole system treatment would be optimal.
8. What would a comprehensive mental health program look like for the fire service?
 - a. I would suggest no psychiatrist since they tend to want to medicate the individual as the treatment. A therapist will take an overall approach the mental and physical health of the individual.
9. Do you think that 24hr open access would encourage those with PTSD symptoms to seek assistance?

- a. Yes. The more available a therapist is, the easier and more productive the therapy cycle can be.

10. What do you see as the reason for firefighters not seeking assistance for mental health issues?

- a. Embarrassment, cost, fear of the guy inside themselves. First responders, like the military, are geared to rush in and help to ask for help. The thought of acknowledging that there is a problem is very scary. Then once there is an issue one begins to wonder about what kind of person they will be if they seek treatment.

Appendix D
(Post-Traumatic Stress Disorder SOP for the Memphis Fire Department)

I. PURPOSE:

In addition to working in hazardous conditions which can cause physical stressors, firefighters are also exposed to emotional stressors that can have an impact on their behavioral health. The presence of mental stressors can be related to a singular significant incident or can be a buildup of multiple calls (cumulative) and the effects may be acute or delayed. Without intervention, firefighters can have detrimental effects without obvious signs or may show signs of depression, deterioration of family/ friend and work relationships, declining work performance and/ or increased health problems. A Critical Incident Stress Management (CISM) program and Peer Support Team (PST) provide support for those members who are in need and can offer guidance to more definitive care if needed. The Wellness-Fitness Initiative (WFI) is a collaborative effort between the International Association of Fire Fighters (IAFF) and the International Association of Fire Chiefs (IAFC) to address firefighter health. It states that "The behavioral health of uniformed personnel is essential to their physical health and well-being." Firefighters must be able to cope effectively with the emotional, physical and mental stresses of work and professional life. The purpose of this policy is to provide MFD's membership tools for to assist in coping with the stressors of the job.

II. POLICY:

The Memphis Fire Department will strive to provide peer support and access to professional services for members who are exposed to significant stressful events that can contribute to behavioral health issues. This program seeks opportunities to minimize the effects of mental health stressors related to the job, on or off duty, to promote good quality of life and job performance.

III. RESPONSIBILITY:

1. It is the responsibility of the CISM Clinical Coordinator to assist in the development of the PST through training and ongoing collaboration with select mental health professionals. The CISM Clinical Coordinator will also provide any post-incident CISM for those needing more than peer support.
2. It is the responsibility of the Incident Commander/ Chief Officers to recognize the potential and anticipate the need for the PST or CISM. The Chief Officer will identify a Peer Support Team member and notify the PST of the time and location to assist.
3. Company Officers/ Supervisors shall be aware of potential significant incidents consistent with this guideline and notify their District Chief immediately following the incident to request a PST visit. Company Officers shall also notify their District Chief if they witness or are aware of any behavior or other situation that could be potentially detrimental to or affecting a member's behavioral health.

4. Any member who feels that they may be suffering from mental stressors of the job, a significant call or a culmination of events should contact their immediate supervisor, but may also contact a PST Member directly. The CISM Coordinator or mental health counselor is also available for direct assistance.

IV. DEFINITIONS:

1. **Critical Incident Stress Management (CISM)** – A comprehensive, integrated, systematic, and multi-component approach to crisis/disaster intervention. Historically, CISM was known for “debriefings;” however, the current CISM approach involves multiple options to provide support and crisis intervention on individual and group levels. Gainesville Fire Rescue recognizes the methods of the International Critical Incident Stress Foundation (ICISF) and has adopted procedures consistent with ICISF training courses.
2. **Critical Incident** – An incident or traumatic event that causes strong emotional reactions that has the potential to interfere with an individual’s normal ability to cope. For initiation of a Peer Support Team intervention, Memphis Fire Department recognizes the following incidents as examples of critical incidents:
 - a. Death of a co-worker
 - b. Significant injury to a co-worker
 - c. Pediatric cardiac, respiratory arrest, or suspected child abuse
 - d. Mass Casualty Incidents involving multiple significant injuries
 - e. Accidents involving the fire apparatus where someone was significantly injured
 - f. Any event that results in undue stress to the responder
3. **CISM Team Coordinator** – A Chief Officer that has responsibility for the CISM program and provides oversight and support to the Peer Support Team. This position is determined by the Fire Director and may be assigned to the Operations Chief.
4. **CISM Clinical Coordinator** – An individual selected to coordinate CISM services and related policy for the agency. This person will coordinate services with the Memphis Fire Department Peer Support Team leaders. The CISM Clinical Coordinator will contract with Gainesville Fire Rescue for these services.
5. **CISM Team** – A team composed of CISM - trained employees (Peer Support Team members), a trained mental health professional, and the CISM Clinical Coordinator.
6. **Peer Support Team (PST)** – A team of personnel identified by the Human Relations Committee and recognized by the CISM Clinical Coordinator as a designated support group that assists employees after critical incidents or for personal issues that are maybe affecting their mental health. Memphis Fire Department will attempt to maintain at least one Peer Support Team Member per shift with the goal of two per shift.
7. **Critical Incident Stress Information Sheets** – Forms that Peer Support Team Members provide to members when they respond for assistance. The information will include; signs

and symptoms of stress, suggestions for assistance, contacts for the Peer Support Team members and other contact information to access professional assistance.

8. Debriefing – An organized, confidential, small group discussion led by the CISM Team with members who have experienced a critical incident. The debriefing of the incident is designed to mitigate the potential for long-term stressful reactions. Participants talk about their experiences, thoughts, and reactions to the stressful incident. Debriefings are confidential, and no notes will be taken or recordings made of the content of the intervention. Debriefings may occur up to seventy-two (72) hours from the time of the incident.

9. Defusing – An organized, confidential, structured, individual or small group discussion, which is not as lengthy or structured as a debriefing. Defusing's are most appropriately performed within twenty-four (24) hours after a critical incident is over. This will be conducted by a Peer Support Team member from shift or called in if none are available. Defusing's are confidential, and no notes will be taken or recordings made of the content of the intervention. Defusing will be initiated any time a critical incident is identified.

10. Employee Assistance Program – The Employee Assistance Program from now on referred to as the EAP, will be utilized for employees who wish to be referred to or who have mandated a referral for evaluation of fit for duty. The current City provider will provide services under the mandatory provision and will provide information to the employer as to the work status of the employee. A secondary Mental Health Professional contracted through the City will provide up to three (3) free visits per member, per year for mental health support for voluntary visits.

11. Mental Health Professional (MHP) – A licensed mental health counselor, licensed clinical social worker, psychologist, or psychiatrists trained in critical incident stress management and is a current carrier of the City of Memphis insurance program.

12. Stress Reaction Symptoms – Physical, behavioral, psychological, and emotional symptoms occurring following a critical incident. Symptoms may include nightmares, flashbacks, fatigue, nausea, concentration and memory problems, anxiety, depression, intestinal problems, and other reactions.

V. PROCEDURE:

1. CISM / Peer Support Team Composition/ Selection/Training: The CISM Team will be comprised of the CISM Clinical Coordinator and the Peer Support Team.

A. The CISM Clinical Coordinator will be identified by the HRC as a Mental Health Professional with extensive knowledge in post-traumatic stress disorders related to emergency responders. The CISM Coordinator shall be an integral part of the training of the Peer Support Team and shall be available to respond within 4 hours of a major incident.

B. CISM Team Coordinator will be assigned by the Fire Director. This member has 24-hour access to all critical calls and will support the Peer Support Team Members.

C. Peer Support Team Members will be selected by the HRC and the CISM Clinical Coordinator based on agreed to selection procedures and training qualifications.

i. Once selected, PST Members will be required to complete: "CISM Group Crisis Intervention" course recognized by ICISF: and "Individual Crisis Intervention" or equivalent training as approved by the Fire Director.

ii. To maintain an active status in the Peer Support Team, a member must attend member meetings regularly unless excused by the Peer Support Team Leader.

D. Mental Health Professionals will be identified as mental health professionals that have experience in; family counseling, substance abuse, post-traumatic stress disorder and are a recognized provider in the City of Memphis health insurance program.

2. **Activation:** A critical incident occurs, a request for assistance or need is identified;

A. Peer Support: Any scenario where an employee is showing signs or

symptoms of excessive stress due to the job or personal issues, a PST Member can be used as a means to assist the employee or recommend professional treatment.

B. Peer Support Response: Upon request, a PST member will respond to the station or location of the employee, crew or crews that are involved, assess the severity of the situation to determine if they can defuse the situation or if more assistance is needed.

i. The Peer Support Team Member can follow up 24 hours after the initial defusing to determine if additional intervention is needed.

ii. If the Peer Support Team Member feels that an employee or employees are affected by the incident to where they are experiencing stress reaction symptoms that could affect their ability to function in their job capacity, they will notify the Division Chief to take the unit out of service for up to 1 hour. The CISM Clinical Coordinator will be contacted for direction for more formal care.

Note: Any unit taken out-of-service or employee relieved from duty beyond 1-hour, will require notification of the CISM Team Coordinator and the Deputy Fire Chief.

iii. Any instance where a Peer Support Team member feels that an employee might need professional help, the CISM Clinical Coordinator shall be notified and used for guidance and referral.

iv. For incidents requiring additional support of the CISM Team, the CISM Team Coordinator shall set up a debriefing session and notify the CISM Clinical Coordinator.

C. CISM Debrief: An organized, confidential, small group discussion will be led by the CISM Team with members who have experienced a critical incident. This can occur 3-4 days after the incident or sooner when those involved can meet together.

VI. Confidentiality

A. The use of this guideline and all communications, information, documents concerning CISM are to be held with utmost sensitivity and considered confidential. Use and sharing of CISM information or documents must be necessary and used only by this guideline. No notes will be taken or created on the direct content of discussions, defusing or debriefings; video or audio recordings are also prohibited.