

POST-TRAUMATIC STRESS DISORDER AND COPING AMONG CAREER PROFESSIONAL FIREFIGHTERS

SUMMARY

This research investigates the relationship between years of service for professional firefighters and the prevalence of post-traumatic stress disorder (PTSD). Ninety-one paid, career firefighters from two different urban fire departments in Upstate New York were assessed on PTSD symptoms and coping strategies. Study participants were asked to remember a traumatic event in the past year and rate symptoms they experienced over the previous month related to that event. Firefighters who had more years on the job tended to utilize more negative and inefficient coping mechanisms. Dealing with stress and trauma at a department level is important, not only from a human standpoint, but from an organizational and budgetary standpoint as well.

FINDINGS

- There was a significant correlation between number of years working as a firefighter and the presence of self-reported PTSD symptoms.
- A significant negative correlation was found between years of service as a firefighter and the use of emotional support as a coping mechanism. This suggests that younger firefighters are more likely to rely on emotional support than their more experienced colleagues.
- Years of service as a firefighter was not related to the use of positive coping mechanisms. In fact, negative coping mechanisms such as “self-blame” and “behavioral disengagement” were significantly correlated with years of service.
- For the entire group, self-distraction was the only negative coping mechanism in the top five that were mentioned. In the short term, self-distraction can be positive, but it turns negative when the person is not doing anything to actually deal with the source of the problem.
- The specific reasons that firefighters with more years on the job are more likely to report PTSD symptoms were not clear because cumulative stress was not part of the study. The firefighters were only asked about stressful events over the previous year.

Authors:

Rudy Nydegger
Liesl Nydegger
Frank Basile

Organization:

The Clute Institute

Publisher:

American Journal of Health Sciences (AJHS) 2.1 (2011): 11-20.

Original Link: [dx.doi.](https://dx.doi.org/10.19030/ajhs.v2i1.4365)

[org/10.19030/ajhs.v2i1.4365](https://dx.doi.org/10.19030/ajhs.v2i1.4365)

FSTAR
FIREFIGHTER SAFETY THROUGH
ADVANCED RESEARCH



Visit www.fstaresearch.org to search for research and information you can use.

FSTAR is managed by the International Association of Fire Chiefs and is funded by a FEMA/AFG/Fire Prevention and Safety grant award.

TAKEAWAYS

- Firefighters are at risk for experiencing stress and trauma, which often leads to PTSD symptoms.
- The top three stress symptoms experienced by the firefighters were “trouble sleeping”, “feeling irritable/angry” and “being super-alert”.
- Firefighters with more years of service are at higher risk for PTSD and are more likely to use negative coping mechanisms.
- Newer firefighters are more likely to use emotional support for stress, which is a positive coping mechanism.
- Four of the top five most frequently mentioned coping strategies were positive: acceptance, humor, religion, and positive re-framing. Even if the firefighters were trying to portray themselves or the profession in a positive way and minimized negative responses, these results indicate the awareness of using positive coping mechanisms over negative ones.
- Fire Departments should provide training and support for dealing with stress and trauma.
- Limitations of the study include:
 - Small sample size of same gender firefighters from only two urban fire departments in New York.
 - PTSD was measured by self-report and it’s possible that those surveyed may not totally be aware of their symptoms or may have not wanted to fully self-disclose since it was done at work.



FIRE STATION TALK

- **Identify mental health resources in your department.**
 - Take advantage of the mental health resources your department has and learn how to access them before times of crisis.
 - Many Employee Assistance Programs offer much more than just face-to-face counseling sessions. From legal and mediation services to online resources, firefighters should take advantage of what their department is offering at no cost to them.
 - Look for resources in your department. Having someone to talk to that understands the profession, culture and department is an important part of a comprehensive behavioral health program. Does your department offer peer support or fire department chaplains?
- **Take care of yourself and your crew.**
 - Encourage the use of positive coping mechanisms. Positive coping mechanisms are healthy techniques used to deal with a difficult situation.
 - Promote physical fitness as a priority for your department. Exercise mimics the stress response. It helps get rid of built-up stress hormones adrenaline and cortisol.
 - Humor is another way firefighters deal with traumatic situations. Humor is a good way to increase social support and to relieve stress.
 - Understand that stress is a response to an event, not the actual event itself. What could be considered a crisis for one person may not be for another. Individual coping mechanisms, support systems and how closely the situation matches your own can all contribute to how the event is perceived.
 - Departments should encourage routine “check-ups” on stress levels at the company officer level with their crews. Waiting on the member to ask for help, may sometimes be too late.
- **Recognize symptoms of stress and know when to ask for help.**
 - Create a culture on your crew, in your station and in your department where it is OK to ask for help.
 - Identify how you personally respond to stress. Learn to recognize when you are stressed and deal with it before it impacts your life.
 - Understand that years of service is positively correlated with PTSD. Whether it is a critical incident or the daily buildup of stressors, it is important to deal with the stress and ask for help if necessary.
 - The top three symptoms reported were trouble sleeping, feeling irritable/angry, and being super alert. All of these things are very normal reactions to stress in the short term. But when these symptoms don’t go away, it means that the coping mechanisms being used are not enough.



CONSIDERATIONS FOR CHIEFS

Department leaders should consider the following:

- **Create a Behavioral Health Oversight Committee.**
 - The purpose of this committee is to provide a confidential, consistent and meaningful approach to implementing behavioral health resources.
 - Have all areas of your organization represented: suppression, chief officers, administrative, support divisions, volunteers, and labor.
 - Look at what components are currently offered and solicit input on their effectiveness.
 - Brainstorm ideas on enhancing or adding additional components to the current program. Look at peer support teams, employee assistance programs, chaplain programs, mental health benefits from health insurance and contracted behavioral health services.
 - Look to other agencies in the area to see what programs they offer and if you could share resources.
 - Formalize goals and objectives to continue moving the program forward. Continue to solicit feedback from members about the program. Listen to your members and make changes as necessary.
 - Consider inviting other agencies that might have been part of the response to a traumatic event to your after action behavioral support meetings.
- **Recognize how mental health issues affect your organization.**
 - Identify expenses due to mental health issues in regards to workers' compensation, health insurance, pharmacy costs, disability retirements and overtime costs.
 - If you have not experienced any expenses due to stress and trauma, what could be the budgetary impact if you did have a firefighter stop working due to overwhelming stress?
 - Ask your EAP provider which are the most common issues your firefighters report. Use this information to provide specific programming to your department. Be sure to follow all HIPAA regulations for the employee's protection.
- **Offer annual pre-incident education to all areas of the organization.**
 - Firefighters train for all different types of incidents and training on how to take care of themselves after a crisis is no different.
 - Pre-incident education reminds firefighters of the signs and symptoms they might experience after a critical incident, the effects of cumulative stress, effective coping skills to help turn off the fight or flight response and the resources in place if they need help.
 - Teach pre-incident education in every firefighter academy. Knowing that years of service is positively correlated with higher risk for PTSD and negative coping mechanism use makes it essential to teach firefighters the correct coping mechanisms early in their careers.
 - Make sure all employees understand how to access the services provided without having to ask.
- **Support from the Fire Chief on down regarding behavioral health issues.**
 - In a profession that requires skill, reliability and coolness under pressure, an emotionally unfit firefighter can jeopardize not only the safety of themselves, but their co-workers and community.
 - After a tough call, allow crews to go out of service for a period of time to regroup to make sure they can be 100% on the next call. If they can't recover in that time, have policies in place to account for finding relief for the individual or crew.
 - Encourage physical fitness at the station and crew level. Exercise is a controlled stressor and helps get rid of built up stress.
 - Starting with recruit academies, offer annual pre-incident education to prepare firefighters for traumatic events. During times of crisis, emotions outweigh logic. Firefighters will fall back on what they know and their training will kick in.



TERMS

Post Traumatic Stress Disorder (PTSD) - PTSD is a mental health condition that is triggered by a terrifying event- either experiencing it or witnessing it. *Source: Mayo Clinic*

Coping Mechanism - an adaptation to environmental stress that is based on conscious or unconscious choice, and that enhances control over behavior or gives psychological comfort. *Source: Dictionary.com*



STAY IN THE KNOW

Read the research, start the discussion.

Additional resources and tools for this study can be found at www.fstaresearch.org/resource/?FstarId=11461.