

Trauma among emergency responders and terrorism investigators: Suggestions for conducting needed research

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ABSTRACT

This article discusses the paucity of information that exists concerning the traumas and stresses that affect emergency responders (ERs) and terrorism investigators (TIs). There has not yet been an in-depth, phenomenological, qualitative study examining the perceptions of ERs or TIs during and after emergency incidents to determine whether their experiences led to serious stress or trauma.

More research is needed concerning the work experiences of these individuals, which is often dangerous, sometimes taking place in horrific settings, and often occurring in high pressure and high profile situations. We do not know why some ERs and TIs are traumatized by their experiences and others are not. We do not know why some are able to cope with their various stressors in a healthy manner when others develop symptoms clearly indicative of acute stress disorder (ASD) and post-traumatic stress disorder (PTSD). We are not certain to what degree the severity of the trauma experienced directly affects the severity of these symptoms, and we have not studied the resultant ability or inability of ERs and TIs to continue to work and interact with family and friends.

By conducting additional studies on this topic, ERs and TIs can be taught better coping mechanisms, we can establish more proactive professional mental health responses, gain a more empathetic understanding of ERs and TIs, and help emergency and law enforcement organizations prepare more effective educational and training materials.

Key words: emergency responders, terrorism investigators, acute stress disorder, post-traumatic stress disorder

GENERAL BACKGROUND

This research was begun in an effort to understand the reactions of TIs to the harsh and often dangerous environment in which they are required to work. Due to the recent events following Hurricane Katrina and the fact that existing research clearly demonstrates a commonality between the traumas experienced by emergency responders (ERs) and terrorism investigators (TIs), it was deemed appropriate to expand the focus of this article to address the trauma and stress experienced by both groups.

The writer is currently an assistant professor at Florida A & M University and a veteran of over twenty years as a unit chief and supervisory special agent of the Federal Bureau of Investigation (FBI) who managed counterterrorism investigations from 1991 to 1996, supervising all extraterritorial terrorism investigations occurring in Asia (Pakistan to Japan). Among the cases the writer supervised were the discovery of Ramzi Yousef's bomb factory in the Philippines and the plot to blow up US flagged airlines in the Pacific, the murders of consular employees in Karachi, Pakistan, and the sarin attack in Tokyo. The writer was also involved in emergency management as the FBI's representative at the Hawaii federal emergency working group chaired by the Federal Emergency Management Agency. The group engaged in planning, risk assessment, and in recovery efforts from the devastating Hurricane Ineke.

Based upon this experience, the writer has observed that there are three major causes for stress in ERs and TIs:

1. ERs and TIs are often in actual danger in their working environments immediately before, during, and after incidents.

2. There are constant, vivid, and often horrific reminders of the incidents long after they have occurred. ERs and TIs are expected to continue their efforts until their agencies' goals are met.

3. As natural emergencies and terrorism incidents are by their basic nature "high profile," there are almost always politically motivated demands for immediate and effective action, accompanied by intense administrative pressures from within their own agencies. For investigations, solving the crime is of paramount importance. For emergency management, ensuring that all possible resources are brought to bear to alleviate the suffering of the populace is the goal.

These three stressors are often accompanied by attempts to assign blame to the agencies responsible for the recovery work or investigations by the media, special interest groups, and political organizations, while at the same time these agencies are expected to accomplish their missions.

As a result, it is not surprising that sometimes ERs and TIs become stressed. Fortunately, during the past thirty years or so a greater understanding of trauma and stress disorders, including acute stress disorder (ASD) and post-traumatic stress disorder (PTSD), has emerged to help explain what results from a single trauma or a series of traumas.¹ This understanding gives us a greater appreciation for what happens to ERs and TIs in their work and the beginning of a strategy to help address their needs.

Prior to the World Trade Center (WTC) bombing, research concentrated largely upon the traumas and symptoms experienced by abused women, children, and Vietnam veterans.² Recently, some studies have explored in a general manner the trauma symptoms experienced by ERs and TIs due to natural disasters, terrorist attacks, and major motor vehicle accidents.³ After the WTC bombing, some preliminary work examined how ERs and TIs reacted to the bombing. In a cursory mental health evaluation of over 11,000

rescuers, recovery workers, and volunteers, about 50 percent were found to meet the "threshold criteria for clinical mental health evaluation," yet only three percent said they had sought mental health services prior to being interviewed.⁴ It is not known whether others who were interviewed later sought professional counseling.

METHOD

The literature of the past decade was searched for articles and studies concerning trauma, stress, ASD, and PTSD. Particular emphasis was placed on articles that dealt with ERs, TIs, and law enforcement. While the selection of articles cited is representative of the literature as a whole, it is not meant to be a definitive list.

What is known about adult stress?

Where a situation was "viewed extreme and threatening, that is contrary to his or her life experience," it was considered "psychologically shocking" and could be "interpreted as traumatic."⁵ "Between 40 percent and 70 percent of the population" may have experienced a traumatic event in their lives.⁶ A subject's recall of traumas, whether accurate or not, was found to be the basis for stress-related reactions.⁷

Stress, defined as "hardships, straits, adversity or affliction," was considered a nonacute response and had three defined stages: an alarm stage where one was "alerted to potential threats"; a resistance stage where "fatigue, anxiety, tension, and irritability" occurred; and an exhaustion stage where physical or emotional illnesses developed.⁸

As an example, the alarm stage would be when an emergency responder watches weather reports concerning an approaching hurricane, is ordered to work, and is forced to leave his family at home. During this stage stress is very common. Continuing with this example, the resistance stage would include the time preparing for the hurricane, managing the response, and responding after the storm has ended. During this stage the responder works long hours, is required to accomplish many tasks, usually under very trying circumstances, and often feels "put upon" by the media or politicians to justify what he is doing or has not done. During this stage stress may be well elevated.

While the experience of stress during these first two stages is normal and occurs in the majority of ERs and TIs, the third stage is considerably more problematic. Generally, symptoms observed during this stage are nonspecific in nature, such as irritability or shortness of temper. Some ERs and TIs progress to this third stage, exhaustion, exhibiting symptoms that suggest a progression to ASD or PTSD. ASD symptoms were described as a “more acute reaction and of briefer duration” than PTSD.⁹ If symptoms lasted less than one month, the disorder was considered ASD; if its duration was in excess of one month, it was diagnosed as PTSD.¹⁰

Examples of acute PTSD symptoms included nightmares, intrusive or distressing recollections, guilt, denial, flashbacks, shock, outbursts of anger, emotional numbness, hypervigilance and exaggerated startle response, panic, feelings of loss, disorganized thought, memory impairment, detachment, anxiety, poor judgment, inability to concentrate, lack of trust, and avoidance of activities, places, thoughts, and feelings or discussions related to the trauma.¹¹

In the exhaustion phase, the writer has encountered personnel who had to be removed from their work assignments for the following observed symptoms: nonperformance of work (from an employee who had been a superior performer), insubordination (from a TI who had never before exhibited any rebellious behavior), excessive alcoholic consumption (from employees who had been moderate or nondrinkers prior to their assignments), abrupt personality changes noted by peers or managers (in a variety of instances), and an exaggerated sense of the importance of their work (in one memorable instance the TI often remarked, “But boss, no one else can do what I am doing!”). The majority of affected personnel were referred to our Employee Assistance Program for diagnosis and professional counseling. It was not management’s function to determine whether someone had ASD or PTSD; they were only concerned if emotional problems interfered with the individual’s job performance. Unfortunately, managers were often not in a position to determine whether family situations were disturbed by symptoms of ASD or PTSD.

Could a natural emergency or act of terrorism be a cause of stress, ASD, or PTSD, and, if so, is the severity of the symptoms related to the nature of the exposure to that event?

Classes of trauma that constitute stressors include living through a natural disaster or witnessing a terrorist attack.¹² Intense fear, helplessness, terror, a threat of seriously being injured or killed, or exposure to others seriously injured, killed, or traumatized needed to be present to fall within this category.¹³ After the Oklahoma City bombing, a study of persons in the community who were not directly involved as victims, including ERs and TIs, showed that there was a consistently strong relationship between an individual’s exposure to a traumatic event and the “number, severity and persistence” of PTSD symptoms.¹⁴

Is the trauma experienced by ERs or TIs in a dangerous, shocking, or high-profile environment sufficient to cause symptoms of stress, ASD, or PTSD?

“Exposed disaster workers are at an increased risk of ASD, PTSD and depression.”¹⁵ In acts of terrorism, a significant relationship was found between “exposure, proximity and the level of post-disaster” symptoms.¹⁶ “In Vietnam, there was no front line, and in reality there was no front or back to a combat zone. The war was all around the soldier.”¹⁷ Operating in a hostile foreign environment where an individual was never sure of the level of danger for an extended period was traumatic and sufficiently extreme to cause many veterans to develop stress, ASD, and PTSD.¹⁸ Physical danger was found to spur symptoms of stress, ASD, and PTSD in persons working and living in the vicinity of major traffic accidents, child homicides, natural disasters, and terrorism incidents.¹⁹

What are the coping mechanisms used by some ERs and TIs to explain how they manage better than others through similar traumatic events?

Characteristics shown to aid in dealing successfully with great stress include intelligence, self-control of emotions, positive self-image, strong social support within family or work group, optimism, altruism,

a sense of control over the event and the recovery process, spiritual forgiveness, and religious reappraisals.²⁰

How can one assist ERs and TIs in receiving improved mental health treatment, informed and compassionate management, and better educational materials?

ERs and TIs should be informed about the specific symptoms they or their colleagues might experience in their work. They should be aware of the specific actions they can take to better protect themselves and their mental health. "Policymakers and clinicians should consider how a coordinated public mental health response" might effectively supply "needed information, counseling and psychological support following terrorist events."²¹ Since it has been demonstrated that ERs experience similar symptoms to TIs, these recommendations should apply to them as well.

A CALL FOR PHENOMENOLOGICAL RESEARCH

There has not yet been an in-depth, phenomenological, qualitative study to investigate the stress and trauma experienced by ERs and TIs. A phenomenological, qualitative research design consists of a qualitative study, where as a result of in-depth, one-on-one unstructured interviews, the participant's perspectives and views of the realities of their situations are closely examined.²²

"Qualitative research deals with human lived experience. It is the life-world as it is lived, felt, undergone, made sense of, and accomplished by human beings."²³ Phenomenological research has been defined as consisting of "suspending scientific assumptions" about a participant's problems, "gaining a descriptive access, through interviews, to the life-world situations," "an analysis of the meanings of situations" and "the processes that gave rise to them," and "imaginative variation through which the essentials were first grasped" by the participant and then at a "more general level held by all" participants.²⁴

We should begin by seeking to conduct interviews of TIs within six months of the terrorist incident. This should limit problems associated with memory and recall and allow assessment of the severity of the

symptoms felt by the participants.²⁵ We should encourage them to describe the nature of their experiences through extensive interviews, providing researchers with in-depth comments and detailed stories of their experiences.²⁶ In addition, they should describe what they perceive to be the causes of their symptoms, their inner logic, and their understanding of the symptoms they have experienced.²⁷

In particular, questions should seek to elicit responses that describe what the TIs perceived to be the physical and emotional threats inherent within the event or how they felt they were pressured to solve this case of terrorism. EMs and TIs should be queried about whether they believe they were traumatized as a result of this danger or pressure and whether they had any symptoms that would indicate stress, ASD, or PTSD. Of course, the emphasis in all interviews should be to assist participants to recall their experiences.²⁸ Suggestions for interview questions are found in Appendix A and were developed from a review of reported experiences of ERs and TIs in natural disasters, terrorism incidents, traffic fatalities, and juvenile murders.²⁹

The researcher might then characterize the participant's narrative experiences as being highly, moderately, or not symptomatic of stress, ASD, or PTSD.³⁰ These categorizations would allow the researcher to organize data for later in-depth analysis.³¹

CONCLUSION

There is presently no real baseline of knowledge concerning how trauma and stress affect ERs or TIs. Future studies should help mental health professionals better understand how ERs and TIs respond to traumatic events and to determine how prevalent ASD and PTSD are among this select population.

Through such understanding, the mental health community can provide ERs and TIs with effective coping mechanisms and treatments to help them overcome these symptoms, return to work, and resume their normal lives. Commonalities are expected to be found between the experiences and symptoms of ERs and TIs that should allow mental health professionals to apply lessons learned from one group to the other. In addition, emergency services and law

enforcement managers will increase their understanding and empathy for their ERs and TIs and push to develop better educational materials, increase the availability and acceptability of professional counseling services, and provide their front-line staff with the necessary time to heal from traumas without negative administrative action.

Finally, ERs and TIs will gain insight to help them cope with the traumas they are likely to experience, have information on hand that will enable them to make their own informed determination as to what their response is to a stressful event, and be aware of and encouraged to use the professional mental health services available to them.

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APPENDIX A. OPEN-ENDED QUESTIONS FOR EMERGENCY RESPONDERS AND TERRORISM INVESTIGATORS

The questions below are designed for individual emergency responders and terrorism investigators following an emergency/terrorism event that they were personally involved in. Each question should be posed within the context of this event (e.g., "Since you began your work at the _____ scene...") to help gauge the level of specific stress-related attitudes and behaviors caused by this event.

1. Have you noticed you are drinking more?
2. Have you had recurrent thoughts, memories, or dreams of the event or your related investigative actions?
3. Have you avoided feeling or thinking about the event or your related investigative actions?
4. Have you noticed a reduced emotional response to your family, friends, and coworkers?
5. Have you found it difficult to fall/stay asleep? If so, do you know why?
6. Have you been irritable or angry? If so, do you know why?
7. Have you had any memory problems or forgetfulness?
8. Have you felt frustration with the pace of the investigation and/or antipathy toward your superiors or coworkers? If so, do you know why?
9. Have you found any coping mechanisms to help you deal with the stress you have experienced?
10. Is there anything else you would like to tell us about your feelings or thoughts that you think would help us understand your response to this event?