

PSYCHOLOGICAL EFFECTS OF OCCUPATIONAL STRESS ON THE MENTAL HEALTH OF A CRIME SCENE INVESTIGATOR IN WARTIME

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Crime scene investigators (CSIs) are routinely exposed to traumatic events, particularly during wartime, which can intensify occupational stress. This paper explores the mental health impacts of such stress, including PTSD, anxiety, and burnout. It also examines the work of CSIs in Israel during the 2023 war against terrorists in Gaza, highlighting the unique factors that influenced their psychological well-being. The thesis emphasizes the importance of institutional support systems and resilience-building interventions to mitigate these effects.

Keywords: occupational stress, PTSD, crime scene investigator, wartime, resilience, burn-out.

ПСИХОЛОГІЧНІ НАСЛІДКИ ВПЛИВУ ПРОФЕСІЙНОГО СТРЕСУ НА ПСИХІЧНЕ ЗДОРОВ'Я СЛІДЧОГО ПІД ЧАС РОЗСЛІДУВАННЯ МІСЦЯ ЗЛОЧИНУ В УМОВАХ ВІЙСЬКОВИХ ДІЙ

Роман Перцев

На місці злочину слідчі часто зазнають впливу травматичних подій, особливо в умовах військових дій, що може посилити професійний стрес. У тезах розглядається вплив цього стресу на психічне здоров'я людини, зокрема ПТСР, тривожні розлади та професійне вигорання. Також автор висвітлює особливості роботи слідчих в Ізраїлі під час війни проти терористів у Газі у 2023 році. Особлива увага приділяється важливості інституційної підтримки та програм з розвитку стійкості для мінімізації таких наслідків.

Ключові слова: професійний стрес, ПТСР, слідчий на місці злочину, військові дії, стійкість, вигорання.

Crime scene investigators (CSIs) play a critical role in the criminal justice system by examining scenes of violent crime, collecting evidence, and interpreting the remnants of traumatic events. This line of work exposes them to high levels of psychological stress, which is further compounded during wartime, when CSIs encounter even greater volumes of death, destruction, and chaos. The mental health impacts of this exposure can be severe, leading to conditions such as post-traumatic stress disorder (PTSD), anxiety, depression, and burnout.

This paper examines the psychological effects of occupational stress on CSIs during wartime, highlighting the unique challenges they face, the prevalence of PTSD, and the coping mechanisms they use to manage the mental toll of their work. Particular attention is given to the work of CSIs in Israel during the 2023/2024 war against terrorists in Gaza. Israeli CSIs faced significant stressors, including the proximity of violent incidents to civilian areas, the constant threat of further attacks, and the emotional burden of dealing with the aftermath of terrorist activities. The relentless

pressure to work efficiently while under threat, processing scenes of destruction and loss of life, greatly increased the psychological toll on these investigators.

The thesis also discusses the importance of implementing institutional support systems and resilience-building interventions to mitigate the negative psychological consequences of such high-stress occupations. This includes promoting a culture that encourages seeking help, providing access to mental health services, and offering resilience training programs that help CSIs manage stress levels, recognize the signs of burnout, and adopt adaptive coping strategies.

Psychological Stressors for CSIs in Wartime

CSIs are often tasked with analyzing scenes of violent crimes, such as homicides, sexual assaults, and disasters, resulting in repeated exposure to traumatic stimuli. In wartime, these experiences are exacerbated by the scale of violence and destruction. Investigators are often required to examine mass casualty events, including bombings, mass shootings, and atrocities involving mutilated bodies. The stressors are not limited to the crime scenes themselves but also include the chaotic environment of war, where investigators may face threats to their own safety, emotional distress from dealing with the families of victims, and the cumulative impact of long hours and overwhelming caseloads.

The experience of CSIs in Israel during the 2023 war against terrorists in Gaza provides a unique perspective on the intensity of wartime stressors. Israeli CSIs were frequently called upon to respond to missile strikes, terrorist attacks, and large-scale casualties, often in civilian areas. The constant threat of rocket fire, coupled with the need to quickly process crime scenes amidst ongoing hostilities, placed immense psychological pressure on investigators. Factors such as the proximity of these incidents to densely populated civilian regions, the emotional toll of handling victims of terrorism, and the ongoing threat of further attacks heightened the stress experienced by CSIs.

Israeli CSIs were not only tasked with analyzing crime scenes under extreme conditions but also had to operate under heightened security risks, often working while under threat from rocket fire. This combination of personal danger, large-scale trauma, and the emotional strain of processing scenes involving children and families increased the likelihood of developing conditions like PTSD, anxiety, and burnout. The constant pressure to perform their duties effectively while safeguarding their own well-being made the 2023/2024 war against terrorists in Gaza one of the most challenging environments for Israeli CSIs. Studies have shown that this type of high-intensity conflict, particularly in areas under direct attack, significantly raises the risk of trauma-related disorders among forensic personnel [1].

As a result of these compounded stressors, wartime CSIs are at a higher risk of developing mental health issues than their counterparts working in peacetime. Research indicates that the prevalence of PTSD among crime scene investigators ranges from 9.3% to 20%, depending on the nature of their exposure to traumatic events [2]. This is significantly higher than the 3.6% prevalence of PTSD among the general population [3]. In a wartime setting, such as the Gaza conflict in 2023, the prevalence is likely even higher, given the increased frequency and severity of trauma encountered.

PTSD and Other Mental Health Conditions

PTSD is the most prevalent mental health disorder affecting CSIs, especially those working in high-stress environments such as war zones. Symptoms of PTSD include intrusive memories of traumatic events, flashbacks, hypervigilance, avoidance of trauma reminders, and emotional numbing [4]. These symptoms can significantly impair daily functioning, leading to concentration difficulties, disrupted sleep, and strained interpersonal relationships.

In a U.S. study, 9.3% of CSIs met the diagnostic criteria for PTSD, while a larger proportion reported subclinical symptoms, such as hypervigilance, negative beliefs about oneself and others, sleep disturbances, and emotional

detachment [4]. The study also revealed that CSIs with higher levels of PTSD symptoms were more likely to engage in maladaptive coping mechanisms, such as alcohol consumption and social withdrawal [4]. Similar trends have been observed in other countries, where crime scene investigators exhibit higher rates of trauma-related disorders than the general population [5].

In addition to PTSD, many CSIs experience other mental health conditions, including anxiety, depression, and burnout. Burnout is characterized by emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment, often resulting from chronic occupational stress. In wartime, the risk of burnout is particularly high due to constant exposure to violence and death, the lack of adequate psychological support, and the pressure to process a high volume of crime scenes. Research shows that prolonged exposure to traumatic scenes can result in secondary traumatic stress, with symptoms similar to PTSD [5].

Coping Mechanisms and Resilience

Coping mechanisms are the strategies individuals use to manage stress and trauma. Among CSIs, these mechanisms vary significantly, ranging from adaptive strategies like seeking social support and engaging in hobbies to maladaptive strategies like substance abuse and emotional suppression. The effectiveness of these coping mechanisms often determines how well investigators manage their occupational stress and prevent the onset of mental health conditions [4].

Adaptive coping mechanisms are crucial in building resilience—the ability to adapt to stress and trauma while maintaining psychological well-being. Studies show that CSIs who engage in positive coping behaviors, such as discussing their feelings with trusted colleagues, exercising, and finding meaning in their work, are less likely to develop PTSD or other stress-related disorders [4]. However, in wartime, where the frequency and intensity of traumatic events are overwhelming, these strategies may not always suffice.

Maladaptive coping mechanisms, such as alcohol use to numb emotions or withdrawing from social interactions, are linked to higher PTSD scores among CSIs [4]. These behaviors can create a vicious cycle, where job-related stress leads to unhealthy coping strategies, which in turn worsen mental health. Thus, organizations must provide support systems that encourage healthy coping and resilience-building among CSIs.

Institutional Support and Interventions

Given the psychological risks associated with crime scene investigation, particularly in wartime, organizations must provide adequate institutional support to mitigate occupational stress. This includes offering access to mental health services, promoting a culture that destigmatizes seeking help, and implementing resilience training programs. Research indicates that social support is one of the most significant protective factors against PTSD and other mental health disorders [5]. Therefore, organizations must foster an environment where CSIs feel comfortable discussing their experiences and accessing professional psychological support when needed.

Moreover, resilience training has proven effective in helping individuals cope with traumatic stress. Programs that teach CSIs to recognize the signs of burnout, manage stress levels, and use adaptive coping strategies can significantly reduce the incidence of PTSD and other stress-related disorders [4]. In wartime, when stressors are heightened, these measures should be readily available to all forensic and police personnel.

CONCLUSION

The psychological effects of occupational stress on CSIs are significant, particularly in wartime. The nature of their work exposes them to extreme trauma, which can result in conditions such as post-traumatic stress disorder (PTSD), anxiety, depression, and burnout. The experience of Israeli CSIs during the 2023 conflict with terrorist organizations in

Gaza exemplifies the significant psychological pressure placed on forensic investigators in high-risk environments. The combination of prolonged exposure to violent attacks and civilian casualties, along with the threat of future violence and the pressure to rapidly process crime scenes, markedly elevates the risk of mental health disorders. While some CSIs develop resilience through adaptive coping strategies and social support, many struggle with the mental demands of their work, often

resorting to maladaptive behaviors that exacerbate their psychological state.

It is therefore essential that organisations provide comprehensive support systems, including access to mental health services and resilience training, to help CSIs cope with the unique stressors of their occupation. By addressing these needs, we can better protect the mental health of these critical workers and ensure they are equipped to handle the challenges of their demanding roles.

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