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Vicarious Trauma in Counterterrorism Practitioners

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NCITE Research Report

Vicarious Trauma

in Counterterrorism Practitioners

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About the Report

The United States has a professional counterterrorism/counter-extremism workforce whose charge is to maintain the safety of the country. These professionals are exposed to varying degrees of violent and traumatic material ranging from violent images to first-hand accounts of abuse/trauma. What effects do these materials have on the mental health of these workers? Additionally, how does exposure to these materials influence their job satisfaction and job performance? The purpose of this report is to summarize the findings from a project that seeks to build a baseline understanding of how counterterror practitioners are affected by exposure to secondary violent and traumatic materials. Questions about this report should be directed to Joseph Young at jyoung@american.edu.

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About NCITE

The National Counterterrorism Innovation, Technology, and Education (NCITE) Center was established in 2020 as the Department of Homeland Security Center of Excellence for counterterrorism and terrorism prevention research. Sponsored by the DHS Science & Technology Office of University Programs, NCITE is the trusted DHS academic consortium of more than 50 researchers from partner institutions across the U.S. and Europe. Headquartered at the University of Nebraska at Omaha, NCITE is a leading U.S. academic partner for counterterrorism research, technology, and workforce development.

Acknowledgment and Disclaimer

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EXECUTIVE SUMMARY

Those exposed to violence and trauma as part of their careers may experience significant distress; yet there remains a dearth of literature exploring occupational outcomes as a result of this exposure to violence, namely through the pathways of vicarious trauma (VT) and secondary traumatic stress (STS). The current study seeks to explore how violence and trauma exposure during one's job in the counterterrorism workforce can lead to the adverse outcomes of VT and STS, which will in turn impact one's job performance and job satisfaction. We use a mixed methods approach, using a quantitative survey and qualitative interviews to gain a comprehensive picture of how VT and STS affect this population. The quantitative survey consists of various validated scales measuring VT, STS, burnout, job performance, and job satisfaction, as well as questions regarding the types of violent/traumatic material practitioners are exposed to, as well as how frequently they are exposed (i.e., daily, weekly, monthly). Over the two-year course of the project, we amassed 469 survey responses (186 from counterterrorism professionals exposed to violence, and 283 from a control group similar in most demographic ways, who work in government, but are not exposed to violence) and 15 qualitative interviews. Our results suggest that exposure to violent material is positively related to higher reported levels of VT and STS. Moreover, those who reported greater levels of vicarious trauma and STS reported **less job satisfaction** and **more counterproductive work behaviors** on average. Similar themes arise in our qualitative interviews, with respondents reporting psychological distress and job burnout because of violence exposure. In our quantitative modeling, we control for burnout as a rival explanation and still find negative effects of exposure to violence on mental health job satisfaction/performance. Our findings suggest that those with more violence exposure do report higher levels of VT and STS, and those reporting higher levels of VT and STS also report lower job satisfaction and higher counterproductive work behaviors, suggesting our conceptual model captures these constructs in our sample.

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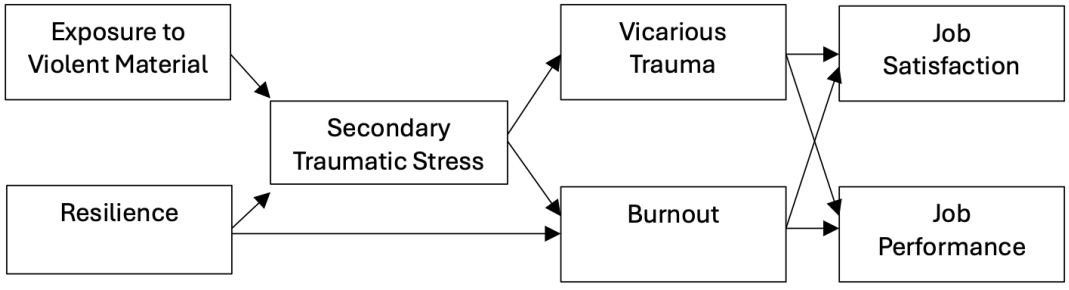
Conceptual Model

Exposure to violent material may lead to a host of negative outcomes in one's personal and professional life. Many counterterrorism practitioners experience violence exposure to some degree during their career – whether primary or secondary exposure – which impacts their employment outcomes vis-á-vis job performance and job satisfaction. Our conceptual model (Figure 1) argues that exposure to violence can lead to increases in secondary traumatic stress (STS). Resilience factors, however, can reduce this impact on STS. As STS build over time, it produces vicarious trauma (VT), which we hypothesize then decreases job performance and job satisfaction. The main alternative to our claim is that burnout is causing decreases in job satisfaction and job performance. If this alternative were supported, it would suggest that burnout, not exposure to violent material and VT are leading to poor job performance and job satisfaction.

Vicarious trauma (VT) is the experience of cumulative, negative changes in worldview following extended exposure to traumatic secondary traumatic material (McCann & Pearlman, 1990). Secondary traumatic stress (STS) differs from this as it can occur following even a single exposure to secondary traumatic material, and results in acute emotional duress like posttraumatic stress disorder (Figley, 1995). Often accompanying VT and/or STS is burnout, which is a syndrome marked by apathy towards life and career and reduced productivity due to chronic work-related stress (Branson, 2019). Violence exposure leads to VT, STS, and/or burnout in counterterrorism practitioners, and the reaction to these mental health challenges can negatively impact employment outcomes, specifically job performance and job satisfaction, as practitioners may find it difficult to fully engage with their careers while simultaneously attempting to cope with mental health stressors that result directly from their jobs. Figure 1 below illustrates this process.



Arrows in the figure suggest how a prior concept is influencing a future outcome.

Survey Results

To date, we have collected **186** responses to the survey across a wide range of government and non-government CT practitioners including federal employees, educators, military, law enforcement, NGO/think-tanks, consultants, and clinicians. Taken together, this *treatment* group reflects the range of individuals who are tasked with understanding, preventing, and responding to the threats of terrorism

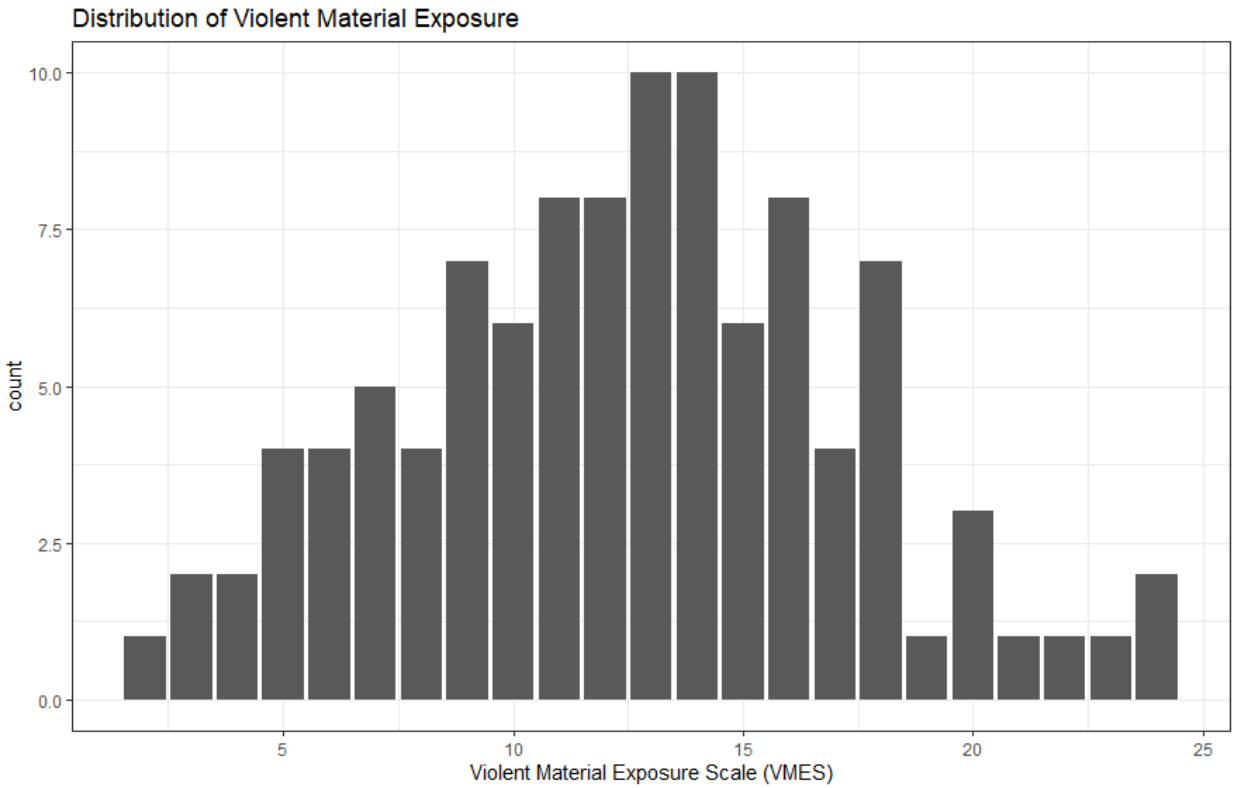
and political violence. We call this the treatment group as these individuals are exposed to violence material in the normal course of their job duties. We collected a control group sample through Qualtrics. This control group consisted of **283** government employees who *do not* regularly face exposure to violent material in their work but are in otherwise similar work environments. Our total survey population, combining the *treatment* and *control* groups is **469** respondents.

Descriptively, this sample was predominantly white (75%), female (53%), with the middle 50% of respondents between the ages of 32-57. Speaking to the relevance of the sample to this project, respondents had an average tenure of 11 years in the CT workforce, and most (58.5%) reported exposure to some form of violence as a part of their work. To assess the range of possible exposure, we generated a frequency-weighted additive scale of exposure (Violent Material Exposure Scale, or VMES; Figure 2) that considered 8 different (specific) sources of violent material that ranged from no exposure across all categories (0) to daily exposure to all 8 specified sources (24).[1] Additionally, within this sample, we evaluated exposure to previous significant negative events (70% of whom reported some prior trauma), access to employment-based mental health resources (80% reported awareness of such resources), secondary traumatic stress, vicarious trauma, and work-related outcomes.

When comparing our sample to diagnostic benchmarks for secondary traumatic stress (as provided by Jacobs and colleagues (2019)), our sample exhibited significant evidence of STS with **24% indicating mild STS, with 11% displayed moderate STS, 7% showing high STS, and 11% indicating severe STS.** While there are no equivalent benchmarks for the Vicarious Trauma Scale (VTS), in introducing the scale Vrklevski and Franklin (2008) found a mean value of 26 in their *less* exposed sample and 41 among their highly exposed sample (and characterize the highly exposed sample as exhibiting significant VT). By comparison the median VTS score in our treated sample is just under 33, with 25% of respondents reporting a score of 40 or higher, suggesting similarly high exposure among some of our respondents.

[1] These included exposure to 1) video material, 2) images, 3) case files, 4) emails, 5) datasets, 6) social media, 7) survivors, 8) news media. Respondents were also able to indicate other forms of violent material they were exposed to, however this was infrequently complete and often overlapped with existing categories.

Figure 2



Building on the theoretical diagram in Figure 1, we estimated a series of structural equation models on observed data, as well as using AMELIA (Honaker et al. 2011) for imputation to consider the totality of the theoretical model proposed. Importantly, the structural equation models relax the assumption of OLS or other linear models, which would impose an equal loading of all items onto underlying concepts.

Among respondents, this study found evidence of a positive relationship between exposure to violent material and secondary traumatic stress when accounting for individual levels of resilience ($\beta = 0.241$, *s.e.* $= 0.094$, $p = 0.010$).[2] That is to say, **respondents exposed to more violent material in the course of their job, more often, reported higher levels of secondary traumatic stress.** Self-reported resilience, however, served as an important protective factor ($\beta = -0.600$, *s.e.* $= 0.077$, $p = 0.000$). For secondary psychological outcomes, we likewise, as expected found evidence that both secondary traumatic stress ($\beta = 0.982$, *s.e.* $= 0.139$, $p = 0.000$) and resilience ($\beta = -0.320$, *s.e.* $= 0.117$, $p = 0.006$) were closely linked to the more chronic outcome of vicarious trauma. Furthermore, both resilience ($\beta = -0.208$, *s.e.* $= 0.087$, $p = 0.018$) and STS ($\beta = 0.539$, *s.e.* $= 0.085$, $p = 0.000$) were predictive of self-reported burnout.

Turning to employment-related outcomes, we observed that while **vicarious trauma was reliably estimated to lead to a higher incidence of self-reported counter-productive behaviors** ($\beta = 0.143$, *s.e.*

[2] Standardized beta coefficients (and diagnostic measures) from the unimputed model are reported. Across estimation procedures (complete case, and AMELIA), substantive findings were identical (while coefficients varied marginally).

= 0.038, $p = 0.000$), **lower levels of task-performance** ($\beta = -0.109$, *s.e.* = 0.043, $p = 0.011$), **and surprisingly, higher levels of contextual performance** ($\beta = 0.106$, *s.e.* = 0.042 , $p = 0.011$), there was no statistically reliable effect on job satisfaction. By contrast, respondents reporting higher levels of burnout indicated more counter-productive work behavior ($\beta = 0.157$, *s.e.* = 0.047, $p = 0.001$), lower levels of task-performance ($\beta = -0.266$, *s.e.* = 0.067, $p = 0.000$), poorer contextual performance ($\beta = -0.204$, *s.e.* = 0.059, $p = 0.001$), and lower levels of job satisfaction ($\beta = -0.469$, *s.e.* = 0.085, $p = 0.000$).

As estimated, the diagnostic measures suggest that the model explains the covariance structure of these items adequately. Among the incremental diagnostics (CFI and TLI), the model resulted in a comparative fit index (CFI) of 0.807 and a Tucker-Lewis index (TLI) of 799. Traditional benchmarks for these diagnostics are approximately 0.90. However, given the relatively modest sample size and large number of indicators per-respondent, a lower level is not uncommon. With respect to the absolute fit indices, the model resulted in a root mean square error of approximation (RMSEA) and standardized root mean square residual (SRMR) of 0.057 and 0.093 respectively. These are within traditional benchmarks of acceptable fit (< 0.08 for RMSEA and <0.10 for SRMR respectively) and align with cutoffs per Hu and Bentler (1999).

Interview Results

In addition to the survey respondents, we interviewed 15 individuals from across the counterterrorism workforce and supporting organizations. This includes two military personnel, four federal law enforcement agents, five intelligence agents, and four practitioners with a non-government/think tank/clinical background. From these interviews, we observed that all participants reported indirect exposure to violent material (e.g., videos, images, social media platforms, text, individuals affected by violent events, etc.) either as part of their past roles, current roles, or both. Eleven respondents shared that, in addition to indirect exposure, they had some direct exposure to violent events, such as being the target of an improvised explosive device attack, being involved in suspected terrorist attack, or being the subject of violent crime in a foreign country. We found that direct and/or indirect exposure to violent material impacted individuals' world view, career, and daily lives.

Ten of our interviewees reported a shift in their world view after exposure to violent material on the job. While three reported a distinctly negative shift, seven said they just felt their world view was different. Five reported no change, one stating that their view did not change because they were already aware of the dangers in the world. One participant who reported a negative shift in world view stated: "The blinder are off, my eyes are open… I tend to see the worst in people before I see the best." An example of a paradigm shift that the individual did not identify as distinctly positive or distinctly negative was:

"I've had to just sort of comes to grips with, you are so incredibly lucky… [there is] a nature to existence when you see how common violence is in so many places, you know, it's a miracle any of us make it to 40."

No individual reported a positive change to their world view following exposure.

Nine individuals reported a shift in feeling towards their career, with six reporting a neutral paradigm shift, two reporting a negative change, and one reporting a positive change. An example of a neutral response was: "How does [violence exposure affect my career?] … I guess it sort of guides it in a sense." Those who reported a negative change reported that they, "felt helpless… That last mission broke me a little bit." The individual who reported a positive change stated: "It's made me more effective at my job… like how dangerous it is, there needs to be a lot of urgency to it."

Eleven individuals felt exposure to violence in their job negatively impacted their daily lives, while four said they felt no impact, and no one reported a positive impact. Those who reported a negative impact to daily life described symptoms associated with work-related burnout and stress. For example, constant hypervigilance, fear for the safety of self and loved ones, and feelings of emotional stunting were described as common occurrences. One individual reported that even when they left work, "it's hard to take your mind off things," while another said the constant fear of harm in daily life has "made me less eager" to do the job.

We are unable to completely discern whether occupational stressor and exposure to violent material are the major cause of stress and burnout associated with these high-exposure jobs. Despite their exposure to violent and traumatic materials, many respondents indicated a high level of satisfaction with their jobs. Even those who reported negative feelings towards the exposure reported some element of personal resilience that helped them cope with the impact of the job. In order of prevalence, these included going

outside/spending time in nature, exercising and focusing on physical and mental health, spending time with friends and family (including pets), setting work boundaries/not discussing work with loved ones, and enjoying media unrelated to work materials.

Beyond personal resilience and coping skills, interviewees reported a series of context-specific factors that could either help or harm their feelings towards their jobs. For example, those who reported a work environment where they felt supported by their coworkers and the organization they worked for reported less strain. Whereas those who felt their workplace lacked mental health resources and had a stigma around seeking help seem to fair worse. Many reported a desire for more accessible and effective mental health programs, such as the implementation of peer support. Additionally, those who felt value congruence in their job, such as reporting feeling mission-oriented and like they were fighting for "good causes", reported more satisfaction than those who experienced value incongruence. Lastly, agency within position, such as being able to choose what projects or how much exposure they will have was important to most respondents. Those who had this agency said it was a critical component of their job satisfaction. By contrast, those who did not have agency expressed a desire for it.

Our findings suggest that counterterrorism practitioners experience above-average violence exposure during their jobs. Many report that this exposure has impacted their world view, feeling towards career, and daily lives. Important mitigators include personal resilience, value congruence, agency within position, and a supportive work environment. We suggest that one sector-wide improvement would be a combination of better access to resources as well as a commitment to providing these resources, especially among the most exposed people in the organization.

Implications

Given the comprehensive survey responses coupled with interview findings, the results support the notion that the counterterror workforce is highly **exposed** to **many kinds of secondary violent materials**, while some also experience direct exposure to violence. These experiences do have negative consequences on not only the mental wellbeing of the force (including distress associated with secondary traumatic stress and vicarious trauma) but also impacts their job satisfaction and workplace behavior. These are important outcomes to consider because, for example, poor job satisfaction is a key determinant of individuals' intention to change careers and can lead to turnover within a profession vitally important to the domestic security of the United States. Moreover, counterproductive work behavior can hinder the effective performance of the workforce (Bride & Kintzle, 2011), which in this case could cost lives. Accordingly, it is important to understand how exposure to violent and traumatic materials is affecting the counterterrorism workforce and the potential for mitigating the effects.

Our survey efforts are complete, and we feel confident that this is a representative sample of a previously unexplored population. Our power analyses suggested we should be able to begin to detect reasonable effect sizes after about 200 surveys and we went well beyond this number. Our population is a little harder to find than a standard adult population, but due to our collaborations and access we are confident that we have the most complete picture of this population thus far. Related, with a larger sample, we were able to model complicated structural equation models that require a larger sample size.

We were able over this year to enhance our survey to include a comparison/control group of practitioners. This comparison group includes professionals with *no exposure* to violent materials as part of their ongoing work effort. This group, for example, includes a similar professional of the same age/rank but who is not exposed to troubling material, violence, or dangerous locations in the course of their routine work. This allows us to better compare normal work stress or what is sometimes called *burnout* to trauma-induced work challenges caused by exposure to extremist/violent content. We see burnout as the most likely alternative explanation to violence exposure for the outcomes we are interested in explaining. Because of the larger sample size and control group, we are more confident that our results aren't simply attributed to burnout. In fact, the data suggest that violence exposure likely has negative effects even when controlling for burnout, especially when individuals lack resources and resilience factors.

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