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UNDERSTANDING DIGITAL FORENSICS MENTAL HEALTH STRESSORS: PTSD AND ANXIETY

By

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Contents

Introduction	1
Post-Traumatic Stress Disorder and Anxiety: Definitions and Symptoms	1
The Impact of PTSD on Anxiety	2
Emotional and Physical Impacts of PTSD and Anxiety	3
Impact on Personal and Professional Life.....	4
Cultural Barriers and Stigma in Addressing Mental Health	4
Emotional and Behavioural Responses to PTSD and Anxiety.....	5
Proposed Interventions	6
Coping Strategies for PTSD and Anxiety.....	6
Final Thoughts	7
<i>A Message to Digital Forensic Investigators</i>	7
About the Author	8
References	9

Introduction

Following on from my introduction to [digital forensics mental health stressors](#), this paper aims to provide a more in-depth examination of two specific operational stressors discussed previously: PTSD & Anxiety.

Post-Traumatic Stress Disorder (PTSD) is a well-recognised mental health condition that develops after exposure to trauma. While it is typically associated with direct traumatic experiences, those who work in professions that involve repeated exposure to distressing materials or accounts, such as digital forensic investigators (DFIs), law enforcement officers, or healthcare professionals, can also develop trauma-related symptoms. In such cases, PTSD is often referred to as Secondary Traumatic Stress (STS) or Vicarious Trauma (VT). These terms reflect the unique way in which indirect exposure to trauma affects individuals. Compounding these challenges is the frequent coexistence of anxiety, which exacerbates emotional and physical strain.

In DSM-5, STS and VT are now incorporated into the PTSD diagnosis, acknowledging the broader spectrum of trauma-related conditions. This inclusion highlights the significance of addressing the cumulative effects of trauma exposure, particularly in professions like forensic investigation, policing, and healthcare, where repeated exposure to distressing material or events can lead to serious mental health challenges.

In this paper, we'll look at the relationship between PTSD and anxiety. We'll explore their definitions, signs, and symptoms, their emotional and physical impacts, and coping mechanisms. Furthermore, this paper will consider the effects on personal and professional life, examine cultural and stigma-related barriers, and propose interventions to alleviate the burden on affected individuals.

Post-Traumatic Stress Disorder and Anxiety: Definitions and Symptoms

Post-Traumatic Stress Disorder (PTSD) is a condition that arises following exposure to a traumatic event. It is characterised by symptoms such as intrusive memories, avoidance behaviours, emotional detachment, and heightened states of alertness. For individuals in professions where exposure to trauma is indirect, such as DFIs who must review graphic content in criminal cases, similar symptoms can emerge.

For example, DFIs who repeatedly view evidence of child abuse or violent crimes may experience intrusive thoughts, nightmares, and emotional dysregulation, akin to those experienced by primary trauma survivors. Over time, if untreated, these symptoms can evolve into more persistent psychological changes, often creating a shift in an individual's worldview or sense of safety due to prolonged exposure to others' trauma. It can lead to cynicism, emotional exhaustion, and diminished trust in others. Research conducted by Gullon-Scott and Johnson (2024) and Kelty et al. (2021) indicated that 30% of DFIs exhibited symptoms of clinical PTSD.

Anxiety, although distinct from PTSD, is often closely linked. It is characterised by persistent worry, fear, or nervousness and can manifest through both psychological and physical symptoms. These include racing thoughts, difficulty concentrating, muscle tension, and physical restlessness. Anxiety frequently co-occurs with PTSD, as the heightened alertness associated with trauma perpetuates feelings of fear and apprehension. Together, PTSD and anxiety create a complex interplay of challenges for individuals exposed to trauma in their professional roles.

The symptoms of these conditions overlap and can be particularly debilitating for those who work in high-stakes environments. Flashbacks, avoidance behaviours, emotional detachment, insomnia, gradual erosion of trust, empathy and hypervigilance are hallmark signs of PTSD. Anxiety adds another layer of difficulty, with persistent worry, rapid heartbeat, and fatigue further straining individuals' emotional and physical resources.

Previous research and, more recently, the findings of the [2024 Forensic Focus wellbeing survey](#), profoundly highlight a critical issue: indirect trauma, such as exposure to distressing evidence, can have psychological impacts akin to direct trauma. This observation is not new, yet the fact that such findings are reiterated underscores a pressing question: why is this still occurring?

Despite decades of research, untreated symptoms of trauma and anxiety continue to lead to chronic psychological and physical consequences for those in high-stress roles like digital forensics. Both previous and more recent research carried out by myself and Forensic Focus underscore how anxiety compounds these effects, exacerbating PTSD symptoms and profoundly affecting cognitive performance and interpersonal relationships.

The ongoing struggle of professionals facing such conditions raises serious concerns about systemic failures in addressing mental health in trauma-exposed professions. Why are organisations still not prioritising tailored interventions and trauma-informed support? And why does the stigma around seeking help persist, preventing so many from accessing the care they need?

These questions demand urgent reflection and action by those who can mandate change. It is not enough to acknowledge these challenges; we must collectively strive to implement meaningful solutions to protect those who dedicate their lives to such vital yet emotionally taxing work.

The Impact of PTSD on Anxiety

PTSD and anxiety are deeply interconnected, often reinforcing and amplifying each other. PTSD's core symptoms, such as intrusive thoughts, hypervigilance, and avoidance, can heighten feelings of apprehension and uncertainty, feeding chronic anxiety. For example, a DFI who is constantly on edge due to exposure to distressing materials may find it difficult to relax, leading to persistent worry and heightened

alertness. This state of hypervigilance, while initially adaptive in response to trauma, becomes maladaptive when it perpetuates fear and anxiety in everyday situations.

Conversely, anxiety can intensify PTSD symptoms. Persistent anxiety prevents trauma processing, creating a cycle of heightened emotional distress. This cyclical relationship between PTSD and anxiety creates a feedback loop that increases emotional distress and diminishes an individual's ability to cope effectively. For professionals like DFIs, the pressure to perform under challenging circumstances exacerbates this dynamic, making it essential to address both conditions concurrently.

Emotional and Physical Impacts of PTSD and Anxiety

The emotional toll of PTSD and anxiety is profound, particularly for those who face trauma indirectly through their work. DFIs often report recurring feelings of dread, helplessness, and frustration. The weight of constantly confronting distressing materials can lead to emotional exhaustion, a sense of futility, and difficulty maintaining empathy. Many individuals also struggle with feelings of inadequacy, as they grapple with the overwhelming demands of their roles and the emotional fallout of their work.

Physically, PTSD and anxiety manifest in ways that further compromise well-being. Common symptoms include chronic fatigue, headaches, and gastrointestinal issues. Sleep disturbances, such as insomnia or nightmares, exacerbate physical exhaustion, creating a vicious cycle of stress and diminished health. Over time, the cumulative impact of these symptoms can lead to more serious conditions, including cardiovascular issues and weakened immunity. For DFIs, the physical strain of long hours and intense focus on distressing materials compounds these challenges, underscoring the need for effective interventions.

The [Forensic Focus Investigator Well-Being Survey Results](#) and previous research paint a concerning picture of the profound professional and personal consequences of unaddressed mental health challenges among Digital Forensic Investigators. Professionally, mental health struggles are shown to reduce focus, increase errors, and slow case progress, with respondents citing burnout and difficulties maintaining accuracy under stress. Similarly, PTSD and anxiety impair decision-making, productivity, and collaboration, often leading to emotional exhaustion and high turnover rates.

On a personal level, emotional withdrawal and irritability strain relationships, with many investigators avoiding discussions about their work with family, deepening feelings of isolation. The erosion of trust and empathy further damages personal connections, as emotional detachment becomes a common coping mechanism. This underscores how these challenges diminish cognitive capacity, disrupt team dynamics, and create significant barriers to maintaining healthy relationships, emphasizing the urgent need for tailored support and systemic change.

Impact on Personal and Professional Life

PTSD and anxiety have far-reaching effects on both personal and professional aspects of life. In their personal lives, individuals often struggle to maintain healthy relationships. Emotional withdrawal, irritability, and difficulty communicating can strain connections with family and friends. Many affected individuals avoid discussing their experiences, fearing that they will be misunderstood or judged, which only deepens their sense of isolation.

Professionally, these conditions impair cognitive functioning and reduce productivity. DFIs may find it difficult to concentrate, leading to errors or delays in their work. Emotional exhaustion can also result in irritability or conflicts with colleagues, further disrupting team dynamics. Over time, these challenges contribute to burnout and high turnover rates in trauma-exposed professions, emphasising the need for organisational support.

Cultural Barriers and Stigma in Addressing Mental Health

Stigma remains one of the most significant barriers to addressing PTSD and anxiety. Many individuals fear that disclosing their struggles will lead to judgement or perceptions of weakness, particularly in professions that emphasise resilience and stoicism. This fear prevents many from seeking help, leaving their symptoms unaddressed until they become overwhelming.

Cultural norms within organisations also play a role in perpetuating stigma. Workplaces that prioritise productivity and outcomes over employee well-being often neglect the mental health needs of their staff. The absence of trauma-informed policies and resources creates an environment where individuals feel unsupported, further exacerbating their struggles. Addressing these cultural barriers is critical to fostering a workplace culture that values mental health and well-being.

The overlap between cultural norms and stigma is deeply evident in both the [Forensic Focus Investigator Well-Being Survey](#) and previous research. Together, they underscore how entrenched workplace expectations and attitudes maintain barriers to addressing mental health challenges among Digital Forensic Investigators (DFIs).

The role of organisational culture in shaping perceptions of mental health is critical. Workplaces often prioritise productivity, case outcomes, and backlogs over employee well-being, fostering a culture that sidelines mental health. Similarly, organisational norms often valorise resilience and stoicism, creating an expectation that employees should silently manage the emotional toll of their work without expressing vulnerability or seeking help.

This emphasis on cultural norms feeds directly into the stigma associated with mental health challenges. Fears of judgment, professional repercussions, and loss of security clearance are key reasons why individuals hesitate to seek support.

The interplay between cultural norms and stigma creates a reinforcing barrier. When organisations focus solely on outcomes and performance, they send an implicit message that mental health issues are a personal failing rather than a workplace responsibility. This culture perpetuates stigma, leaving employees feeling unsupported, isolated, and reluctant to address their struggles, even when they face significant challenges like PTSD or anxiety.

Both the [Forensic Focus Investigator Well-Being Survey Results](#) and earlier research propose similar solutions to break this cycle. They advocate for cultural shifts that prioritise mental health and reduce stigma through trauma-informed policies, leadership empathy training, and the creation of safe, confidential spaces for employees to share their experiences. By fostering a culture that values well-being and normalises seeking help as a strength, organisations can support their employees in facing the unique demands of digital forensic work. This is not just a matter of organisational success but an essential step towards creating healthier, more compassionate workplaces.

Emotional and Behavioural Responses to PTSD and Anxiety

PTSD and anxiety elicit a range of emotional and behavioural responses. Emotionally, individuals may experience persistent fear, sadness, or irritability. Some also report feeling emotionally numb, which can make it difficult to connect with others or find joy in daily activities. Behaviourally, individuals may engage in avoidance, overworking, or risky behaviours such as substance use as a way to cope. These responses, while often understandable, can hinder recovery and exacerbate existing challenges.

The [Forensic Focus Investigator Well-Being Survey Results](#) and previous research highlight significant overlap in the emotional and behavioural responses to PTSD and anxiety among Digital Forensic Investigators (DFIs). Both describe emotional exhaustion, detachment, and feelings of isolation as common experiences, with individuals often struggling to process their emotions or maintain empathy and trust.

Behaviourally, both reports note the prevalence of maladaptive coping strategies, such as substance use, overworking, and avoidance, which exacerbate the challenges over time. The cumulative impact of these responses creates a cycle of stress and isolation, compounded by stigma and workplace cultures that discourage seeking help. Both sources emphasise the urgent need for compassionate interventions, structured support systems, and stigma-free environments to foster healthier emotional and behavioural coping mechanisms for DFIs.

Proposed Interventions

Addressing PTSD and anxiety requires a multifaceted approach that includes both organisational strategies and individual interventions. Organisations should implement trauma-informed policies that recognise the psychological risks of forensic work. These policies should provide access to confidential counselling services, regular well-being assessments, and anonymous platforms for sharing experiences. Leadership training on empathy and stress management is also essential in creating a supportive workplace environment.

On an individual level, resilience training and education on effective coping mechanisms can empower individuals to manage their symptoms more effectively. Practices such as mindfulness, journaling, and engaging in creative activities can help individuals process their emotions and reduce stress. For DFIs, role rotation or limiting exposure to particularly distressing materials can alleviate the psychological burden of their work, creating a healthier balance between their professional responsibilities and personal well-being.

The proposed interventions in the [Forensic Focus Investigator Well-Being Survey Results](#) and previous research align closely, emphasising the need for tailored, systemic changes to support the mental health of DFIs. Both advocate for trauma-informed counselling, resilience training, and access to confidential peer forums, recognising the importance of addressing the unique psychological demands of forensic work. Leadership empathy and cultural shifts are central themes, with both sources highlighting the need to prioritise employee well-being over productivity metrics.

Practical strategies such as role rotation and limiting exposure to distressing materials are also recommended to reduce the cumulative emotional toll on investigators. Additionally, both stress the importance of reducing stigma by fostering open, supportive environments where seeking help is normalised and encouraged. Together, these findings provide a compassionate, actionable framework for organisations to create healthier, more sustainable workplaces for DFIs.

Coping Strategies for PTSD and Anxiety

Despite the significant challenges posed by PTSD and anxiety, individuals employ a range of coping mechanisms to manage their symptoms. Positive strategies, such as mindfulness practices and physical exercise, have been shown to reduce stress and promote resilience. Mindfulness, including meditation and deep breathing exercises, helps individuals cultivate a sense of calm and focus, while regular exercise alleviates symptoms of anxiety and improves overall health. For DFIs, engaging in peer support networks is particularly beneficial, as it provides a safe space to share experiences and reduce feelings of isolation.

However, not all coping mechanisms are healthy or sustainable. Some individuals turn to risky behaviours, such as alcohol or substance use, as a way to numb their distress.

While these methods may provide temporary relief, they often exacerbate underlying issues and create additional health risks. Avoidance behaviours, such as withdrawing from social or professional responsibilities, can also hinder recovery by reinforcing feelings of isolation and helplessness.

Both the [Forensic Focus Investigator Well-Being Survey](#) and previous research highlight the critical need for tailored mental health support systems to address the unique challenges faced by Digital Forensic Investigators. The survey emphasises practical interventions, recommending trauma-informed counselling, confidential peer forums, and online platforms that allow for anonymous discussions. Complementing this, the previous research advocates for trauma-informed organisational policies, leadership training to foster empathy, and resilience education. It also suggests practical measures such as role rotation and limiting exposure to distressing materials to reduce the psychological burden. All of the research to date underlines the importance of proactive leadership in driving cultural shifts within organisations, reducing stigma, and prioritising the well-being of DFIs. Together, they stress that meaningful and specialised support is not optional but essential for fostering a healthier and more sustainable workplace environment.

Final Thoughts

PTSD and anxiety continue to pose significant challenges for Digital Forensic Investigators, affecting their emotional, physical, personal, and professional well-being. There is a pressing need for tailored interventions to address these interconnected issues. Organisational culture, stigma, and a lack of trauma-informed support perpetuate cycles of stress and isolation, leaving many professionals feeling unsupported and unable to seek the help they need.

To address these challenges, organisations must prioritise systemic changes, including trauma-informed policies, leadership training to foster empathy, and the creation of safe, stigma-free environments. Practical measures such as role rotation, reducing exposure to distressing materials, and providing access to confidential peer forums and counselling are critical. These interventions must be coupled with proactive efforts to normalise mental health discussions and value the well-being of employees as an organisational priority.

A Message to Digital Forensic Investigators

To all Digital Forensic Investigators,

Firstly, I would like to extend my heartfelt gratitude to all the Digital Forensic Investigators who have taken the time to contact me directly and share your experiences. Your openness and willingness to speak out cannot be overstated in its importance. Sharing your experiences not only helps to shape future research but can also serve as a cathartic outlet, allowing you to decompress and bring attention to the

challenges you face. Your voices are essential in driving meaningful change and shaping future research.

To the professionals in digital forensics, your work is invaluable, and your resilience is extraordinary. However, the weight you carry is not yours alone to bear. It is imperative that organisations and society recognise the toll of your role and commit to supporting you through comprehensive, meaningful interventions. Together, we can create a healthier, more sustainable workplace, where those who dedicate their lives to justice can thrive both personally and professionally.

As the festive season approaches, I want to take a moment to express our deepest gratitude for the extraordinary work you do, often behind the scenes and away from the spotlight. While many of us will be celebrating with friends and family, you will be facing some of the darkest corners of humanity, examining traumatic material to keep us all safe.

The courage and resilience it takes to do your job, especially during this time of year, does not go unnoticed. You may not wear a uniform or stand on the front lines, but the contribution you make to justice and public safety is immeasurable. Your work protects lives, safeguards communities, and brings solace to victims and their families, even if the cost is personal sacrifice.

We at Forensic Focus wish a Merry Christmas to you and your families, who may be without you at their table during the festive period, as you dedicate yourselves to protecting and serving others. May this season bring moments of peace, love, and reflection for you and your loved ones. With the utmost respect and gratitude, we wish you strength, joy, and hope for the year ahead. Stay safe; we thank you for your service and your commitment.

With deepest thanks and warm wishes,

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Paul Gullon-Scott BSc MA MSc MSc FMBPSS is a former Digital Forensic Investigator with nearly 30 years of service at Northumbria Police in the UK, specializing in child abuse cases. As a recognized expert on the mental health impacts of digital forensic work, Paul now works as a Higher Assistant Psychologist at Roseberry Park Hospital in Middlesbrough and is the developer of a pioneering well-being framework to support digital forensics investigators facing job-related stress. He recently published the research paper “[UK-based Digital Forensic Investigators and the Impact of Exposure to Traumatic Material](#)” and has chosen to collaborate with Forensic Focus in order to raise awareness of the mental health effects associated with digital forensics. Paul can be contacted in confidence via [LinkedIn](#).

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