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Self-Care Mechanisms for Police Officers and Military Personnel Exposed to Terrorist Documents

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Michaela Wooller

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Abstract

Introduction. Police officers and military personnel are exposed to a wide range of potentially traumatic incidents due to the nature of their work. These incidents include arriving first to accidents and instituting initial assessments and treatments of victims. Police and military work may involve child victims of crime and abuse, violent, individual, and mass incidents, body retrievals, search and rescue, among others. Police officers and military personnel are generally exposed to terrorist documents while on overseas deployments. Despite a growing awareness from the general public of the impact of terrorism on both victims and first responders, most of the literature has focussed directly on victims of terrorism rather than first responders. The literature has focused on acts of terrorism but not that of terrorist documents.

Method. The qualitative Delphi Method was used to gain information on possible self-care mechanisms that police officers and military personnel can use to help mitigate the potentially damaging psychological effects of being exposed to terrorist documents. This information was collected via a two-part process using a questionnaire that was distributed via email.

Results. A total of five participants were recruited, all of whom completed both parts one and two of the study. The results provided in-depth answers to various questions regarding exposure to terrorist documents, occupational and organisational variables and varying questions around self-care both at the individual and organisational level. The results highlighted both practical and conceptual ideas as to how psychologists who have worked with first responder populations suggest police officers and military personnel who are exposed to terrorist documents within their work can protect themselves.

Discussion. The results of the study presented individuals and organisations with strategies and methods that police officers and military personnel can use to protect themselves from the potentially adverse effects of exposure to terrorist documents. Limitations and future research suggestions are discussed with a focus on how this study can be expanded to provide self-care strategies to a broader population of first responders and to support a broader range of potentially traumatic exposures.

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“There are wounds that never show on the body that are deeper and more hurtful than anything that bleeds.” - Laurell K. Hamilton

Chapter 1 - Introduction

Terrorism is a multifaceted phenomenon (Lentini, 2003) that occurs when a substate group or individual uses or threatens to use violence against people, non-combatants or property in order to achieve or effect political change through the use of an atmosphere of fear (Lentini, 2008). Terrorism has become a radical style of war. Since the New York twin tower attacks on September 11, 2001, people have become more aware of the impact of terrorism, not on only victims but first responders and the general public (Shigemura & Nomura, 2002). Most of the literature has paid attention to direct victims of terrorism, and less is understood of the impact on first responders (Motreff et al., 2020). Due to the unpredictable nature of disasters, including terrorism, first responders are at risk of suffering negative psychological consequences (Mao et al., 2018).

Society is now beginning to identify and understand the gravity of the psychological damage resulting from this type of traumatic exposure (Velazquez & Hernandez, 2019). Butler et al. (2003) explained that disasters connected to terrorism might have a worse impact on a person's mental health than a disaster that did not involve the intentional perpetration of violence. Li et al. (2018) found that those exposed to intentional trauma (terrorism) can face chronic psychological distress, ultimately affecting their quality of life. The Fifth edition of the Diagnostic Statistical Manual [DSM-V], American Psychiatric Association [APA] (2013) explained that interpersonal acts have the potential to be more traumatising and lead to an increased risk of developing Posttraumatic Stress Syndrome (PTSS). Mao et al. (2018) stressed that interventions are key to mitigating these potentially damaging psychological consequences.

It is understood that law enforcement agencies need individuals to view potentially disturbing images for investigative purposes, however, there is a scarcity of research examining the impact of such work on individuals psychological well-being (Perez et al., 2010). To the author's knowledge there is no research on the impacts of viewing terrorist documents and correspondingly what police officers and military personnel can do to protect themselves from the potentially adverse effects of this exposure. Therefore, this research project will explore the specific area of terrorist documents and determine how first responders who have been exposed to terrorist documents can protect themselves through the use of self-care mechanisms.

This area is challenging to study and observe due to confidentiality and the nature of secrecy. To the author's knowledge, there was no definition of a terrorist document. Therefore, this study considered a terrorist document to be a piece of written, printed, or electronic matter that provides information or evidence (Oxford Languages, n.d.) which depicts terrorism. Police officers and military personnel, as part of the first responder group, will be the focus of this research project. These two populations are generally the two occupational groups deployed overseas to offer their assistance in a work capacity to view such documents or materials. It is during these deployments where the majority of exposure to terrorist documents occurs. The potential effects of this exposure have not been described in the literature, mainly because it is a difficult area to research.

This research has aimed to address the gap in the literature by gathering registered and clinical psychologists' expert knowledge on the most appropriate and effective self-care mechanisms for police officers and military personnel who are exposed to terrorist documents. These self-care mechanisms are hoped to assist in

mitigating the many potential mental health consequences of traumatic exposure such as PTSS, depression, and other psychological distress.

Research for chapter one has been limited due to the very nature of secrecy and confidentiality of the terrorist documents police officers and military personnel are working with. As a result of these limitations, chapter one initially looked broadly at what first responders are exposed to in their line of work and then focused specifically on what police officers and military personnel are exposed to in their line of work. There is a discussion on the effects of traumatic exposure, including cumulative trauma exposure for police officers and military personnel. Psychological consequences of traumatic exposure such as PTSS, depression, suicidality, moral injury, sleep disorders, and effects of trauma work on family, friends, and organisations are analysed.

In this study, Posttraumatic Stress Syndrome (PTSS) will be used in replace of Posttraumatic Stress Disorder (PTSD) to reduce the stigma associated with using the term 'disorder.' When this study uses the term PTSS, it is also referring to research that has studied or mentions PTSD. PTSS is defined as symptoms consistent with PTSD, however, these symptoms occur within 30 days following a person experiencing a traumatic event (Sparks, 2018).

How our five senses can play a role in traumatic exposure and its after effects is also considered. Then more specifically exposure to child abuse imagery. The rationale for including this section was due to the limited research on the effects of viewing terrorist documents. Exposure to child abuse imagery is considered to have effects transferable to that of terrorist documents. Finally, there is an examination of barriers to support, maladaptive coping mechanisms and self-care mechanisms both generally and more specifically to trauma work.

Chapter 2 - Relevant literature

First responders

First responders (police officers, firefighters, ambulance officers (McKeon et al., 2019) military personnel and rescue disaster workers (Kleim & Westphal, 2011) are exposed to potentially traumatic incidents due to the nature of their work (Pietrantoni & Prati, 2009). They are among the first to arrive at both the sites of traumatic incidents and have the first access to victims (Kleim & Westphal, 2011). Therefore, repetitive exposure to trauma is an unavoidable outcome of the first responder role (McKeon et al., 2019).

Huddleston et al. (2007) found that 74% of police officers had experienced a work-related traumatic incident within their first 12 months of policing. These potentially traumatic incidents include emergency scenes that may involve children, mass incidents, and violent incidents, among others (McKeon et al., 2019). Traumatic incidents can be experienced directly, observed, or vicariously (Hammer, 2005). Traumatic incidents are considered critical as they can overwhelm the individual's sense of meaning in their life (Pietrantoni & Prati, 2009). Psychological responses to traumatic incidents (e.g., actual or threatened) differ depending on the person's genetic makeup, the social context of the incident, and their past personal experiences. When these factors combine with the characteristics of the traumatic incident (e.g., exposure length, intensity, cause, availability of psychological and physical help), behaviour responses vary from resilience to disability (Benedek et al., 2007).

As a result, first responders are at increased risk of experiencing poor mental health, including PTSS and depression (Kleim & Westphal, 2011). Studies such as Berger et al. (2012) found that rescue workers had a pooled current prevalence of

PTSS far exceeding that of the general population. The worldwide pooled current PTSS prevalence was 10% among first responders (Berger et al., 2012). Poor mental health in first responders is related to substantial personal and public costs and can adversely affect their service to victims and patients (Kleim & Westphal, 2011).

Traumatic exposure on police officers

"Sworn police officers are citizens whose job duties help maintain order by enforcing the laws of the land, detecting crime, and arresting violators" (McKay-Davis et al., 2020). The stress and trauma regularly experienced by police officers may negatively affect their health and well-being (Papazaoglou & Tuttle, 2018). The distinctive type of stress faced by police has been associated with developing negative attitudes towards people, life, and work (Potard et al., 2018). This can be understood as police officers are confronted with psychologically and emotionally challenging situations (Park et al., 2018) and expected to have the highest level of performance and control and act well under tremendous stress (Papazaoglou & Tuttle, 2018). Park et al. (2018) clarified that it is individual police officers who are wearing the burden of occupational stress because it is accepted as an inescapable nature of their job.

Many police officers involved in potentially traumatic situations have acknowledged feelings of anger, horror, sadness, and helplessness (Brunet et al., 2001). These traumatic situations may be referred to as critical incidents. A critical incident is described as an unexpected and severe exposure provoking an emotional reaction that overwhelms the officer's current coping ability (Potard et al., 2018). These critical incidents pose a threat to the psychological and physical integrity of police officers (Park et al., 2018). Critical incidents are common and are not always a result of extreme violence (Potard et al., 2018). These may include exposure to dead

or badly injured bodies, witnessing and managing survivors' emotional reactions, inability to save a life, and the experience of personally being in dangerous and physically harmful situations (Potard et al., 2018). Arble et al. (2018) emphasised that exposure to critical incidents alongside exposure to the nature of the work may have severe consequences.

Moral injury is one such consequence. Moral injury has recently emerged in the research literature as an independent aspect of trauma exposure, different from PTSS. Unlike PTSS, moral injury is not classified as a mental disorder yet can significantly affect a person's emotional, psychological, behavioural, social and spiritual functioning (Barnes et al., 2019). Exposure to potentially traumatic events that violate a person's moral values may cause severe distress and functional impairments known as "moral injuries" (Griffin et al., 2019). Shay (1994) introduced the idea of moral injury, and, later in 2014, conceptualised moral injury as "a character wound that stems from a betrayal of justice by a person of authority in a high-stakes situation" (Shay, 2014). A potentially morally injurious incident is defined as "perpetrating, failing to prevent, bearing witness to, or learning about acts that transgress deeply held moral beliefs and expectations" (Litz et al., 2009, p. 697). Moral injury differs from PTSS, PTSS includes additional symptoms such as hyperarousal, which is not central to moral injury. It is possible to have moral injury and not meet criteria for PTSS (Bryan et al., 2018). Litz et al. (2009) further explained that symptoms of moral injury may include PTSS, self-harming (e.g., non-suicidal self-injury and suicidal behaviours), self-handicapping behaviours (e.g., retreating in the face of success or good feelings), and demoralisation (e.g., hopelessness). PTSS is one of the most noted psychological consequences of traumatic event exposure (Prati & Pietrantoni, 2010). Like moral injury, PTSS onset does not need to include being

physically hurt and instead can be onset by the incidence of seeing someone (including strangers) be harmed or threatened (The National Institute of Health, 2009).

PTSD itself is a Trauma and Stressor-related Disorder (APA, 2013) resulting from exposure to trauma that is ordinarily beyond the range of typical human experience (Stretch, 1990). Rates of PTSS are higher for those whose vocation increases their risk of exposure to trauma (APA, 2013). These vocations include those of first responders; specifically, “the risk of developing PTSS is about three times higher for people in the military or law enforcement than for the general population” (Rynor, 2010). PTSS is more common than other operational stress injuries such as anxiety disorders, depression, or addiction (Rynor, 2010). PTSS is commonly characterised by four symptoms groups: intrusion (e.g., distressing memories), avoidance of persistent stimuli related to the event, negative alterations in cognitions and mood, and alterations in arousal and reactivity (e.g., irritable behaviour and outbursts) (APA, 2013). PTSS is also characterised by a persistent negative emotional state, persistent distorted cognitions about the cause or consequences of the trauma leading to blame of self or others, and reckless or self-destructive behaviour (Pai, 2017). The National Institute of Health (2009) reported that PTSS may manifest with symptoms of emotional numbness, aggression, insomnia, apathy, among others. Marmar et al. (2006) found that the rate of duty-related PTSS in police officers ranged from 7% to 19%. In addition, many officers’ symptoms did not meet full diagnostic criteria for PTSS but remained debilitating. Despite these statistical findings, studies that examine PTSS in police officers are still limited (Ellrich & Baier, 2017). Javidi and Yadollahie (2012) found that approximately 84% of those experiencing PTSS may have comorbid conditions, including substance abuse, feelings of despair,

hopelessness, and shame. Other adverse psychological outcomes include, but are not limited to, sleep disturbance, anxiety, depression, and increased use of alcohol or tobacco (Benedek et al., 2007).

PTSS may contribute to other disorders, including anxiety, major depressive disorder and mania. With that said, police personnel do not regularly develop pathogenic consequences such as PTSS when exposed to potentially traumatic events (de Terte, 2012). Even with the amount of exposure to potentially traumatic incidents, most officers do not have advancing signs of PTSS or psychological distress (Potard et al., 2018). Psychological resilience is the most common result following exposure to potentially traumatic events (de Terte, 2012). A study by de Terte et al. (2014) determined a three-part model of psychological resilience. This three-part model of the environment, physical behaviours and cognitions established that social support, adaptive health practices, adaptive coping, and optimism were effective when police officers were faced with adversity. Given this finding, it is clear that more research would be beneficial to determine what self-care may keep police officers and military personnel who are exposed to terrorist documents from psychological harm.

Effects of trauma on military personnel

Military personnel are those who serve in the armed forces (Webster Dictionary, 2021). There is increased concern amongst the public and veterans that the impact on US military personnel deployed in Iraq, Afghanistan, and other countries will be significant and enduring (Smith et al., 2008). The harm experienced by military personnel may be indiscernible to others and yet may significantly impact the rest of their lives (Koven, 2017).

One of the unseen effects is often PTSS, which has been researched mainly within a military context (Stretch, 1990). PTSS is considered a severe mental health consequence resulting from military service due to its persistence (Thomas et al., 2010). Smith et al. (2008) found that self-reported symptoms of PTSS were nearly twice that for deployed personnel. Several attempts have been made, in the literature, to explore the connection between PTSS and military service (Koven, 2017). Koven's (2017) review found that most studies determined an evident link between PTSS, suicide, and military service. Gradus (2013) supported this finding, reporting significantly lower rates of PTSS in adult Americans versus war veterans. Thomas et al. (2010) found that post-deployment PTSS and depression rates in military personnel varied from 9% to 21% depending on the reported functional impairment level. They found that 12 months post-combat, the prevalence rate of mental health problems did not diminish; if there was any change, they increased. These findings are unsurprising, given that psychological disorders are more predominant in veterans than in the general population (Koven, 2017).

There is substantial evidence on the psychologically damaging effects of deployment, however, less is known about the potential for military personnel to become violent post-deployment (MacManus et al., 2013). Alongside the increased risk for military personnel to experience PTSS, anxiety, depression, and alcohol abuse, there is also evidence to suggest that military personnel are at increased risk of engaging in violent behaviour post-deployment (MacManus et al., 2012; Thomas et al., 2010). Post-deployment psychological symptoms such as PTSS and alcohol abuse are often found to be potential mediators of the link between combat and violence (Taft et al., 2007). The US Institute of Medicine (2013) found that of all the problems that veterans face, involvement within the criminal justice system through offending

is one of the most problematic. MacManus et al. (2013) analysed aggressive behaviour in veterans who had deployments in Iraq and Afghanistan. They found that of all offenders, violent offending was the most common in the sample (64%), and the rate of offending was greater in the post-deployment period than in-service pre-deployment or pre-military periods. They found that increased frequency of exposure to traumatic events during deployment increased the risk of violent offending. The finding is evidenced by 17% of male military personnel in the sample holding a criminal record during or post military deployment.

Although many military personnel return from their service mostly unharmed, many also do not (Koven, 2017). In addition to PTSS, other recorded and common impacts of military service are depression, suicidal behaviour, alcoholism, and drug use in an effort to self-medicate. Smith et al. (2008) suggested that increased awareness and understanding about resilience and vulnerability to PTSS needs to be improved. Also, improving access to care may decrease morbidity in military personnel. Cigrang et al. (2014) recommended equipping all service personnel with information regarding the emotional challenges and coping strategies alongside information about PTSS and major depressive disorder indicators that may mitigate against a culture that sees psychological difficulties as a weakness. Thomas et al. (2010) suggested increased information on post-deployment care is crucial. Future research on PTSS in veterans should go further than identifying the prevalence of mental health disorders. More information on successful and unsuccessful attempts to rehabilitate veterans is necessary (Koven, 2017).

Cumulative trauma

Cumulative trauma is defined as multiple traumas experienced over a period of time by an individual (Hammer, 2005). There are several names for repeated trauma, including cumulative trauma, poly victimisation, and poly traumatisation (Scott-Storey, 2011). This study will use the term 'cumulative trauma' to encompass all of the above terms. Within the first responder population, cumulative traumatic exposure is an anticipated risk for the development of mental illness (Geronazzo-Alman et al., 2017). Previous thinking was that repetitive experiences of potentially traumatic incidents would increase a person's resilience to further exposures (Stephens & Miller, 1998). In contrast, research now indicates that increased traumatic exposure will increase psychological consequences (Huddleston et al., 2007). Evidence has evolved indicating the relationship between the number of potentially traumatic incidents experienced and the severity of psychological symptoms, namely PTSS (Stephens & Miller, 1998). Moran and Britton (1994) argued that a person's ability to cope was diminished with each new potentially traumatic exposure, and with each new potentially traumatic exposure, there may be increased psychological effects. Moran and Britton (1994) studied 210 volunteer emergency workers and found a relationship between the increased number of potentially traumatic incidents attended and the severity of stress reactions. In addition, Stephens and Miller (1998) surveyed 527 New Zealand police officers and investigated the prevalence of PTSS and its relationship with traumatic experiences. They found that an increase in the number of work-related traumatic experiences was related to increased PTSS symptoms. Buchanan et al. (2001) found that in a sample of New Zealand police officers, those who had an increased number of potentially traumatic exposures were more likely to develop PTSS. More recently, Geeson (2017)

explained that growing evidence demonstrates that traumatic exposure to multiple events is related to higher levels of distress. They found a positive direct relationship between traumatic event exposure and psychological distress, meaning that participants who reported more exposure to traumatic events experienced higher levels of psychological distress. Williams et al. (2007) looked at the impact of trauma in a South African population of the general public. They found that as the number of traumatic exposures increased, the risk of significant distress increased compared to participants who reported no traumatic exposure. An important finding was that those participants who had experienced the most traumatic incidents were five times more likely to have high distress than participants with no traumatic exposures. Nilsson et al. (2015) examined the prevalence of self-reported experiences of childhood traumas and cumulative traumas in a sample of adults in Sweden. They found that 10% of their participants with the most reported traumas were significantly associated with psychological distress. This study is significant as it demonstrated a linear association between the number of cumulative traumas experienced and an increase of psychological distress.

These studies support the relationship between cumulative traumatic events and mental health difficulties. The concept of cumulative trauma has important implications for organisations where employees are likely to suffer frequent or chronic exposure to traumatic events. The concept of cumulative trauma is central in this research project as police officers and military personnel are at particular risk due to the number of potentially traumatic exposures as part of their job (Stephens & Miller, 1998). It is also important to note that the traumatic experiences of individuals may have a bearing on how they cope with exposure to terrorist documents during their overseas deployments. Therefore, cumulative trauma is central to the importance

of self-care for those exposed to terrorist documents. Cumulative traumatic experiences are therefore essential to acknowledge and recognise when considering intervention or support.

Psychological effects of trauma exposure – Sleep disturbances

Due to the nature of police work, officers face many stressors which can negatively impact sleep quality, including sleep initiation, maintenance, and nightmares (Neylan et al., 2002). Sleep disruption is linked to significant distress, functional daytime impairment, and poor health outcomes (Nappi et al., 2012). For military personnel, deficiency in sleep and consequential fatigue likely impacts personal safety, mission success, unit performance and safety, and even national security (Good et al., 2020). For police officers, sleep disorders were common and were associated with an increased risk of poor health, job performance, and safety outcomes (Rajaratnam et al., 2011). Neylan et al. (2002) further analysed subjective sleep quality in police officers. They found that many police officers reported disturbances in subjective sleep quality, which were not explained by the effect of rotating work shifts. These findings propose that it is the characteristics of police work that may contribute to sleep disturbances.

Within the military personnel population, recent evidence suggested that exposure to deployment may have detrimental effects on sleep within the returning veteran population (Capaldi et al., 2011). Hunt et al. (2016) found that 23% of military personnel returning from military deployment in Afghanistan reported sleep difficulties at follow-up. In addition, 11% had sleep problems which as a result interfered with their daily functioning. The factors contributing to the deficiency in sufficient, restorative sleep for those in the military included combat operations, shift

work, comorbidities of psychiatric disorders, and Traumatic Brain Injury (TBI) (Good et al., 2020). A key finding in the literature is that sleep disturbances were strongly associated with PTSS and general psychopathology (Neylan et al., 2002). Capaldi et al. (2011) found that sleep disturbances were clinically significant and common among recently deployed combat veterans but nonspecific across primary diagnoses of PTSS, major depression, anxiety disorders, and TBI. Increasingly, research has shown a relationship between PTSS and sleep quality, particularly in veteran populations (Lewis et al., 2009). Chopko et al. (2021) explained that sleep problems are reported as a hallmark of PTSS as recent evidence supports the idea that disrupted sleep is a critical component of PTSS (Nappi et al., 2012). Furthermore, sleep disruption may be related to the development and continuation of PTSS. Nightmares and insomnia are a couple of the most challenging, long-lasting, and distressing symptoms of PTSS (Nappi et al., 2012). Chopko et al. (2021) noted that the frequency of trauma exposure can influence how PTSS symptoms are experienced. PTSS symptom clusters may have differing effects on sleep problems. Chopko et al. (2021) supported the finding that the nature of the trauma significantly influences PTSS reactions and the frequency of the trauma experienced. Lewis et al. (2009) explored whether sleep disturbance is common to veterans generally or simply those with PTSS. They studied Australian Vietnam war veterans and found that all of the participants with PTSS reported clinically significant sleep disturbance as well as 90% of those participants without PTSS also reported clinically significant sleep disturbance indicating that serious sleep problems are found within the veteran population and are not only a factor of PTSS.

Effects of trauma on family, friends and organisations

Police officers and military personnel are not the only people who are affected by traumatic exposure. Untreated and unmanaged mental health problems can have a significant impact on the health and development of an individual as well as their family members (Lindinger-Sternart, 2015). In the family context, recent research has alluded to proposed mechanisms of transmission of trauma within a family unit – from one family member to another (Waddell et al., 2020). A qualitative study by Waddell et al. (2020) reported that the partners of first responders and veterans experienced significant impacts on their mental health. Fear et al. (2018) studied 1044 children aged three to sixteen of 621 fathers deployed to Afghanistan and Iraq between 2003 and 2009 in the UK Armed Forces. Fear et al. (2018) discovered that fathers' probable PTSS was associated with adverse childhood emotional and behavioural well-being more so than paternal deployment. Uchida et al. (2018) studied children of first responders involved with the World Trade Centre attacks. They established that increased rates of parents PTSS alongside other behavioural issues were significantly correlated to behavioural problems in the child. Participants in the Waddell et al. (2020) study voiced a critical need for early education and information about PTSS to gain strategies to manage its impacts and understand how it affects people's lives. They stressed that the need was not for psychoeducation in a clinical setting but rather a way of gaining strategies and tools for managing PTSS.

A further aspect of trauma exposure and the corresponding effect on families is voiced by Miller (2007) who discussed the concept of overprotectiveness within the home in response to police work. They explained that many officers try to protect their families from the reality of what they see. These overprotective behaviours may include suspiciousness, hypervigilance, and paranoid behaviour. This may result in

demands on spouses and children. They may be vigilant on where they are going, timeframes of when they will return, and detailed accounts on what they will be doing (Miller, 2007).

Effects of trauma exposure on police officers and military personnel may be extended to that of their organisations. Officer's poor mental well-being may negatively affect the individual's professionalism, organisational effectiveness, and public safety (Purba & Demou, 2019). Huddleston (2002) explained that police officers who had been negatively affected by traumatic events may retire prematurely, resulting in the organisation losing their knowledge, experience, and professional skills. For military personnel, the success of a mission depends largely on how effectively individual soldiers adapt to mission stressors (Shigemura & Nomura, 2002). Therefore, without adequate support for soldiers, the mission and consequently the organisation suffers too.

Barriers to support

Although society is beginning to understand the consequences of traumatic exposure, there are still barriers that prevent first responders from gaining professional support (Velazquez & Hernandez, 2019). PTSS is likely underreported as a consequence of attitudes and barriers within both military and police organisations as well as in the general population (Rynor, 2010). Potential reasons for officers holding back on receiving psychological support (Papazaoglou & Tuttle, 2018) may include officer's worries around confidentiality, particularly as psychological wellness can be dependent on police officers retaining their jobs, the stigma associated with mental illness, and the ability of the therapist to understand police work (Ménard et al., 2016; Wright et al., 2006). Lindinger-Sternart (2015) found a

gender difference when it came to asking for help. They stated that males exhibited fewer positive attitudes to seek help, to avoid conversations about stressful events and painful feelings due to masculine norms and stigma.

Sharp et al. (2015) conducted a systematic review on military officers potential barriers to seeking mental health support. They discovered that 60% of military officers who experienced mental health problems did not seek help. This was primarily due to the stigma experienced by officers when it came to seeking psychological help. Evans et al. (2013) found that police officers preferred mandatory psychologist referrals as they reduced the stigma of attending. Miller (1995) a police psychologist, explained that "Tough job personnel, cops especially, have a reputation for shunning mental health services, perceiving its practitioners as softies and bleeding hearts who help rotten criminals go free with wussy excuses or overcomplicated psychobabble." Ménard et al. (2016) further explained that officers have dual concerns firstly that peer counsellors lack the psychological knowledge to help effectively and psychologists lack the knowledge of policing. Wester and Lyubelsky (2005) described that the goal and challenge for the psychologist is to make clear that although they have not worked as an officer, it does not stand that they are unable to understand the officer's psychological distress.

Organisational vs occupational trauma

Policing is a stressful occupation which can impair police officers mental health (Potard et al., 2018). Stress from policing can be operational or organisational in nature (Queirós et al., 2020). Occupational variables are those caused by or related to doing a specific type of work or engaging in a particular occupation (Your Dictionary, n.d.), e.g. police work. Occupational trauma can be classified as primary

trauma (direct exposure to a traumatic event) or secondary trauma (indirect trauma exposure such as reviewing crime materials or videos) (Biggs et al., 2021). In contrast, organisational or operational variables can be defined as patterns of thought and behaviour shared by members of the same organisation and reflected in their language, values, attitudes, beliefs, and customs (American Psychological Association, n.d.). Organisational stress is defined by an emotional, cognitive, behavioural or physiological response to the aggressive or harmful aspects of work, work environment and organisational climate (Mirela & Mădălina-Adriana, 2011).

Despite the risk and trauma of police work, it may be that stress among police officers in Western democracies may likely stem from organisational pressure and management practices as opposed to actual traumatic experience (Chan, 2007). In police work, occupational stressors increase the risk for police officers to experience mental health morbidities (Purba & Demou, 2019). The literature contains a breadth of information regarding the impact of occupational stressors or trauma on officers well-being, yet there is a lack of research on the impacts of organisational stressors (Purba & Demou, 2019). A study by Queirós et al. (2020) found that police officers presented high operational and organisational stress which were at critical values for burnout and low resilient coping, preferring task-orientated coping rather than emotional and avoidance coping. Purba and Demou (2019) aimed to conduct a systematic review to assess the relationship between organisational stressors and police officers well-being. They found strong evidence of significant associations between organisational stressors and the outcomes of occupational stress, psychiatric symptoms, psychological impacts, emotional exhaustion and personal accomplishment. The most consistent organisational stressors included lack of support, administrative pressure, long working hours and job pressure. A study by

Perez et al. (2010) utilising a group of computer forensic investigators exposed to child sexual abuse as part of their work found that 32% of employees indicated that workload and management issues were significant in regards to the difficulties they experienced at work. Some employees found that their distress was heightened as they considered caseloads were too high and management did not comprehend the impact of the work on employees.

Maladaptive coping

Coping refers to one's ability to regulate overwhelming feelings, stress and to deal with the unpleasant events from which those feelings originate (Anshel et al., 2013). Coping strategies explain one's use of specific cognitive or behavioural techniques that enable and support someone to create personal resources or adjust their environmental demands to generate stress reduction or stress management (Anshel et al., 2013). It is generally considered that there are two ways of occupational coping. The first is when a person implements coping strategies which help to alleviate work demands and the negative emotions associated with work. Adaptive coping strategies are most often healthy as they attempt to address the problem (Webster, 2014).

In contrast, the second is through maladaptive or avoidant coping which may be used to hide problems and emotions. These strategies are mainly unhealthy due to being used to escape problems or emotions (Webster, 2014). There is a breadth of literature on maladaptive coping, which is often associated with combat exposure, deployment and increased risk-related behaviours such as alcohol misuse. Alcohol abuse is an important problem in law enforcement (Violanti et al., 2011) as high exposure to threatening situations is often related to alcohol misuse (Killgore et al.,

2008; McDevitt-Murphy et al., 2010; Wilk et al., 2010). Risk factors for alcohol abuse in the police include stress, peer pressure, isolation, young males, and a culture that approves alcohol use (Violanti et al., 2011). A considerable amount of previous research has focused on police alcohol use as a consequence of demographics, job stress, and the police culture (Lindsay & Shelley, 2009). It is well researched that police officers often use alcohol as a way of coping, including to relax. However, it is thought that alcohol misuse may be related to psychological illness.

Alcohol misuse may result from traumatic exposure or a response to psychological illness (Jacobson et al., 2008). Lindsay and Shelley (2009) researched alcohol use in police officers and determined an association between drinking alcohol as a social outlet and drinking alcohol to fit in with their peers. Interestingly, the study showed that the officers most at risk for drinking problems admitted that fitting in with their peers was a priority and contributed the most to why they drank alcohol as opposed to using alcohol to deal with stress or as a social outlet. Violanti et al. (2011) also found that police work-related stress factors (i.e. PTSS, depression, shift work) were not significantly associated with drinking behaviour among officers. Instead, external life events, including divorce or separation, were associated with increased hazardous drinking behaviour in male officers. These findings pose significant implications and suggest further research is needed to explore the spillover effect of police work on personal and family life.

It has become evident that vulnerability to psychological illnesses may be due to a deficiency in effective coping strategies available to police officers to help overcome and work through traumatic events (Patterson, 2001). Ménard et al. (2016) found that negative coping was related to critical incidents and PTSS scores. Thus, they recommended training to implement coping mechanisms for officers as a

possible area of intervention. Park et al. (2018) explained that interventions designed to enhance coping skills would be helpful for police officers to better deal with the negative consequences of trauma exposure. Without suitable coping strategies and resources, there is an increased risk for PTSS (APA, 2000). Velazqez and Hernandez (2019) found that studies have indicated a growing need for implementing prevention and intervention strategies to provide support to officers who have been exposed to trauma.

Traumatic exposures and the senses

Stressor and trauma-related disorders, including PTSD, are characterised by a heightened sensitivity to threats (Wilkerson et al., 2018). This heightened sensitivity to threats can occur through the engagement of the senses. Several studies have demonstrated the contribution of the senses to the intensification of memories of traumatic experiences (Bradley et al., 2001; Daniels & Vermetten, 2016; Perez et al., 2010; Silver et al., 2013; Wilkerson et al., 2018). This study will focus on vision (imagery), smell (olfactory) and hearing (auditory) due to these senses being most relevant to exposure to terrorism and terrorist documents. As a result, touch and taste will not be discussed.

Smell

Odour memories have been considered different from other memories, including verbal or visual memories. This is thought to be because odour memories can be more strongly ingrained and are closely related to strong emotions (Daniels & Vermetten, 2016). It is well understood that olfactory intrusions in PTSS can be a debilitating phenomenon resulting from the involuntary recall of odour memories

(Daniels & Vermetten, 2016). Wilkerson et al. (2018) conducted a study on olfactory function and response to specific trauma-related odours in combat-related PTSS. They studied trauma-exposed combat Veterans, with and without PTSS, who were assessed for general and specific odour sensitivities. The combat veterans with PTSS, compared to combat veterans with comparable trauma exposure but without PTSS, had increased ratings of odour intensity and odour triggered PTSS symptoms.

Hearing

Of the five senses, auditory experiences are of the most relevant to this research as terrorist documents can include videos with audio components. Perez et al. (2010) described that one of their participants reported that the sound of children being abused was the most challenging aspect of their work. Furthermore, Stevenson (2007) studied supervisors that either worked in or were responsible for units of workers who were required to view child sexual abuse images as part of their work. It was noted by eight of the twelve participants that many of the investigators they supervised, who viewed videos with sound found them far more distressing than still images. In particular, one participant explained that "…when you are laying in your bed at 3 a.m. after the kids have woken you up, it is not the images that come into your brain, it is the voices" (Stevenson, 2007, p. 27). Using a population of therapists who worked with sexual abuse/assault survivors, Steed and Downing (1998) found that the therapists experienced a variety of severe adverse effects which may have a pervasive impact on their functioning professionally and personally. They also found that the therapist's responses to hearing traumatic client material included anger, pain, frustration, sadness, shock, horror and distress.

Imagery

Silver et al. (2013) examined psychological and physical health impacts of exposure to collective traumas of September 11 2002, (9/11) terrorist attacks and images of the Iraq War. They measured media exposure and acute stress responses. They found that Early 9/11 and Iraq War-related television exposure and frequency of exposure to war images predicted increased posttraumatic stress symptoms 2 to 3 years after 9/11. This finding strongly suggested that exposure to graphic media images may result in physical and psychological effects previously assumed to require direct trauma exposure.

An occupation within the area of law enforcement is that of forensic technicians. Forensic technicians are involved in crime scene investigations. Forensic technicians and crime scene investigators primary duties are identifying, collecting, preserving, and documenting physical and other evidence in criminal investigations (Young & Ortmeier, 2011). An area of concern is that of exposure of adverse imagery such as graphic violent crimes, motor vehicle accidents, and biological or chemical hazards, amongst other disturbing imagery (McKay-Davis et al., 2020). As a result of this exposure, forensic technicians may experience psychological distress. There is a scarcity of studies that have explored the psychological impacts of their occupational duties (McKay-Davis et al., 2020). A study by McKay-Davis et al. (2020) found that forensic technicians had higher on-duty stress scores than sworn police officers and similar off-duty stress scores to sworn police officers. This is thought to result from working in violent crime scenes, long working hours, shift work, and frequent operations in unsafe environments. Perez et al. (2010) found that greater exposure to disturbing media was related to higher secondary traumatic stress disorder and cynicism. Bradley et al. (2001) discovered that participants who viewed pictures

depicting threat, violent death, and pornography had the strongest emotional arousal. An example of exposure leading to psychological illness is the story of George Brickell. In 2001, a judge awarded George Brickell, a police video operator, $242,000 in compensation after he developed PTSS from viewing horrific images as part of his job (Wilson, 2002).

Discussion around the effects of exposure to child abuse imagery is included due to the lack of documented research on the effects of viewing terrorist documents. Exposure to child abuse imagery may have effects transferable to viewing terrorist document. Child abuse investigators are at risk of suffering from the symptoms of secondary trauma, depression, and anxiety (Tehrani, 2018). Those who work in child abuse investigations, such as computer forensic examiners, are not the primary victims, at times the distress of being indirectly involved in these traumatic event goes unnoticed (Whelpton, 2012). Once again, research focuses on the victims of child abuse images and leaves behind the professionals, specifically those involved in the legal process or those briefed with the forensic analysis of seized evidence (Edelmann, 2010). Often it is thought that individuals who work directly with traumatised people would be more at risk of psychological damage. However, while forensic interviewers do not physically witness the victimisation, they are exposed to still and video images of the crimes.

At a minimum, there may be an impact on professionals working in the child sexual abuse field at a cognitive, emotional, and psychosexual/interpersonal level (Edelmann, 2010). Several studies have investigated and found that those workers involved in the investigations of child sexual abuse cases may be at increased risk of developing secondary traumatic stress disorder or suffering from symptoms of

secondary stress (Brady, 2017; Bonach & Heckert, 2012; Craun et al., 2015; Edelmann, 2010; Slane et al., 2018; Whelpton, 2012).

Edelmann (2010) investigated the potential cognitive, emotional, and interpersonal impact of viewing images of child abuse on the professionals involved. They found evidence indicating regular exposure to child abuse images as a part of one's work could potentially lead to vicarious trauma as the viewer is exposed to the distressing experiences of others. Some workers may experience psychological and physical symptoms related to stress, such as intrusive images, nightmares and problems with sleep, mood disturbance, and increased alcohol intake. Some organisations understand the potential negative impact of this type of exposure and therefore provide mandatory counselling (Edelmann, 2010). In the United Kingdom, there exists The Internet Watch Foundation (IWF), The Metropolitan Police Child Protection and Computer Forensic units, and the Child Exploitation and Online Protection Centre, where employees are commonly exposed to images of child abuse (Edelmann, 2010). Perez et al. (2010) study on computer forensic investigators who are exposed to child sexual abuse aimed to measure the extent to which exposure to these images leads to burnout and secondary traumatic stress disorder symptoms. They undertook this research because, despite law enforcement agencies requiring workers to view potentially disturbing images for investigative purposes, there is a lack of research investigating the effects of this type of work on workers psychological health. Participants consisted of twenty-eight federal law enforcement personnel whose job it was to investigate child pornography cases online. Results indicated that employees exposed to these images were experiencing substantial rates of burnout, and many were at risk for secondary traumatic stress disorder.

Furthermore, there were significant rates of reported poor psychological well-being throughout the group.

Their results also indicated that secondary traumatic stress disorder and burnout scores were associated with higher levels of distrust in others. Several studies have eluded distrust as a key finding for those working with abused children (Craun et al., 2015; Whelpton, 2012). Whelpton (2012) aimed to determine the psychological effects on the South African Police Service's Computer Forensic Examiners working with child pornography. The study found that all participants were significantly affected psychologically and experienced strong emotions such as horror and disgust in response to regular exposure to child pornography. In addition, viewing child pornography may cause negative long-term changes for computer forensic examiners including affecting the way they perceive themselves, intimate relationships and their environment. Craun et al. (2015) also found that their participants (Internet Crimes against Children personnel) were distrusting of others when asked about the effects of working in this area. Slane et al. (2018) later analysed professionals involved in investigating child sexual abuse cases, specifically looking at when they should, whether they should and what circumstances would assist the investigations and victims in exposure to child sexual abuse images online. They expressed that it is commonly thought that some images are so potent, they cannot be "unseen." Child sexual abuse images fit this statement as this type of abuse exceeds the boundaries of moral acceptability resulting in potential trauma (Slane et al., 2018). This may explain Whelpton's (2012) finding that none of the participants were adequately prepared for their initial exposure to the material.

Self-care mechanisms

At the end of an officer's shift or deployment, they must go home and resume the role of a parent, sibling, friend, or spouse (Papazaoglou & Tuttle, 2018). Officers have to transition from being tough and independent on duty to loving and warm at home (Wester & Lyubelsky, 2005). Shigemura and Nomura (2002) explained that historically, soldiers returned from the war by boat, and through this journey, they had several weeks to prepare for their return home. This time served the purpose of internal and informal debriefing, where they could gain perspective and closure from their experiences before arriving home and back into civilian life. Today, with the additions to sea and air travel, police and military personnel can be home in 24 hours and are expected to quickly adapt back to home life (Shigemura & Nomura, 2002).

Consistent with this finding is the concept of 'Decompression.' Decompression is used in military environments as a process designed to allow service personnel returning from deployment the ability to adapt to the home environment gradually, with the aim of reducing the potential for unhealthy or maladaptive mental health adjustments (Hacker Hughes et al., 2008). Alternatively, decompression can be thought of as "time away from a battle, relaxation" (Hacker Hughes et al., 2008). Hacker Hughes et al. (2008) studied troops returning from active service in operational theatres. Their study consisted of up to 1-week difference in journey time between those who sailed and those who sailed part of the way and flew the remainder. They found that those who sailed the whole way had better psychological outcomes as a result of increased time available to debrief each other, unwind and 'decompress.' A study by de Terte et al. (2014) using New Zealand Defence Force personnel investigated perceptions of a third-location decompression program. They found that the military personnel involved perceived the

decompression program as a valuable and helpful procedure overall, thus suggesting that military personnel perceive decompression programs as an important part of their transition home.

Despite the regular use of self-care throughout the health and social services field, agreement on defining self-care is mainly absent (Lee et al., 2020). In a general sense, self-care encompasses a range of activities that individuals may engage in to manage their physical and emotional health (Lee & Miller, 2013). Personal self-care is described as "a process of purposeful engagement in practices that promote holistic health and well-being of the self." Professional self-care is defined as "the process of purposeful engagement in practices that promote effective and appropriate use of the self in the professional role within the context of sustainable holistic health and well-being" (Lee & Miller, 2013, p. 99). Self-care is specific care undertaken by a person that helps them feel good (Richards et al., 2010). Baum (2016) explained that generally it is important to practice relaxation and take part in pleasurable events. These events will enhance the quality of life and provide purpose and meaning. Examples include travelling, self-expression such as reading, drawing, painting, sculpting, and writing (journal, story, or professional articles). Sports, exercise, and other hobbies include cooking, dining out, attending films, plays, and other outings in addition to spending time with friends and family or engagement in religious or philanthropic activities (Baum, 2016). In addition, "treating oneself" in ways that are special and meaningful to the individual may be beneficial. This may be dining at a favourite restaurant, getting a massage or other forms of pampering, or any outing such as going to a movie/play or museum (Maltzman, 2011).

In the trauma literature, de Terte (2012) analysed why some police officers develop pathogenic consequences when exposed to potentially traumatic events

whereas others do not. de Terte (2012) found that adaptive health practices, adaptive coping, social support from peers/colleagues, optimism, and a greater understanding of emotions acted as resilience factors concerning the development of posttraumatic stress. Other key themes of self-care were highlighted, including professional strategies (i.e., adequate trauma training), supervision, and support. Personal strategies include spirituality, physical health (including exercise, nutrition, and adequate sleep) and psychological self-care, and family and friend support (Baum, 2016; Cunningham, 2004; Richards et al., 2010; VanDeusen & Way, 2006). Perez et al. (2010) on computer forensic investigators of child sexual abuse, found that employees used various coping strategies to support them through their work. The key strategy of social support from family, friends and colleagues was found by 36% of the responders to be the most effective. Furthermore, humour and having the ability to laugh or joke with colleagues was important. For 25% of responders, off-work hobbies was a primary coping mechanism. Multiple responders regarded the separation of work and family as crucial for coping; this included "leaving work at work" and reiterating that "what I view does not belong to me." Other strategies included religion and focusing on the positive impacts of their job on society and financial compensation (Perez et al., 2010).

Physical activity

Physical activity can improve mental health by limiting and preventing major mental health problems such as anxiety, depression, and low mood (Kohl & Cook, 2013). It is well-known that physical exercise is a beneficial self-care strategy for general health. However, in the trauma literature, exercise is also encouraged as a self-care mechanism. The U.S Department of Health and Human Services (2018)

advises that for significant health benefits, adults should do a minimum of 150 minutes to 300 minutes a week of moderate-intensity physical activity to be beneficial. Some considerable benefits include reduced feelings of anxiety, reduced blood pressure, and improvements in sleep. A study by Lark et al. (2021) with police officers aimed to determine if high-intensity intermittent training (HIIT) could be a potential stress reduction tactic for already trained police. Their study indicated that moderately trained people displayed high psychological stress but found that following a 10-week HIIT intervention, participants perceived stress levels appeared lowered.

Exercise and relaxation techniques such as yoga or meditation are beneficial for stress management (Maltzman, 2011). Smith et al. (2019) discovered that preferred and beneficial physical self-care practices included exercise, good nutrition, sleep, and maintaining a routine. Physical self-care in a workplace setting may include 5-minute breaks for stretching exercises and forming walking groups for 15 to 30-minute walks during the workday (Maltzman, 2011). In a study on well-being in a population of police officers, Arble et al. (2018) found that engaging in physical exercise was related to significantly greater well-being.

Spiritual

When defining the spiritual aspect of self-care, it must be defined broadly to encompass all facets of spirituality (Richards et al., 2010). Spirituality is most commonly attributed to the meaning and purpose in one's life and one's aim of discovery for wholeness (Hage, 2006). A study by Boero et al. (2005) on health care workers found that spirituality was a significant factor in their quality of life.

Maltzman (2011) further encouraged seeking out spiritual or religious support to help mitigate the effects of secondary trauma or vicarious trauma.

Culture

Despite fast-changing cultural diversity in the New Zealand Police and New Zealand Armed Forces (Te Ara, n.d.), (New Zealand Police, 2018) to the author's knowledge, there is very limited literature on the role that culture plays in self-care for police officers and military personnel. As culture influences self-care (Osokpo & Riegel, 2021), there will be a small discussion around the role culture plays in self-care in the health industry, where more research exists. For example, a study by Jönsson et al. (2020) aimed to describe how healthcare providers perceive the role of culture in self-care and how those perceptions shape their experiences and practices. Jönsson et al. (2020) explained that it is important to consider that people with different backgrounds might have different self-care goals. Moreover, the concept of self-care may be too focused on Western culture and might not be seen as important in cultures that are less focused on autonomy. Understanding the importance of cultural factors that help or hinder self-care behaviour is anticipated to facilitate the design of effective, tailored interventions (Osokpo & Riegel, 2021).

Psychological

Psychological self-care may be one of the most important forms of self-care, particularly for those who work in trauma-related fields. Baum (2016) focused on self-care for therapists working with traumatised clients. They suggested that physically leaving the office or speaking with friends or family during breaks may be helpful. Baum (2016) explained that it is often difficult for those in trauma-related roles not to take these narratives and images home. Therefore, the essential part of

self-care for those involved in trauma work is to prevent and diminish bringing any negative thoughts of work home (Maltzman, 2011). This may be done through a transition period, which encourages a scheduled period where the worker is allowed to focus on work and transition to the expectation of being fully involved in the home routine. Several psychological self-care mechanisms include using "thought stopping" if one is experiencing intrusive thoughts, feelings or visual images (Maltzman, 2011). Also, undertaking regular internal and personal emotional "check-ins" to supervise one's responses and actions can also be effective. "Self-reflecting" can be critical to pinpoint patterns leading to stress (Maltzman, 2011). A distinctly different psychological self-care strategy is to cognitively change one's perception of their work or an event. Perez et al. (2010) examined the psychological impact of viewing disturbing media on investigators engaged in computer forensics work. The data showed that employees scored high on professional efficacy. These results suggested that despite exposure to potentially traumatic content, employees were better off when focusing on the positives of their work, such as knowing they were making significant contributions and that their work makes a positive difference.

Support

Failure or success in coping with traumatic stress depends to a significant degree on interpersonal and social functioning (Kaniasty, 2012). The element of self-care referred to as support incorporates the relationships from both professional and personal support systems (Richards et al., 2010). Social support is generally attributed to the functions performed for the individual by significant (i.e., primary) others and secondary group members (Thoits, 2011). Smith et al. (2019) found that preferred psychosocial self-care practices were time with family and friends, participating in

peer-support programs including online support forums, and regularly seeing a mental health professional.

The impact of support from family and friends has been mixed throughout the literature. However, there are significant findings that indicate that friends and family do provide emotional support. Evans et al. (2013) explained that police officers often received emotional support from family, however, when discussing the work, they would limit the extent of the severity of it to protect them. Kurtz (2008) demonstrated that support from family and friends could help mitigate some of the impacts of working in a stressful field as family and friends may act as a barrier from the traumatic and harmful effects of the job.

Baum (2016) explained that psychotherapy might be essential given the limitations of confidentiality to debrief with friends and family while also not wanting to burden them with traumatic stories (Maltzman, 2011). Psychotherapy allows a space where people can share their experiences of trauma work with confidence that the information will be kept private and confidential. Aside from psychologists, Baum (2012) explained that it may be helpful for some to face the traumatic exposure and meet the feelings head-on in a one on one or support group setting. Doing this may be helpful as discussing these feelings with colleagues who understand the type of work faced allows an opportunity to share similar feelings.

Participants from Maltzman's (2011) study defined supervisory support as "the quality and frequency of the day-to-day case-level supervision, the day-to-day support regarding job-related 'baseline' stressors, and the support provided during a critical incident." Supervisors play an important role in providing ongoing support to their staff, which should help to prevent the potential adverse effects of this work (Maltzman, 2011). A study by Prati and Pietrantoni (2010) examined a sample of

studies investigating the relationship between social support and mental health among first responders. Despite controversy in the literature, their meta-analysis demonstrated that social support was significantly related to better mental health outcomes among first responders. Evans et al. (2013) studied police officers experiences of supportive and unsupportive interactions following distressing incidents. They found that police officers who experienced supportive supervisors considered supervisors a vital part of self-care. They found that they could express themselves and felt that their supervisors supported the need for talking. Maltzman (2011) also acknowledged this finding as they found that staff often explained that hearing and understanding that there is nothing "wrong" with them and that their emotional responses to what they have experienced are understandable allows near-instant subjective relief. Overall, officer well-being was strengthened through the interactions with supervisors (Evans et al., 2013). The participants in Maltzman's (2011) study overwhelmingly agreed that they could manage the demands of their work if they felt supported, validated, and valued by the organisation, specifically by their direct supervisor.

A study by Guilaran et al. (2020) provided evidence of the direct beneficial effects of receiving social support on social adjustment outcomes among professionals routinely involved in potentially traumatic circumstances. Specifically, of the different support sources, more support from colleagues and supervisors predicted better social and occupational functioning. Guilaran et al. (2020) found that increased emotional and tangible support was related to less functioning deficits both socially and occupationally. Moreover, receiving social support directly influenced positive changes in interpersonal/social relationships after traumatic exposure. This study has important implications as it demonstrates that despite emergency responder work

being psychologically and socially taxing, emergency responders may gain psychological and social benefits resulting from the right support from the right kind of people.

On an organisational level, supervisors can support workers by spreading knowledge of the effects of traumatic exposure by normalising and incorporating this information regularly into the workplace culture (Maltzman, 2011). Organisations can make self-care and self-care plans a regular topic of discussion. In addition, supervisors, managers, or leaders should model self-care and provide regular training around formulating self-care plans and providing information around identifying early warning signs of secondary traumatic stress (Evans et al., 2013; Rienks, 2020). In addition, all managers should be made aware of the need for “time out” and should be trained to be aware and observant of the signs of work-related stress (Whelpton, 2012) to help with prevention and early intervention (Rienks, 2020).

A second area for self-care at the organisational level could be to provide 24-hour, ongoing mental health assistance to officers if they require it (Ménard et al., 2016). An example of this in the USA are counselling programs, COPS.2 and COPS (Burke et al., 2007). These services provide 24-hour confidential telephone counselling with specially trained police officers (active or retired) who can refer the officers to licensed professionals trained to work with police should they require it. Maltzman (2011) analysed the implementation of a self-care model within a large social services organisation. The primary purpose of the self-care model was to implement proactive and preventive psychoeducation for direct service and support personnel. The model hoped to lessen the potential for secondary trauma and vicarious trauma through proactive support and acute symptom relief. The self-care model was based on the following six assumptions. First, that staff were competent to

implement self-care, complete their work and be mentally stable and healthy. Second, one's experiences with secondary trauma had caused them to be considered a workplace risk. Third, it is not the fault of the person who is experiencing secondary trauma. The fourth and fifth assumptions are that for the self-care model to be successful, it is crucial that support starts from management down and that the self-care model needs to be embodied in the organisation's structure. Lastly, the self-care model has two fundamental compatible goals: to support workers and support the cohesion of organisational functioning.

Both Perez et al. (2010) and Horwitz (2006) indicated that there is a need to minimise employee exposure to potentially traumatic imagery at an organisational level. They explained that because it is highly unlikely that investigations into child abuse will decrease, there needs to be a way to reduce workers exposure. A way to practically do this is to constructively designate persons for assignments that are appropriate to their level, thereby reducing unnecessary staff exposure to traumatic material (Whelpton, 2012). Another option is to decrease the length of time workers can remain in such roles or limit the number of cases to which an individual is assigned. For example, trauma interventions in the child protection workforce focus on minimising ongoing exposure to the events and helping workers process their experiences, resulting feelings and identifying and managing any lingering trauma effects of exposure (Perez et al., 2010).

Salloum et al. (2015) analysed the role of trauma-informed self-care (TISC) on compassion fatigue, burnout, and secondary trauma in a child welfare case managers and supervisors population. Trauma-informed self-care is characterised by an awareness of how we each emotionally experience exposure to traumatised victims. Moreover, it is how we engage in adaptive self-care or coping strategies. Trauma-

informed self-care differs compared to general personal self-care activities. Despite results not indicating a relationship between traumatic-informed self-care and secondary trauma, it is still worth noting that particular types of trauma-informed self-care practices may be more helpful than others to decrease secondary trauma. Salloum et al. (2015) explained that trauma-informed self-care is specific to work with traumatised populations and includes seeking supervision, working within supportive teams, attending trauma-specific training, and balancing caseloads. Trauma-informed self-care incorporates a variety of personal self-care strategies designed to reduce stress, including implementing stress management techniques, creating a work-life balance plan, and undertaking therapy for personal issues resulting from their work.

In the trauma literature, a study by Wright et al. (2006) provided an in-depth report of the main challenges faced by child abuse investigators and how these professionals dealt with these daily challenges. The study found that three main types of self-care support made the most significant difference. Overall, the finding was that officers tended to rely mainly on informal coping mechanisms. These were informal debriefing with immediate colleagues, workplace humour (including black humour) and defining job success measurement. Informal debriefing with colleagues was highly valued because colleagues understood job stressors and could provide advice and support based on their experience in the job. Being able to do this helped to normalise the officer’s emotional responses. Humour was seen as a beneficial strategy to help dissipate work stress and maintain a working environment that was light-hearted, positive, and tension-releasing (Evans et al., 2013; Wright et al., 2006). Black humour, described by Wright et al. (2006) as the juxtaposition of morbid and farcical elements to give a humorous effect, was never derogatory or at the expense of a child. Vivona (2014) demonstrated that police regularly used black humour to cope with the

fear, anxiety and disgust of death scenes. Geiger (2016) also studied humour and cynicism in first responders and determined that humour and cynicism were participants favourite ways to relieve tension and reflect with others over specific details of traumatic experiences. Wright et al. (2006) explained the use of adapting the measurement of job success from convictions and charges to using alternative criteria based on their dynamic role as counsellors, victim liaison officers, and police public relations officers. These parts of the job allowed for satisfaction due to client gratitude and praise from colleagues and superiors.

Overall, it is crucial for those working in trauma-related fields to be offered self-care strategies and coping resources to readjust back to a calm mind both psychologically and emotionally (Huddleston, 2002). Studies such as Richards et al. (2010) have shown important implications. One of these is the significant positive correlation between self-care frequency and well-being, which suggested that the higher levels of participation in self-care, the better general well-being. Results from Rienks (2020) and Owens-King (2019) found that in the caseworker and social worker population, those who most actively used coping strategies at baseline experienced significantly fewer secondary traumatic stress symptoms than those who were not as active with their self-care strategies. Rienks (2020) also demonstrated that having a determined and intentional self-care plan was significant for better outcomes. This may be due to intentional and clear plans becoming habitual and therefore sustainable and regular. Findings from the literature have encouraged and steered the focus of this research project on determining the most appropriate and effective self-care mechanisms for police officers and military personnel who have been exposed to terrorist documents.

Chapter 3 - Methodological considerations

Methodological considerations to facilitate data collection involved adequate preparation and appropriateness of the data collection approach, selection of participants, cultural inclusiveness, and awareness of any ethical and sensitivity issues. This study used qualitative measures designed to assess the most effective and appropriate self-care mechanisms for police and military personnel, who are generally on overseas deployments when exposed to terrorist documents.

Cultural considerations

Cultural considerations were taken for this research. Cultural consultation with Dr. Simon Bennett, the Kaimatai Hinengaro Matua: Māori Clinical Psychologist, Senior Lecturer at Massey University was made to ensure the research was culturally appropriate and respectful. This included an aspect of the questionnaire that asks the importance of cultural customs, traditions, and practices relevant to self-care and what self-care might look like culturally to be inclusive for police officers, military personnel and other first responders who are culturally diverse.

Delphi Method

Due to this field being narrow and the nature of terrorist documents being highly classified, there were issues with confidentiality, among other barriers to communicating directly with police officers and military personnel who had been directly exposed to terrorist documents. As a result, researching such a topic directly with police officers and military personnel who had been specifically exposed to terrorist documents was not possible. The Delphi Method enabled contact with

participants who were one step removed from police or military organisations. The use of the Delphi Method allowed questions around self-care to be asked to professionals who had directly worked with police officers and military personnel who may have been exposed to terrorist documents. Thus, this research was able to be executed in a sensitive, non-re-traumatising way while still allowing for practical and helpful insights and access into a highly secretive area.

The Delphi Method is a qualitative research design. The Delphi Method is a process to gather expertise or opinions from anonymous people with specialized knowledge. The Delphi Method aims to reach a consensus on the topic in question (Ungvarsky, 2020). It involves groups of experts without concern for geography. The process is based on experts replying to several "rounds" involving specific questions through email. After each round, participants receive feedback of the group response, which typically takes the form of points of agreement listed in order of most to least often mentioned. The rounds process repeats itself with the goal of reducing the range of responses until "consensus" is achieved. With each repetition, specific responses would receive increasing or decreasing mention, eventually being pared down to an outcome acceptable to all. Delphi consensus typically ranges from 55 to 100% agreement, with 70% considered standard.

Bridged Delphi Method version

There were several iterations with the Massey University Ethics Committee because this project involved a novel way of researching this phenomenon. This research project used a bridged version of the Delphi Method to collect data. A flow chart describing the recruitment process is attached in the documents section (Appendix E). As per the Delphi Methodology, the questionnaire was distributed via

email to protect participants identities and ensure flexibility for participants to complete the study. This consisted of emailing a questionnaire document to the participants which consisted of 5 demographic questions and 13 questions to be answered by participants. After answering these questions, the participants returned the document to the primary researcher via email. The questions were collated and summarised, and then a summarised version of participants part one answers was returned once more to the participants (Appendix F). For part two of the bridged Delphi Method, participants had the opportunity to agree or disagree and make any additional comments to the answers that had been collated and summarised. Following part two, the questionnaire was returned to the primary researcher once more. The results of part two of the study were the final results that were presented in this thesis.

Participants/recruitment

This research project aimed to recruit approximately 25 participants in the study. Participants in this study were recruited through the New Zealand College of Clinical Psychologists and the New Zealand Psychological Society. The invitation to participate (Appendix A) was advertised through these organisations in their monthly e-newsletters. In addition to an invitation distributed via these organisations, the primary supervisor of this study blind copied the invitation to their connections to seek other eligible participants who would be interested in participating. The invitation included a brief introduction to the research project and outlined the background and purpose of the study. Interested members contacted the primary researcher directly via email. After potential participants had expressed their interest in participating, an information sheet (Appendix B) and the questionnaire (Appendix

C) was sent to the participant. If the participants chose to complete the study after reading the information sheet, it was considered that consent was gained.

Participant eligibility criteria

To be selected for participation in this study, participants were required to be psychologists (Clinical or General scope) who were currently or had worked with (in the last three years) with police officers or military personnel or other first-responder groups.

Ethical considerations

Potential ethical issues involved asking participants to answer potentially traumatic questions which included questions around terrorism and asking participants to reflect and consider potentially traumatic conversations with clients. This potential ethical issue was addressed by providing contacts on the information sheet for support for all participants if they felt they needed support during or post their participation. In addition, all participants were free to leave the study at any point without any consequence. Lastly, participation in this study was voluntary and anonymous. A second potential ethical issue involved keeping myself safe from the potentially traumatic nature of this study. This potential ethical issue was addressed by using the self-care mechanisms I had gained through my job as a counselling assistant. In addition, I was able to debrief with my supervisor, a clinical psychologist who possesses knowledge about this field and who was available for more in-depth support if required.

Ethics

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 21/45. This research project is accessing psychologists that are contracted to the New Zealand Defence Force and the New Zealand Police, as opposed to accessing psychologists that worked directly for these organisations. However, Lieutenant (Chief Mental Health Officer) Colonel Steve Kearney has been advised out of courtesy. All data was kept confidential, and all raw data was maintained under password protection. Only the primary researcher had access to the raw data. To protect any conflict of interest due to my supervisor's identity, the study's supervisor only had access to unidentifiable information as participants were itemised. No personally identifying information was asked on the questionnaire. The information sheet informed potential participants of what the study entailed and that if answering any of the questions was too distressing, they could either be ignored or, if necessary, participation in the study could be stopped without any consequences. Information on available support was included in the information sheet. This included both free services and services requiring payment. During the recruitment process, one of the participants disclosed that they had last worked with a police officer or military personnel in the last four years rather than three years which was the initial eligibility criteria to participate in the study. This was discussed with the study's primary supervisor and addressed with the Ethics committee to extend the criteria from three years to five years to include this participant as they were considered to have helpful and important insights that would benefit the study. Ethics approval was gained for this adjustment on January 14, 2022, by the Massey University Human Ethics Committee: Southern A, Application 21/45. It was too late to change this eligibility criteria on the participant invitation and participant

information sheet as they had already been released to the organisations and already been advertised in their monthly e-newsletters, therefore the criteria of three years remained for any other potentially interested participants seeing these e-newsletters.

Chapter 4 - Method

Procedure

A pilot study was completed to ensure the information sheet would provide the most accurate indications for participants in terms of length of participation. The pilot study included timed trial runs with three non-psychologists who were not eligible to participate in the study. Their participations times ranged from 15 mins to 30 mins for part one and between 5 to 10 minutes for part two of the study. The bridged version of the Delphi Method consisted of two rounds of questionnaires distributed through email. The questionnaire included five demographic variables and 13 questions, including aspects of one psychometric measure (Carver, 1997) (Appendix D). To ensure anonymity and timely completion of the study, the questionnaire was distributed via email with a cut-off date to complete parts one and two. Due to significant delays in gaining Ethics approval resulting in a small window of opportunity to collect data, the study started recruiting participants from November 29, 2021 and ended recruiting for part one of the study on December 31, 2021 (4 weeks to show interest in participating). On January 21, 2022 the second part of the study (the summarised questionnaire) was returned to participants who had completed and returned part one of the questionnaire before the cut-off date. Part one was estimated to take approximately 30 minutes to complete. Part two of the study included an opportunity for participants to note whether they agreed or disagreed with

the summarised answer and make any final comments. Part two of the study was estimated to take approximately 10-15 minutes to complete. One participant was excluded before they had completed part one of the study as this participant initially showed interest in participating, however upon receiving the questionnaire, realised that they did not fully meet the criteria to participate and therefore did not complete part one or part two of the study. In total, five participants completed part one and two of the study.

Psychometric measures

Demographic items

Participants were asked to complete a series of questions that covered the population of clients they generally work with, the years they have been practicing for, and their understanding of the organisational culture of the police/military. Also, the number of hours per week they work clinically with first responders or military personnel and whether the first responders they work with are based in New Zealand or at an overseas location.

Chapter 5 - Results

This chapter begins with a breakdown of the participants' demographics (Table 1 and Table 2), followed by a qualitative summary of all participants summarised answers from part one and part two of the study (Table 3). Finally, results from the study are discussed. One of the participants had worked with police officers in New Zealand in the last five years, and one currently works with only police officers. Three participants had worked with both police officers and military

personnel. Of those three, two currently worked with both police officers and military personnel, and one currently worked with police officers and had worked with military personnel previously. Four of the five participants practised as a psychologist between 13 to 20 years (13, 16, 20, 20). The fifth participant has been practising as a psychologist for approximately 38 years. Overall, the year's participants had been practising as a psychologist ranged from 13 to 38 years, with a mean of 21.4 years. One of the participants did not currently work with police officers, military personnel, or other first responders. The second participant worked 1-2 hours per month with police officers, military personnel, or other first responders. The remaining three participants worked with police officers, military personnel, or other first responders 1-2 hours per week. In an average week, the number of hours that participants practised clinically with police officers, military personnel or other first responders ranged from less than one hour per week to 2 hours per week. Of the four out of five participants working with police officers, military personnel, or other first responders, two were working with these clients in New Zealand. The remaining two participants were working with these clients both in New Zealand and overseas.

Table 1. Demographics – Participants experience with clients

Demographic	Groups worked with (Current/Past)	Years practicing as a psychologist	Clinical hours p/w with police officers/military/other first responders	Clients work in NZ or overseas
Participant ID				
1	Police	38 years	None currently	N/A
2	Police and Military	13 years	1-2 hours per month	New Zealand
3	Police and Military	20 years	Biweekly	New Zealand
4	Police	20 years	1-2 hours per week	New Zealand/Overseas
5	Police and Military	16 years	1-2 hours per week	New Zealand/Overseas

Table 2. Demographics – Organisational culture of the police and military

Participants	**Participants understanding of organisational culture of the police and military**
1	The culture is very rigid. There are still pockets of police officers who are not open to understanding the science and psychology behind behaviour. In our training delivery, there were some officers who could not accept that sex offenders and violent offenders could have differing risk profiles from very low risk of committing a further offence through to offenders who were very likely to reoffend. In their view all offenders were high risk.
2	There is a clear hierarchy; a strong sense of comradery; While at an organizational level more efforts are being made to understand and support mental health, at a social level this is still not seen as acceptable and mental health problems can be career limiting.
3	Varies considerably but in many aspects, I think the organizational structure is supportive of the employees wellbeing. However, there are still narratives that undermine this.
4	I have a fairly limited understanding, that comes only from hearing about it via referred officers, welfare staff and the district commander, who I have some professional contact with.
5	Police is hierarchical and career-progressive based on performance and need. Its predominantly male-based. Most have a genuine care-based commitment to serve and make things “right”. There is an unstated acceptance to “Do what it takes”. There is a high acceptance of alcohol.

Table 3. Part two – Summarised answers

Questions	Summarised Answer
What is your understanding of what a terrorist document is?	Any document developed to incite aggression, hatred, or fear. Alternatively, a terrorist document is any document outlining evidence related to a potential or actual attack of terrorism.
How long should police officers or military personnel view terrorist documents each day and each week?	It depends on what documents are being viewed and how they are viewed. It also depends on the individual police officer or military personnel and their personal background, including past trauma, current resilience and training in resilience, general coping methods, and mental health. Viewing terrorist documents should be done in as little time as possible a day (perhaps 1 hour per day to 3 hours per week) and should include regular breaks and be done in the presence of another colleague to ensure the worker does not feel alone in this work.
What length of time should police officers or military personnel spend on overseas deployments?	No more than four weeks, and it will depend on their personalities, family situations and career needs.
Would it be beneficial for police officers or military personnel to undertake their work (exposure to terrorist document) from New Zealand/Aotearoa or continue to work at an overseas deployment location?	It depends on the individual officer and support around the officer. Some officers may have more support in New Zealand which may be helpful; however, it could be more traumatic viewing these documents surrounded by family. Preparation is key to managing distressing experiences, so lighter exposure in New Zealand prior to more exposure overseas may be helpful.
Is there a significant difference between police officers or military personnel working from New Zealand/Aotearoa or overseas?	It depends on whether it is police or military – for those in the military, they may have more formal and informal support within the organisation. In comparison, police may have more access to family and friends outside of work. Being home may provide more distractions and more ways to disconnect from work and be supported by family and friends outside of colleagues.
Would it be beneficial for police officers or military personnel to undertake a standdown period between overseas deployments?	Generally yes, however, it may not suit everyone. It depends on the training, professional supervision, and personal characteristics of the officer and what the individual has been exposed to. Blanket rules do not always work, and it depends on the needs of the individual officer. It is additionally best for policy advice to err on the side of caution and minimise potential harm.
If police officers or military do this type of work overseas (i.e., viewing terrorist documents), have you any advice on how they should integrate back into New Zealand/Aotearoa?	The organisation needs to make support available that is tailored to the individual. This may include professional supervision and professional psychological debriefing to avoid a build-up of stress and trauma. In addition, a standdown period where officers can be reminded of their role in New Zealand and be present to fully engage in the home role may be helpful.
The various ways people experience terrorist documents may differ. Are there any particular sensory exposures to terrorist documents that are more psychologically detrimental for police officers or military personnel (for example, verbally, visually, auditory)?	It depends on the individual; however videos or visual material will likely be more traumatic or psychologically detrimental than verbal or auditory materials. Smell is also often a big trigger for activating memories. Additionally, there may be strong links between visual and auditory material and possibly a compounding effect.

Do organisational variables/culture lead to worse mental health outcomes than occupational variables?	Yes, however, both can be equally problematic. In terms of organisational culture, it is crucial to have an open environment where officers can discuss how they are feeling and where support can be provided. Organisational variables are often more obtuse and harder to quantify, identify and challenge. Supportive work cultures that allow for individual adjustment and a range of responses facilitate better health outcomes than an organisation that suggests a toughen-up mentality.
Is it important for those police officers or military personnel who have traditions, practices, rituals, ceremonies, customs, routines, or anything similar to incorporate them when undertaking self-care?	Yes, these can be incredibly important and helpful as they can help the person connect with their values and internal/external supports. However, it can also depend on the traditions and practices, as some can be worse for self-care, such as using coping methods that serve to push away appropriate coping. A good example of an unhelpful coping method is alcohol/binge drinking which is very prevalent in the New Zealand Defence Force and New Zealand Police.
How should police officers or military personnel who are exposed to terrorist documents practice self-care?	It depends on the individual and their level of resiliency and what helps them maintain home and work-life boundaries. In general, however, self-care should include regular opportunities to talk openly, honestly, and in a non-judgmental manner. In addition, self-care should include ways to compartmentalise work and personal life, such as limiting work-related tasks at home and creating specific boundaries. Practical ways include viewing as few terrorist documents as possible and, if viewing, listening on low volume with a small screen or double speed the video to reduce the amount of time exposed.
How much work/time should police officers and military personnel spend on self-care each day and each week?	It depends on the individual, 15 mins to an hour a day to 3 hours a week. However, regular self-care is more critical than specific timeframes and needs to be an essential part of each day by being incorporated into life routine and prioritised when working with challenging material. Self-care should also be enjoyable and not 'just part of the job.'

What self-care strategies do you think would be helpful for police officers or military personnel who have been exposed to terrorist documents? *For example, but not limited to:* **Self-distraction** such as turning to work or other activities to take their mind off things and doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping. **Active coping** such as concentrating their efforts on doing something about the situation they are in and taking action to try to make the situation better. **Use of emotional support** such as getting emotional support from others and getting comfort and understanding from someone. **Use of instrumental support** such as getting help and advice from other people and trying to get advice or help from other people about what to do. **Positive reframing** such as trying to see it in a different light, to make it seem more positive and looking for something good in what is happening. **Humour** such as making jokes about the situation or making fun of the situation. **Acceptance** such as accepting the reality of the fact that it has happened and learning to live with it. **Religion** such as trying to find comfort in religion or spiritual beliefs and praying or meditating. **Planning** such as trying to come up with a strategy about what to do and thinking hard about what steps to take. *Other:*	All of the suggestions below may be beneficial. However, it will be different for each person. Each person should develop a 'toolkit' of different strategies that can be created by working through a list such as the list below. In addition to the list below, developing emotional regulation skills, peer mentoring, group support, and exercise may be helpful. The use of exercise is important as it can provide social connections as a result of exercising with a friend. As well as exercise, perspective-taking on typical New Zealand culture can be helpful to aid re-acculturation.

Chapter 6 - Discussion

Terrorist document

The study determined that a terrorist document is considered a piece of written, printed, or electronic matter that provides information or evidence (Oxford Languages, n.d.) depicting terrorism. This may be in written form, photographed, or videoed. To clarify what a terrorist document is, participants were asked, “What is your understanding of what a terrorist document is?” The summarised answer explained a terrorist document as, “Any document developed to incite aggression, hatred, or fear. Alternatively, a terrorist document is any document outlining evidence related to a potential or actual attack of terrorism.” This finding agreed with the literature definition of a terrorist document. This finding was positive and reassuring as this study was centred on the effects of exposure to terrorist documents. Therefore, consensus among the participants concerning the literature was critical to ensure this study was accurately understood prior to beginning.

Organisational vs occupational variables

Several studies, including Purba and Demou (2019), Chan (2007), Queirós et al. (2020) and Perez et al. (2010), discussed the crucial impact of organisational stressors on mental health outcomes in addition to occupational stressors. Purba and Demou (2019) found that lack of support from colleagues, supervisors, and the organisation, long working hours, job demands, and stressors revealed significant impacts on the mental well-being of police officers. Perez et al. (2010) studied computer forensic investigators of child sexual abuse and asked what management could do to help with job stress. They found 25% of participants suggested decreased

workload, 21% suggested job rotation, specifically a need to cycle people out of roles involving child pornography images and 18% said more concern from management about morale, depression, anger, and the need for professional counselling or team building for increased morale. They also wanted management to better understand the impact the work has on employees. These findings encouraged a question to participants about the effects of organisational and occupational variables. The following questions were asked of participants, "What is your understanding of the organisational culture of the police and military?" The summarised answer to this question outlined police and military cultures as "Rigid, hierarchal, and career-progressive and based on performance and need. These organisations are generally supportive and committed to employees' well-being; however, there are still pockets of employees who are not open to understanding the science and psychology behind behaviour, allowing mental health problems to be career limiting. There is also a high acceptance of alcohol use." The finding that mental health problems can be career-limiting was consistent with the literature. Studies such as Wright et al. (2006) discussed that reasons for scepticism of police officers seeing clinicians were due to the fear of repercussions despite confidentiality. The finding around alcohol use being part of police and military culture was supported by a breadth of literature outlining the association between police and military work and alcohol misuse. Several studies, including Violanti et al. (2011), Killgore et al. (2008), McDevitt-Murphy et al. (2010) and Wilk et al. (2010), found alcohol abuse to be a significant problem in law enforcement. This finding makes sense considering occupations that experience high exposure to threatening situations are often related to alcohol misuse.

Participants were further asked, "Do organisational variables/culture (defined as patterns of thought and behaviour shared by members of the same organisation and

reflected in their language, values, attitudes, beliefs, and customs, or shared perceptions of organisational work practices within organisational units) lead to worse mental health outcomes than occupational variables (defined as something that is caused by or relates to doing a certain type of work, or relating to, or caused by engagement in a particular occupation)?" The summarised answer explained that "Both occupational and organisational variables can be problematic for mental health outcomes. However, organisational variables are often harder to quantify, identify and challenge. An organisational culture that suggests a 'toughen-up' mentality will likely have worse mental health outcomes for their staff than an organisational culture that supports individual adjustment and a range of responses to occupational events." This finding that a 'toughen up' mentality may result in worse mental health outcomes was supported in the literature. For example, Perez et al. (2010) found that lack of understanding from management was a contributing factor to employee's difficulties. Cigrang et al. (2014) also support this finding as they recommended that all service personnel be provided with information regarding emotional challenges, including PTSS and major depressive disorder, and coping strategies to spread awareness to mitigate against a culture that sees psychological difficulties as a weakness. This current study's findings also bring new information about why organisational variables may be more detrimental to employees' mental health. To explain, occupational events like attending suicides and accident scenes, among others, are quantifiable. In contrast, a lack of support at an organisational level following these sorts of events is more challenging to quantify and, therefore, potentially harder to address.

Cumulative trauma

The literature review determined negative cumulative effects resulting from increased traumatic incidents (Buchanan et al., 2001; Geeson, 2017; Geronazzo-Alman et al., 2017; Huddleston et al., 2007; Stephens & Miller, 1998). These findings were deemed to have important implications for organisations with employees such as police officers and military personnel who have regular potentially traumatic exposures. Therefore, the concept of cumulative trauma is central to this research because the population studied are police officers and military personnel.

This study aimed to explore what psychologists considered appropriate and effective self-care methods for police officers and military personnel who are regularly exposed to terrorist documents and, therefore, are at risk of the effects of cumulative trauma. As a result, participants were asked, “How long should police officers or military personnel view terrorist documents each day and each week?” Participants concluded that “It is dependent on what documents are being viewed and how they are viewed. It also depends on the individual police officer or military personnel and their personal background, including past trauma, current resilience and training in resilience, general coping methods, and mental health. Viewing terrorist documents should be done in as little time as possible a day (perhaps 1 hour per day to 3 hours per week) and should include regular breaks and be done in the presence of another colleague to ensure the worker does not feel alone in this work”. Not all participants were in agreement with the second part of this summarised answer; however, no additional comments as to why were offered.

Another question asked, “What length of time should police officers or military personnel spend on overseas deployments?” Participants mostly agreed that “These overseas deployments should be no more than four weeks; however, the exact

length of time will depend on their personalities, family situations, and career needs." Again, there was not full consensus as one participant stressed that "Having a rigid approach is unlikely to be helpful to either the organisation or the person involved. I would suggest a realistic approach that meets the needs of all involved."

A further question asked, "Would it be beneficial for police officers or military personnel to undertake a standdown between overseas deployments?" Participants concluded that "Standdown periods generally are beneficial. However, it may not suit everyone. Blanket rules do not always work, and it depends on the needs of the individual officer. It also depends on the officer's training, professional supervision, personal characteristics and what the individual has been exposed to. It is also best for policy advice to err on caution and minimise potential harm."

The answers to these questions solidify and support the literature on cumulative trauma (Buchanan et al., 2001; Geeson, 2017; Geronazzo-Alman et al., 2017; Huddleston et al., 2007; Stephens & Miller, 1998). The findings agree with the notion that the more traumatic exposures a person has, the worse the psychological consequences may be. The findings summarise that exposure to terrorist documents and deployments should be kept to a minimum and acknowledge that a standdown period may be beneficial. This finding is in accordance with Perez et al. (2010), who specifies the need to decrease the length of time workers can remain in such roles or limit the number of cases to which an individual is assigned. For example, in their study on the child protection workforce, trauma interventions focus on minimising ongoing exposure to the events. Although individuality plays a significant role in self-care, the findings of this study also highlighted actual timeframes that could be implemented at an organisational level to support employees to undertake self-care.

These self-care mechanisms would ultimately limit exposure to terrorist documents to protect against the potentially adverse effects of cumulative trauma.

Barriers to support

A review of the literature found that despite improvements in society's understanding of the consequences of traumatic exposure, there are still barriers to first responders getting the help they require (Velazquez & Hernandez, 2019). Negative mental health consequences such as PTSS may be underreported due to remaining attitudes and barriers within military and police organisations (Rynor, 2010). The literature determined potential reasons for police officers and military personnel refraining from gaining psychological support, including concerns around confidentiality, the stigma around mental illness, and the inability of a therapist to understand police and military work. Therefore, participants were asked, "If police officers or military do this type of work overseas (i.e., viewing terrorist documents), have you any advice on how they should integrate back into New Zealand/Aotearoa?" Participants concluded that "An organisation needs to make support available that is tailored to the individual. This may include professional supervision and psychological debriefing to avoid a build-up of stress and trauma. In addition, a standdown period where officers can be reminded of their role in New Zealand and be present to fully engage in the home role may be helpful." This finding supports the literature such as Maltzman (2011), who explained that an organisation, including its supervisors, can support workers by spreading the knowledge of the effects of traumatic exposure and normalise and incorporate this information regularly in the workplace culture. The current study's finding that professional supervision and psychological debriefing can help to avoid stress and trauma build-up is consistent

with Perez et al. (2010), who explained that it may be helpful to workers to process their experiences, feelings and identify and manage any ongoing effects of traumatic exposure.

The current study also highlighted the critical need for organisations to provide internal support through professional development and debriefing while also providing external freedom outside of the work realm for these employees to spend crucial and quality time in their home role, whether this be with friends or family. What is important is that it is outside of work and for a substantial period of time. This finding is consistent with Kurtz (2008), who explained that support from family and friends could help mitigate some of the impacts of working in a stressful field as family and friends may act as a barrier from the traumatic and harmful effects of the job.

Traumatic exposures and the senses

Findings from the literature review determined that, at a minimum, there may be an impact on professionals who observe child abuse as part of their work (Edelmann, 2010). Several studies found evidence that indicated that regular exposure to potentially traumatic documents, including that of child abuse as a part of one's work, could potentially lead to vicarious trauma (Brady, 2017; Bonach & Heckert, 2012; Craun et al., 2015; Edelmann, 2010; Slane et al., 2018; Whelpton, 2012). As a result of these findings, it was essential to ask participants, "The various ways people experience terrorist documents may differ. Is there any particular sensory exposure of terrorist documents that is more psychologically detrimental for police officers or military personnel (for example, verbally, visually, auditory)?"

The participants outlined that "It is dependent on the individual; however, videos or visual material will likely be more traumatic or psychologically detrimental than verbal or auditory materials. Smell is also often a big trigger for activating memories. There may also be strong links between visual and auditory material with the possibility of a compounding effect."

These findings were consistent with the literature such as Silver et al. (2013), McKay-Davis et al. (2020), Perez et al. (2010) and Bradley et al. (2001), which all suggest that exposure to disturbing images or videos may have increased adverse psychological effects on viewers. In particular, Perez et al. (2010) expressed that it is commonly thought that images and images with audio components were the most challenging aspects for participants who were exposed to child abuse as part of their work. Moreover, the finding that smell is often a big trigger for activating memories is supported by Daniels and Vermetten (2016) and Wilkerson et al. (2018), both of which demonstrate a relationship between odour and emotional memories. These findings have important implications that should be carefully considered when supporting police officers and military personnel who are exposed to terrorist documents as part of their work.

Self-care mechanisms

This study's central aim was to determine the most appropriate and effective self-care mechanisms for police officers and military personnel who have been exposed to terrorist documents most often during overseas deployments. The rationale for this study was due to a significant gap in the literature on this specific subject. A review of the literature on self-care mechanisms for police officers and military personnel who had been exposed to potentially traumatic events found that adaptive

health practices, adaptive coping, social support from colleagues, optimism and a greater understanding of emotions all served as resilience factors against the development of PTSS (de Terte, 2012; de Terte et al., 2014). Other key themes of self-care were highlighted, including professional strategies (i.e., adequate trauma training), supervision, and support. Personal strategies included spirituality, physical health (including exercise, nutrition, adequate sleep), psychological self-care, and family and friend support (Baum, 2016; Cunningham, 2004; Richards et al., 2010; VanDeusen & Way, 2006).

It is evident from the literature that it is crucial for those working in trauma-related fields to be offered self-care strategies and coping resources to readjust back to a calm mind both psychologically and emotionally (Huddleston, 2002). As a result of these findings, participants were asked six questions on self-care to determine what individuals can do for themselves and what organisations can do to support employees to mitigate the potentially negative psychological effects of exposure to terrorist documents as part of one's work. The first question asked, "Would it be beneficial for police officers or military personnel to undertake their work (exposure to terrorist document) from New Zealand/Aotearoa or continue to work at an overseas deployment location?" Participants stressed that "It is dependent on the individual and their surrounding support system. Some officers may have more support in New Zealand which may be helpful; however, for others, it could be more traumatic viewing these documents surrounded by family. It was also suggested that preparation is key to managing distressing experiences, so it may be beneficial to begin with less severe exposure in New Zealand prior to more exposure overseas." Second, participants were asked, "Is there a significant difference between police officers or military personnel working from New Zealand/Aotearoa or overseas?" Participants

concluded that “It depends on whether it is police or military – those in the military may have more formal and informal support within the organisation. In comparison, police may have more access to family and friends outside of work. Being home may provide more distractions and more ways to disconnect from work and be supported by family and friends outside of colleagues.” These findings provide new information not found in the literature review regarding the potential difference in support networks between police officers and military personnel.

Furthermore, there were mixed findings on support from friends and family, reflecting mixed findings in the literature. For example, Kurtz (2008) considered that support from family and friends could help mitigate some of the impacts of working in a stressful field as family and friends may act as a barrier from the traumatic and harmful effects of the job. With that said, Evans et al. (2013) and (Maltzman, 2011) discussed that police officers often received emotional support from family. However, when discussing the work, they would limit the extent of the severity of it to protect them and to avoid burdening their friends and family with traumatic stories. These findings, despite being mixed, have important implications when encouraging self-care. Overall, it is clear that the effectiveness of support from family and friends is dependent on the individual. In addition, consideration should be given to what organisation the person works for when creating self-care plans and determining where support should come from. The first aspect of this answer supports the literature on cultural importance of self-care in the health industry. Participants were further asked, “Is it important for those police officers or military personnel who have traditions, practices, rituals, ceremonies, customs, routines, or anything else similar to incorporate them when undertaking self-care?” Participants commented that “Yes, these can be incredibly important and helpful as they can help the person connect with

their values and internal/external supports. However, it can also depend on the traditions and practices, as some can be worse for self-care, such as using coping methods that serve to push away appropriate coping. An example of an unhelpful coping method is alcohol/binge drinking which is very prevalent in the New Zealand Defence Force and New Zealand Police." This question was asked due to a scarcity in the literature on the role of culture in self-care mechanisms for police officers and military personnel, despite fast-changing cultural diversity in the New Zealand Police and New Zealand Armed Forces (New Zealand Police, 2018; Te Ara, n.d.). These findings should be considered when organisations support police officers and military personnel with diverse cultural backgrounds. It is also worth noting the finding by Jönsson et al. (2020), which suggested that the concept of self-care may have an unbalanced focus on Western culture and does not consider enough other cultures.

This second part of this answer was consistent with the literature that focused on police alcohol use as a coping method due to demographics, job stress, and the police culture (Lindsay & Shelley, 2009). Violanti et al. (2011), Killgore et al. (2008), McDevitt-Murphy et al. (2010) and Wilk et al. (2010) all further discuss in depth the prevalence of alcohol abuse, particularly for military personnel involved in combat exposure/deployment as well as police officers involved in threatening situations. Participants were asked, "How much work/time should police officers and military personnel spend on self-care each day and each week?" They explained that "It is dependent on the individual and that regular self-care that is incorporated into a life routine and prioritised during challenging times is more important than specific timeframes. However, they suggested that 15 mins to an hour a day or approximately 3 hours a week is an estimated timeframe. Self-care should also be enjoyable and not just "part of the job."

Participants were further asked, “How should police officers or military personnel exposed to terrorist documents practice self-care?” Participants suggested, “Viewing as few terrorist documents as possible and, if necessary, listening on low volume with a small screen or double speed the video to reduce the amount of time exposed.” Part of this finding was consistent with Holman et al. (2020), who explained that closer proximity to images or videos was considered more graphic than images or videos captured from further away. Therefore, seeing the image or video from an increased distance may be helpful to reduce the potentially harmful effects of the video. In addition, participants explained that “It is dependent on the individual, their level of resiliency and what helps them maintain home and work-life boundaries. In general, however, self-care should include regular opportunities to talk openly, honestly, and in a non-judgmental manner. Self-care should include ways to compartmentalise work and personal life, such as limiting work-related tasks at home and creating specific boundaries.” This finding was consistent with Perez et al. (2010), who analysed computer forensic investigators of child sexual abuse. The investigators discussed their key strategies included separation of work and family; this included “leaving work at work” and reiterating that “what I view does not belong to me.” The current study’s suggestion that self-care should include regular opportunities to talk openly, honestly and in a non-judgemental manner was in line with Evans et al. (2013), which found that police officers who experienced supportive supervisors considered supervisors a vital part of self-care. They found that they could express themselves and felt that their supervisors supported the need for talking.

To solidify the previous question, participants were lastly asked, “What self-care strategies do you think would be helpful for police officers or military personnel who have been exposed to terrorist documents?” Participants were provided with nine

examples from Carver's (1997) Brief Cope. They concluded that "All of Carver's (1997) suggestions may be beneficial. However, it will be different for each person. Each person should develop a ''toolkit'' of different strategies that can be created by working through a list such as Carver's (1997) Brief Cope. In addition to this list, developing emotional regulation skills, peer mentoring, group support, and exercise may be helpful. The use of exercise is important as it can provide social connections as a result of exercising with a friend. As well as exercise, perspective-taking on typical New Zealand culture can be helpful to aid re-acculturation." These findings were in consensus with literature by Smith et al. (2019), Kohl & Cook (2013), Arble et al. (2018), Richards et al. (2010), Cunningham (2004), VanDeusen & Way (2006), Baum (2016) all of which endorse the use of exercise, social support including supervisory support.

In addition to the consensus in findings, several new suggestions and thoughts were raised following these questions. Participants in this study provided both practical timeframes that individuals can be directed by and concepts such as that each police officer and military personnel should develop a ''toolkit'' of different strategies that can be created. In addition, a new suggestion not found in the literature was that perspective-taking on typical New Zealand culture could be helpful to aid re-acculturation. These findings are significant and have strong discoveries that can be taken upon by individual police officers, military personnel, and their organisations. These findings endeavour to support police officers and military by providing them with a variety of self-care mechanisms that can be implemented at both the individual and organisational level to help mitigate the potentially adverse psychological effects following terrorist document exposure.

Study limitations

The main limitations to the current study include the study design resulting in tight constraints on participant eligibility criteria and significant delays in obtaining Ethics approval. There are additional limitations, however, the most significant are focused on in this section with the primary intention to aid future research on this topic. Use of the Delphi Method: the practical advantages of using the Delphi Method will be compared to the Delphi Method's limitations. It may not have been possible to do this type of research without using the Delphi Method. Investigating the field of police officers, military personnel, and terrorist documents is narrow, and the nature of terrorist documents is highly secretive, resulting in issues with confidentiality, among other barriers, particularly when needing to communicate with police officers and military personnel about their personal experiences with terrorist documents. It was deemed that this investigation would likely not have been possible due to the confidentiality of the information within both the police and military organisations. Importantly, the ethical impact of recruiting police officers and military personnel and then inquiring into potentially traumatic situations may have opened the police officers and military personnel to re-traumatisation. As a result of these constraints, the Delphi Method was utilised.

The Delphi Method enables contact with participants who are one step removed from police or military organisations, who were still considered capable of providing important information and insights despite not being directly involved. Using the Delphi Method, we gained key insights into what self-care strategies police officers and military personnel could use to help mitigate the effects of potentially traumatic exposure to terrorist documents. This was conducted without the possibility of re-traumatising police officers and military personnel by using the clinical

knowledge and skills of psychologists who have directly worked with police officers, military personnel, or other first responders in the last three years. Thus, this research was executed in an accessible, wide-ranging, sensitive, non-re-traumatising way while still allowing practical and helpful insights and access into a highly secretive area. The Delphi Method's main limitations were that because we could not access police officers and military personnel, we needed to specify which psychologists were recruited in this study. We were only able to recruit psychologists that were specifically contracted to the New Zealand Police or New Zealand Defence Force. Including psychologists that worked directly for the New Zealand Police or New Zealand Defence Force would have required adherence to the Official Information Act. This had a considerable effect on the number of participants we recruited for this study. Ideally, this study would have recruited only psychologists that had worked with police officers and military personnel who had been exposed to terrorist documents generally while on overseas deployments. However, this was considered not feasible because of patient-client confidentiality and the narrowness of being able to specifically find psychologists who had worked with these specific clients in the last three years using our recruitment channels.

A further limitation resulting from use of the Delphi Method was that we recruited only those psychologists who had worked with police officers, military personnel, or other first responders in the last three years to ensure that participant's had current and specific knowledge and experiences with police officers, military personnel, or other first responder populations. This is because their experience with these occupational groups is directly relevant to specific questions around self-care. One participant recruited in the early stages disclosed that they had last worked with police officers or military personnel in the last four years rather than three. Due to

difficulty obtaining participants, this issue was discussed with the study's supervisor and taken to the Ethics committee to extend the criteria from three years to five years to include this participant. Ethics approval was gained for this adjustment on January 14, 2022, by the Massey University Human Ethics Committee: Southern A, Application 21/45. Unfortunately, this adjustment could not be changed on the participant invitation and information form because advertising for this study had already been released in monthly e-newsletters. Therefore, the criteria of three years remained for any other potentially interested participants seeing these e-newsletters. As a result of these limitations, the study recruited considerably fewer participants than what was aimed for in the study's planning phase. This tight eligibility criterion may have been a significant reason for the limited number of participants who showed interest in participating in this study.

The Delphi Method was also limited by its qualitative aspect providing more in-depth and prevalent trends in thoughts and opinions. It was a time-consuming process for participants to complete a questionnaire twice, despite using a bridged version of the Delphi Method. A bridged version was used to allow for a 12-month time frame to complete this research and allow for any unexpected delays to receive approval from the Ethics committee. In addition, using a questionnaire that asked primarily open-ended questions to ensure as much helpful information was collected as possible allowed participants to stray from the question asked accidentally. This study found that multiple questions had answers that deviated from the question asked, resulting in less specific information. It was also a labour-intensive process to summarise all participants' answers into a succinct general summary/consensus, with some answers diverging from the question asked.

The last major limitation of using the Delphi Method was that it was challenging to investigate causality as it is not possible to analyse the data mathematically. Therefore, the qualitative research was not statistically represented. Another limitation of this study was that of time constraints. The delays in gaining Ethics approval resulted in a six-month delay in the recruitment of participants, resulting in a one-month timeframe rather than the initially proposed three-month timeline to recruit participants. In addition, unfortunately, as Ethics approval was gained at the end of November, recruitment had to take place over the summer/Christmas holiday period when it was thought that many psychologists would be on annual leave. This major delay had significant effects on the number of participants recruited and the amount of information gained, ultimately resulting in less information to analyse.

Directions for future research

The current study has identified key areas for future research related to the study design and contains important possible directions that follow from these suggestions. These include expanding the eligibility criteria, including a broader range of mental health professionals, using a mixed-method qualitative/quantitative design and more consideration of cultural impacts.

Future research could expand the eligibility criteria to allow for psychologists that have worked with police officers, military personnel, or other first responders in the last ten or more years. Whether or not this increased length of time deems potential future participants to be appropriate to participate could be explored using a vetting tool. A vetting tool allows for an extended number of psychologists who may possess helpful and relevant knowledge and experience. A vetting tool could allow

participation to depend on the currency of their experience and knowledge instead of a tight eligibility criteria timeframe to ensure all participants have current knowledge.

A more comprehensive array of participants would provide more diverse and wide-ranging professional opinions on self-care mechanisms for police officers and military personnel who have been exposed to terrorist documents. Future research could also increase the eligibility of participants from just psychologists (general or clinical scope) to include other mental health professionals such as counsellors, psychiatrists, support workers, general practitioners, among others. Allowing for more variability of participants has many potentially helpful implications. For example, it can be assumed that police officers and military personnel may have received support from a greater variety of mental health professionals than only psychologists. Therefore, including other mental health professionals may have important implications for how police officers and military personnel accept future study findings. Individual police officers or military personnel may have an unconscious bias due to previous experience with other mental health professionals. As a result, they may be more willing to accept opinions on self-care if they have had previous positive experiences with certain mental health professionals rather than assuming all officers will be open and willing to accept advice from only psychologists, particularly if they have limited experience with psychologists, compared to the likes of a trusted general practitioner or other mental health professional.

One of the limitations of this study was that of the issue of validity with qualitative only research methods. Therefore, future research could use a mixed-method qualitative/quantitative design to obtain statistically representative data. This could be completed by developing a quantitative approach in conjunction with the qualitative aspect of the Delphi Method. An example could include a questionnaire

containing a Likert scale where participants rate their answers to questions numerically instead of participants only providing answers to open-ended opinion questions. This would allow for elements of the study to be quantitively analysed and therefore provide more confidence and validity in the results.

A final area that future research could explore is self-care mechanisms for police and military personnel with an enhanced cultural lens. The results from the question, “Is it important for those police officers or military personnel who have traditions, practices, rituals, ceremonies, customs, routines, or anything else similar to incorporate them when undertaking self-care?” suggest that future research would benefit from a more direct focus on cultural or religious aspects of self-care. For example, future studies could analyse which traditions, practices, rituals, ceremonies, customs, routines, or anything similar substantially affect mental health outcomes for police officers or military personnel following exposure to terrorist documents. Researching with a cultural lens is an important consideration given New Zealand’s bicultural environment and commitment to Te Tiriti O Waitangi. In addition, given that there are over 100 iwi and ethnic groups represented in the New Zealand Police (New Zealand Police, n.d.) and back in 2011, Māori made up 17% of the armed forces (Te Ara, n.d.), it is essential to undertake further research with a more robust cultural lens. This research could determine if culturally supported self-care mechanisms may play an important role for Māori, Pasifika, and other culturally diverse police officers and military personnel. An additional cultural aspect that could direct future research is recruiting culturally diverse participants using demographic eligibility criteria. Purposely including participants of diverse cultural backgrounds has important implications given that in 2010, 60 active Māori psychologists represented 4% of all active psychologists (Ministry of Health, 2007). The inclusion of Māori participants

in future research would provide a critically important, unique, and inclusive selection of professional opinions on self-care mechanisms for culturally diverse police officers and military personnel. Lastly, the inclusion of Māori and other culturally diverse perspectives will make results wider-reaching and inclusive of all New Zealand police officers and military personnel.

Chapter 7 – Conclusion

Key areas of limitations and potential future research has been highlighted. The findings of the current study provide information to police officers, military personnel and their corresponding organisations as to what self-care strategies may be the most appropriate and effective for police officers and military personnel to implement both at work and at home to reduce the potentially negative psychological effects of exposure to terrorist documents.

It is hoped that this study may be a starting point for further research with this important and unique group of police officers and military personnel. In addition, it is hoped that these findings are useful for police officers and military personnel exposed to terrorist documents most often on overseas deployments and other police officers, military personnel, and first responder populations exposed to potentially traumatic incidents. This study provides an array of self-care mechanisms ranging from weekly self-care timeframes to how long overseas deployments should be. This research was conducted with the intention of providing the New Zealand Police and New Zealand Defence Force with information that they can then provide to their employees as a helpful aid against psychologically harmful exposures that are a regular part of police and military work.

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Appendices

Appendix A – Participant invitation

Participant Invitation

Kia ora, my name is Michaela Wooller, and I am doing a Master's degree in Psychology at Massey University. My project is being supervised by Dr. Ian de Terte, a senior lecturer in Clinical Psychology at Massey University.

We are seeking Psychologists (Clinical or General scope) who currently or have worked with (in the last three years) with clients who are Police or Military personnel or other first-responders populations. You are being invited to participate in a research project aiming to determine the most appropriate and effective self-care mechanisms for police and military personnel who have been exposed to terrorist documents.

Aim of the study:

This research project will focus on self-care mechanisms specifically for police officers and military personnel as these two occupational groups are deployed overseas to offer their assistance. It is during these deployments where exposure to terrorist documents occurs. In this study, 'terrorist documents' refer to videos, photographs, and written documents that depict terrorism. A prominent reason for undertaking this research is due to a significant gap in the literature on this specific topic. The majority of the literature has paid attention to direct victims of terrorism, and less is understood of the impacts on first responders. In addition, there is a multitude of literature explaining the significant adverse psychological effects that exposure to traumatic events can have on police, military personnel, and other first responders. However, there is a lack of literature on how police and military personnel can care for themselves after exposure to terrorist documents.

What is involved:

This research project will use a bridged version of the Delphi Method to collect data. A bridged Delphi Method will involve your participation by responding to 13 questions using your professional knowledge and will involve two rounds of emails. Firstly, the questionnaire will be sent to you via email, where it will be responded to and returned to myself, the primary researcher. After this round, your answers will be summarised and returned once again to provide you the opportunity to make any additional comments or changes. The questionnaire will then be again returned once more to myself.

Your participation will take approximately 20-30 minutes for the first part and approximately 10 minutes the second time around.

Risk of harm:

Participating in this study is not anticipated to cause any distress. However, there is a possibility of feeling discomfort due to the negative and traumatic nature of the topic. If this is the case, contacts will be provided for support.

If you are interested in participating in this study, please email Michaela Wooller (Primary researcher): michaelawooller@gmail.com to receive the information sheet and questionnaire.

Appendix B – Participant information sheet

Participant Information Sheet

Self-care Mechanisms for Police and Military Personnel Exposed to Terrorist Documents

Kia ora, my name is Michaela Wooller, and I am doing a Master's degree in Psychology at Massey University. My project is being supervised by Dr. Ian de Terte, a senior lecturer in Clinical Psychology at Massey University.

Invitation:

You are being invited to participate in a research project aiming to determine the most appropriate and effective self-care mechanisms for police and military personnel exposed to terrorist documents. You have been selected based on your qualifications.

Aim of study:

My research aims to determine what self-care mechanisms are most appropriate and effective for police officers and military personnel who have been exposed to terrorist documents. This research project will focus on self-care mechanisms specifically for police officers and military personnel as these two occupational groups are deployed overseas to offer their assistance. It is during these deployments where exposure to terrorist documents occurs. In this study, 'terrorist documents' refer to videos, photographs, and written documents that depict terrorism. A prominent reason for undertaking this research is due to a significant gap in the literature on this specific topic. The majority of the literature has paid attention to direct victims of terrorism, and less is understood of the impacts on first responders. In addition, there is a multitude of literature explaining the significant adverse psychological effects that exposure to traumatic events can have on police, military personnel, and other first responders. However, there is a lack of literature on how police and military personnel can care for themselves after exposure to terrorist documents.

What is involved:

This research project will use the Delphi Method. The Delphi Method is a qualitative research design, involving groups of experts without concern for geography. The information you will be providing will be collected confidentially through email.

Typically, the process involves participants replying to several "rounds" involving specific questions through email. After each round, participants receive feedback of the group response which typically takes the form of points of agreement listed in order of most to least often mentioned. The rounds process repeats itself with the goal of reducing the range of responses until "consensus" is achieved. With each repetition, specific responses would receive increasing or decreasing mention, eventually being pared down to an outcome acceptable to all. Delphi consensus typically ranges from 55 to 100% agreement with 70% considered standard.

This research project will use a bridged version of the Delphi Method to collect data. A bridged Delphi Method will involve your participation by responding to 13 questions using your professional knowledge and will involve two rounds of emails. Firstly, the questionnaire will be sent to you via email where it will be responded to and returned to myself, the primary researcher. After this round, your answers will be summarised and returned once again to you to provide the opportunity for any additional comments or changes. The questionnaire will then be again returned once more to myself.

Your participation will take approximately 20-30 minutes for the first part and approximately 10 minutes the second time around.

By taking part in this project, it is taken that we assume you have given consent to be involved.

Risk of Harm:

Participating in this study is not anticipated to cause any distress. However, there is a possibility of feeling discomfort due to the negative and traumatic nature of the topic. Should you experience any distress while completing this survey or any time after, it is important that you seek support. Below are free mental health services:

- Depression.org.nz – Free text number 4202
- Depression helpline – 0800 111 757
- Need to talk? Free call or text 1737 any time for support from a trained counsellor.
- Lifeline – 0800 543 354 (0800 LIFELINE) or free text 4357 (HELP).

Below are further services. Please note that there will be a cost for engaging in these services.

You can talk to your GP (**General Practitioner**) or if you would like some information on contacting a Psychologist, please refer to:

- **The New Zealand Psychological Society** http://www.psychology.org.nz
- **The New Zealand College of Clinical Psychologists** http://www.nzccp.co.nz

Confidentiality and use of data:

All data is kept confidential. The data collected will be used for my Master's thesis. This study may be published in an academic journal or other outlet. Data will be stored on my private computer under password protection until my thesis has been submitted and marked. After this, the data will be kept by my supervisor for five years then destroyed. The results from this study will be presented to both organisations to offer some insight on how to best support police and military personnel.

My supervisor and myself will be the only people who have access to the raw data. I myself will be the only one who will view your chosen email address. I am not involved in the police or any military organisation and there is no conflict of interest for myself as the primary researcher.

My supervisor Dr. Ian de Terte is a reservist with the military, an ex-police officer and a specialist clinical psychologist. To protect any conflict of interest due to my supervisor's identity, Dr. de Terte will only have access to your unidentifiable information as participants will be itemised.

The only exception to this confidentiality is if your safety, my safety or someone else's safety is at risk.

How to find the survey results:

This study will be completed by the end of February 2022. Please note that there will be no personally identifying information. If you would like a study summary, this can be emailed to you once the study is completed.

Your Rights:

You are under no obligation to accept this invitation.

You have the right to decline to answer any particular question.

You have the right to stop participating at any point without consequence, however once completed and submitted, you will not be able to retract your survey data as there is no way of tracing your data back to you.

Project Contacts

If you have any questions regarding this study please contact myself or my research supervisor.

Michaela Wooller (Primary researcher): michaelawooller@gmail.com, 0273239486

Dr. Ian de Terte (Massey University research supervisor) I.deTerte@massey.ac.nz

Committee approval statement:

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 21/45. If you have any concerns about the conduct of this research, please contact Dr Negar Partow, Chair, Massey University Human Ethics Committee: Southern A, telephone 04 801 5799 x 63363, email humanethicsoutha@massey.ac.nz.

Appendix C – Questionnaire

Please answer the questions below in your professional opinion based on your clinical knowledge and expertise.

Demographics

What groups do you predominantly work with clinically? For example, do you work with clients involved in the Military, Police or both?

How many years have you been practicing as a psychologist?

What is your understanding of the organisational culture of the police and military?

In the average week, how many hours do you work clinically with first responders or military personnel?

Do the first responders or military personnel you work with work overseas or in New Zealand/Aotearoa?

Questions

What is your understanding of what a terrorist document is?

How long should police officers or military personnel view terrorist documents each day and each week?

What length of time should police officers or military personnel spend on overseas deployments?

Would it be beneficial for police officers or military personnel to undertake their work (exposure to terrorist document) from New Zealand/Aotearoa or continue to work at an overseas deployment location?

Is there a significant difference between police officers or military personnel working from New Zealand/Aotearoa or overseas?

Would it be beneficial for police officers or military personnel to undertake a standdown period between overseas deployments?

If police officers or military do this type of work overseas (i.e., viewing terrorist documents), have you any advice on how they should integrate back into New Zealand/Aotearoa?

The various ways people experience terrorist documents may differ. Are there any particular sensory exposures to terrorist documents that are more psychologically detrimental for police officers or military personnel (for example, verbally, visually, auditory)?

Do organisational variables/culture lead to worse mental health outcomes than occupational variables?

Organisational variables/culture: *defined as patterns of thought and behaviour shared by members of the same organisation and reflected in their language, values, attitudes, beliefs, and customs, or shared perceptions of organisational work practices within organisational units.*

Occupational variables: *defined as something that is caused by or relates to doing a certain type of work or engagement in a particular occupation.*

Is it important for those police officers or military personnel who have traditions, practices, rituals, ceremonies, customs, routines, or anything similar to incorporate them when undertaking self-care?

How should police officers or military personnel who are exposed to terrorist documents practice self-care?

How much work/time should police officers and military personnel spend on self-care each day and each week?

What self-care strategies do you think would be helpful for police officers or military personnel who have been exposed to terrorist documents?

For example, but not limited to:

Self-distraction such as turning to work or other activities to take their mind off things and doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.

Active coping such as concentrating their efforts on doing something about the situation they are in and taking action to try to make the situation better.

Use of emotional support such as getting emotional support from others and getting comfort and understanding from someone.

Use of instrumental support such as getting help and advice from other people and trying to get advice or help from other people about what to do.

Positive reframing such as trying to see it in a different light, to make it seem more positive and looking for something good in what is happening.

Humour such as making jokes about the situation or making fun of the situation.

Acceptance such as accepting the reality of the fact that it has happened and learning to live with it.

Religion such as trying to find comfort in religion or spiritual beliefs and praying or meditating.

Planning such as trying to come up with a strategy about what to do and thinking hard about what steps to take.

Other:

Appendix D – Brief cope - Carver, (1997)

Carver, C. S. (1997). "You want to measure coping but your protocol's too long: Consider the Brief COPE." *International Journal of Behavioral Medicine*, 4, 92-100.

Brief COPE

The items below are an abbreviated version of the COPE Inventory. We have used it in research with breast cancer patients, with a community sample recovering from Hurricane Andrew, and with other samples as well. At present, none of that work has been published, except for an article reporting the development of the Brief COPE, which includes information about factor structure and internal reliability from the hurricane sample (citation below).

We created the shorter item set partly because earlier patient samples became impatient at responding to the full instrument (both because of the length and redundancy of the full instrument and because of the overall time burden of the assessment protocol). In choosing which items to retain for this version (which has only 2 items per scale), we were guided by strong loadings from previous factor analyses, and by item clarity and meaningfulness to the patients in a previous study. In creating the reduced item set, we also "tuned" some of the scales somewhat (largely because some of the original scales had dual focuses) and omitted scales that had not appeared to be important among breast cancer patients. In this way the positive reinterpretation and growth scale became positive reframing (no growth); focus on and venting of emotions became venting (focusing was too tied to the experiencing of the emotion, and we decided it was venting we were really interested in); mental disengagement became self-distraction (with a slight expansion of mentioned means of self-distraction). We also added one scale that was not part of the original inventory--a 2-item measure of self-blame--because this response has been important in some earlier work.

You are welcome to use all scales of the Brief COPE, or to choose selected scales for use. Feel free as well to adapt the language for whatever time scale you are interested in.

Following is the brief COPE as we are now administering it, with the instructional orientation for a presurgery interview (the first time the COPE is given in this particular study). Please feel free to adapt the instructions as needed for your application.

Scales are computed as follows (with no reversals of coding):

Self-distraction, items 1 and 19
Active coping, items 2 and 7
Denial, items 3 and 8
Substance use, items 4 and 11
Use of emotional support, items 5 and 15
Use of instrumental support, items 10 and 23
Behavioral disengagement, items 6 and 16
Venting, items 9 and 21
Positive reframing, items 12 and 17

Planning, items 14 and 25
Humor, items 18 and 28
Acceptance, items 20 and 24
Religion, items 22 and 27
Self-blame, items 13 and 26

I have had many questions about combining scales into "problem focused" and "emotion focused" aggregates, or into an "overall" coping index. I do not generally do that in my own use of the scales. There is no such thing as an overall score on this measure, and I recommend no particular way of generating a dominant coping style for a give person. I generally look at each scale separately to see what its relation is to other variables. An alternative is to create second-order factors from among the scales (see the 1989 article) and using the factors as predictors. If you decide to do that, I recommend that you use your own data to determine the composition of the higher-order factors. Different samples exhibit different patterns of relations.

Brief COPE

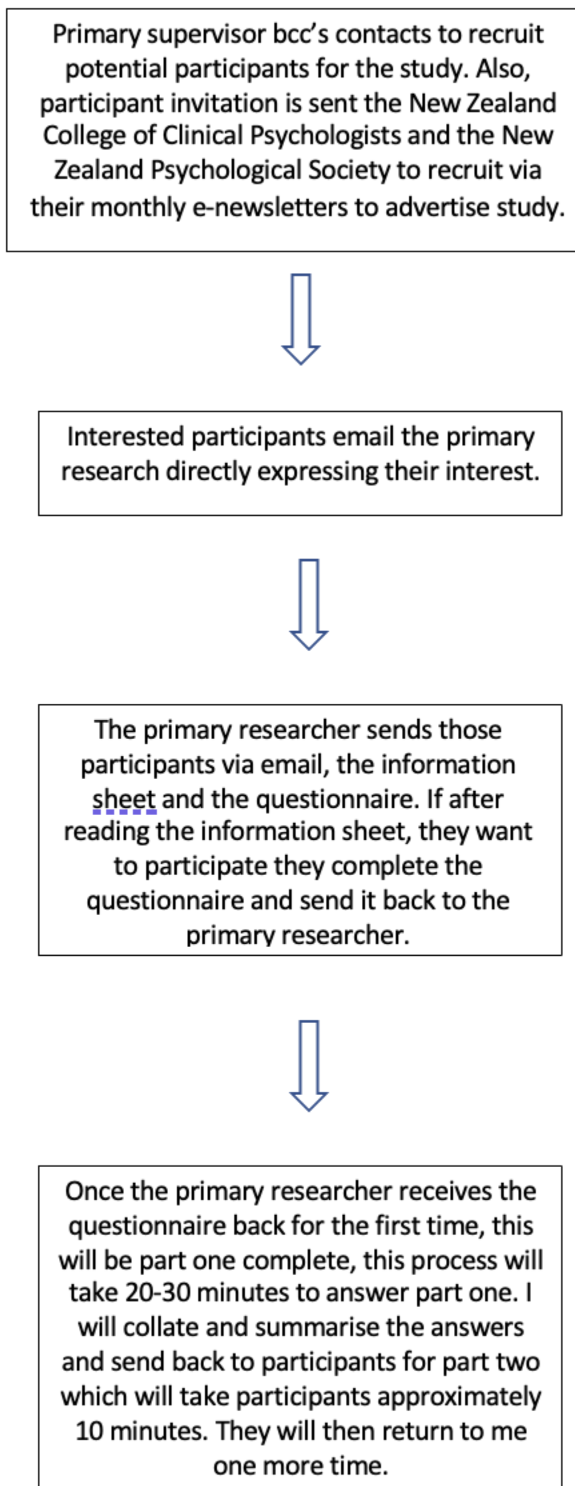
These items deal with ways you've been coping with the stress in your life since you found out you were going to have to have this operation. There are many ways to try to deal with problems. These items ask what you've been doing to cope with this one. Obviously, different people deal with things in different ways, but I'm interested in how you've tried to deal with it. Each item says something about a particular way of coping. I want to know to what extent you've been doing what the item says. How much or how frequently. Don't answer on the basis of whether it seems to be working or not-just whether or not you're doing it. Use these response choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can.

1 = I haven't been doing this at all
2 = I've been doing this a little bit
3 = I've been doing this a medium amount
4 = I've been doing this a lot

1. I've been turning to work or other activities to take my mind off things.
2. I've been concentrating my efforts on doing something about the situation I'm in.
3. I've been saying to myself "this isn't real.".
4. I've been using alcohol or other drugs to make myself feel better.
5. I've been getting emotional support from others.
6. I've been giving up trying to deal with it.
7. I've been taking action to try to make the situation better.
8. I've been refusing to believe that it has happened.
9. I've been saying things to let my unpleasant feelings escape.
10. I've been getting help and advice from other people.
11. I've been using alcohol or other drugs to help me get through it.
12. I've been trying to see it in a different light, to make it seem more positive.

13. I've been criticizing myself.
14. I've been trying to come up with a strategy about what to do.
15. I've been getting comfort and understanding from someone.
16. I've been giving up the attempt to cope.
17. I've been looking for something good in what is happening.
18. I've been making jokes about it.
19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.
20. I've been accepting the reality of the fact that it has happened.
21. I've been expressing my negative feelings.
22. I've been trying to find comfort in my religion or spiritual beliefs.
23. I've been trying to get advice or help from other people about what to do.
24. I've been learning to live with it.
25. I've been thinking hard about what steps to take.
26. I've been blaming myself for things that happened.
27. I've been praying or meditating.
28. I've been making fun of the situation.

Appendix E – Flow chart diagram of recruitment process



Appendix F – Part two summarised answers

Part Two

Below is a summary of all participants' anonymous answers from part one of the study. In your professional opinion, please make a final comment on whether you agree or disagree with the collective answers or add an additional comment should you want to express anything further.

What is your understanding of what a terrorist document is?

Any document developed to incite aggression, hatred, or fear. Alternatively, a terrorist document is any document outlining evidence related to a potential or actual attack of terrorism. Viewing a terrorist document in a work role can also be considered transferrable to that of viewing child pornography.

Agree/disagree:

Additional comment:

How long should police officers or military personnel view terrorist documents each day and each week?

It depends on what documents are being viewed and how they are viewed. It also depends on the individual police officer or military personnel and their personal background, including past trauma, current resilience and training in resilience, general coping methods, and mental health.
Viewing terrorist documents should be done in as little time as possible a day (perhaps 1 hour per day to 3 hours per week) and should include regular breaks and be done in the presence of another colleague to ensure the worker does not feel alone in this work.

Agree/disagree:

Additional comment:

What length of time should police officers or military personnel spend on overseas deployments?

No more than four weeks, and it will depend on their personalities, family situations and career needs.

Agree/disagree:

Additional comment:

Would it be beneficial for police officers or military personnel to undertake their work (exposure to terrorist document) from New Zealand/Aotearoa or continue to work at an overseas deployment location?

It depends on the individual officer and support around the officer. Some officers may have more support in NZ which may be helpful; however, it could be more traumatic viewing these documents surrounded by family. Preparation is key to managing distressing experiences, so lighter exposure in NZ prior to more exposure overseas may be helpful.

Agree/disagree:

Additional comment:

Is there a significant difference between police officers or military personnel working from New Zealand/Aotearoa or overseas?

It depends on whether it is police or military – for those in the military, they may have more formal and informal support within the organisation. In comparison, police may have more access to family and friends outside of work. Being home may provide more distractions and more ways to disconnect from work and be supported by family and friends outside of colleagues.

Agree/disagree:

Additional comment:

Would it be beneficial for police officers or military personnel to undertake a standdown period between overseas deployments?

Generally yes, however, it may not suit everyone. It depends on the training, professional supervision, and personal characteristics of the officer and what the individual has been exposed to. Blanket rules do not always work, and it depends on the needs of the individual officer.

Agree/disagree:

Additional comment:

If police officers or military do this type of work overseas (i.e., viewing terrorist documents), have you any advice on how they should integrate back into New Zealand/Aotearoa?

The organisation needs to make support available that is tailored to the individual. This may include professional supervision and professional psychological debriefing to avoid a build-up of stress and trauma. In addition, a standdown period where officers can be reminded of their role in NZ and be present to fully engage in the home role may be helpful.

Agree/disagree:

Additional comment:

The various ways people experience terrorist documents may differ. Are there any particular sensory exposures to terrorist documents that are more psychologically detrimental for police officers or military personnel (for example, verbally, visually, auditory)?

It depends on the individual, however videos or visual material will likely be more traumatic or psychologically detrimental than verbal or auditory materials. Smell is also often a big trigger for activating memories.

Agree/disagree:

Additional comment:

Do organisational variables/culture lead to worse mental health outcomes than occupational variables?

Organisational variables/culture: *defined as patterns of thought and behaviour shared by members of the same organisation and reflected in their language, values, attitudes, beliefs, and customs, or shared perceptions of organisational work practices within organisational units.*

Occupational variables: *defined as something that is caused by or relates to doing a certain type of work or engagement in a particular occupation.*

Yes, however, both can be equally problematic.
In terms of organisational culture, it is crucial to have an open environment where officers can discuss how they are feeling and where support can be provided. Organisational variables are often more obtuse and harder to quantify, identify and challenge. Supportive work cultures that allow for individual adjustment and a range of responses facilitate better health outcomes than an organisation that suggests a toughen-up mentality.

Agree/disagree:

Additional comment:

Is it important for those police officers or military personnel who have traditions, practices, rituals, ceremonies, customs, routines, or anything similar to incorporate them when undertaking self-care?

Yes, these can be incredibly important and helpful as they can help the person connect with their values and internal/external supports. However, it can also depend on the traditions and practices, as some can be worse for self-care, such as using coping methods that serve to push away appropriate coping.

Agree/disagree:

Additional comment:

How should police officers or military personnel who are exposed to terrorist documents practice self-care?

It depends on the individual and their level of resiliency and what helps them maintain home and work-life boundaries. In general, however, self-care should include regular opportunities to talk openly, honestly, and in a non-judgmental manner. In addition, self-care should include ways to compartmentalise work and personal life, such as limiting work-related tasks at home and creating specific boundaries. Practical ways include viewing as few terrorist documents as possible and, if viewing, listening on low volume with a small screen or double speed the video to reduce the amount of time exposed.

Agree/disagree:

Additional comment:

How much work/time should police officers and military personnel spend on self-care each day and each week?

It depends on the individual, 15 mins to an hour a day to 3 hours a week. However, regular self-care is more critical than specific timeframes and needs to be an essential part of each day by being incorporated into life routine and prioritised when working with challenging material. Self-care should also be enjoyable and not 'just part of the job.'

Agree/disagree:

Additional comment:

What self-care strategies do you think would be helpful for police officers or military personnel who have been exposed to terrorist documents?

All of the suggestions below may be beneficial. However, it will be different for each person. Each person should develop a 'toolkit' of different strategies that can be created by working through a list such as the list below.
In addition to the list below, developing emotional regulation skills, peer mentoring, group support, and exercise may be helpful. The use of exercise is important as it can provide social connections as a result of exercising with a friend. As well as exercise, perspective-taking on typical NZ culture can be helpful to aid re-acculturation.

Agree/disagree:

Additional comment:

For example, but not limited to:

Self-distraction such as turning to work or other activities to take their mind off things and doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.

Active coping such as concentrating their efforts on doing something about the situation they are in and taking action to try to make the situation better.

Use of emotional support such as getting emotional support from others and getting comfort and understanding from someone.

Use of instrumental support such as getting help and advice from other people and trying to get advice or help from other people about what to do.

Positive reframing such as trying to see it in a different light, to make it seem more positive and looking for something good in what is happening.

Humour such as making jokes about the situation or making fun of the situation.

Acceptance such as accepting the reality of the fact that it has happened and learning to live with it.

Religion such as trying to find comfort in religion or spiritual beliefs and praying or meditating.

Planning such as trying to come up with a strategy about what to do and thinking hard about what steps to take.

Other: