DISCERNING MORAL INJURY

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Abstract

Moral injury is a recently developed psychological construct used to explain trauma that cannot be adequately explained by post-traumatic stress disorder (PTSD). It arises from experiences in which sufferers feel that they have violated deeply held moral beliefs and has multiple negative long term health and professional consequences for individuals affected. In order to better understand moral injury, this study seeks to understand how it is identified in individuals by others and utilizes Christie's (2018) Ideal Victim Theory and Gray and Wegner's (2009) Moral Typecasting Theory as a theoretical framework. Participants for this study were 374 undergraduate students at the University of Nevada, Las Vegas. Participants were asked to complete an online questionnaire in order to gauge how they identified moral injury in various contexts and populations. Repeated measures and one-way ANOVAs and a confirmatory factor analysis were used to analyze the data for this sample. Data analysis found that participant identification of moral injury was related by the context, indicators, ACE scores, and the gender presented in the scenarios.

Keywords**:** moral injury, moral distress, trauma, post-traumatic stress disorder

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Chapter 1:

Introduction

Moral injury as a psychological phenomenon was introduced to explain the specific trauma military veterans suffered that could not be adequately encompassed by post-traumatic stress disorder (PTSD; Litz et al., 2009). Generally defined within the literature as "trauma caused by violations of deeply held values and beliefs" (Cahill et al., 2023, p. 225) by the self or others, moral injury primarily occurs after an individual commits or fails to prevent an action that is in direct opposition to their own sense of what is right or wrong (Litz et al., 2009; Papazoglou & Chopko, 2017). Moral injury often manifests as intense "social, psychological, and spiritual suffering" (Carleton & Snodgrass, 2022, p. 54) as exemplified by the feelings of shame, guilt, and self-imposed social isolation often reported by sufferers (Cahill et al., 2023). Furthermore, since its initial introduction in the 1990s, it has expanded its application to other fields such as healthcare, education, policing and abortion research to provide a more encompassing understanding of trauma and its impact (Cahill et al., 2023; Carleton & Snodgrass, 2022; Fleming, 2022; Friedman, 2000; Schaible & Gecas, 2010).

This study examined participants' ability to recognize and identify moral injury in different scenarios and populations in order to fill a gap in the current research. The ability for individuals to recognize morally injurious events is critical as it has multiple significant implications for the criminal justice system moving forwards. Research has demonstrated that moral injury significantly impairs the ability of police officers to do their jobs as it leads to burnout that impacts productivity, increases compassion fatigue, and is associated with mental health problems such as substance abuse and increased suicidal ideation (Battles et al., 2018;

Bryan et al., 2014; Dale et al., 2021; Papazoglou & Chopko, 2017). In other words, individuals are harmed both psychologically and professionally from the development of moral injury. The ability to recognize morally injurious events is therefore important as it allows individuals to detect potential moral injury in both themselves and those around them. By recognizing moral injury, those afflicted by it may then be guided to the necessary resources to treat moral injury and potentially reduce its detrimental effects, as outlined above.

This thesis provides an overview of the current research on moral injury in diverse populations (e.g., criminal justice professionals, victims of crime, healthcare and education professionals, etc.). Moral injury in this project was analyzed within the criminal justice context through both Christie's (2018) "ideal victim" theory and Gray and Wegner's (2009) Moral Typecasting Theory.

Chapter 2:

Review of Related Literature

There is a growing awareness of the negative impact of trauma on people's lives. This project is focused on a specific type of trauma: moral injury. This chapter will define moral injury, look at its sequelae and consider the research that has developed around specific professions. Personal characteristics and their relationship to moral injury will also be considered.

Moral Injury

The term *moral injury* is used broadly within the literature, having expanded well beyond its original realm of military veteran research (Cahill et al., 2023; Litz et al., 2009). It is distinct from – though often intertwined with – post-traumatic stress disorder (PTSD) as PTSD often fails to wholly encapsulate the unique phenomenon of moral distress caused by moral injury (Litz et al., 2009; Murray & Ehlers, 2021). As Fleming (2022) explains, because moral injury "is the result of acts of transgression and/or betrayal . . . some form of culpable perpetrative action must occur for [it] to develop" whereas PTSD does not necessitate this "culpable perpetrative action" (p. 1027). In other words, for moral injury to develop, individuals who experience a violation of their morals must feel some level of culpability – whether perceived or actual – for said violation (Cahill et al., 2023; Fleming, 2022; Yager & Kay, 2020). For example, a victim of genocidal rape may develop moral injury after the assault due to internalized cultural beliefs that it is a woman's moral duty to die rather than to be raped (Miller, 2009). That is to say, even if in reality those who experience morally injurious events are not to blame for their traumatic experience, if sufferers *believe* that they are to blame, they are at a higher risk of developing moral injury (Cahill et al., 2023; Fleming, 2022; Yager & Kay, 2020).

Additionally, this internalized self-blame narrative manifests itself in the form of various symptoms – such as intense shame, guilt, social withdrawal, rumination, dissociation, and substance abuse, to name a few – that persist long after the initial morally injurious event has taken place (Fleming, 2022; Miller, 2009; Murray & Ehlers, 2021). For instance, Murray and Ehlers (2021) found that patients within a clinical setting often believed that they were unworthy of love or forgiveness for their actions – e.g., "I have lost my soul and no-one will ever forgive or love me" (p. 4) – and commonly withdrew from others. Moral injury also impacts individuals' professional life. As it is associated with other psychological factors such as burnout, individuals with moral injury are at an elevated risk of underperforming at their job or leaving it entirely (Dale et al., 2021; Dean et al., 2019; Dewa et al., 2014; Dsouza, 2019; Han et al., 2019).

Consequently, moral injury is a complex psychological phenomenon wherein sufferers feel they have deeply violated their own moral code. It causes negative affect (e.g., shame, guilt, anger) and impairment in day-to-day functioning (e.g., social withdrawal, rumination) in sufferers who believe themselves to be culpable for their own trauma experiences (Cahill et al., 2023; Fleming, 2022; Yager & Kay, 2020).

The Cost of Moral Injury

The cost of moral injury is made evident through its symptomatology as it manifests itself via various psychological, physical, social, and spiritual symptoms (Carleton & Snodgrass, 2022; Litz et al., 2023). As discussed by Litz et al. (2023), moral injury casts a wide net in its expression as it ultimately "undermine[s] foundational beliefs" (p. 2) that the individual holds about the world at large. This can result in significant problems for the sufferer as their understanding of the world as fair (i.e., the "just-world" belief) is irrevocably shaken, causing disillusionment and acrimony towards the self and others (Litz et al., 2023). As a consequence,

moral injury often comes with many of the following symptoms: self-blame; guilt; rumination; re-experiencing of the event (which can exacerbate negative affect); feeling unworthy of love and forgiveness; self-loathing; and self-sabotaging behaviours (Cahill et al., 2023; Jinkerson, 2016; Litz et al., 2009). Individuals often withdraw socially as they fear others will not understand their experiences and, in some cases, engage in self-injurious behaviours such as parasuicidality and recklessness (Cahill et al., 2023; Litz et al., 2009). In addition to the aforementioned symptoms, individuals with moral injury report worse symptoms of PTSD; higher lifetime rates of suicidal ideation and suicide attempts; and higher rates of anxiety, depression, and alcohol abuse (Battles, 2018; Bryan et al., 2014; Toyoda et al., 2023). Individuals with moral injury may develop a loss of trust in authorities as well as a loss of religion (Carleton & Snodgrass, 2022; Phelps et al., 2021). For example, Carleton and Snodgrass (2022) found that, for Catholic participants who had received an abortion, the participants often underwent a period of estrangement from their religion as they felt they had effectively excommunicated themselves through their actions. In other words, moral injury causes numerous mental and physical health concerns in sufferers, significantly diminishing their quality-of-life (Carleton & Snodgrass, 2022; Litz et al., 2009).

Additionally, research has demonstrated that moral injury negatively impacts productivity in the workplace (Dale et al., 2021; Dean et al., 2019; Dsouza, 2019). As discussed by Phelps et al. (2021), individuals who develop moral injury as a result of their occupation often feel anger towards their co-workers and authority figures. This anger often manifests itself in the form of aggression, disengagement, and ostracization and threatens the harmony in a workplace. Moral injury uniquely impacts high-risk professions (e.g., military) because "strong and cohesive teams and high morale" (p. 99) are paramount to ensuring the success and safety of those involved

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(Phelps et al., 2021). So, moral injury poses a threat to productivity as it impacts the integrity and effectiveness of a workplace by disrupting professional relationships.

Moral injury is also associated with the development of burnout in professionals (Dale et al., 2021; Dean et al., 2019; Dsouza, 2019). Best defined as a variety of symptoms, burnout arises when an individual is pushed past their professional and personal limits and results in exhaustion, frustration, cynicism, professional attrition, and decreased productivity in the sufferer (Dean et al., 2019, p. 400; Dsouza, 2019). Burnout is well documented in numerous professions – such as healthcare, policing, education, and military personnel – and has a clear cost for many industries (Čartolovni et al., 2021; Chambel & Oliveira-Cruz, 2010; Friedman, 2000; Schaible & Gecas, 2010). For instance, within the healthcare system alone, burnout accounts for an estimated annual loss of 4.6 billion dollars for the United States and 213.1 million dollars in Canada (Dewa et al., 2014; Han et al., 2019). Thus, moral injury and the consequences that arise from it (e.g., burnout) are costly not only to the individuals suffering from it, but to the productivity and revenue of many industries as well.

Moral Injury as an Occupational Hazard

Research has demonstrated that moral injury may be related to one's job as certain occupations provide unique stressors as well as exposure to potentially morally injurious experiences (PMIEs) that other occupations do not (Glazer, 2022; Litz et al., 2009; Murray & Ehlers, 2021). This section therefore discusses moral injury as an occupational hazard within the education, criminal justice, and military field. It also provides an overview of the research regarding moral injury and stigmatize jobs such as sex work. Specific symptomology related to moral injury as an occupational hazard are discussed, as well.

Education

Professionals within the education field are at an elevated risk of developing moral injury as, due to the nature of their jobs, they are asked to make ethical decisions that can impact the future of their students (Glazer, 2022; Hanna et al., 2022; Keefe-Perry, 2018; Sugrue, 2020). Glazer (2022), for example, discussed how teachers experienced administrative mismanagement (e.g., overcrowding classrooms) as morally injurious as it diminished the quality of education for students and overly burdened teachers, leading to burnout. Notably, prior research has highlighted how detrimental burnout is in teachers as burnt-out teachers reported feelings of dissociation; deindividualization of students; dissatisfaction; frustration; and negative self-image (Friedman, 2000). Some teachers with burnout even described feeling fundamentally altered post-burnout; that they are "not the same person" (p. 596) anymore (Friedman, 2000). In addition to burnout, poor management can culminate in teachers making the decision to transfer schools. As Glazer (2022) found, transferring schools can be a morally injurious event as transferring teachers "felt like [they] deserted" (p. 124) vulnerable students at disadvantaged schools in favor of students at advantaged ones, worsening the education equality gap.

Additionally, teachers experience unique risks for moral injury as illustrated by the COVID-19 pandemic (Hanna et al., 2022). In Hanna et al.'s (2022) study, the researchers found that higher education professionals felt unfairly pressured to sacrifice their own health and well-being by senior management, leading to feelings of betrayal and undermining existing beliefs (e.g., "just world" belief mentioned earlier). Higher education professionals were additionally asked to behave in ways that violated their own moral codes, such as supporting on-campus events despite feeling that it jeopardized the health and safety of students. Consequently, moral injury has become an occupational hazard of the education field.

Criminal Justice Professionals

Policing research indicates that officers are vulnerable to developing moral injury while on the job (Murray & Ehlers, 2021; Stancel et al., 2019; Papazoglou & Chopko, 2017). As discussed by Stancel et al. (2019) as well as Murray and Ehlers (2021), police officers frequently experience traumatic events that may threaten their moral code. For instance, police officers may be expected to use physical force while on the job and risk causing bodily harm or death to others; or, they may fail to prevent such events from occurring to a civilian, violating their policing ethics (Stancel et al., 2019). Alternatively, behaving in a way that is perceived as incongruent with policing standards may also contribute to the development of moral injury in officers. An example of this comes from Murray and Ehlers, who discuss how a police officer who vomited at the scene of a suicide later developed moral injury as a result. Put another way, moral injury development in police officers may differ from other populations, as police officers not only contend with violating their own personal moral code but their professional moral code (e.g., vomiting while on the job), as well (Murray & Ehlers, 2021).

Furthermore, moral injury in police officers impacts their ability to perform their jobs as officers with moral injuries report higher rates of compassion fatigue, burnout, and job resignation (Papazoglou & Chopko, 2017; Papazoglou et al., 2018; Stancel et al., 2019). As previously stated, moral injury also is associated with exacerbated PTSD, anxiety, and depression symptoms as well as higher substance abuse rates (Battles, 2018; Bryan et al., 2014; Toyoda et al., 2023). This association is especially relevant for police officers as they are already at heightened risk for substance abuse problems and PTSD as an occupational hazard (Ballenger et al., 2011; Miller & Galvin, 2016). Thus, moral injury should be taken into account when analyzing mental health issues faced by police officers.

Military Personnel

As moral injury originated within military veteran research, it is unsurprising then that military personnel such as soldiers are at high risk for developing moral injury (Bryan et al., 2014; Litz et al., 2009; Litz et al., 2022; Okulate et al., 2021; Richardson et al., 2020). Due to the very nature of their profession, soldiers often experience morally injurious events such as engaging in armed conflicts against enemy combatants, resulting in fatally shooting them; seeing and handling human remains; and, in some extreme cases, committing wartime atrocities (Litz et al., 2022). For example, Okulate et al. (2021) found that Nigerian soldiers – particularly those who engaged in or failed to prevent killing non-combatants – struggled immensely with their (in)actions and developed severe moral injury as a consequence. The most common symptoms found by the researchers included feelings of guilt, regret, shame, and suicidal ideation. Soldiers with moral injury were also found to struggle with substance abuse (Okulate et al., 2021). Research by Bryan et al. (2014) has found that military personnel with moral injuries reported higher levels of suicidal ideation. Thus, due to the nature of their profession, military personnel are at risk for moral injury.

Stigmatized Jobs

While sex work is only legal in limited instances in Nevada, it is a highly stigmatized job often intertwined with high rates of victimization (Farley et al., 2004). It is also an area that carries historical moral implications. There has been no research to date looking at moral injury related to sex work, prostitution, or human trafficking. Research on other types of sexual victimization has found that those experiences often manifest as moral injury (Miller, 2009; Temoney, 2021). As previously discussed, Miller (2009) found that cultural norms regarding sexual violence led to victims of genocidal rape reporting symptoms indicative of moral injury.

For the Masalit and Zaghawa people, "death is preferable to suffering the diminishment of rape" (p. 511) and, as a consequence of this cultural norm, Masalit and Zaghawa victims of genocidal rape reported feeling guilt and responsibility for not fighting back as it was "[b]etter to have died and preserved one's dignity" (p. 511) than to be victimized and survive (Miller, 2009). In other words, genocidal rape was a morally injurious event for victims as they felt they betrayed "deeply held values and beliefs" by surviving sexual violence (Cahill et al., 2023, p. 225). Similarly, Temoney (2021) argued that genocidal rape victimization can result in moral injury if victims are religious, as religions may moralize sexual purity. In other words, victims who have internalized religious morals of sexual purity may feel sexual violence victimization to be a violation of said religious morals, leading to moral injury (Temoney, 2021). Thus, genocidal rape is one such example of a victimization experience which fuels the development of moral injury in its victims (Miller, 2009; Temoney, 2021).

Personal Characteristics and Moral Injury Development/Risk

Within the literature, the personal characteristics of an individual have been found to be related to one's moral injury risk as well as one's moral injury prognosis (e.g., Hamrick et al., 2022; Richard et al., 2023). So, this section will provide an overview of the research analyzing the relationship of an individual's personal characteristics, such as gender and prior victimization experiences, with their potential risk of moral injury alongside their potential moral injury development path. Additionally, research concerning the relationship between personal characteristics and traumatization will be considered.

Gender

Research examining the relationship between gender and moral injury is still in its

infancy. However, preliminary research has found several indicators that gender may be related to the development and prognosis of moral injury in men and women, respectively (Borges et al., 2022; Hamrick et al., 2022; Weiss et al., 2023). Namely, there appears to be a gender difference in exposure to potentially morally injurious experiences (PMIEs), with women experiencing more varied and gender specific PMIE scenarios than men (Hamrick et al., 2022; Maguen et al., 2020). For instance, in one sample of American military personnel, female participants reported higher rates of witnessing others commit PMIEs as well as experiencing within-ranks betrayal PMIEs (e.g., sexual harassment) when compared to male participants (Maguen et al., 2020).

Furthermore, female participants reported more adverse psychological symptoms following a PMIE where they felt they had been betrayed by other military personnels. Male participants for the study did not report more adverse psychological symptoms based on PMIE type; rather, they indicated that all three forms of PMIEs caused psychological distress (Maguen et al., 2020). This indicates that not only may there be gender differences in how military personnel are psychologically impacted by exposure to various forms of PMIEs but, additionally, that one's gender may be related to exposure to certain PMIEs in the first place.

Notably, research on sexual violence and harassment has also found that victimization may contribute to the development of moral injury (Frankfurt et al., 2018; Hamrick et al., 2021; Weiss et al., 2023). This correlation is particularly salient amongst military personnel who have experienced military sexual trauma (MST), which is defined within the literature as "a form of within-ranks violence and leadership failure" (p. 10010) wherein the victim(s) are exposed to unwanted and threatening sexual remarks and/or actions, often from fellow military personnel and leaders (Hamrick et al., 2021). MST victimization has been associated

with multiple detrimental psychological symptoms that closely mirror those of moral injury, such as the internalization of negative self-schemas. The overlap in symptoms of MST with moral symptoms may imply an overlap in the psychological processes behind these two phenomena (Hamrick et al., 2021; Weiss et al., 2023). Furthermore, foundational moral injury researchers such as Litz et al. (2009) have argued that MST should be considered a PMIE as the victim often feels a sense of deep betrayal.

The few studies that have explored the relationship between MST and moral injury have found that there is a positive correlation between the two (Hamrick et al., 2021). Specifically, military personnel who report MST are more likely to also report higher rates of both other-directed and betrayal-based moral injury (Harmick et al., 2021; Maguen et al., 2020). As female military personnel report higher rates of MST than male personnel do – with a recent Department of Defense (2021) report finding that 8.4% of female personnel report some form of MST in their career compared to 1.5% of male personnel –there are gender differences in exposure to PMIEs.

Finally, preliminary research on chronic pain and moral injury in military veterans have found that female participants who reported betrayal-based PMIEs were both more likely to report chronic joint pain compared to female participants who did not, as well as reported higher pain severity (Ranney et al., 2022). This finding was not replicated in male participants as exposure to betrayal-based PMIEs did not influence chronic pain outcomes, suggesting that men and women may experience different outcomes for both mental and physical health, post-moral injury development (Ranney et al., 2022). Thus, women and men have different levels of exposure to certain types of PMIEs such as MST, giving credence to the idea that gender is a potential factor in moral injury development and prognosis (Hamrick et al., 2023;

Maguen et al., 2020; Weiss et al., 2023).

Adverse Childhood Experiences (ACE) Score

Adverse childhood experiences (ACE) are defined within the literature as "abuse and household dysfunction during childhood" (p. 246; e.g., physical, emotional, or sexual abuse; exposure to criminal behaviour and substance abuse), that often have long-reaching consequences well into adulthood (Felitti et al., 1998). These consequences have been observed to manifest both physically – such as in the form of heart disease, cancer, and liver disease – as well as psychologically – as seen in the higher rates of depression and suicide attempts – as individuals with a higher occurrence of ACEs are more likely to report health issues than those with a lower occurrence (Felitti et al., 1998). That is to say, individuals with exposure to one or more ACEs continue to have their health negatively impacted well into adulthood (Felitti et al., 1998).

ACE Scores and Post-Traumatic Stress Disorder. Research has demonstrated a relationship between exposure to ACEs and later diagnoses of PTSD in individuals. Specifically, individuals who report one or more ACEs are more likely to be diagnosed with PTSD and experience more severe symptomology post-traumatization experience in adolescence and adulthood when compared with those who do not report any ACEs (Brockie et al., 2015; Crede et al., 2023; Karatzias et al., 2020; Schalinski et al., 2016). For example, research by Schalinski et al. (2016) found that participants who reported ACEs – particularly those that occurred around 3-5 years of age – were more likely to report PTSD and dissociation symptoms than those who did not. This may be because early exposure to ACEs disrupts normal hippocampus development, creating an increased vulnerability to later victimization experiences (Schalinski et al., 2016).

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Higher incidences of ACEs have also been found to worsen prognosis (Brockie et al., 2015; Tabb et al., 2022). Specifically, research by Brockie et al. (2015) found that those with higher ACE scores were three times more likely to display PTSD symptoms than those with lower ACE scores. This finding is further corroborated by other research studies. For instance, research on victims of urban violence has found that victims' PTSD symptoms had a positive relationship with ACE scores (Tabb et al., 2022). In other words, as an individual's ACE score increases, so does their PTSD symptoms, suggesting that repeated instances of childhood trauma may further increase an individual's vulnerability to later victimization experiences (Brockie et al., 2015; Tabb et al., 2022). So, exposure to ACEs may have a relationship with diminished mental health outcomes for adults as it may make them more vulnerable to trauma and its negative effects on the human psyche.

These findings on ACEs and PTSD are of specific relevance for this study as, while moral injury and PTSD are distinctive phenomena, they are still related as both moral injury and PTSD are rooted in trauma (Litz et al., 2009). Consequently, moral injury and PTSD have been found within the research to have some overlap with one another (Koenig et al., 2020). Thus, when discussing moral injury – particularly because much of the research on the topic is still in its infancy – it is beneficial to examine existing trauma research, such as the relationship between ACE scores and exacerbated trauma symptoms.

ACE Scores and Moral Injury. As ACEs are particularly associated with negative mental health outcomes for individuals, this is of particular concern for moral injury research (Felitti et al., 1998; Richard et al., 2023). Currently, there exists a dearth of literature examining the relationship between ACE scores and moral injury risk and development. Some notable preliminary studies have emerged recently, however, and therefore have started

to provide a foundational understanding of the issue. For instance, research examining ACEs and moral injury within a sample of public safety personnel found that exposure to one or more ACEs was associated with an increased risk of developing moral injury post-PMIE (Roth et al., 2021). In other words, the researchers found that prior ACE exposure may be related to more moral injury symptoms in individuals with moral injury as well as poorer emotional regulation (Roth et al., 2021). Thus, ACE scores were concluded to have a mediating effect on moral injury amongst this population (Roth et al., 2021).

This finding is consistent with other studies examining ACEs and moral injury in military personnel cross-culturally (Battaglia et al., 2019; Zerach & Levi-Belz, 2022). Namely, preliminary research examining both Canadian and Israeli military personnel have found that, amongst these populations, prior exposure to ACE(s) were positively associated with moral injury severity and worsened prognosis for combat exposed soldiers (Battaglia et al., 2019; Zerach & Levi-Belz, 2022). Furthermore, Battaglia et al. (2019) found that, of the various ACEs, emotional abuse was the most significantly associated with moral injury development. The researchers additionally found that participants who reported emotional abuse were more likely to report moral injury related to perceived betrayal-based forms of PMIEs. That is to say, exposure to childhood emotional abuse may contribute to negative self-schemas in adulthood and, as a consequence, leave individuals more vulnerable to moral injury development (Battaglia et al., 2019).

This is not an unreasonable conclusion to draw as prior research on childhood emotional abuse and negative self-schemas has found that adults with such a history are more likely to endorse schemas centering defectiveness, shame, and vulnerability to harm (Wright et al., 2009). In other words, childhood emotional abuse may be related to the development of

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unhealthy cognitive frameworks (i.e., schemas) in individuals which, in turn, influence how people who have experienced childhood emotional abuse interpret and perceive emotionally challenging events such as PMIEs (Battaglia et al., 2019; Wright et al., 2009). So, people with prior histories of ACEs – particularly emotional abuse – may be more at risk of moral injury as they already have the groundwork laid, so to speak, in the form of negative self-schemas consistent with those already associated with moral injury diagnoses (Battaglia et al., 2019). Through exposure to PMIEs, individuals might then have these pre-laid schemas "reactivated" (Roth et al., 2022, p. 8). Or, put more clearly, prior ACE exposure may make an individual more emotionally vulnerable and less resilient overall to moral injury and its reactivation potentials (Battaglia et al., 2019; Felitti et al., 1998; Roth et al., 2022; Wright et al., 2009).

While less explicitly on moral injury, there has also been research examining the impact of childhood trauma on moral-decision making as well as moral development in adults. Specifically, childhood trauma has been found to be potentially related to the development of one's moral sensitivity and, therefore, moral-decision making skills (Nazarov et al., 2016; Xiang et al., 2020). For example, in a study examining the moral decision-making process of female participants with histories of childhood abuse, the researchers found that the participants with PTSD diagnoses reported lower utilitarian and altruistic moral reasoning than those without (Nazarov et al., 2016). In other words, female participants with PTSD reported being more motivated by feelings of guilt and shame rather than by any perceived "benefit to the greater good" (Nazarov et al., 2016, p. 7).

Nazarov et al. (2016) theorized that this difference in moral reasoning and decision making was due to prior experiences with guilt and shame stemming from past victimization,

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giving them greater insight into potential intrapersonal consequences of moral decision making. Due to having experienced shame and guilt because of their victimization, they were more motivated to avoid future moral distress and, therefore, less likely to prioritize utilitarian moral reasoning (Nazarov et al., 2016).

Individuals with childhood trauma – such as in the form of one or more ACEs – may be more at risk of moral injury because such trauma might negatively impact an individual's moral-decision making skills (Nazarov et al., 2016; Xiang et al., 2020). However, the relations of childhood trauma, moral-decision making, and moral development to the risk of moral injury is speculative. More research examining these phenomena is needed before any further relationships can be established.

In summary, moral injury research has expanded beyond its original scope of military veteran research in recent years (Cahill et al., 2023; Litz et al., 2009). While it may be comorbid with PTSD, the literature has demonstrated that moral injury should be considered distinctive as moral injury requires a perceived level of culpability for one's own traumatization experience, unlike PTSD (Fleming 2022; Litz et al., 2009; Murry & Ehlers, 2021). As discussed in this section, moral injury symptomology is characterized by persistent negative emotions (e.g., shame, guilt, and dissociation), self-blame narratives, and negatively impacts job performance (Dale et al., 2021; Fleming, 2022; Miller, 2009; Murray & Ehlers, 2021). Moral injury may even be related to one's occupation as the research has found that certain jobs – such as those within the education, criminal justice, and military fields – provide unique PMIE exposure (Glazer, 2022; Litz et al., 2009; Murray & Ehlers, 2021). Furthermore, one's personal characteristics such as gender and prior victimization experiences have been found within the literature to increase one's risk for moral injury

(Hamrick et al., 2022; Richard et al., 2023).

So, existing research has demonstrated that moral injury is a multifaceted issue. It does not simply occur in a vacuum but, rather, is related to multiple factors such as the context regarding the initial PMIE exposure, job occupation, and personal characteristics (Hamrick et al., 2022; Richard et al., 2023; Litz et al., 2009). Because moral injury is a complex phenomenon, applying a theoretical framework to help further ground it is necessary. Therefore, the next section will discuss Christie's (2018) ideal victim theory as well as Gray and Wegner's (2009) Moral Typecasting Theory and its relevance to moral injury.

Chapter 3:

Theoretical Framework

As exemplified by the literature review, moral injury research – particularly as it relates to the criminal justice system – is still in its infancy. However, moral injury and its link to criminal justice research may still be analyzed and bolstered through Christie's (2018) theoretical lens of the ideal victim. This theory posits that certain victims of crime are given more legitimacy and sympathy by society as a whole due to pre-existing personality or lifestyle traits. As Christie argues, victims who are believed to have more responsibility and control over their environments are more likely to be seen as more responsible and, therefore, less sympathetic than victims who are not. For example, a woman physically assaulted by a stranger is more of an "ideal victim" than a woman physically assaulted by her spouse because, in the spouse scenario, the woman is seen as more culpable in her victimization as she is perceived to have the freedom to leave whereas, in the stranger assault scenario, the woman's victimization is seen as out of her control (Christie, 2018). This belief of the ideal victim and diminished responsibility for their victimization can also be seen by findings regarding sentencing decision-making by Angelone et al. (2014) and Gilchrist and Blisset (2002). In other words, victimhood and its legitimacy is not inherently granted to victims of crime; rather, it is doled out dependent on "socially constructed, mobilized, and malleable" (p. 378) factors of the victim (Daly, 2014).

Additionally, as initially proposed by Bosma et al. (2018), the ideal victim theory can be further strengthened by the addition of Gray and Wegner's (2009) Moral Typecasting Theory (MTT). The MTT argues that assessing a situation in which a moral outcome occurs results in an individual being either a moral agent ("one who acts") or a moral patient ("one who is acted upon" Bosma et al., 2018, p. 30; Gray & Wegner, 2009). In other words, individuals assess a

situation as black or white: One is either the perpetrator or the victim as nuance is not permissible within this moral framework. Victims who are believed to behave poorly (e.g., fail to leave an abusive spouse) during their victimization experience are unable to be the ideal victim and, consequently, do not have their victimization legitimized through societal and institutional means (Bosma et al., 2018). So, as Bosma et al. argue, this theory aligns with "the notion that the ideal victim [is] someone who is essentially blameless" (p. 30-31).

The ideal victim theory can be applied to individuals with moral injury as the ideal victim theory and MTT both argue that victimhood (e.g., who deserves sympathy for their trauma) is moralized via socially constructed factors of the victim (Bosma et al., 2018; Christie, 2018; Daly, 2014; Gray & Wegner, 2009). Victims must act in a specific, idealized way in order to be seen as legitimate and deserving of sympathy and, by extension, justice (e.g., Angelone et al., 2014 and Gilchrist & Blisset, 2002; Bosma et al., 2018; Christie, 2018). However, victims with moral injury may be unable to achieve this coveted victim status as moral injury necessitates that victims have some level of culpability (whether perceived or actual) in their victimization event (Cahill et al., 2023; Fleming, 2022; Yager & Kay, 2020). For example, Miller (2009) discusses how cultural beliefs regarding genocidal rape contribute to the development of moral injury in victims as it is seen as more morally righteous for women to die rather than to experience the "soul death" of rape (p. 511). In other words, victims of moralized crimes – such as genocidal rape – cannot be seen as the "ideal victim" because, in accordance with the MTT, it is impossible for an individual to be both a moral agent (i.e., the one who commits a moralized action) and moral patient (i.e., the one who has a moralized action committed upon them; Bosma et al., 2018). Thus, moral injury further complicates the ideal victim narrative as it adds a secondary, nuanced layer to victimization experiences. That is, victims do not always act in a morally pure

way; rather, they may violate their own morals in the process of their victimization, complicating

their perceived victimhood status (Cahill et al., 2023; Miller, 2009).

Chapter 4:

Methodology

Purpose of the Study

As mentioned previously, this study sought to understand how morally distressing events were perceived and categorized by participants across the different scenarios and populations. As the existing literature on moral injury has numerous gaps – particularly with regards to victimization experiences and the criminal justice system – this study sought to help provide greater insight into how moral injury is understood and identified by individuals and to help explain the experiences of individuals dealing with trauma. Consequently, the research questions were as follows:

(1) Does the context of trauma experienced (e.g., military, policing, or victimization scenarios) change the estimation of potential moral injury ?

(2) Does the context of trauma experienced change the estimation of symptoms of moral injury (e.g., shame, worthiness, self-blame)?

(3) Do people with higher ACE scores and/or a personal history of sexual victimization give higher estimates of moral injury?

(4) Are there gender differences in perceptions of moral injury?

Participants

Participants for the study consisted of undergraduate students enrolled in Criminal Justice 104 for the Fall 2023 and Spring 2024 semesters at the University of Nevada, Las Vegas. The total sample size for this study was 374. Participants received a course credit if they chose this research option but they had the choice to do other activities for course credit. Participants could withdraw from participating in the research at any time if they found the questions

uncomfortable without losing participation credit. The survey was administered through the CRJ research portal SONA.

Demographic Characteristics

The majority of participants were female (61.2%), 35.9% were male, and 2.9% were transgender or non-binary. The age of participants varied from 18 to 70 years old. The mean age for this data set was 20.29 years old with a standard deviation of 5.38. Additionally, the racial and ethnicity identities of participants were as follows: Hispanic or Latino (39.3%); White or Caucasian (25.9%); Black or African American (12.9%); as Multi-Racial or Other (10.8%); Asian or Asian-American (9.5%); and Native Hawaiian or Other Pacific Islander (1.6%). Finally, participants were asked demographic questions regarding their expected and/or current university major. Participants primarily majored in Criminal Justice (51.7%); Other (e.g., Engineering; 28.8%); Psychology (11.1%); Hard Sciences (5.8%), Journalism (1.3%); Communications (0.8%); and Social Work (0.5%).

Measures

Participants completed an online 45-minute survey. Participants read multiple scenarios in the form of brief vignettes consisting of morally distressing and/or injurious events experienced by different populations. These scenarios were created for the purpose of this research project.

Six scenarios had been created to assess different potential types of moral injury. The first scenario was a 21-year-old woman who currently exchanges sex acts for money in order to afford food and rent, without the knowledge of her friends and family as sex work goes against their moral code. The second scenario involved a 39-year-old veteran who witnessed a team member fatally shoot a civilian in an argument. The third scenario was a 52-year-old primary

school teacher who is concerned one of her students is struggling with food insecurity but, due to inept school administration, she is unable to help her student. The fourth scenario was a 29-year-old police officer who fatally shot a woman in the midst of a psychotic episode. The fifth scenario was a 30-year-old veteran who recently started feeling guilt over killing enemy combatants while deployed. Finally, the sixth scenario was a 16-year-old runaway who is exchanging sex acts for money and has socially withdrawn as a result.

After reading each scenario, participants were asked to complete a 9-item version of Litz et al.'s (2021) Moral Injury Outcome Scale (MIOS). This Likert-type scale was modified so participants could evaluate hypothetical situations, specifically whether the characters in these scenarios might have the symptoms of moral injury. The scenarios and questions can be seen in Appendix A. The composite scores for the scenarios and the individual item reponses were used as the dependent variables.

The survey also included questions on childhood abuse and sexual victimization. These data were collected in order to study the impact of prior victimization on moral injury identification. Participants were asked to complete a 13-item Sexual Experiences Survey questionnaire (Koss & Oros, 1982) in order to assess if they had a prior history of sexual victimization. Additionally, participants completed Finkelhor et al.'s (2015) 10-item revised Adverse Childhood Experiences (ACE) scale. This revised ACE scale expands the scope of the original scale to include questions concerning socioeconomic status, peer victimization, peer social isolation, and exposure to community violence. Prior research has found this revised scale to be valid (Finkelhor et al., 2015). Both ACE scores and sexual assault histories were used as dependent variables.

Finally, demographic questions about the participants were collected to describe the sample characteristics as listed above. The self-reported gender identity was used as an independent variable for the final research question.

Chapter 5:

Findings

To explore perceptions of moral injury, participants were asked to rate symptoms common to moral injury across six different scenarios. Their responses, and the participants' histories of victimization were analyzed in this chapter.

Identification of Moral Injury

Participant (n = 374) scores for the 9-item moral injury questionnaire were combined and totaled across the six different moral injury scenarios in order to gauge participant identification of moral injury.

Figure 1

Means of Moral Injury Scale
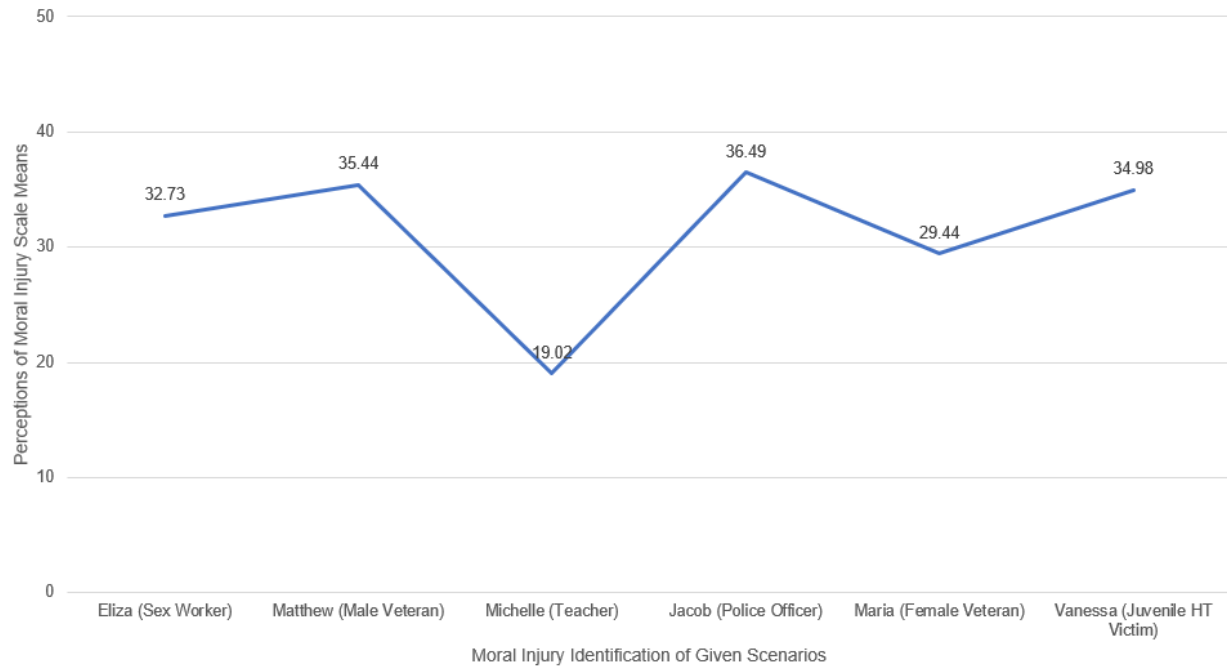
Note. Figure 1 displays the means for each moral injury scenario listed in the questionnaire participants completed.

The means for participants' assessment of moral injury risk ranged from 17.67 to 36.49 on a 9-item scale, depending on the scenario. Specifically, participants scored Jacob (the male police officer scenario) as ranking the highest in moral injury risk on a 9-item scale and Michelle (the female teacher scenario) as ranking the lowest in moral injury risk. See Table 1.

Moral Injury Context

To examine the first research question about whether moral injury is identifiable in different contexts (e.g., military, policing, or victimization scenarios), the responses assessing the

severity of moral injury symptoms were analyzed. Participants estimated symptoms for six

different scenarios.   In order to analyze the findings for this research question, a one-way

repeated measures ANOVA was employed to compare scores between the six different moral

injury scenarios. To begin with, the means and standard deviations are presented in Table 1. Post

hoc analyses from the ANOVA are indicated in Table 1, specifying which means differed

significantly from each other.

Table 1

Means and Standard Deviations of Perceived Moral Injury Across Scenarios

Scenario	N	Mean	Standard deviation
4. Jacob (Male Police Officer)[a]	337	36.66	5.18
2. Matthew (Male Veteran)[b]	337	35.61	5.00
1. Eliza (Female Sex Worker)[a]	337	32.70	4.87
6. Vanessa (Female Juvenile Human Trafficking Victim)[b]	337	34.87	5.92
5. Maria (Female Veteran)[a]	337	29.41	5.45
3. Michelle (Female Teacher)[a]	337	19.02	5.91

Note. A superscript note indicates which post-hoc comparisons were significant at the $p \leq .001$ level using a Bonferroni adjustment for multiple comparisons. *a* varies from all others, while *b* varies from all others other than the other *b* (i.e., Matthew does not vary significantly from Vanessa only).

For the ANOVA, data analysis found that sphericity had been violated as per Mauchly's test of sphericity, $\chi^2(14) = 244.86$, $p = .001$. Consequently, Huynh-Feldt's estimate of sphericity was applied to correct the degrees of freedom ($\varepsilon = .76$). Analysis thus found that there was a significant effect across the six scenarios, $F(3.85, 1294.61) = 810.38$, $p < .001$, (Wilks' Lambda

= .14, multivariate partial eta squared = .71). These results suggest that moral injury was more

identifiable in certain scenarios.

For post-hoc pairwise comparisons presented in Table 1, a Bonferroni adjustment was

applied. there was no significant difference (p = .260) between the identifiability of moral injury

for Scenario 2 (Matthew Male Veteran) and Scenario 6 (Vanessa Juvenile HT victim). Each of

these scenarios varied from each of the remaining scenarios (p < .001). All remaining

comparisons were statistically significant (p < .001).

Moral Injury Measures

Since research and the use of moral injury scales is relatively new, the second area of

interest looked at the individual items being used. To look at whether the context of the scenarios

relates to the individual items used to measure moral injury, repeated measures ANOVAs with

within-subjects factors were conducted in order to compare the 9 items from the modified

version of Litz et al. (2021)'s Moral Injury Outcome Scale (MIOS). Table 2 showcases the

means and standard deviations for the shame item. Post-hoc analyses are additionally shown in

Table 2, showcasing the significant differences between means for the item that measured shame

(i.e., … is ashamed of themself because of the things they have seen or done).

Table 2

Means and Standard Deviations Across Shame for Each Scenario

Scenario	N	Mean	Standard deviation
4. Jacob (Male Police Officer)[a]	370	4.64	0.61
2. Matthew (Male Veteran)[b]	370	4.51	0.67
6. Vanessa (Female Juvenile Human Trafficking Victim)[b]	370	4.41	0.83
1. Eliza (Female Sex Worker)[a]	370	4.11	0.95
5. Maria (Female Veteran)[a]	370	3.90	0.86
3. Michelle (Female Teacher)[a]	370	2.48	1.17

Note. A superscript note indicates which post-hoc comparisons were significant at the $p \leq .001$ level using a Bonferroni adjustment for multiple comparisons. Comparisons *a* varied from all other scenarios. Comparisons *b* varied from all others other than the other *b* (i.e., Matthew does not vary significantly from Vanessa only).

For the ANOVA, data analysis found that sphericity had been violated as per Mauchly's test of sphericity, $\chi^2(14) = 214.09$, $p = .001$. Consequently, Huynh-Feldt's estimates of sphericity were applied to correct the degrees of freedom ($\varepsilon = .86$). Analysis thus found that there

was a significant difference in responses across the six scenarios, $F (4.32, 1594.37) = 904.06$, $p <$ .001, (Wilks' Lambda = .25, multivariate partial eta squared = .75). These results suggest that shame was found to be more identifiable in certain contexts by participants as means were found to vary across scenarios. The findings from this study indicate that participants found Jacob, the police officer, and Matthew, the male veteran, to experience the highest rates of shame with regards to their scenario. This finding may imply that participants for this data set associated shame with a failure to uphold a higher moral standard associated with being a police officer or military veteran.

Table 3 presents the means and standard deviations for the item measuring expected self-doubt (i.e., ... is doubtful of their ability to make moral decisions). Post-hoc analyses are noted in Table 3 for means that differed significantly. Analysis thus found that there were significant differences in responses across the six scenarios, $F (4.75, 1774.933) = 134.93$, $p < .001$, (Wilks' Lambda = .41, multivariate partial eta squared = .59; Huynh-Feldt's correction ($\varepsilon = .27$) used for sphericity violation). As participants ranked Jacob and Matthew as being more associated with the doubtful item, these results suggest that the context of the scenarios led to different assessments of expected self-doubt. Again, this finding may imply that there is a higher moral standard associated with Jacob and Matthew's job occupation, leading to the characters feeling more doubtful of their moral decision making post-PMIE exposure.

Table 3

Means and Standard Deviations Across Doubtful for Each Scenario

Scenario	N	Mean	Standard deviation
4. Jacob (Male Police Officer)[a]	375	3.98	0.95
2. Matthew (Male Veteran)[c]	375	3.63	1.00
6. Vanessa (Female Juvenile Human Trafficking Victim)[c]	375	3.54	1.05
5. Maria (Female Veteran)[b]	375	3.29	0.97
3. Michelle (Female Teacher)[a]	375	2.39	1.12
1. Eliza (Female Sex Worker)[b]	375	3.26	0.98

Note. A superscript note indicates which post-hoc comparisons were significant at the $p \leq .001$ level using a Bonferroni adjustment for multiple comparisons. Comparisons *a* varied from all others scenarios. Comparisons *b* varied from all others other than the other *b* (i.e., Eliza does not vary significantly from Maria only). Comparison *c* varies from all others except the other *c* (i.e., Matthew does not vary significantly from Vanessa).

The means and standard deviations for the item measuring expected unworthiness (i.e., ... believes they are no longer worthy of being loved) are presented in Table 4. Post-hoc analyses

are noted in Table 4 for means that differed significantly. Analysis thus found that there were significant differences in responses across the six scenarios, $F (4.70, 1731.21) = 292.34$, $p <$ .001, (Wilks' Lambda = .22, multivariate partial eta squared = .79; Huynh-Feldt's correction ($\varepsilon =$ .44) used for sphericity violation). These results suggest that the context of the scenarios led to different assessments of expected unworthiness as Vanessa, the female juvenile human trafficking victim, and Jacob were ranked the highest in expected unworthiness. Vanessa being associated with expected unworthiness by participants may speak to an associated stigma with trading sex for money as well as with victimization experiences.

Table 4

Means and Standard Deviations Across Unworthiness for Each Scenario

Scenario	N	Mean	Standard deviation
6. Vanessa (Female Juvenile Human Trafficking Victim)[c]	370	3.64	1.07
4. Jacob (Male Police Officer)[c]	370	3.49	1.02
1. Eliza (Female Sex Worker)[b]	370	3.35	1.03
2. Matthew (Male Veteran)[b]	370	3.25	1.06
5. Maria (Female Veteran)[a]	370	2.38	0.93
3. Michelle (Female Teacher)[a]	370	1.64	0.74

Note. A superscript note indicates which post-hoc comparisons were significant at the $p \leq .001$ level using a Bonferroni adjustment for multiple comparisons. Comparisons *a* varied from all others scenarios. Subscript *b* indicates that scenario 1 did not vary significantly from 2 or 4. Comparison *c* indicates that scenario 4 did not vary from 6.

Table 5 presents the means and standard deviations for the item measuring expected unforgiveness (i.e., ... believes they are an unforgivable person because of things they have seen or done). Post-hoc analyses are noted in Table 5 for means that differed significantly. Analysis

thus found that there were significant differences in responses across the six scenarios, F (4.67, 1723.74) = 339.39, $p < .001$, (Wilks' Lambda = .22, multivariate partial eta squared = .78; Huynh-Feldt's correction ($\varepsilon = .48$) used for sphericity violation). These results suggest that the context of the scenarios led to different assessments of expected unforgiveness. Namely, Jacob and Matthew were associated with the unforgiveness item the most by participants. As with the previous items they were ranked highest in, this association may be due to not meeting the moral expectation of one's job, resulting in the death of someone else.

Table 5

Means and Standard Deviations Across Unforgiveness for Each Scenario

Scenario	N	Mean	Standard deviation
4. Jacob (Male Police Officer)[c]	370	4.24	0.86
2. Matthew (Male Veteran)[c]	370	4.12	0.86
6. Vanessa (Female Juvenile Human Trafficking Victim)[a]	370	3.72	1.06
5. Maria (Female Veteran)[b]	370	3.36	1.09
1. Eliza (Female Sex Worker)[b]	370	3.24	1.08
3. Michelle (Female Teacher)[a]	370	1.88	0.95

Note. A superscript note indicates which post-hoc comparisons were significant at the $p \leq .001$ level using a Bonferroni adjustment for multiple comparisons. Comparisons *a* varied from all others scenarios. Comparisons *b* varied from all others other than the other *b*. Comparison *c* varies from all others except the other *c*.

Table 6 presents the means and standard deviations for the item measuring expected self-blame (i.e., ... blames themselves). Post-hoc analyses are noted in Table 6 for means that differed significantly. Analysis thus found that there were significant differences in responses across the

six scenarios, $F_{(4.28, 1559.25)} = 158.68$, $p < .001$, (Wilks' Lambda = .32, multivariate partial eta squared = .68; Huynh-Feldt's correction ($\varepsilon = .30$) used for sphericity violation). These results suggest that the context of the scenarios led to different assessments of expected self-blame. Analysis revealed that Matthew and Jacob were rated the highest by participants in expected self-blame. This is interesting as Matthew, who did not directly cause the death of a civilian, is ranked as more likely to blame himself for the event than Jacob, who did directly cause the death of a civilian.

Table 6

Means and Standard Deviations Across Self-Blame for Each Scenario

Scenario	N	Mean	Standard deviation
2. Matthew (Male Veteran)[c]	365	4.60	0.65
4. Jacob (Male Police Officer)[c]	365	4.58	0.69
5. Maria (Female Veteran)[b]	365	3.78	0.91
6. Vanessa (Female Sex Worker)[b]	365	3.51	1.16
1. Eliza (Female Juvenile Human Trafficking Victim)[b]	365	3.56	1.00
3. Michelle (Female Teacher)[a]	365	3.29	1.16

Note. A superscript note indicates which post-hoc comparisons were significant at the $p \leq .001$ level using a Bonferroni adjustment for multiple comparisons. Comparisons *a* varied from all others scenarios. Subscript *b* indicates that scenario 6 did not vary significantly from 1 or 4. Comparison *c* indicates that scenario 2 did not vary from 4.

The means and standard deviations for the item measuring expected hated (i.e., ... feels that people would hate them if they really knew them) are presented in Table 7. Post-hoc analyses are noted in Table 7 for means that differed significantly. Analysis thus found that there

were significant differences in responses across the six scenarios, F (4.60, 1705.87) = 605.79, p < .001, (Wilks' Lambda = .13, multivariate partial eta squared = .87; Huynh-Feldt's correction (ε = .62) used for sphericity violation). These results suggest that the context of the scenarios led to different assessments of expected being hated as, specifically, participants ranked Vanessa, the female juvenile human trafficking victim, and Eliza, the female sex worker, as the highest in the expected to be hated item. This is of interest as the PMIEs for both scenarios are related to the sex trade industry, implying that participants may view said industry as stigmatizing, regardless of whether the scenario characters was an adult who could choose sex work or a juvenile who is considered to be a victim under federal anti-trafficking laws.

Table 7

Means and Standard Deviations Across Hated for Each Scenario

Scenario	N	Mean	Standard deviation
6. Vanessa (Female Juvenile Human Trafficking Victim)[a]	372	4.37	0.82
1. Eliza (Female Sex Worker)[b]	372	4.17	0.87
2. Matthew (Male Veteran)[b]	372	4.03	1.03
4. Jacob (Male Police Officer)[b]	372	3.99	0.97
5. Maria (Female Veteran)[a]	372	2.97	1.05
3 Michelle (Female Teacher)[a]	372	1.61	0.75

Note. A superscript note indicates which post-hoc comparisons were significant at the $p \leq .001$ level using a Bonferroni adjustment for multiple comparisons. Comparisons *a* varied from all others scenarios. Subscript *b* indicates that scenario 2 did not vary significantly from 1 or 4.

Table 8 presents the means and standard deviations for the item measuring expected undeservingness (i.e., ... feels like they don't deserve a good life). Post-hoc analyses are noted in Table 8 for means that differed significantly. Analysis thus found that there were significant differences in responses across the six scenarios, $F (4.84, 1790.87) = 221.67, p < .001$, (Wilks'

Lambda = .27, multivariate partial eta squared = .73; Huynh-Feldt's correction (ε = .38) used for sphericity violation). These results suggest that the context of the scenarios led to different assessments of expected undeservingness. Participants were found to have ranked Jacob, the male police officer, as the highest in expecting to be undeserving of a good life, followed by Vanessa, the female juvenile human trafficking victim. It is interesting to note that participants felt failing to intervene in a civilian death (as in Jacob's scenario) was likely to produce feelings of being undeserving of good things higher than being a victim of human trafficking (as in Vanessa's scenario).

Table 8

Means and Standard Deviations Across Undeservingness for Each Scenario

Scenario	N	Mean	Standard deviation
4. Jacob (Male Police Officer)[b]	371	3.34	0.99
6. Vanessa (Female Juvenile Human Trafficking Victim)[b]	371	3.26	1.11
2. Matthew (Male Veteran)[b]	371	3.17	1.09
1. Eliza (Female Sex Worker)[a]	371	2.83	0.98
5. Maria (Female Veteran)[a]	371	2.62	0.96
3. Michelle (Female Teacher)[a]	371	1.59	0.73

Note. A superscript note indicates which post-hoc comparisons were significant at the $p \leq .001$ level using a Bonferroni adjustment for multiple comparisons. Comparisons *a* varied from all others scenarios. Subscript *b* indicates that scenario 2 did not vary significantly from 4 or 6. Additionally, 4 did not vary from 6.

The means and standard deviations for the item measuring expected dishonesty (i.e., ... feels that she cannot be honest with other people) are presented in Table 9. Post-hoc analyses are noted in Table 9 for means that differed significantly. Analysis thus found that there were significant differences in responses across the six scenarios, $F (3.98, 1246.88) = 534.30, p <$

.001, (Wilks' Lambda = .18, multivariate partial eta squared = .82; Huynh-Feldt's correction (ε = .59) used for sphericity violation). These results suggest that the context of the scenarios led to different assessments of expected dishonesty. As with the expected hated item, participants were found to view Vanessa, the female juvenile human trafficking victim, and Eliza, the female sex worker, as ranking highest in expected dishonesty. This finding may indicate that there is an assumed level of dishonesty associated with the sex trade industry, regardless of whether those involved were an adult who could choose sex work or a juvenile who is considered to be a victim of exploitation.

Table 9

Means and Standard Deviations Across Dishonesty for Each Scenario

Scenario	N	Mean	Standard deviation
6. Vanessa (Female Juvenile Human Trafficking Victim)[c]	368	4.50	0.66
1. Eliza (Female Sex Worker)[c]	368	4.45	0.69
2. Matthew (Male Veteran)[b]	368	4.23	0.90
4. Jacob (Male Police Officer)[b]	368	4.21	0.94
5. Maria (Female Veteran)[a]	368	3.64	1.11
3. Michelle (Female Teacher)[a]	368	1.89	0.98

Note. A superscript note indicates which post-hoc comparisons were significant at the $p \leq .001$ level using a Bonferroni adjustment for multiple comparisons. Comparisons *a* varied from all others scenarios. Comparisons *b* varied from all others other than the other *b*. Comparison *c* varies from all others except the other *c*.

Table 10 presents the means and standard deviations for the item measuring expected not proud (i.e., ... has lost pride in themselves). Post-hoc analyses are noted in Table 10 for means that differed significantly. Analysis thus found that there were significant differences in

responses across the six scenarios, $F(4.08, 1494.44) = 237.837$, $p < .001$, (Wilks' Lambda = .33,

multivariate partial eta squared = .67; Huynh-Feldt's correction ($\varepsilon = .39$) used for sphericity

violation). These results suggest that the context of the scenarios led to different assessments of

expected not proud. Participants were found to rank Jacob, the male police officer, and Matthew,

the male veteran, as the highest in expected levels of the not proud item. This may imply that

participants view Jacob and Matthew as having failed to meet the expectations of their jobs,

leading to increased feelings of being not proud.

Table 10

Means and Standard Deviations Across Not Proud for Each Scenario

Scenario	N	Mean	Standard deviation
4. Jacob (Male Police Officer)[c]	367	4.20	0.84
2. Matthew (Male Veteran)[c]	367	4.09	0.87
6. Vanessa (Female Juvenile Human Trafficking Victim)[b]	367	3.98	0.93
1. Eliza (Female Sex Worker)[b]	367	3.70	0.98
5. Maria (Female Veteran)[a]	367	3.56	0.97
3. Michelle (Female Teacher)[a]	367	2.31	1.17

Note. A superscript note indicates which post-hoc comparisons were significant at the $p \leq .001$ level using a Bonferroni adjustment for multiple comparisons. Comparisons *a* varied from all others scenarios. Comparisons *b* varied from all others other than the other *b*. Comparison *c* varies from all others except the other *c*.

For research question 2, data analysis seemed to reveal a general pattern as Jacob and Matthew were ranked as being the most associated with certain moral injury measures such as the shame, doubtful, unforgiveness, self-blame, and not proud items. As Jacob and Matthew's

PMIE exposure occurred while on the job, it may imply that these items may be associated with a failure to uphold the moral standards of their jobs. A less prevalent pattern was also found for Vanessa and Eliza, as participants associated them with measures such as the unworthiness, hated, dishonesty items. This may indicate a level of stigma attached to both the sex trade industry as well as sexual victimization experiences not attached to other forms of PMIEs.

History of Sexual Victimization and Adverse Childhood Experiences

As an additional part of the survey, participants were asked to complete a 13-item Sexual Experiences questionnaire. From these responses, the four items that asked if participants had experienced sexual assault were re-coded into a new dichotomous variable. If participants reporting experiencing any of these behaviors, they were coded as having been a victim of sexual assault. Data analysis found that 15.3% of participants indicated experiencing sexual assault, whereas 84.7% of participants did not indicate any instances of sexual assault or victimization. Ethnicity was analyzed for a history of sexual victimization and was not found to have a significant relationship ($p > .05$).

Participant (n = 354) Adverse Childhood Experiences (ACE) scores on a 14-item questionnaire were totaled and analyzed, with higher scores indicating more adverse childhood experiences. For this data set, the mean score was 4.28 with a standard deviation of 3.37. Specifically, it was found that 86.2% (n = 305) of participants had a score of one or more ACEs and 37.7% (182) had a score of 4 or more. Further analysis revealed that there was a significant positive correlation between ACE scores and experiences of sexual assault in this data set ($r = .394$, $p < .01$). This finding suggests that individuals with higher ACE scores are more likely to report experiences of sexual assault.

Furthermore, data analysis found that there was a weak correlation between ACE scores and moral injury for Eliza (female sex worker; $r = -.048$), Matthew (the male veteran; $r = .121$, $p < .05$), and Michelle (the female teacher; $r = -.057$). However, none of these correlations are statistically significant at the $p < .05$ level. There is a significant positive correlation between ACE scores and moral injury for Jacob (the male police officer; $r = .135$, $p < .05$), Maria (the female veteran; $r = .049$), and Vanessa (female juvenile human trafficking victim; $r = .032$). This indicates that individuals with higher ACE scores were more likely to identify these three scenarios as being morally injurious.

Analysis additionally found that there was a significant correlation between gender and ACE score, $r(352) = .26$, $p = .001$, as female participants indicated higher ACE scores (M = 4.82, SD = 3.50) than male participants (M = 3.14, SD = 2.89). Furthermore, 89.9% (n = 195) of female participants indicated one or more ACEs and 48% (126) indicated four or more ACEs. Comparatively, 78.7% (n = 100) of male participants had a score of one or more ACEs and 14.9% (46) had a score of four or more ACE scores. Finally, ethnicity was analyzed and was not found to have a significant correlation with ACE scores for this data set ($p > .05$).

There were positive correlations between ACE scores and moral injury for Matthew ($r = .121$, $p < .05$), Jacob ($r = .135$, $p < .05$), Maria ($r = .049$), and Vanessa ($r = .032$), indicating that higher ACE scores are associated with a greater identification of moral injury. These scenarios are notable as they involve scenarios that describe instances of morally injurious actions from the behavior of others (i.e., Matthew and Vanessa) as well as from the scenario characters themselves (Jacob and Maria). This may imply that participants with ACE scores are more sensitive to moral injury as well as identify morally injurious actions related to the actions of both the self and others as leading to moral injury.

With these two measures of participants' history of trauma, the next step in analyses was to explore whether they might impact judgment of moral injury. The research question 3, "Do people with higher ACE scores and/or a personal history of sexual victimization give higher estimates of moral injury?" was first considered using a Pearson's correlation coefficient to assess the relationship between ACE scores and moral injury estimates for each of the six scenarios. The results are presented in Table 11. Analysis revealed a positive correlation between ACE scores and moral injury estimates for Matthew, the male veteran, $r(343) = .12$, $p = .024$ and Jacob, the police officer, $r(348) = .14$, $p = .011$. Notably, ACE scores were not significantly correlated to assessments of moral injury in the female scenarios, only the two male scenarios. This was unexpected as this study hypothesized that ACE scores would be significantly correlated to assessments of moral injury in the female scenarios. There were no significant correlates between sexual victimization and moral injury estimates for any of the scenarios presented in this study (all p's > .05).

Table 11

Pearson Correlations Among ACE, History of Sexual Victimization Scores and Identification of Moral Injury

	ACE	Assault	1 Eliza	2 Matthew	3 Michelle	4 Jacob	5 Maria	6 Vanessa
ACE Scores	-							
Sexual Assault	.39**	-						
1 Eliza (Female Sex Worker)	-.05	-.02	-					
2 Matthew (Male Veteran)	.12*	.05	.40**	-				
3 Michelle (Female Teacher)	-.06	.03	.06	-.07	-			
4 Jacob (Male Police Officer)	.14*	.03	.39**	.68**	-.044	-		
5 Maria (Female Veteran)	.05	.05	.22**	.27**	.29**	.36**	-	
6 Vanessa (Female Juvenile Human Trafficking Victim)	.03	.05	.51**	.47**	.06	.50**	.45**	-

Note. ACE in this table refers to Adverse Childhood Experiences. Assault refers to a History of Sexual Victimization.
**Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).

Moral Injury Differences for Gender

The gender of the participants did not have a significant relationship with the identification of moral injury as male participants were assigned similar injury estimates as the female participants. Consequently, research question 4, "Are there gender differences in perceptions of moral injury?" analyzed the gender differences for the scenarios rather than for the participants. Because there was a context similarity for the two veteran scenarios, a paired t-test was used to compare the means of the moral injury scale items between scenario 2 (Matthew Male Veteran) and scenario 5 (Maria Female Veteran).

There was a significant difference in the scores for Scenario 2 (Matthew Male Veteran) and Scenario 5 (Maria Female Veteran) for all 9 items of the modified MIOS scale, as shown in Table 12. Participants felt that Matthew was significantly more likely ($p < .01$) to experience shame, self-doubt, feeling unworthy, feeling unforgiveable, self-blame, feeling hated; undeserving; that he cannot be honest; and that he has lost pride. Thus, there may be a difference in how moral injury is identified for men and women. On the other hand, there were also important differences between the content of the scenarios. Matthew witnessed a team member shoot a civilian during an argument, while Maria saw active combat and was reflecting on the things she had to do in war, including the fact that she killed people. Thus, differences between the means in these two scenarios cannot simply be attributed to differences in the genders of the people in the scenarios.

Table 12

Paired Sample T-Test Between Scenario 2 and Scenario 5

Item	Matthew (Male Veteran)		Maria (Female Veteran)		*t*-test	*df*
	M	SD	M	SD		
1 Ashamed	4.51	0.67	3.40	0.86	12.47**	373
2 Self-doubt	3.63	1.00	3.28	0.98	5.30**	375
3 Unworthy	3.25	1.06	2.37	0.94	12.78**	375
4 Unforgiveable	4.11	0.87	3.36	1.09	11.50**	373
5 Self-blame	4.60	0.66	3.79	0.91	16.04**	372
6 Hated	4.04	1.02	2.98	1.06	14.74**	375
7 Undeserving	3.17	1.09	2.63	0.97	8.28**	374
8 Cannot be honest	4.24	0.90	3.64	1.11	9.00**	372
9 Lost pride	4.07	0.88	3.56	0.97	9.02**	374

Note. M = Mean. SD = Standard Deviation. *df* = Degrees of Freedom.

**Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).

In summary, data analysis revealed a variety of findings for this study. Specifically, it was found that participants indicated that moral injury was more likely to be identified in certain scenarios; the context of the scenarios related to moral injury estimates given by participants; participants with histories of sexual assault victimization could potentially be more sensitive to moral injury occurring from the actions of others; ACE scores were correlated to assessments of

moral injury in the male scenarios only; and, finally, that there may be potential differences in

how moral injury is identified in men and women.

Chapter 6:

Discussion

Existing literature has examined moral injury within a military context (e.g., Litz et al., 2009). However, there is little research examining how individuals recognize and identify moral injury across various populations and contexts. To rectify this gap, this study sought to examine the ability of individuals to recognize moral injury across various scenarios and populations. Four research questions were posed in order to seek better understanding of how moral injury is identified by individuals.

The first research question, "Does the context of trauma experienced (e.g., military, policing, or victimization scenarios) change the estimation of potential moral injury?" the second research question, "Does the context of trauma experienced change the estimation of symptoms of moral injury (e.g., shame, worthiness, self-blame)?" and the fourth research question, "Are there gender differences in perceptions of moral injury?" were both supported by this study's findings. The third research question, "Do people with higher ACE scores and/or a personal history of sexual victimization give higher estimates of moral injury?" was only partially supported by the findings of this study, however.

Contextual Identification of Moral Injury

The first thing that the project was interested in looking at was whether the context or roles of the people experiencing moral injury would affect the recognition of the trauma experienced. This study found that participants did assess the context as relevant to the moral injury score. Nearly all of the scenarios' composite scores varied from the other situations but for one pairing (i.e., the second and third highest scores).

The scenario that was the least identified as moral injury was the school teacher scenario. It was significantly lower than all others, possibly suggesting that it was an expected job stress rather than moral injury. This finding regarding the teacher was surprising as prior research has identified that professionals within the education field are at a higher risk of moral injury when compared to other populations (Glazer, 2022; Hanna et al., 2022; Keefe-Perry, 2018; Sugrue, 2020). In fact, prior research has assessed education professionals as having unique forms of exposure to morally injurious situations, such as transferring schools or exposure to betrayals by management, that other professionals either do not have or are less likely to be exposed to (Glazer, 2022; Hanna et al., 2022).

Consequently, this study's finding regarding the teacher scenario indicates that there may be a discrepancy between how researchers identify moral injury in education professionals and how the general population does so. This is a potential cause for concern as such a discrepancy may contribute to an inability to access proper mental healthcare for professionals within the education field. That is to say, if the general population is unable to recognize moral injury risk within an educational context, those within that field may be unable to recognize moral injury in themselves or in colleagues and fail to seek appropriate treatment; leading to burnout and employee attrition in the workplace (Glazer, 2022; Friedman, 2000). Because moral injury is a new area being measured, there is not yet a cut-off point that distinguishes between being injured or not.

The police officer-involved shooting was identified as having the highest expected potential for moral injury. This finding was not surprising as prior research has indicated that police officers have elevated risks of developing moral injury (Murray & Ehlers, 2021; Papazoglou & Chopko, 2017; Stancel et al., 2019). Furthermore, due to the nature of the scenario

presented, it is one of the more stereotypical examples of a potentially morally injurious experience (PMIE) as Jacob, the police officer, fatally shot a civilian experiencing a mental health crisis. This action is not only a potential violation of a personal moral code violation (e.g., that excessive force resulting in bodily harm is wrong), but also of a professional moral code violation (e.g., that, as a police officer, Jacob should protect and serve the public). The high moral injury score for this scenario is consistent with prior research by Murray and Ehlers (2021) which found police officers developed moral injury after violating their professional moral code. Additionally, over the last few years, there has been greater coverage of officer involved shootings (OIS) by both traditional and social media sources (Howard et al., 2023). This increased awareness of OIS amongst young adults may have contributed to the higher rates of identification of moral injury for Jacob in this study.

Components of Moral Injury

The second research question examined whether the context of moral injury changed the estimation of symptoms of moral injury (e.g., shame, worthiness, self-blame). It was hypothesized for this study that the context of moral injury would change participants' estimates of moral injury symptoms. This hypothesis was supported by data analysis as it was found that participants did estimate different moral injury symptoms for different contexts. Notably, participants were more likely to associate Vanessa, the female juvenile human trafficking victim, with items more closely related to moral injury symptoms such as feelings of unworthiness, being hated, undeservingness, and dishonesty. This finding is interesting as Vanessa is an underaged victim of human trafficking (and therefore displays less agency than the other

scenario characters), yet participants estimated high rates of moral injury symptoms with her scenario.

For example, participants indicated that Vanessa would be more likely to feel unworthy of being loved and more likely to fear being hated by others. This finding may be tied to stigma associated with both trading sex for money – regardless of one's ability to truly consent – and with being victimized sexually. Research by Fukushima et al. (2020) has found that, within the United States, human trafficking victimization is associated with high levels of societal and cultural stigma, such as being seen as a criminal rather than as a victim. Participants of this study may therefore have given higher estimates of certain moral injury symptoms due to this societally entrenched stigma, believing that trafficking victims may view themselves more negatively than those who played a more active role in their PMIE exposure. Furthermore, as Eliza, the female sex worker, was given the second highest estimate for the hated and dishonesty items, this may speak further to a perceived stigma regarding trading sex for money. Namely, that those who do so must lead inherently dishonest lives or risk exposure and, consequently, hatred for their actions. This finding may also indicate that PMIEs related to trading sex for money may be associated with different items than other PMIEs.

Matthew, the male veteran, was also found to have higher estimates of certain moral injury symptoms by participants. For example, participants ranked him as having the highest feeling of self-blame. He was also ranked as being the second highest for the shame, doubtful, unforgiveness, and not proud items. This is interesting and Matthew was not directly responsible for the death of the civilian in his scenario; rather, he failed to prevent another person from killing the civilian. However, participants still estimated that he would feel high levels of moral injury symptoms. This may imply that participants were estimating high levels of symptoms

because Matthew had failed to uphold the high moral standards associated with his job. Kleykamp et al. (2023), for instance, found that U.S. military veterans are strongly associated with positive stereotypes of being self-disciplined, responsible, and reliable. So, Matthew's actions may have contradicted these positive stereotypes, leading to participants judging him more harshly than they would someone who they did not expect to embody these positive stereotypes.

Finally, analysis revealed that Michelle, the female teacher, was estimated by participants to rank the lowest on every moral injury symptom. This finding may imply that, not only was Michelle not identified as suffering from moral injury, but that she was not expected to experience many of its symptoms.

Trauma and Identification

The third research question for this study examined whether participants with a personal history of trauma were more likely to give higher estimates of moral injury scores for the study scenarios. It was hypothesized that ACE scores and/or a history of sexual victimization would influence moral injury estimates. More specifically, it was expected for participants with ACE scores and a history of sexual victimization to estimate scenario 6 (Vanessa Juvenile HT Victim) as having higher rates of moral injury as juvenile human trafficking is a form of ACE and sexual victimization.

The study's findings partially supported this hypothesis. Specifically, data analysis revealed that ACE scores were related to the male scenarios but not to any of the female scenarios, including the scenario for Vanessa, the Juvenile HT Victim. A history of sexual victimization, on the other hand, was not found to be related to any of the scenarios.

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As with the previous research questions, this finding was surprising. For this study, it was hypothesized that a history of trauma may make participants more sensitive to trauma and its impacts as well as more aware of it. As discussed within the literature review, prior research has found that individuals with higher ACE scores are more vulnerable to moral injury development and also have worsened prognosis (Battaglia et al., 2019; Zerach & Levi-Belz, 2022). Consequently, it was hypothesized that this higher vulnerability may translate into a higher estimation of moral injury, particularly concerning a history of sexual victimization and Scenario 6. This study's finding that a history of sexual victimization did not influence participants' estimates of moral injury coupled with the finding that ACE scores were only related to male scenarios was unexpected.

Even more specifically, it was particularly unexpected that a prior history of victimization was not found to be related to Vanessa, the Female Juvenile Human Trafficking Victim, as human trafficking is a form of both sexual victimization as well as a form of ACE. This seems contradictory to prior research, such as by Battaglia et al. (2019) and Zerach and Levi-Belz (2022), which found that individuals with prior victimization had a heightened sensitivity to moral injury.

This study's findings may be due to the more subtle nature of the scenario vignette as, while Vanessa is stated to live with her pimp, it is not overtly explicit that she is being forced into sex trafficking. Prior research on pathological adaptations to violence has found that individuals who experience repeated instances of violence in their lifetime develop a desensitization towards it, internalizing and normalizing beliefs about violence as an adaptive mechanism in order to cope with exposure to violence (Ng-Mak et al., 2002). Consequently, participants with a history of victimization may not have displayed a heightened sensitivity to

Vanessa's scenario due to pathological adaptations. In other words, Vanessa's scenario may not have been seen as explicitly violent or even abnormal to participants with prior histories of victimization. However, future investigation on the underlying psychological mechanisms behind this finding are needed before any definitive conclusions may be drawn. Regardless, given this finding, as well as that of previous research questions, it appears that participants for this study were more likely to recognize moral injury as something that happens to men rather than to women.

Gender and Identification

This study's final research question examined whether gender differences exist in the identification of moral injury. First this study considered the gender of the participants assessing moral injury/distress. There has been no prior research that considered the gender of the people identifying moral injury. The second way that gender may impact assessment would be to vary the gender of the person in the scenario. Prior research suggested that women have been found to be more susceptible to moral injury (Borges et al., 2022; Hamrick et al., 2022; Weiss et al., 2023). Consequently, for the gender of the participant, it was hypothesized that female participants would have higher rates of identifying moral distress when compared to male participants. The findings for this study did not support this hypothesis and, instead, revealed that the gender of participants had no significant relationship with their rates of moral injury identification.

The gender of the individuals in the scenarios may have shown differences but the scenarios were not parallel in terms of what was experienced. The findings may imply that the gender of the character exposed to moral injury matters. The scenarios that contained male

characters tended to be identified as more likely to be morally injurious. This finding was surprising as prior research on gender differences and moral injury have found that there is a gender difference in exposure to PMIEs (Hamrick et al., 2022; Maguen et al., 2020). As previously discussed, researchers have found that women not only experience higher exposure and more diverse types of PMIEs but that they are also more likely to be exposed to gender-specific PMIEs than their male counterparts (e.g., sexual harassment; Maguen et al., 2020).

This gender difference in scenarios was considered by comparing the military veteran scenarios (Matthew & Maria). Participants were more likely to consider that Matthew would suffer from moral injury than Maria, so the opposite trend than seen in prior research. This result is also surprising when the context for the veterans was considered. Specifically, in Maria's scenario, it is directly stated she had killed multiple enemy combatants (the source of her potential moral injury) whereas, in Matthew's scenario he only observes another soldier killing a civilian and fails to intervene. In other words, despite Maria directly causing the potentially morally injurious event, participants were not as likely to identify potential moral injury in her. However, this may be due to the circumstances of the scenario (e.g., not intervening in a civilian's death vs. killing enemy combatants), rather than purely based on the gender of the individual in the scenario. So, this finding may be more tied into Christie's (2018) theory of the ideal victim as participants may be more likely to assign culpability to someone who is indirectly responsible for the death of a civilian than to assign it to someone who is directly responsible for the death of enemy combatants, as civilians are presumed to have some level of innocence whereas enemy combatants are not. Alternatively, the difference may be attributable to the fact that killing was within the role of Maria's job whereas the incident with the civilian was outside

of Matthew's normal military role. Thus, while the gender of the participant was not found to have any impact on moral injury identification, the gender of the scenario protagonist might.

Theory

As previously mentioned, it may be beneficial to view moral injury within the theoretical framework of Christie's (2018) ideal victim theory as well as Gray and Wegner's (2009) Moral Typecasting Theory (MTT). The findings from this study seem to support the relevance of these theories to moral injury research.

For example, the ideal victim theory and MTT may be applied to the veteran scenarios. While it was speculated earlier that the differences in moral injury estimates for Maria (the female veteran) and Matthew (the male veteran) may be due to gender differences in moral injury identification, there could be other factors at play. Maria was said to have killed enemy combatants whereas Matthew was said to have failed to prevent the death of a civilian yet participants gave higher moral injury estimates for Matthew. However, as the civilian in the scenario was presumed to be innocent, participants' judgment of Matthew's inactions may tie into the ideal victim theory and MTT. That is to say, the civilian might have better embodied Christie's coveted ideal victim status as participants might have interpreted the civilian as having less responsibility and control (two necessary factors to be an ideal victim) over their environment due to being accosted by strangers in the form of foreign military personnel (Christie, 2018).

Additionally, Matthew may have failed to achieve this ideal victim status as participants interpreted him as exerting more responsibility and control than the civilian. As previously discussed, military veterans are positively stereotyped by the American public as being self-

disciplined, responsible, and reliable (Kleykamp et al., 2023). So, in accordance with the ideal victim theory, Matthew may have been assumed by participants to have a certain elevated baseline of control and responsibility for his environment when compared to the civilian. Furthermore, as argued by MTT, participants may not have allowed for nuance within Matthew's scenario as one is either a perpetrator or a victim in situations with a moral outcome (Gray & Wegner, 2009). So, Matthew may have been judged more harshly than Maria – despite not directly killing anyone – due to the factors described by the ideal victim theory and MTT.

So, when attempting to understand the factors that feed into moral injury estimates and identifiability, it may be beneficial to view it through the theoretical lenses of both the ideal victim theory and Moral Typecasting Theory.

Limitations

A limitation of this research is that it cannot make any causal claims due to its exploratory and hypothetical nature. For example, this study cannot make a causal claim that experiencing childhood abuse leads to greater perceptions of moral injury, this study can only explore correlations or relationships. Another limitation is that this study did not randomize the presentation of the scenarios so there may have been a primacy effects.

Participant sampling is another limitation of this study. Specifically, because participants were convenience-sampled from students enrolled in an introductory Criminal Justice undergraduate course at the University of Nevada, Las Vegas, this may limit the generalizability of the study's findings to the general population as well as cross-cultural populations. As prior research by Henrich et al. (2010) has found, Western, Educated, Industrialized, Rich, and Democratic ("WEIRD") populations – such as those found in universities – are the exception to

human behavior rather than the norm. In other words, as summarized by these researchers, WEIRD participants, such as the ones in this study, "are among the least representative populations one could find for generalizing about humans" (p. 61). So, non-WEIRD populations may identify moral injury differently than WEIRD ones. Thus, future research should expand the participant pool beyond that of university undergraduate students.

Another possible data limitation is that two participants did not disclose their age and one participant was 70 years old. These participants were not excluded because this study did not analyze age as a potential confounding factor. Over 86% of the participants were 18 through 21 years old so the sample for the most part was in the same age group.

One of the limitations of any moral injury research is the paucity of prior investigations on this topic. The survey and scenarios that this study used were exploratory in nature as this is still an emerging field and topic of study. The adaptation of Litz et al.'s (2021) Moral Injury Outcome Scale (MIOS) in order to explore various factors associated with moral injury such as the contexts, indicators, personal histories of victimization, and gender differences was new and needs to be explored further for reliability and validity.

Chapter 7:

Conclusion and Future Implications

As highlighted throughout this study, moral injury is detrimental to the well-being of individuals affected. It is linked to a plethora of health problems such as negative affect (e.g., shame, guilt), substance abuse, decreased workplace productivity and suicidal ideation, to name a few (Fleming, 2022; Miller, 2009; Murray & Ehlers, 2021; Battles, 2018; Bryan et al., 2014; Toyoda et al., 2023). It may pose a unique challenge for mental health professionals and academics as it necessitates that sufferers feel some level of perceived culpability for their own victimization experiences, complicating potential treatment and understanding of the issue. Therefore, this study sought to examine participants' ability to recognize and identify moral injury in different scenarios and populations in order to paint a more comprehensive picture of moral injury and its development and risk factors. This study was exploratory in its methodology, as specific scenarios were created to vary the contexts of exposure to PMIEs and highlight any potential related moral injury. This was novel as there has been no research on how PMIE context leads to different estimates of moral injury by third party observers. Notably, participants did not indicate that Michelle's (the female teacher) scenario would lead to moral injury whereas they indicated that Jacob's (the male police officer) scenario would lead to the highest moral injury outcomes. This may imply that moral injury is more readily identifiable in certain contexts than in others.

Conclusion

As highlighted throughout this study, moral injury research is still in its infancy. However, the research that does currently exist has demonstrated the importance of investigating this phenomenon. While related to PTSD, moral injury is also distinct from it, given that moral

injury has its own symptomology and root causes separate from PTSD (Litz et al., 2009; Murray & Ehlers, 2021). Most notably, sufferers believe themselves to be uniquely culpable for their own trauma as moral injury arises from individuals violating their own deeply held moral beliefs (Cahill et al., 2023; Fleming, 2020; Yager & Kay, 2020). Consequently, moral injury poses unique challenges for academics and mental health practitioners alike, as it is both under researched (and, thus, poorly understood) as well as inherently difficult to effectively treat due to the complex nature of PMIEs.

This study is a necessary step to increase available literature on moral injury as well as to develop a more comprehensive understanding of moral injury, its symptoms, and its identification. The findings from this study suggest that the way individuals identify and understand moral injury is nuanced and complex. Namely, moral injury identification varies based on context, alongside estimates of moral injury symptoms; individuals with a personal history of childhood trauma may identify moral injury at higher rates than individuals without a personal history; and moral injury is potentially more readily identifiable in male sufferers than in female sufferers. Additionally, this study's findings indicate that Christie's (2018) ideal victim theory and Gray and Wegner's (2009) Moral Typecasting Theory may be useful theories to apply to moral injury and its identification. However, due to the exploratory nature of this study, further research is warranted before any definitive conclusions about moral injury can be drawn. Finally, future research can better understand the impact moral injury has on many professions, such as military and policing, and develop better treatment plans for them.

Implications

Moral injury is an important and oft-overlooked aspect of mental health, particularly for certain populations, such as military or policing personnel. However, despite the demonstrated

negative personal and professional outcomes associated with moral injury for impacted individuals, moral injury has not received much academic or cultural attention. In order to improve the outcomes for individuals with moral injury, this mental health phenomenon should be more vigorously addressed both within and outside of academia. Addressing this phenomenon will allow for both the underlying mechanisms and the identifiability of moral injury to be better understood. Increased understanding of moral injury may then be applied to developing treatment plans for moral injury as there are very few moral-injury-specific ones available at the time of writing.

Furthermore, building the literature around moral injury will allow for increased awareness and allow for greater recognition of potential moral injury development post-PMIE exposure. Potentially, building the literature may even lead to future screening measures for certain high-risk professions, such as military or policing. However, it is important to first try to understand the mechanisms behind moral injury and its identification, as this study has aimed to do.

Future Directions

Moral injury has only recently entered the lexicon and, as a result, there are multiple avenues for future researchers to explore with regards to it. Future research should examine moral injury, how it presents, how it is interpreted, and how it may be treated. More research on the intersection of moral injury and personal demographics is needed.

For example, this study found that there seems to be a difference in how moral injury is identified and interpreted in men compared to women as participants were more likely to associate moral injury with the male scenarios. Future research should be done on gender differences in the identification of moral injury in order to better understand how individuals

interpret and perceive symptoms in others. To avoid possible confounds, that research should use scenarios that are identical for the male and female protagonists.

Similarly, there is little to no research on moral injury and ethnicity. While this study did examine ethnicity / race, it was not found to have a significant relationship with participants' identification of moral injury. More research, however, is needed to corroborate these findings as there is currently a lack of research on ethnicity, race, and moral injury in general. Future directions could include scenarios where the ethnicity and/or race of scenario participants are made readily apparent to participants, for instance.

More ambitious research studies may wish to examine the prevalence of moral injury within certain populations, as well. While prior research has identified certain professions as being more at risk than others (i.e., military and policing), other professions have only been tentatively identified (i.e., education professionals) within the literature. Examining certain populations will allow for a more comprehensive view of the issue. Without better data, it is difficult to fully understand the scope of the issue and how many are affected by moral injury in their day-to-day lives.

Finally, future studies should study how and why certain scenarios are being viewed as more morally injurious than others. For example, as the results from this study showed, with regards to education professionals, at least one PMIE was not identified as highly morally injurious by participants. Consequently, future research may wish to examine this more in-depth in order to gain higher comprehension of the underlying mechanisms that are utilized when determining moral injury risk. This may bolster clinical practices and screening methods.

Appendix A:

Questionnaire

Eliza is a 21-year-old woman who currently exchanges sex acts for money in order to cover the costs of food and rent. She is not enrolled in school, nor does she have any plans to do so. Her friends and family are unaware that she engages in sex work, and she worries they will find out and that they will judge her, as sex work goes against their moral code. As a result, she has become more distant and secretive, hurting her relationships with friends and family.

1. With the above scenario in mind, do you think Eliza…

	Strongly disagree	Disagree	Neither Disagree nor agree	Agree	Strongly agree
…is ashamed of herself because of the things she has seen or done?	1	2	3	4	5
…doubtful of her ability to make moral decisions?	1	2	3	4	5

…believes she is no longer worthy of being loved?	1	2	3	4	5
…believes she is an unforgiveable person because of things she has seen or done?	1	2	3	4	5
…blames herself?	1	2	3	4	5

2.   With the above scenario in mind, do you think Eliza…

	Strongly disagree	Disagree	Neither Disagree nor agree	Agree	Strongly agree
…feels that people would hate her if they really knew her?	1	2	3	4	5

…feels like she doesn't deserve a good life?	1	2	3	4	5
…feels she cannot be honest with other people?	1	2	3	4	5
…has lost pride in herself?	1	2	3	4	5
…feels she cannot be honest with other people?	1	2	3	4	5

Matthew is a 39-year-old veteran. In 2004, when he was deployed overseas, a team member fatally shot a civilian during an argument with the civilian, leading to the civilian's death. Matthew and his team had their firearms out due to the tense nature of the interaction. The military ultimately decided not to take action against the soldiers, and no one was seriously reprimanded for the event. This event violated Matthew's moral code.

Since the event, Matthew continues to think about it and blame himself for not stopping the event from happening. He also can't shake the feeling that the firearms further escalated the situation. He moves between feeling angry no consequences occurred for the event and feeling relieved that he was not punished severely. He now feels isolated from others because he feels cannot tell his family, friends, or therapist the details about what happened. He is afraid that if he does, they will no longer want him in their lives or will think that he's a bad person.

3. With the above scenario in mind, do you think Matthew…

	Strongly disagree	Disagree	Neither Disagree nor agree	Agree	Strongly agree
…is ashamed of himself because of the things she has seen or done?	1	2	3	4	5
…doubtful of his ability to make moral decisions?	1	2	3	4	5
…believes he is no longer	1	2	3	4	5

worthy of being loved?					
…believes he is an unforgiveable person because of things he has seen or done?	1	2	3	4	5
…blames himself?	1	2	3	4	5

4. With the above scenario in mind, do you think Matthew…

	Strongly disagree	Disagree	Neither Disagree nor agree	Agree	Strongly agree
…feels that people would hate him if they really knew him?	1	2	3	4	5

…feels like he doesn't deserve a good life?	1	2	3	4	5
…feels he cannot be honest with other people?	1	2	3	4	5
…has lost pride in himself?	1	2	3	4	5
…feels he cannot be honest with other people?	1	2	3	4	5

Michelle is a 52 year old woman who teaches fourth grade. Recently, she has noticed that one of her students, Sam, is showing some concerning behaviors. Sam has struggled to concentrate in class, has lost weight, and has begun hoarding snacks and food. Michelle is worried that Sam is not getting enough to eat at home. She's brought it up to school administration, who has said that they will look into it, but so far nothing has come of it. Michelle has started bringing extra snacks

to give to Sam but feels guilty that she is not doing more to help her student and worries that she

is failing Sam.

5. With the above scenario in mind, do you think Michelle…

	Strongly disagree	Disagree	Neither Disagree nor agree	Agree	Strongly agree
…is ashamed of herself because of the things she has seen or done?	1	2	3	4	5
…doubtful of her ability to make moral decisions?	1	2	3	4	5
…believes she is no longer worthy of being loved?	1	2	3	4	5

…believes she is an unforgiveable person because of things she has seen or done?	1	2	3	4	5
…blames herself?	1	2	3	4	5

6. With the above scenario in mind, do you think Michelle…

	Strongly disagree	Disagree	Neither Disagree nor agree	Agree	Strongly agree
…feels that people would hate her if they really knew her?	1	2	3	4	5
…feels like she doesn't	1	2	3	4	5

deserve a good life?					
…feels she cannot be honest with other people?	1	2	3	4	5
…has lost pride in herself?	1	2	3	4	5
…feels she cannot be honest with other people?	1	2	3	4	5

Jacob is a 29-year-old man currently employed as a police officer in a city with a high crime rate. In 2019, he and multiple other officers responded to a mental health call in a city's suburban area. A woman had experienced a psychotic episode and threatened her husband with a knife. The husband was able to flee their house and get help from their neighbors, where he then called emergency services for help for his wife. When police arrived on the scene, they were unable to de-escalate the situation, and after the woman attempted to injure one of the responding officers with the knife, Jacob fatally shot the woman in accordance with his police training.

Since the event, Jacob has been feeling extremely guilty and ashamed of himself. He keeps replaying the event in his mind and thinking about what he could have done to avoid fatally shooting the woman. Additionally, he feels that he cannot talk to his friends or family about what happened, as when he tried in the past, he felt judged and blamed further for the event. He is also too embarrassed to attend religious meetings anymore, as his religion emphasizes non-violence, and he feels he has deeply violated this belief.

7. With the above scenario in mind, do you think Jacob…

	Strongly disagree	Disagree	Neither Disagree nor agree	Agree	Strongly agree
…is ashamed of himself because of the things she has seen or done?	1	2	3	4	5
…doubtful of his ability to make moral decisions?	1	2	3	4	5
…believes he is no longer	1	2	3	4	5

worthy of being loved?					
…believes he is an unforgiveable person because of things he has seen or done?	1	2	3	4	5
…blames himself?	1	2	3	4	5

8. With the above scenario in mind, do you think Jacob…

	Strongly disagree	Disagree	Neither Disagree nor agree	Agree	Strongly agree
…feels that people would hate him if they really knew him?	1	2	3	4	5

	1	2	3	4	5
…feels like he doesn't deserve a good life?	1	2	3	4	5
…feels he cannot be honest with other people?	1	2	3	4	5
…has lost pride in himself?	1	2	3	4	5
…feels he cannot be honest with other people?	1	2	3	4	5

Maria is a 30-year-old military veteran who saw active combat. Until recently, she felt proud of her time in the military and knew she was a good soldier who did everything correctly. She was disciplined, listened to and obeyed orders, and displayed great teamwork skills.

While she never forgot her time in active combat, she made sure not to dwell on it and to distract herself with work or hobbies. After being forced to take time off work due to a minor injury, Maria has been thinking about her time in the military more and more without work to distract her. Specifically, she keeps thinking about the enemy combatants she killed during active duty. She talked to her friend, who was in the military at the same time as her, and he told her to stop thinking about it because she did what was required of her as a soldier. Despite this, she can't stop going over the events in her head, wondering if she could've done something different. She is also reluctant to seek help because she's worried she will be told to just forget about it again.

9. With the above scenario in mind, do you think Maria…

	Strongly disagree	Disagree	Neither Disagree nor agree	Agree	Strongly agree
…is ashamed of herself because of the things she has seen or done?	1	2	3	4	5
…doubtful of her ability to make moral decisions?	1	2	3	4	5

	1	2	3	4	5
…believes she is no longer worthy of being loved?	1	2	3	4	5
…believes she is an unforgiveable person because of things she has seen or done?	1	2	3	4	5
…blames herself?	1	2	3	4	5

10. With the above scenario in mind, do you think Maria…

	Strongly disagree	Disagree	Neither Disagree nor agree	Agree	Strongly agree
…feels that people would hate her if	1	2	3	4	5

they really knew her?					
…feels like she doesn't deserve a good life?	1	2	3	4	5
…feels she cannot be honest with other people?	1	2	3	4	5
…has lost pride in herself?	1	2	3	4	5
…feels she cannot be honest with other people?	1	2	3	4	5

Vanessa is a 16-year-old girl who ran away from an unstable foster care home placement two years ago. Since running away, she began to exchange sex acts for money to cover food and rent costs. She lives with two 19-year-olds working in prostitution and their pimp. Vanessa does not

currently attend school, nor does she plan to. She worries that, if she did, her classmates and teachers would find out that she engages in prostitution and judge her for it. In general, she spends a lot of her day worrying that people will find out and, as a result, has become more and more isolated.

11. With the above scenario in mind, do you think Vanessa…

	Strongly disagree	Disagree	Neither Disagree nor agree	Agree	Strongly agree
…is ashamed of herself because of the things she has seen or done?	1	2	3	4	5
…doubtful of her ability to make moral decisions?	1	2	3	4	5
…believes she is no longer worthy of being loved?	1	2	3	4	5

	1	2	3	4	5
…believes she is an unforgiveable person because of things she has seen or done?	1	2	3	4	5
…blames herself?	1	2	3	4	5

12. With the above scenario in mind, do you think Vanessa…

	Strongly disagree	Disagree	Neither Disagree nor agree	Agree	Strongly agree
…feels that people would hate her if they really knew her?	1	2	3	4	5
…feels like she doesn't	1	2	3	4	5

deserve a good life?					
…feels she cannot be honest with other people?	1	2	3	4	5
…has lost pride in herself?	1	2	3	4	5
…feels she cannot be honest with other people?	1	2	3	4	5

References

Angelone, D. J., Mitchell, D., & Grossi, L. (2015). Men's perceptions of an acquaintance rape: The role of relationship length, victim resistance, and gender role attitudes. *Journal of Interpersonal Violence, 30*(13), 2278–2303. https://doi.org/10.1177/0886260514552448

Ballenger, J. F., Best, S. R., Metzler, T. J., Wasserman, D. A., Mohr, D. C., Liberman, A., Delucchi, K., Weiss, D. S., Fagan, J. A., Waldrop, A. E., & Marmar, C. R. (2011). Patterns and predictors of alcohol use in male and female urban police officers. *The American Journal on Addictions, 20*(1), 21–29. https://doi.org/10.1111/j.1521-0391.2010.00092.x

Battles, A. R., Bravo, A. J., Kelley, M. L., White, T. D., Braitman, A. L., & Hamrick, H. C. (2018). Moral injury and PTSD as mediators of the associations between morally injurious experiences and mental health and substance use. *Traumatology (Tallahassee, Fla.), 24*(4), 246–254. https://doi.org/10.1037/trm0000153

Battaglia, A. M., Protopopescu, A., Boyd, J. E., Lloyd, C., Jetly, R., O'Connor, C., Hood, H. K., Nazarov, A., Rhind, S. G., Lanius, R. A., & McKinnon, M. C. (2019). The relation between adverse childhood experiences and moral injury in the Canadian Armed Forces. *European Journal of Psychotraumatology*, *10*(1), 1546084–1546084. https://doi.org/10.1080/20008198.2018.1546084

Brockie, T. N., Dana-Sacco, G., Wallen, G. R., Wilcox, H. C., & Campbell, J. C. (2015). The relationship of adverse childhood experiences to PTSD, depression, poly-drug use and suicide attempt in reservation-based Native American adolescents and young adults. *American Journal of Community Psychology, 55*(3-4), 411–421. https://doi.org/10.1007/s10464-015-9721-3

Bryan, A. O., Bryan, C. J., Morrow, C. E., Etienne, N., & Ray-Sannerud, B. (2014). Moral
injury, suicidal ideation, and suicide attempts in a military sample. *Traumatology*, *20*(3),
154. http://dx.doi.org/10.1037/h0099852

Bosma, A., Mulder, E., & Pemberton, A. (2018). The ideal victim through other(s') eyes. In M.
Duggan (Ed.), *Revisiting the 'Ideal Victim': Developments in Critical Victimology* (pp.
27-42). Bristol University Press. https://doi.org/10.2307/j.ctv301ds5

Borges, L. M., Desai, A., Barnes, S. M., & Johnson, J. P. S. (2022). The role of social
determinants of health in moral injury: Implications and future directions. *Current
Treatment Options in Psychiatry*, *9*(3), 202–214. https://doi.org/10.1007/s40501-022-
00272-4

Cahill, J. M., Moyse, A. J., & Dugdale, L. S. (2023). Ruptured selves: moral injury and wounded
identity. *Medicine, Health Care, and Philosophy, 26*(2), 225–231.
https://doi.org/10.1007/s11019-023-10138-y

Carleton, T. C., & Snodgrass, J. L. (2022). *Moral injury after abortion: Exploring the
psychospiritual impact on Catholic women*. Taylor & Francis Group.

Čartolovni, A., Stolt, M., Scott, P. A., & Suhonen, R. (2021). Moral injury in healthcare
professionals: A scoping review and discussion. *Nursing Ethics, 28*(5), 590–602.
https://doi.org/10.1177/0969733020966776

Chambel, M. J., & Oliveira-Cruz, F. (2010). Breach of psychological contract and the
development of burnout and engagement: A longitudinal study among soldiers on a
peacekeeping mission. *Military Psychology, 22*(2), 110–127.
https://doi.org/10.1080/08995601003638934

Christie, N. (2018) The ideal victim. In M. Duggan (Ed.), *Revisiting the 'Ideal Victim':*

    Developments in critical victimology (pp. 11-24). Bristol University Press.

    doi:10.46692/9781447339151.004

Crede, M., Tynan, M., Harms, P. D., & Lester, P. B. (2023). Clarifying the association between

    adverse childhood experiences and postdeployment posttraumatic stress disorder

    symptom severity: A meta-analysis and large-sample investigation. *Journal of Traumatic*

    Stress, 36(4), 700–711. https://doi.org/10.1002/jts.22940

Dale, L. P., Cuffe, S. P., Sambuco, N., Guastello, A. D., Leon, K. G., Nunez, L. V., Bhullar, A.,

    Allen, B. R., & Mathews, C. A. (2021). Morally distressing experiences, moral injury,

    and burnout in Florida healthcare providers during the COVID-19 pandemic.

    International Journal of Environmental Research and Public Health, 18(23), 12319.

    https://doi.org/10.3390/ijerph182312319

Daly, K. (2014). Reconceptualizing sexual victimization and justice. In I. Vanfraechem, A.

    Pemberton and F.M. Ndahinda (Eds.), *Justice for victims* (pp. 378-395). Routledge.

Dean, W., Talbot, S., & Dean, A. (2019). Reframing clinician distress: moral injury not burnout.

    Federal Practitioner, *36*(9), 400-402. Retrieved from PubMed Database.

Dewa, C. S., Jacobs, P., Thanh, N. X., & Loong, D. (2014). An estimate of the cost of burnout on

    early retirement and reduction in clinical hours of practicing physicians in Canada. *BMC*

    Health Services Research, 14(1), 254–254. https://doi.org/10.1186/1472-6963-14-254

Department of Defense. (2021). Department of Defense annual report on sexual assault in

    military: Fiscal year 2021.

    https://www.sapr.mil/sites/default/files/public/docs/reports/AR/FY22/DOD_Annual_Rep

    ort_on_Sexual_Assault_In_The_Military_FY2021_Consolidated.pdf

Dsouza, R. F. (2019). Moral Injury, medical workforce and productivity. *Bulletin Of The*

    International Institute Of Organisational Psychological Medicine (IIOPM), *4*(1), 8-10.

Dyo, M., Kalowes, P., & Devries, J. (2016). Moral distress and intention to leave: A comparison

    of adult and paediatric nurses by hospital setting. *Intensive & Critical Care Nursing*, *36*,

    42–48. https://doi.org/10.1016/j.iccn.2016.04.003

Farley, M., Cotton, A., Lynne, J., Zumbeck, S., Spiwak, F., Reyes, M. E., ... & Sezgin, U.

    (2004). Prostitution and trafficking in nine countries: An update on violence and

    posttraumatic stress disorder. *Journal of trauma practice*, *2*(3-4), 33-74.

    https://doi.org/10.1300/J189v02n03_03

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss,

    M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction

    to many of the leading causes of death in adults: The adverse childhood experiences

    (ACE) study. *American Journal of Preventive Medicine*, *14*(4), 245–258.

    https://doi.org/10.1016/S0749-3797(98)00017-8

Finkelhor, D., Shattuck, A., Turner, H., & Hamby, S. (2015). A revised inventory of Adverse

    Childhood Experiences. *Child Abuse & Neglect*, *48*, 13–21.

    https://doi.org/10.1016/j.chiabu.2015.07.011

Fukushima, A. I., Gonzalez-Pons, K., Gezinski, L., & Clark, L. (2020). Multiplicity of stigma:

    cultural barriers in anti-trafficking response. *International Journal of Human Rights in*

    Healthcare, *13*(2), 125–142. https://doi.org/10.1108/IJHRH-07-2019-0056

Fleming, W. H. (2022). Complex moral injury: Shattered moral assumptions. *Journal of Religion*

    and Health, *61*(2), 1022–1050. https://doi.org/10.1007/s10943-022-01542-4

Frankfurt, S. B., DeBeer, B. B., Morissette, S. B., Kimbrel, N. A., La Bash, H., & Meyer, E. C. (2018). Mechanisms of moral injury following military sexual trauma and combat in post-9/11 U.S. war veterans. *Frontiers in Psychiatry*, *9*, 520–520. https://doi.org/10.3389/fpsyt.2018.00520

Friedman, I. A. (2000). Burnout in teachers: Shattered dreams of impeccable professional performance. *Journal of Clinical Psychology, 56*(5), 595–606. https://doi.org/10.1002/(SICI)1097-4679(200005)56:53.0.CO;2-Q

Glazer, J. (2022). A devil's bargain: teachers' decision to transfer and moral injury. *Teachers and Teaching, Theory and Practice, 28*(1), 118–129. https://doi.org/10.1080/13540602.2022.2027363

Gray, K., & Wegner, D. M. (2009). Moral typecasting: Divergent perceptions of moral agents and moral patients. *Journal of Personality and Social Psychology, 96*(3), 505–520. https://doi.org/10.1037/a0013748

Hamrick, H. C., Ehlke, S. J., Davies, R. L., Higgins, J. M., Naylor, J., & Kelley, M. L. (2022). Moral injury as a mediator of the associations between sexual harassment and mental health symptoms and substance use among women veterans. *Journal of Interpersonal Violence*, *37*(11-12), NP10007–NP10035. https://doi.org/10.1177/0886260520985485

Hanna, P., Erickson, M., & Walker, C. (2022). UK Higher Education staff experiences of moral injury during the COVID-19 pandemic. *Higher Education*, 1–18. https://doi.org/10.1007/s10734-022-00956-z

Han, S., Shanafelt, T. D., Sinsky, C. A., Awad, K. M., Dyrbye, L. N., Fiscus, L. C., Trockel, M., & Goh, J. (2019). Estimating the attributable cost of physician burnout in the United States. *Annals of Internal Medicine, 170*(11), 784–790. https://doi.org/10.7326/M18-1422

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *The Behavioral and Brain Sciences*, *33*(2-3), 61–83. https://doi.org/10.1017/S0140525X0999152X

Howard, L. C., Krueger, E. A., Barker, J. O., Boley Cruz, T., Cwalina, S. N., Unger, J. B., Barrington-Trimis, J. L., & Leventhal, A. M. (2023). Young adults' distress about police brutality following the death of George Floyd. *Youth & Society*, *55*(6), 1173–1190. https://doi.org/10.1177/0044118X221087282

Jinkerson, J. D. (2016). Defining and assessing moral injury: A syndrome perspective. *Traumatology (Tallahassee, Fla.), 22*(2), 122–130. https://doi.org/10.1037/trm0000069

Keefe-Perry, L. C. (2018). Called into crucible: Vocation and moral injury in U.S. public school teachers. *Religious Education, 113*(5), 489–500. https://doi.org/10.1080/00344087.2017.1403789

Karatzias, T., Shevlin, M., Fyvie, C., Grandison, G., Garozi, M., Latham, E., Sinclair, M., Ho, G. W. K., McAnee, G., Ford, J. D., & Hyland, P. (2020). Adverse and benevolent childhood experiences in Posttraumatic Stress Disorder (PTSD) and Complex PTSD (CPTSD): implications for trauma-focused therapies. *European journal of psychotraumatology, 11*(1), 1793599. https://doi.org/10.1080/20008198.2020.1793599

Koenig, H. G., Youssef, N. A., Ames, D., Teng, E. J., & Hill, T. D. (2020). Examining the overlap between moral injury and PTSD in US veterans and active duty military. *The Journal of Nervous and Mental Disease, 208*(1), 7–12. https://doi.org/10.1097/NMD.0000000000001077

Koss, M. P., & Oros, C. J. (1982). Sexual Experiences Survey: A research instrument

    investigating sexual aggression and victimization. *Journal of Consulting and Clinical*

    Psychology, 50(3), 455–457. https://doi.org/10.1037/0022-006X.50.3.455

Kleykamp, M., Schwam, D., & Wenig, G. (2023). What Americans think about veterans and

    military service: Findings from a nationally representative survey. *RAND Corporation*.

    https://www.rand.org/pubs/research_reports/RRA1363-7.html.

Litz, B. T., Stein, N., Delaney, E., Lebowitz, L., Nash, W. P., Silva, C., & Maguen, S. (2009).

    Moral injury and moral repair in war veterans: A preliminary model and intervention

    strategy. *Clinical Psychology Review, 29*(8), 695–706.

    https://doi.org/10.1016/j.cpr.2009.07.003

Litz, B. T., Plouffe, R. A., Nazarov, A., Murphy, D., Phelps, A., Coady, A., Houle, S. A., Dell,

    L., Frankfurt, S., Zerach, G., & Levi-Belz, Y. (2022). Defining and assessing the

    syndrome of moral injury: Initial findings of the moral injury outcome scale consortium.

    Frontiers in Psychiatry, 13, 923928–923928. https://doi.org/10.3389/fpsyt.2022.923928

Maguen, S., Griffin, B. J., Copeland, L. A., Perkins, D. F., Finley, E. P., & Vogt, D. (2020).

    Gender differences in prevalence and outcomes of exposure to potentially morally

    injurious events among post-9/11 veterans. *Journal of Psychiatric Research*, *130*, 97–

    103. https://doi.org/10.1016/j.jpsychires.2020.06.020

Mantri, S., Lawson, J. M., Wang, Z., & Koenig, H. G. (2020). Identifying moral injury in

    healthcare professionals: The moral injury symptom scale-HP. *Journal of Religion and*

    Health, 59(5), 2323–2340. https://doi.org/10.1007/s10943-020-01065-w

Miller, S. C. (2009). Moral injury and relational harm: Analyzing rape in Darfur. *Journal of*

    Social Philosophy, 40(4), 504–523. https://doi.org/10.1111/j.1467-9833.2009.01468.x

Miller, T. R., & Galvin, D. M. (2016). Assessing and responding to substance misuse in law enforcement. *Southern Illinois University Law Journal, 40*(3), 475.

Mũrage, A., Morgan, R., Samji, H., & Smith, J. (2023). Gendered and racial experiences of moral distress: A scoping review. *Journal of advanced nursing*, 10.1111/jan.15901. Advance online publication. https://doi.org/10.1111/jan.15901

Murray, H., & Ehlers, A. (2021). Cognitive therapy for moral injury in post-traumatic stress disorder. *Cognitive Behaviour Therapist, 14*, e8–e8. https://doi.org/10.1017/S1754470X21000040

Nazarov, A., Walaszczyk, V., Frewen, P., Oremus, C., Lanius, R., & McKinnon, M. C. (2016). Moral reasoning in women with posttraumatic stress disorder related to childhood abuse. *European Journal of Psychotraumatology*, *7*(1), 31028–31028. https://doi.org/10.3402/ejpt.v7.31028

Ng-Mak, D. S., Salzinger, S., Feldman, R., & Stueve, A. (2002). Normalization of violence among inner-city youth: A formulation for research. *American Journal of Orthopsychiatry*, *72*(1), 92–101. https://doi.org/10.1037/0002-9432.72.1.92

Okulate, G. T., Akinsanmi, M. A., Oguntuase, R. A., & Majebi, M. A. (2021). Moral injury among Nigerian soldiers following combat: Case reports and a review of the literature. *Military Medicine, 186*(9-10), e1048–e1052. https://doi.org/10.1093/milmed/usaa373

Papazoglou, K., & Chopko, B. (2017). The role of moral suffering (moral distress and moral injury) in police compassion fatigue and PTSD: An unexplored topic. *Frontiers in Psychology*, *8*, 1999–1999. https://doi.org/10.3389/fpsyg.2017.01999

Papazoglou, K., Koskelainen, M., & Stuewe, N. (2018). Exploring the role of compassion satisfaction and compassion fatigue in predicting burnout among police officers. *Open*

Journal of Psychiatry & Allied Sciences, 9(2), 107–112. https://doi.org/10.5958/2394-2061.2018.00020.4

Phelps, A. J., Dell, L., & Murray, K. (2021). Moral injury and anger in the workplace. In *Anger at work: Prevention, intervention, and treatment in high-risk occupations* (pp. 81–110). American Psychological Association. https://doi.org/10.1037/0000244-004

Ranney, R. M., Maguen, S., Bernhard, P. A., Holder, N., Vogt, D., Blosnich, J. R., & Schneiderman, A. I. (2022). Moral injury and chronic pain in veterans. *Journal of Psychiatric Research*, *155*, 104–111. https://doi.org/10.1016/j.jpsychires.2022.08.009

Richard, J., Deng, J., Ivoska, W., & Derevensky, J. (2023). Adverse childhood experiences, problem gambling and disordered gaming: The mediating role of internalizing and externalizing problems among adolescents. *International Journal of Mental Health and Addiction*. https://doi.org/10.1007/s11469-023-01086-y

Richardson, N. M., Lamson, A. L., Smith, M., Eagan, S. M., Zvonkovic, A. M., & Jensen, J. (2020). Defining moral injury among military populations: A systematic review. *Journal of Traumatic Stress, 33*(4), 575–586. https://doi.org/10.1002/jts.22553

Roth, S. L., Andrews, K., Protopopescu, A., Lloyd, C., O'Connor, C., Losier, B. J., Lanius, R. A., & McKinnon, M. C. (2022). Mental health symptoms in Public Safety Personnel: Examining the effects of adverse childhood experiences and moral injury. *Child Abuse & Neglect*, *123*, 105394–105394. https://doi.org/10.1016/j.chiabu.2021.105394

Schaible, L. M., & Gecas, V. (2010). The impact of emotional labor and value dissonance on burnout among police officers. *Police Quarterly, 13*(3), 316–341. https://doi.org/10.1177/1098611110373997

Schalinski, I., Teicher, M. H., Nischk, D., Hinderer, E., Müller, O., & Rockstroh, B. (2016).

Type and timing of adverse childhood experiences differentially affect severity of PTSD,

dissociative and depressive symptoms in adult inpatients. *BMC Psychiatry, 16*(1), 295–

295. https://doi.org/10.1186/s12888-016-1004-5

Stancel, K., Russo, C., Koskelainen, M., Papazoglou, K., & Tuttle, B. M. (2019). Police moral

injury, compassion fatigue, and compassion satisfaction: A brief report. *Salus Journal,

7*(1), 42–57.

Stanley, M. J., & Logan, R. I. (2024). Moral resilience and race, ethnicity, and culture within

healthcare workers during the COVID-19 pandemic in the USA: A scoping review.

Journal of Racial and Ethnic Health Disparities. https://doi.org/10.1007/s40615-024-

01911-7

Sugrue, E. P. (2020). Moral injury among professionals in K–12 education. *American

Educational Research Journal, 57*(1), 43-68. https://doi.org/10.3102/0002831219848690

Tabb, L. P., Rich, J. A., Waite, D., Alberto, C., Harris, E., Gardner, J., Gentile, N., & Corbin, T.

J. (2022). Examining Associations between Adverse Childhood Experiences and

Posttraumatic Stress Disorder Symptoms among Young Survivors of Urban Violence.

Journal of Urban Health: Bulletin of the New York Academy of Medicine, 99(4), 669–

679. https://doi.org/10.1007/s11524-022-00628-4

Temoney, K. E. (2021). The war came alive inside them: Moral injury, genocidal rape, and

religion. *The Journal of Religious Ethics, 4*9(3), 479–494.

https://doi.org/10.1111/jore.12366

Toyoda, H., Ishikawa, K., Omi, Y., Kado, T., Iizuka, S., & Endo, T. (2023). Psychological violence victimization with moral injury in sports exacerbates PTSD symptoms. *Sports Psychiatry, 2*(1), 3–12. https://doi.org/10.1024/2674-0052/a000034

Weiss, M. A., Hawkins, L., & Yarvis, J. S. (2023). Moral injury in women military members and Veterans: What do we really know? *Journal of Military, Veteran and Family Health*, *9*(4), 129–136. https://doi.org/10.3138/jmvfh-2022-0075

Wright, M. O., Crawford, E., & Del Castillo, D. (2009). Childhood emotional maltreatment and later psychological distress among college students: The mediating role of maladaptive schemas. *Child Abuse & Neglect*, *33*(1), 59–68. https://doi.org/10.1016/j.chiabu.2008.12.007

Xiang, Y., Cao, Y., & Dong, X. (2020). Childhood maltreatment and moral sensitivity: An interpretation based on schema theory. *Personality and Individual Differences*, *160*, 109924–109927. https://doi.org/10.1016/j.paid.2020.109924

Yager, J., & Kay, J. (2020). Autotraumatic stress disorders: Posttraumatic stress disorder variants When the victim bears responsibility for the trauma. *The Journal of Nervous and Mental Disease*, *208*(12), 947–952. https://doi.org/10.1097/NMD.0000000000001235

Zerach, G., & Levi-Belz, Y. (2023). Exposure to potentially morally injurious events, disruption in assumptive world, moral injury symptoms, and psychological distress among Israeli female veterans. *Stress and Health*, *39*(3), 651–662. https://doi.org/10.1002/smi.3214

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