MORAL INJURY IN THE FORENSIC PSYCHIATRIC POPULATION

THE DEVELOPMENT AND VALIDATION OF A TOOL TO MEASURE MORAL INJURY IN A FORENSIC PSYCHIATRIC POPULATION

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A Thesis Submitted to the School of Graduate Studies in Fulfilment of the Requirements for the Degree Master of Science

MASTER OF SCIENCE, PSYCHOLOGY (2023)

PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

McMaster University

Hamilton, Ontario

TITLE: The Development and Validation of a Tool to Measure Moral Injury In a Forensic Psychiatric Population

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PAGES: xi, 142

Lay Abstract

This study delves into moral injury experienced by individuals labelled non-criminally responsible (NCR) due to mental health issues within the criminal justice system. Moral injury captures the emotional turmoil, including guilt and shame, arising from engaging in morally conflicting actions or facing betrayal. Our research explores the influence of moral emotions like shame and guilt on those involved in criminal activities. We discovered shame often leads to negative behaviors and self-disapproval, while guilt promotes self-forgiveness and empathy. Both emotions impact the likelihood of reoffending. We also designed and validated a new tool, the Moral Injury Screener, to grasp moral distress in NCR individuals. This tool revealed that guilt and perceived betrayal are central to their moral struggles. Recognizing these feelings is vital for understanding and addressing moral injury within the criminal justice system.

Abstract

This research investigates the intricate interplay between the moral emotions of shame and guilt, within justice-involved populations, with a special focus on those deemed Not Criminally Responsible (NCR) due to Mental Disorder. Recognizing the pivotal role of offense-related shame and guilt in motivating behavior and influencing psychological functioning, we conducted an extensive investigation to underscore the significance of acknowledging moral injury (MI) and its symptoms within this context. By synthesizing two comprehensive studies, our objective was twofold: to shed light on the prevalence and effects of shame and guilt, and to introduce the concept of moral injury as a fundamental lens for understanding their impact.

In the first study, we examined the influence of shame and guilt on motivating behavior and psychological well-being among offending populations. We found that shame consistently relates to adverse outcomes, including defensive behaviors, self-loathing, and externalizing behaviors such as blame-shifting. Contrary to our predictions, guilt was associated with constructive responses, such as self-forgiveness, empathic concern, and assuming responsibility for one's actions. However, both shame and guilt contributed to the risk of recidivism among certain offenders. This study illuminates the intricate dynamics between moral emotions, psychopathology, and recidivism, underscoring the need to acknowledge the differential influences of the moral emotions, shame, and guilt.

In the second study, we developed and validated the Moral Injury Screener in the Offending Population NCR (MIO-NCR), a self-report measure that assesses MI in justice-involved individuals, particularly NCR individuals. Through rigorous psychometric analysis, the MIO-NCR demonstrated promising criterion and construct validity. Our findings emphasized the centrality of guilt and betrayal in MI experienced by NCR individuals, aligning with contemporary syndromal

definitions. The MIO-NCR, an invaluable tool, enables promising identification of MI within the NCR population.

By consolidating these studies, we found that shame and guilt manifest profoundly within the justice-involved population, underscoring the value of MI and its core symptoms. The current thesis not only reaffirms the importance of understanding moral emotions but also advances knowledge on MI within this unique context. Our research provides a framework for developing a comprehensive approach to intervention and rehabilitation that recognizes the intricate relations between moral emotions, psychopathology, and recidivism, ultimately fostering healthier outcomes for justice-involved individuals.

Acknowledgements

I am genuinely grateful for the countless people who have shaped and supported me along this journey of completing my thesis and master's degree. First and foremost, I want to express my gratitude to my supervisors, Dr. Bruno Losier and Dr. Margaret McKinnon, for their unrelenting support and mentorship throughout all the challenges and victories this degree brought forth. Working with and learning from each of them has been a true privilege and joy. I sincerely appreciate all you have done and the opportunity to foster my passion for this discipline. I thank to my committee members, Dr. Heather Moulden and Dr. Louis Schmidt, for their invaluable feedback and encouragement at each stage of this journey.

I would also like to express appreciation towards the many individuals involved in the development and validation of the MIO-NCR study that formed the focus of my dissertation: Dr. Sophia Roth, Dr. Cory Gerritsen, Dr. Sandy Simpson, Dr. Kim Soyeon, and Dr. Krystle Martin, for all their valued guidance, feedback, and overseeing on the MIO-NCR project. I also acknowledge the support received from the staff at SJHH, who have contributed to this research project since its inception. I also warmly thank Dr. David Streiner and Dr. Senay Asmas for their expertise and consultation on these analyses. I express my deepest gratitude to the patients and their treating clinicians for their participation; without them, this thesis would not have been possible.

Finally, I thank my friends, both in and out of the program, for keeping me grounded and making this experience fun; my family, who has supported me since the start; and lastly, my mom, words cannot express all you have done to see me through this.

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List of all Abbreviations

ACE	Adverse Childhood Experiences
AHS	Adult Hope Scale
BCIS	Beck Cognitive Insight Scale
BFI	Big Five Inventory
CFA:	Confirmatory Factor Analysis
DASS	Depression Anxiety Stress Scale
DERS	Difficulties with Emotion Regulation Scale
KMO	Kaiser-Meyer-Olkin Test
EFA	Exploratory Factor Analysis
GASP	Expressions of Moral Injury Scale-Military Version
EMIS-M	Guilt and Shame Proneness Scale
ISLES	Integration of Stressful Life Experiences Scale
IRI	Interpersonal Reactivity Index
MI	Moral Injury
MIES	Moral Injury Events Scale
MISS-M	Moral Injury Symptoms Scale-Military Version
MIQ	Moral Injury Questionnaire
MSA	Measure of Sampling Adequacy
PMIES	Potentially Morally Injurious Events
PTSD	Posttraumatic Stress Disorder

Declaration of Academic Achievement

This thesis contains four chapters, including a general introduction (Chapter 1), two empirical chapters (Chapters 2 through 3), and a general conclusion (Chapter 4) where the primary research contributions, limitations, and future directions are discussed.

The collection of original research included in this thesis (Chapter 3) was conducted as part of a larger research project established and run jointly between St. Joseph's Healthcare, Hamilton (SJHH), Centre for Addictions and Mental Health (CAMH), Ontario Shores Centre for Mental Health Sciences, and Waypoint Centre for Mental Health Care. The original principal investigators, Dr. Margaret McKinnon and Dr. Bruno Losier, were responsible for the project conceptualization, design, and implementation. I contributed significantly to the data extraction/entry, organization, and analysis. In collaboration with my supervisors, I was responsible for determining, conducting, and interpreting the specific data analyses performed and for writing all subsequent chapters and manuscripts.

This larger project was financially supported, in part, by Canadian Institutes of Health Research grants to Dr. Margaret McKinnon. This project is only possible with the important contributions of many others throughout this project in conducting the comprehensive assessments and completion of the first phase of the research project. Here, I will highlight Dr. Sophia L. Roth, Aamna Qureshi, Dr. Heather M. Moulden, Dr. Gary A. Chaimowitz, and Dr. Ruth A. Lanius. In conducting the research presented in Chapter 3, I received invaluable consultation conducting analysis provided by Dr. Senay Asma and Dr. David Streiner.

Chapter 1 | General Introduction

1.1 Moral Injury: Definition and Conceptualization

Moral Injury (MI) is a complex and evolving concept that has recently garnered recognition and attention in the research literature. MI refers to the psychological, emotional, and spiritual distress arising from violating deeply held moral beliefs and values (Drescher et al., 2011; Jinkerson, 2016; Litz et al., 2009). Unlike traditional notions of trauma, which focus on physical harm or threat, MI centers around the inner conflict and anguish individuals experience when they witness or participate in events that challenge their sense of right and wrong. At its core, MI involves the recognition of a moral transgression, either by oneself or others, and the subsequent emotional and existential consequences that follow (Jinkerson, 2016). It encompasses guilt, shame, and a profound loss of trust in oneself, others, and societal systems (Jinkerson, 2016). Individuals may grapple with existential and spiritual conflicts, questioning their identity, purpose, and the meaning of their experiences (Jinkerson, 2016)

It is essential to differentiate MI from related constructs, such as PTSD or guilt (Barnes et al., 2019; Crisford et al., 2008; 2010; Sun et al., 2019). While PTSD focuses on the traumatic response to life-threatening events, MI emphasizes the moral dimension and the violation of ethical principles (Griffin et al., 2019; Litz & Kerig, 2019). Conversely, guilt typically arises from personal wrongdoing (Levinson, 2012; Lewis, 1971). In contrast, MI extends beyond individual actions to encompass witnessing or being part of events that go against one's moral compass (Jinkerson, 2016). Understanding the definition and conceptualization of MI provides a crucial foundation

for comprehending the subsequent core symptoms and impacts explored in this thesis. We can better grasp its unique challenges by recognizing MI as a distinct psychological phenomenon.

1.2 Moral Injury Symptoms

MI is characterized by a wide range of behavioral characteristics and psychological symptoms (Currier et al., 2015a; Currier et al., 2015b; Drescher et al., 2011; Litz et al., 2009; Nash & Litz, 2013; Shay, 2014). Nearly all descriptions of MI include guilt and shame, including a loss of trust in oneself, others, or a higher power (Litz et al., 2022; Griffin et al., 2019; Jinkerson, 2016). Furthermore, descriptions often depict a spiritual crisis, sometimes implying its presence (Litz et al., 2009; Shay, 2014, 1998; Smith-MacDonald et al., 2018). Following the symptoms of guilt, shame, loss of trust, and spiritual crises related to perceived moral transgressions, descriptions of MI encompass a variety of psychological problems such as depression, anxiety, and intrusive thoughts and images (Bryan et al., 2014; Currier, Holland, & Malott, 2015; Currier, Holland, Rojas-Flores, et al., 2015; Hoffman et al., 2018, 2019; McEwen et al., 2020; Nash et al., 2013; Nazarov et al., 2018; Nickerson et al., 2015, 2018; Papazoglou et al., 2020; Stein et al., 2012; Worthington & Langberg, 2012). Due to the shame, guilt, and overall self-perception as evil, many depictions of MI involve attempts at self-punishment, including isolation, excessive alcohol or substance use, and self-sabotaging behaviours (Bryan et al., 2018; Griffin et al., 2019; Proeve & Howells, 2002; Shay, 2014). Social problems are typically viewed as consequences of losing trust in others, resulting in isolation or self-harm behaviours (Bryan et al., 2018; Litz et al., 2009; Nash

& Litz, 2013). Litz and colleagues (2009) also proposed a potential link between MI and criminal behaviour or domestic violence. The final state of MI has been described as deep demoralization (Frankfurt & Frazier, 2016)

Fontana and Rosenheck (2004) further explored the association between morally injurious events, shame/guilt syndromes, and spiritual crises. In their investigation, VA clinicians treating veterans with PTSD assessed distress levels based on the type of traumatic event experienced. They identified two distress clusters: (a) "agentic action," which included instances of killing, enjoying killing, and participating in atrocities, and (b) "failure," encompassing experiences such as failing to fulfill duties, contributing to a friend's death, and the inability to save the wounded. These clusters suggested that the veteran participants had encountered MI alongside PTSD, or that their post-traumatic responses could be better understood in the context of MI (Fontana & Rosenheck, 2004). Regarding MI, Fontana and Rosenheck (2004) found that potentially morally injurious events (PMIEs), such as killing, enjoying killing, participating in atrocities, contributing to another's death, and failing to save the wounded, positively predicted guilt and spiritual crisis or loss of meaning in life. This study provided empirical support for the role of guilt in the development of MI and has been supported by other literature (Marx et al., 2010; McEwen et al, 2020; Nazarov et al., 2015).

In addition, Stein and colleagues (2012) provided additional empirical support linking MI events and emotional responses in individuals affected by traumatic events. They interviewed service members diagnosed with PTSD, using the PTSD Symptom Scale, Interview Version, and classified their responses as either morally injurious or non-

morally injurious. The findings revealed that service members whose trauma content aligned with MI reported higher levels of reexperiencing and guilt compared to those whose distressing traumas were unrelated to MI. Moreover, when MI events were associated with the actions of others, MI significantly predicted feelings of anger (Stein et al., 2012). These results contribute to the growing body of evidence supporting the connection between MI and emotional reactions in trauma-affected individuals (Hoffman et al., 2018; 2019; Nazarov et al., 2018; Nickerson et al., 2018; 2015; Worthington & Langberg, 2012).

Suicidal ideation and behavior have also been linked to MI symptoms (Bryan et al., 2018; Murphy, 2006; Proeve & Howell, 2002; Stein et al., 2012). Hendin & Haas (1991) conducted interviews with combat veterans at a VA Medical Center and discovered that many participants had attempted suicide post-deployment or had been preoccupied with suicidal thoughts since their return. Suicide attempts were significantly associated with combat guilt, depression, survivor's guilt, anxiety, and severe PTSD (Hendin & Haas, 1991). Combat guilt also emerged as a significant predictor of preoccupation with suicide (Hendin & Haas, 1991). Notably, guilt about combat actions, survivor's guilt, depression, anxiety, and intrusive thoughts have all been identified as aspects of MI. The connection between MI and suicidal ideation reported by Hendin & Haas (1991) is not surprising, as MI can lead to demoralization as an end-state and results from the study paralleled other literature (Fourie, 2015; Førde et al., 2008; Frankfurt et al., 2016; Griffin et al., 2019; Hoffman et al., 2018)

MacNair (2002) analyzed the National Vietnam Veterans Readjustment Study (NVVRS) and found distinct psychological differences between Vietnam veterans who engaged in killing during combat and those who experienced combat without killing. While combat killing does not equate to MI, the cognitive dissonance related to killing can be one pathway associated with its development. It is crucial to note the high likelihood of comorbid PTSD in this sample. Veterans who killed during combat displayed higher levels of intrusive thoughts, social alienation, anger, sleep problems, dissociation, substance abuse, violent outbursts, nightmares, and hyper-alertness compared to other veterans, which aligns with trauma-related literature (Baker et al., 2021; Hosser et al., 2008; Kelley et al., 2019; MacNair, 2002; Nazarov et al., 2018; Nickerson et al., 2015; Papanastassiou et al, 2004; Papazoglou et al., 2020; Rew et al., 2022). While some of these outcomes are also symptoms of PTSD, specific issues like social alienation, substance abuse, and violent outbursts may be better explained by MI rather than PTSD alone (Hoffman et al., 2018; 2019; Levi-Belz et al., 2020; MacNair, 2002; Papanastassiou et al., 2004; Papazoglou et al., 2020; Papazoglou & Chopko, 2017).

1.3 Differentiating MI and PTSD

Emerging from military literature, concerns arose regarding the theoretical differentiation between MI and Post-Traumatic Stress Disorder (PTSD), with debates about whether MI was essentially a reframing of combat stress responses (Litz et al., 2009). While both MI and PTSD share certain features, such as arising after intense experiences and correlating with psychological and social issues, they diverge significantly in etiology and manifestations (Hendin & Haas, 1991; Maguen et al., 2011;

Shay, 2014; Stein et al., 2012). PTSD commonly emerges from exposure to life-threatening or harmful traumatic events, triggering heightened stress responses via the hypothalamic/amygdalic-pituitary-adrenal axis. This results in elevated attention and arousal, leading to avoidance behaviors and reinforcing perceived danger (Hoge, 2010; Litz et al., 2016; Norrholm et al., 2011). In contrast, MI does not solely stem from fear-based reactions and physiological distress, as seen in PTSD (Barnes et al., 2019; Sun et al., 2019). Instead, MI arises from ruptured relationships with oneself, others, and humanity, leading to pervasive shifts in beliefs and behaviors (Litz et al., 2016). It emerges from moral conflicts where actions or actions of others clash with personal moral codes (MacNair, 2002; Marx et al., 2010). MI and PTSD are stressor-linked conditions where exposure to triggering events is essential yet not solely determinative (Litz & Kerig, 2019). While PTSD has historically been linked to danger and fear, only in DSM-5 did it acknowledge moral challenges post-trauma as symptoms of PTSD (Barnes et al., 2019; Frankfurt & Frazier, 2016; Litz et al., 2009). However, for such symptoms to contribute to a PTSD diagnosis, they must result from a Criterion A trauma involving actual or threatened death, serious injury, or sexual violence (Leskela et al., 2002).

In contrast, MI encompasses psychological distress post-moral transgressions, which may not always meet the PTSD Criterion A. This includes involvement in or witnessing immoral acts, encountering behaviors violating moral standards, and PMIEs. Notably, a universal consensus on PMIE's definition is lacking, subjectively rooted in perceived moral transgressions, and agreement on universally accepted MI criteria or symptom profiles remains elusive (Griffin et al., 2019; Litz & Kerig, 2019).

Despite ongoing debates, MI consistently shows strong associations with various adverse emotional responses, including shame, guilt, and anger. It is also linked to cognitive impairments such as a loss of trust in oneself and others, and decreased meaning-making. Additionally, social, and behavioral manifestations like withdrawal and self-harm are frequently observed in individuals with MI (Jinkerson, 2016; Litz et al., 2009). Guilt and shame are recognized as playing significant roles in the development of MI, contributing to feelings of self-condemnation and an inability to forgive oneself (Litz et al., 2009). Thus, while comorbidity between MI and PTSD is observed as they share certain features, there are symptomatic differences, such as the absence of physiological arousal in MI and guilt and shame not necessarily involved in PTSD. The assertion that guilt and shame play a substantial role in the presentation of MI is substantiated by empirical evidence. Litz et al. (2009) found connections between these emotions and PMIEs, and their impact on various psychological outcomes. In the context of MI, these two distinct emotions hold great significance, as their notable differences are pivotal in comprehending the condition's existence.

Derived from the military literature, MI emerged as a distinct construct aimed at comprehending the intricate experiences of psychologically wounded soldiers that eluded explanation through PTSD. Similar to PTSD, MI arises due to a compromised recovery process following a subjective traumatic encounter. Among combat veterans, the coexistence of PTSD and MI is prevalent, given the emotionally charged environment of combat, rife with frequent moral conflicts alongside life-threatening events (Fontana & Rosenheck, 2004; Levi-Belz et al., 2020) Fontana and Rosenheck (2004) found that

veterans with PTSD who experienced PMIEs were more likely to exhibit symptoms associated with MI, such as guilt, loss of faith, anger/aggression, and occupational difficulties. When individuals experience both PMIEs and psychological trauma simultaneously, the initial development of MI, including shame, guilt, and loss of meaning in life, may serve as a critical point that catalyzes the subsequent development of full PTSD, including its more physiological components (Barnes et al., 2019; Levi-Belz et al., 2020; Stein et al., 2012). The relationship between MI and PTSD may be explained by the notion that moral guilt hampers the natural post-traumatic recovery response, thus triggering a disordered reaction (Barnes et al., 2019). Although the symptom constellation of MI is more extensive than that of PTSD, unresolved MI may ultimately contribute to the development of pernicious PTSD (Litz et al., 2009; Levi-Belz et al., 2020).

1.4 Theoretical Perspectives on MI

Originating from the military trauma literature, moral injury was initially conceptualized as an emotional, spiritual, and psychological wound stemming from acts of commission or omission that challenge one's sense of morality, leading to profound inner moral conflict (Drescher et al., 2011; Litz et al., 2009). Early measures of MI sought to assess experiences of potentially morally injurious events, categorized as perpetration through morally violating acts (e.g., killing non-enemy combatants in the line of duty, failing to save a life) or morally violating betrayals (e.g., receiving orders to be complicit in the suffering of others). However, these early characterizations were criticized for focusing on population-specific exposures rather than the deeper experience of a moral wound (Frankfurt & Frazier, 2016; Litz & Kerig, 2019; Yeterian et al., 2019). MI and

PTSD have been explored by Litz and colleagues (2009), who propose a model that acknowledges MI as a distinct aspect of trauma. This model acknowledges that MI encompasses both exposure to traumatic events and the infringement upon moral values, resulting in distinct emotional and psychological consequences that extend beyond the symptoms of PTSD (Litz et al., 2009). These events often center around either the commission of a moral violation or the perception of a moral betrayal, frequently involving individuals or powerful organizations that were previously trusted (Griffen et al., 2019; Litz et al., 2009; Shay, 2014).

Shay (2014) highlighted the profound impact of moral betrayal within the military, where individuals experience significant psychological and moral distress when their trust is violated. In this context, being responsible for causing a morally troubling act or failing to prevent it may give rise to a PMIE. On the other hand, while there is often overlap or co-occurrence, betrayal PMIEs entail experiencing, witnessing, or learning about morally violating acts committed by another individual or organization, often by someone trusted, resulting in harm to oneself and/or others (Drescher et al., 2013; Shay, 2014). Such betrayal can have far-reaching effects, leading to complex emotional responses and deeply felt moral dilemmas.

Recently, efforts have been made to broaden the definition of MI and expand the populations under study, diverging from the military context. For instance, researchers have proposed syndromal definitions of MI to provide a clear and cohesive description applicable across diverse populations. One such perspective, put forward by Jinkerson (2016), characterizes moral injury as "a particular trauma syndrome encompassing

psychological, existential, behavioral, and interpersonal challenges arising from perceived violations of deep moral beliefs by oneself or trusted individuals". According to Jinkerson's framework, four core symptoms of MI are identified: guilt, shame, spiritual/existential conflict, and a loss of trust in oneself, others, or higher beings. This expanded approach to defining MI aims to offer a more comprehensive understanding of the phenomenon and its manifestations in various contexts.

After the core symptoms, secondary manifestations emerge, encompassing feelings of depression, anxiety, and anger, re-experiencing moral conflict, self-harm, and social difficulties (Jinkerson, 2016). This syndromal definition does not exclude the incorporation of traditional perspectives on MI development, typically arising from moral perpetrations or moral betrayals. Instead, it provides a framework to investigate and characterize MI across diverse populations by centering on its consequences rather than its specific determinants. This broader approach allows for a more comprehensive examination of MI's impact on individuals and communities, offering valuable insights into its complexities and manifestations.

In a recent study, Bonson et al. (2023) put forward a novel theoretical model that significantly enhances our comprehension of MI. This model emphasizes that MI involves a profound breakdown in the relationship with oneself, others, and humanity, resulting in significant shifts in beliefs and behaviors. It distinguishes PMIEs from traumatic events defined by PTSD criteria, recognizing the high-stakes nature of PMIEs and their capacity to challenge deeply held beliefs, irrespective of specific outcomes (Currier et al., 2015; Williamson, Greenberg, & Murphy, 2019; Zerach & Levi-Belz,

2018). Furthermore, the model considers the influence of predisposing factors, such as adverse childhood experiences and contextual factors surrounding PMIEs, in shaping the development of MI (Bonson et al., 2023). By refining the conceptualization of MI, identifying PMIEs, and shedding light on predisposing factors, this model represents a substantial advancement in our understanding of the evolution of MI.

However, a challenge in the field of MI lies in the need for a systematic means to assess its presence. Due to the origin of MI in the military context, traditional tools developed to measure MI were tailored to specific populations, limiting their scope to assessing exposure to military related PMIEs (Frankfurt & Frazier, 2016; Litz & Kerig, 2019; Yeterian et al., 2019). These tools focused on events such as causing the death of non-combatants or failing to aid injured women or children. As the study of MI expanded to other populations, researchers adapted these tools to query exposure to perpetration and betrayal events relevant to the context and group of individuals (Currier et al., 2015; Hoffman et al., 2019). However, such attempts to assess MI were predominantly phenomenological, drawing criticism for their narrow focus on population-specific exposures to PMIEs rather than the broader experience of moral wounds (Frankfurt & Frazier, 2016; Litz & Kerig, 2019; Roth et al., 2022; Yeterian et al., 2019).

Consequently, research has shifted towards a syndromal approach to MI, aiming to identify a characteristic symptom profile that can be applied to a broader range of populations (Jinkerson, 2016; Roth et al., 2021). Jinkerson's theoretical framework, employed in the current investigation, defines MI as a syndrome encompassing four core symptoms: guilt, shame, loss of trust, and existential conflict, which, in turn, lead to

secondary symptoms, including emotional sequelae (e.g., anger, depression, anxiety) and behavioral manifestations (e.g., re-experiencing, self-harm, social problems). These secondary features can be seen as persistent depression and heightened anxiety, as well as feelings of simmering anger and an unwelcome reexperiencing of the moral conflicts that initiated the MI. Furthermore, individuals grappling with MI may engage in self-harming behaviors, such as contemplating suicidal ideation, resorting to substance abuse, or engaging in self-sabotaging actions. These secondary features can also extend into the interpersonal realm, leading to difficulties in forming and maintaining relationships and a sense of social alienation (Jinkerson, 2016; Roth et al., 2022).

Within a syndromal framework, the focus lies on identifying and measuring the symptoms associated with MI, prioritizing them over identifying and measuring distinct PMIEs themselves. This syndrome perspective emphasizes the need for a clear set of symptoms and criteria that define a particular condition. Jinkerson (2016) adeptly integrated phenomenological, empirical, and theoretical perspectives, presenting a concise and comprehensive framework that allows for a deeper comprehension of the multifaceted nature of MI and its encompassing array of symptoms. To accurately identify MI, a specific set of criteria has been established, necessitating (a) a history of exposure to morally injurious events, (b) the presence of guilt as a central element, and (c) the concurrent presence of at least two additional symptoms, which may be drawn from either the core or secondary symptom lists. By integrating these well-defined criteria into the proposed definition, a more systematic and standardized approach can be

achieved in assessing and diagnosing MI in individuals, leading to an enhanced understanding of this intricate phenomenon (Jinkerson et al., 2016; Roth et al., 2021).

By adopting this perspective, MI can be conceptualized as a syndrome with distinct symptomatology, enabling standardized assessment, research, and communication among researchers and clinicians (Currier et al., 2019; Jinkerson et al., 2016; Maguen et al., 2020). This approach provides a more systematic and reliable means of identifying and addressing MI, ultimately enhancing our understanding of its consequences.

1.5 MI in the Not Criminally Responsible (NCR) Population

Limited research has been conducted on MI in individuals from NCR populations who have committed criminal offences related to non-legally justified moral violations (Alison Smith-MacDonald, 2022; Griffin et al., 2019). However, it is plausible that many individuals involved in the justice system may be susceptible to experiencing moral pain and subsequent MI (Roth et al., 2021). Offenders may feel guilt or shame if their actions contradict their moral code, which can be seen as a moral perpetration (Gardner et al., 2014; Proeve & Howells, 2002). Conversely, individuals may experience anger and a sense of injustice if they feel compelled to offend due to a perceived failure of institutional support, which can be viewed as a moral betrayal (Farmer & Andrew, 2009; Farnsworth et al., 2014; Gardner et al., 2014; Maguen et al., 2017). Within the forensic psychiatric population, particularly among individuals NCR, due to a mental disorder (Criminal Code, RSC, 1985, c. C-46), the experience of moral pain holds significant relevance.

The relationship between offending behaviour and moral emotions has received limited research attention, with a need for studies exploring the specific construct of moral pain resulting from a particular offence. Existing research in this area often focuses on individual emotions as traits and their association with antisocial activity rather than examining the complex construct of moral pain (Barón et al., 2018; Tangney et al., 2007). This body of research has faced criticism for yielding inconsistent findings regarding the presence and impact of specific moral emotions, particularly guilt and shame, frequently conflating these concepts in the literature (Stuewig et al., 2015; Tibbetts, 2003). Moreover, much of the research on offending behaviour and moral emotions has been conducted in non-clinical samples and situations involving minor law violations, where profound levels of moral pain are less likely to occur (Tangney et al., 2007). Nevertheless, a limited body of psychological and criminological research suggests that the perpetration of a criminal offence may trigger more profound distress levels (Crisford et al., 2008; Griffin et al., 2019; Proeve & Howells, 2002; Maguen et al., 2017; Roth et al., 2021). Studies examining mentally disordered offenders have revealed that the commission of a crime, especially when it involves violence, can result in offence-related guilt and the development of PTSD, which is distinct but related to MI (Crisford et al., 2008; Gray et al., 2003; Papanastassiou et al., 2004; Pollock, 1999). Although preliminary, these findings are significant in identifying a link between committing an offence while experiencing mental illness and developing psychological distress (Johnsson et al., 2014; Maguen et al., 2017; Farnsworth et al., 2014; Spenser et al., 2015).

Therefore, it seems valuable to investigate MI in another vulnerable population, forensic psychiatric population.

The forensic population encompasses individuals deeply intertwined with the legal and criminal justice systems, including those facing charges, victims, witnesses, and those undergoing forensic evaluations (Simon & Ahn-Redding, 2008). This category involves individuals linked to alleged criminal activities, whether as perpetrators, victims, or witnesses, often requiring assessments to determine their mental state or legal competency. Forensic psychiatry, within this realm, addresses individuals with mental health challenges embroiled in legal matters (Crisford et al., 2010). Notably, a subset of this population is individuals labeled as "Not Criminally Responsible" (NCR) due to mental disorders, who undergo evaluation and treatment for alleged crimes. This diverse group encompasses conditions such as schizophrenia, bipolar disorder, and personality disorders, necessitating specialized care within the legal context (Spaans et al., 2016). The NCR designation applies to those who committed offenses but are not held legally accountable due to recognized mental illnesses during the act. A comprehensive understanding of the relevant criminal responsibility legislation is pivotal to contextualizing this undertaking. To meet the criteria of a criminal offense under the Canadian Criminal Code, an action must involve a prohibited act ("actus reus") carried out with the intention or awareness of its moral or legal wrongfulness ("mens rea") (Crocker et al., 2015; Ferguson & Ogloff, 2011). Section 16 of the Criminal Code outlines provisions to address situations where an individual's actions were influenced by

a mental disorder during the commission of a criminal offense. Stated in Section 16 of the Criminal Code (1985):

"No person shall be held criminally responsible for an action conducted or a failure to act while under the grip of a mental disorder that rendered said person incapable of fully understanding the nature and implications of the said action or failure, or of comprehending its wrongful nature."

In accordance with Canadian legal principles, an individual must demonstrate mental illness and fulfill at least one condition from the aforementioned legal criteria to be designated as "Not Criminally Responsible" (NCR; Simon & Ahn-Redding, 2008). While the term "insanity defense" has historically been internationally used in various jurisdictions to denote this concept (Crocker et al., 2011; Simon & Ahn-Redding, 2008), for the purposes of this paper, individuals fitting this profile will be referred to as falling under the NCR designation. It is essential to note that the proportion of NCR cases within the criminal justice system remains relatively small, underscoring the recognition that certain mental illnesses can impede an individual's understanding of their actions and highlighting the pivotal role of mental health within the legal process (Crocker et al., 2015). The incongruity between their offense-related behavior and typical demeanor may render individuals found NCR particularly susceptible to experiencing MI symptoms, emphasizing the intricate relationship between legal and psychological elements (Fuller et al., 2019; Jahic et al., 2021; Latimer & Lawrence, 2006; Miladinovic & Lukassen, 2014).

These vulnerabilities stem from a combination of factors, such as the co-occurrence of mental illness and legal involvement, the stigmatization and

marginalization they experience, the complex interplay between their psychiatric condition and the criminal justice system, and the moral dilemmas they may encounter within forensic settings (Ferranti et al., 2013).The moral dilemmas inherent in their circumstances, such as reconciling personal culpability with mental illness, can intensify the psychological distress and MI they experience. This vulnerability to MI may be particularly relevant for individuals who witness a reduction in psychiatric symptoms as they undergo treatment and recovery as they gain insight into their offence and its consequences. The dissonance between their past behaviour and their evolving understanding of morality can lead to moral distress, guilt, and shame, intensifying their susceptibility to MI (Penny et al., 2013; 2022; Roth et al., 2021).

In addition, the pre-existing mental disorders within forensic populations, particularly among NCR, render them more vulnerable to the adverse effects of MI (Gudjonsson et al., 2011; Roth et al., 2021). Individuals grappling with pre-existing mental health challenges are often more sensitive to moral conflicts, intensifying feelings of guilt, shame, and moral distress (Maguen et al., 2017; Currier et al., 2019). This psychological turmoil resulting from MI can significantly impact well-being, functioning, and quality of life (Currier et al., 2015; Griffin et al., 2019; Nazarov et al., 2015, 2018; Watkins et al., 2016; Williamson et al., 2018). Recognizing the intricate interplay between pre-existing mental disorders and the psychological repercussions of MI (Bryan et al., 2016; Currier et al., 2019), it becomes apparent that exposure to morally challenging situations heightens the likelihood of moral transgressions, triggering subsequent emotional distress. These moral transgressions, characterized by actions

conflicting with personal moral codes or societal norms, give rise to guilt, shame, and moral anguish, particularly heightened by the presence of Adverse Childhood Experiences (ACEs) and challenges in emotional regulation (Cloitre et al., 2019; Huesmann et al., 2002; Luke & Banerjee, 2013; Wingenfeld et al., 2011; Cohen et al., 2017). Forensic psychiatric populations exposed to offense-related moral emotions often grapple with elevated emotional dysregulation and moral distress, potentially contributing to the development of MI (Jahic et al., 2021; Wingenfeld et al., 2011). This psychological distress can manifest as heightened rates of anxiety, depression, PTSD, and substance abuse (Battaglia et al., 2019; Briere, 1992; Cook et al., 2005; Jahic et al., 2021; Jinkerson, 2016; Protopopescu et al., 2020; Menzies et al., 2017).

Depression, a prevalent mental disorder, frequently co-occurs with MI (Bryan et al., 2018; Gerber et al., 2022). For those already grappling with depression, MI can exacerbate symptoms, fostering intense guilt, shame, distorted self-perception, hopelessness, and loss of interest (Currier et al., 2015; Hosser et al., 2008; Spearing et al., 2022; Walker et al., 2021). The weight of guilt and shame may precipitate self-harming behaviors as maladaptive coping mechanisms (Harris et al., 2015; Currier et al., 2019; Murphy & Harris, 2007; Proeve & Howells, 2002), thus amplifying psychological distress due to MI (Nazarov et al., 2018). Similarly, anxiety disorders are often observed in tandem with MI within forensic populations (Maguen et al., 2017; Gerber et al., 2022). The fear of exposure, judgment, or rejection stemming from moral transgressions fuels a state of perpetual apprehension and hypervigilance (Cartwright, 2002; Currier et al., 2015; Farnsworth et al., 2019; Murphy, 2007), magnifying overall distress and impacting

well-being (Bryan et al., 2018; Smith et al., 2018). Individuals with pre-existing anxiety disorders may witness their symptoms escalate due to MI, as internal conflicts and emotional distress exacerbate anxiety-related manifestations (Asmundson & Stapleton, 2008).

Elevated PTSD symptoms are also a notable consequence of MI (Barnes et al., 2019; Currier et al., 2019; Koenig et al., 2019; Roth et al., 2023; Walker et al., 2021). Exposure to morally injurious events or actions triggering internal conflict can exacerbate PTSD symptoms, including intrusive thoughts, nightmares, flashbacks, and heightened physiological arousal (Barnes et al., 2019; Maguen et al., 2017; Gerber et al., 2022). The traumatic nature of MI, coupled with internal conflicts and emotional distress, prolongs, and intensifies PTSD symptoms (Browne et al., 2015). Individuals with pre-existing PTSD may experience a resurgence of traumatic memories and worsening symptoms when confronted with moral transgressions (Gray et al., 2003; Hijazi et al., 2015; Spearing et al., 2022). This co-occurring of mental health challenges and MI can impede recovery and complicate the healing and rehabilitation journey. Furthermore, several contributing factors, including Adverse Childhood Experiences (ACEs) and emotional regulation difficulties, increase the risk of MI within the forensic psychiatric NCR population (Huesmann et al., 2002).

ACEs are prevalent among individuals within forensic psychiatric populations and contribute to their vulnerability to MI and psychological distress (Battaglia et al., 2019; Briere, 1992; Cook et al., 2005; Felitti et al., 1998; Huesmann et al., 2002; Jinkerson, 2016; Protopopescu et al., 2020). ACEs refer to traumatic experiences during childhood,

such as abuse, neglect, household dysfunction, or witnessing violence (Felitti et al., 1998; Huesmann et al., 2002). Accumulated traumatic experiences have a profound impact on their psychological well-being and render them more susceptible to MI (Battaglia et al., 2019; Briere, 1992; Cook et al., 2005; Jinkerson, 2016; Protopopescu et al., 2020). The trauma resulting from ACEs can manifest as shame, guilt, and self-blame, influencing an individual's behavior and moral perceptions, in addition to resulting in an increased risk of mental health disorders, substance abuse, and criminal behavior (Bardeen et al., 2013; Burns et al., 2010; Cloitre et al., 2019; Day, 2009; Hillis et al., 2016; Nickerson et al., 2015; Barlow et al., 2017; Iversen et al., 2007; Perez et al., 2018; Sareen et al., 2013). In addition, ACEs may influence the ability to cope with moral challenges later in life, including difficulties with emotional regulation (Cabrera et al., 2007; Campos et al., 2004; Hughes et al., 2017). Effective emotional regulation protects against MI, equipping individuals to adeptly navigate moral dilemmas, avert transgressions, and manage the psychological aftermath of their choices (Campos et al., 2004; Day, 2009). While challenges in emotional regulation render vulnerability to MI (Roth et al., 2022). This accentuates the vulnerability of the forensic psychiatric population to MI, an aspect that has only recently garnered research attention (Roth et al., 2021).

In fact, Roth et al. (2021) was one of the first studies to explore the moral and emotional experiences of the forensic psychiatric NCR population for symptoms consistent with MI. The study uniquely incorporated staff accounts of patient experiences in understanding MI among this population by employing a combination of top-down and bottom-up approaches to data analysis. Based on this analysis, Several themes emerged

from the research underscoring the relevance of MI to justice-involved individuals found in NCR.

Using a Jinkerson's syndromal framework, the study provided preliminary evidence that both core and secondary MI symptoms are pertinent to the forensic psychiatry context. Previous theoretical and empirical studies have characterized MI as encompassing impairing moral emotions (such as guilt, shame, and anger), negative self and other appraisals, behavioural problems (such as withdrawal and self-harm), and symptoms of anxiety and depression (Currier et al., 2017; Jinkerson, 2016; Litz et al., 2009; Nickerson et al., 2018; Yeterian et al., 2019). The findings of Roth et al. (2021) represent the first empirical demonstration of similar patterns among justice-involved individuals found in NCR, indicating the presence of comparable consequences stemming from the moral pain associated with committing a criminal offence.

Roth et al.'s (2021) findings align with traditional definitions of MI, distinguishing between experiences of moral perpetrations (via commission or omission) and moral betrayals. Participants in the study reported profound feelings of guilt, shame, remorse, and regret regarding their offenses, as well as self-directed anger and a loss of trust in their own morality. Some individuals resorted to increased substance use to cope with these distressing emotions, and suicidal thoughts were also reported. Moreover, the findings indicate that outwardly directed moral pain was prevalent among NCR individuals. This included a loss of trust and anger towards the forensic system, friends, and family. These experiences resonate with perceived moral betrayals and align well with Jinkerson's framework, which identifies core symptoms of MI, such as guilt, shame,

and loss of trust in oneself, others, or a higher being. Additionally, the study highlights secondary symptoms, including feelings of depression, anxiety, and anger, as well as re-experiencing moral conflict, self-harm tendencies, and social difficulties (Jinkerson, 2016). Thus, it is made clear that the results indicate that a symptom-based perspective effectively captures the consequences of both types of moral violations among the NCR population.

This unique population experienced moral pain related to their involvement with the forensic system, leading to a loss of trust in the treatment and recovery process. NCR individuals questioned their ability to contribute positively to society and expressed significant anger, anxiety, and hopelessness (Roth et al., 2021). Loved ones and care providers' perceived lack of belief in them and perceptions of an indefinite and unjust sentence length contributed to these emotions (Roth et al., 2021). Staff members confirmed these experiences, noting that behavioral presentations commonly seen in forensic settings, such as privilege violations, substance use, extreme mistrust and anger towards care providers, withdrawal, and reluctance to discuss the index events, may have moral relevance and be influenced by negative moral emotions (Roth et al., 2021). While more research is needed to understand the relationship between these behaviors and moral pain fully, these preliminary findings align with existing literature reporting similar observations (Roth et al., 2021). Significantly, this study represents the first attempt to employ a symptom-based definition of moral injury, adapted from military contexts, to explore its applicability across different populations. The findings provide preliminary empirical support for the utility of a syndromal definition of moral injury in cross-

population research. By adopting this framework, researchers can establish a standardized approach to the study of moral injury and facilitate meaningful comparisons across diverse populations.

1.6 Current Existing Measures of Assessing MI

Several self-report questionnaires have been developed to assess MI, particularly concerning military and war-related experiences. These assessments vary in their approach, with some using checklists to identify PMIEs (e.g., involvement in killing others) (Bryan et al., 2016; Currier et al., 2015; Nash et al., 2013), while others inquire about common reactions associated with MI, such as guilt, shame, and betrayal. In the first category of assessment tools, Nash and colleagues developed the 9-item Moral Injury Events Scale (MIES) for military contexts, focusing on war-related events including self-perpetration, perpetration by others, and experiences of betrayal (Bryan et al., 2016; Nash et al., 2013). Following this, the 20-item Moral Injury Questionnaire (MIQ) by Currier and team also evaluates morally injurious events and associated symptoms, such as violations of deeply held moral beliefs and feelings of betrayal (Currier et al., 2015). Modified versions of MIQ include inquiries about guilt, shame, difficulty in forgiveness, and withdrawal (Braitman et al., 2018).

For exclusive assessment of MI symptoms, the 45-item Moral Injury Symptoms Scale-Military Version-Long Form (MISS-M-LF) was introduced, followed by the 17-item Expressions of Moral Injury Scale-Military Version (EMIS-M) by Currier and colleagues (Currier et al., 2018). A shorter 10-item version of MISS-M-LF (MISS-M-SF) and a 4-item short version of EMIS-M were later developed (Koenig et al., 2018; Currier

et al., 2018). These measures primarily target active-duty military personnel or veterans, focusing on self- and other-directed moral emotions related to military experiences. Aligned with Shay (2014) and Litz et al. (2009), these scales predominantly concentrate on MI symptoms arising from combat situations, encompassing emotions like shame, grief, meaninglessness, and remorse due to violations of core moral beliefs (Currier et al., 2018). These symptoms pertain to actions taken (e.g., killing combatants or innocents, maltreating others, deserting comrades), actions not taken (e.g., failing to protect innocents or fellow soldiers), and observations of others' actions (Koenig et al., 2018). Additionally, MI symptoms may involve feelings of betrayal by authority figures, both within and outside the military, and encompass religious or spiritual struggles, even leading to a loss of faith from wartime experiences (Wortmann et al., 2017).

It is clear that a more comprehensive approach to MI assessment is needed, one that combines both phenomenological and syndromal perspectives (Roth et al., 2021; Yeterian et al., 2019). The syndromal approach emphasizes identifying the symptom profile of MI, going beyond mere assessment of PMIE exposure, and uncovering the core features of MI that manifest across diverse populations. This approach provides a standardized framework for understanding and identifying MI in different contexts (Yeterian et al., 2019). However, it may not fully capture the unique moral challenges faced by specific populations, such as those within forensic psychiatric settings. On the other hand, the phenomenological approach acknowledges the individual's unique experiences and contextual moral challenges, recognizing that MI can manifest differently depending on the specific population (Yeterian et al., 2019). It highlights the

importance of considering context and personal interpretation in understanding MI experiences.

The development of an innovative assessment tool that seamlessly integrates both phenomenological and syndromal elements holds the key to achieving a comprehensive understanding of MI within diverse populations, including the vulnerable forensic psychiatric population (Wood et al., 2020). By combining the strengths of these approaches, this novel tool aims to capture a symptom profile of MI that can be generalized across different contexts while also recognizing the unique and context-specific experiences faced by individuals within forensic psychiatric settings. This innovative assessment tool will be elaborated upon in the forthcoming chapters, detailing its design, administration, and validation process within another vulnerable population such, as the forensic psychiatric NCR population. By combining the phenomenological and syndromal perspectives, this tool will pave the way for a more comprehensive and sensitive approach to assessing and addressing MI within the forensic psychiatric population.

Thesis Objectives

The ground-breaking study by Roth et al. (2021) has ignited a new direction for research, focusing on developing measures and interventions specifically tailored to address moral injury within forensic psychiatric populations. This study catalyzes further exploration and aims to bridge the knowledge gap surrounding the unique moral challenges faced by individuals in forensic psychiatric NCR settings. Building upon this foundation, this thesis aims to develop a new measure that effectively captures MI and its

consequences within the forensic psychiatric NCR population. While existing measures have primarily targeted military and combat-related moral injury experiences, they may not fully characterize the unique moral challenges faced within the forensic psychiatric context. This new measure will consider the diverse roles and experiences within forensic psychiatric settings, including the impact of mental health issues, the presence of the criminal justice system, and the complexities involved in providing psychiatric care in a forensic environment. The thesis has a strong interest in the possible emergence of MI in the early phases of recovery, as the NCR population begins to gain insight into the nature of their crime. Research supports diminished insight in untreated or refractory patients suffering from psychotic disorders (Crocker et al., 2015; Roth et al., 2021), prevalent conditions in the forensic psychiatry realm. This novel scale can then be used to characterize the subset of the forensic psychiatric population that experiences MI.

In the upcoming chapters, the first study, a scoping review, is a critical step in understanding the offending population's distinct experiences of shame and guilt. By systematically analyzing the existing literature, the study aims to uncover the various facets of these emotions in the context of criminal behavior. This review will summarize the current state of knowledge and the importance of understanding these moral emotions and identify conceptual gaps in the literature that warrant further investigation. In the second study, we develop and validate the MIO-NCR scale targeting the assessment of moral injury sin the forensic psychiatric NCR population. By incorporating phenomenological and syndromal perspectives, the scale comprehensively assesses moral injury experiences among NCR individuals. The validation process seeks to ensure the

scale's accuracy, reliability, and sensitivity in capturing morally injurious experiences, making it a valuable tool for researchers and clinicians working with this vulnerable population.

Together, these two studies form a robust and synergistic approach to investigating moral injury within the offending population. The scoping review illuminates the manifestations of shame and guilt in this context, shedding light on their presence and consequences. This underscores the paramount importance of comprehending these emotions. Notably, the review reaffirms that shame and guilt manifest within the offending population, reinforcing the foundational framework upon which the MIO-NCR scale is constructed. In parallel, the MIO-NCR scale is a precise tool to quantitatively measure and evaluate moral injury experiences within the distinctive forensic psychiatric NCR cohort. This dual study approach not only enriches our comprehension of moral injury but also bolsters the significance of addressing shame and guilt in pursuing a comprehensive understanding of psychological dynamics within the offending population.

Chapter 2: Exploring the influence of shame and guilt on motivating behaviour and influencing psychological functioning among offending populations: A scoping review

The work in the following chapter is being prepared for submission. Proposed co-authorship for this manuscript includes Dr. Linna Tam Seto, Dr. Heather Moulden Dr. Margaret C. McKinnon and Dr. Bruno Losier

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Thus, in the following chapter, we investigate the impact of shame and guilt on motivating behavior and psychological well-being within offending populations, emphasizing their roles in psychopathology and recidivism. Through systematic database searches, we evaluated the literature using both quantitative and qualitative analyses. This research highlights the importance of comprehending moral emotions in enhancing our grasp of psychopathological dynamics within this unique context.

Exploring the influence of shame and guilt on motivating behaviour and influencing psychological functioning among offending populations:

A scoping review

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Abstract

Background: Shame and guilt are moral emotions important in promoting altruistic behaviour and inhibiting antisocial behaviour. These emotions may also contribute to the onset and maintenance of psychological disorders in individuals with a history of criminal offense. Here, we examine the influence of shame and guilt on motivating behaviour and psychological functioning among offending populations, with a specific focus on psychopathology and recidivism.

Methods: A systematic search of five electronic databases was conducted to identify relevant literature. Two reviewers independently screened citations for eligibility; a single reviewer performed data abstraction. Both quantitative and qualitative syntheses were conducted.

Results: Shame and guilt play important roles in the offending population's mental health and psychological functioning. Specifically, shame has been consistently linked to detrimental outcomes, including defensive behaviours, self-hatred, and externalizing behaviours including blaming others. In the case of individuals with a history of criminal offense, shame may result in overly cautious social behaviour motivated in part by negative self-perceptions. By contrast, guilt has been associated with more constructive responses, including self-forgiveness, empathic concern, and taking responsibility for one's actions, a pattern associated with increased cooperative behaviours. Despite these distinctions, both shame and guilt may contribute to the risk of recidivism among some individuals with a history of criminal offense.

Conclusion: This review suggests that shame and guilt positively and negatively affect motivating behaviour and influence psychological functioning among criminally and non-criminally responsible offending populations. Although guilt generally has positive implications, the interplay between shame and guilt is complex. Careful examination will be required to better understand the impact of guilt and shame on behaviour and the potential for rehabilitation among offending populations, including those found not criminally responsible. Accordingly, further research is needed to understand better the complex relations between moral emotions, psychopathology, and recidivism.

Exploring the influence of shame and guilt on motivating behaviour and influencing psychological functioning among offending populations:

A scoping review

The distinction between shame and guilt as distinct emotions has gained increased attention in recent years in psychology and criminology. Although these emotions have been historically conflated, there is increasing recognition that they represent distinct experiences with potentially differing implications for individuals and their behaviour (Bumby, 2000; Cook, 1988; Dearing et al., 2005; Wiechelt & Sales, 2001) with scholars across multiple disciplines exploring this distinction. Whereas guilt arises through violation of internal norms, shame appears linked with fear of criticism or disapproval by others (Berson, 2021; Duncan et al., 2015; Gilbert, 1998; Miceli & Castelfranchi, 2018). Along this vein, individuals may shift between self-awareness and external focus, with guilt emerging when personal values are violated (self-awareness) and shame occurring when others' values are perceived to be violated (external focus; Gibbons, 1990).

Evolutionary scholars emphasize the relation between shame and the need for social attractiveness and status, with guilt instead associated with empathic concerns for others (Gilbert, 1998). This distinction suggests shame is mainly linked to disapproval or criticism by others through its connection to the perceived threat to interpersonal relationships (Leary, 2000; Scheff & Retzinger, 1991). This distinction has not always been held up empirically and may differ by source of evaluation (Harris, 2003; Lindsay-Hartz, 1984; Wallbott & Scherer, 1995). Nonetheless, several studies comparing shame

and guilt reveal that whereas shame is characterized by feelings of exposure, a desire to hide, and perceptions of rejection; guilt is more closely associated with concerns about one's actions (Wicker et al., 1983; Tangney et al., 1996).

Interestingly, shame can be experienced even in the absence of others, suggesting that external evaluation is unnecessary (Tangney et al., 1996). For example, some scholars have proposed that shame arises when an individual forms a global negative evaluation of oneself. By contrast, guilt arises when an individual's evaluation is confined to a negative evaluation of specific actions (Lewis, 1971; Lewis, 1992; Lindsay-Hartz, 1984; Tangney, 1991). Here, whereas guilt appears associated with transgressions and rule-breaking, shame is linked to a perceived failure to live up to one's ideals (Lewis, 1971; Piers & Singer, 1953; Tangey & Dearing, 2002). Lewis, however, argues that shame's global nature and guilt's more specific focus may not reflect a fundamental difference between failure and transgression but rather a difference in how failure is attributed to the self or specific action (Lewis, 1992).

Tangey's work supports this distinction between attributions of failure by focusing on the underlying cognitive processes associated with guilt and shame (Tangney, 1990). Here, Tangey suggests that shame involves a global evaluation of the self as defective or unworthy. By contrast, guilt appears linked to a specific evaluation of one's behaviour as morally wrong or harmful to others. Tangney and Dearing (2002) expanded the model further, pointing to the externalization of blame in shame and the internalization of responsibility in guilt. They emphasize that whereas shame often involves defensive mechanisms like denial or projection, guilt tends to elicit reparative behaviour and a

desire to make amends for one's actions. This research sheds light on how shame and guilt are linked to different evaluations of the self and behaviour and to individuals' subsequent defensive or reparative responses. Understanding these distinctions between guilt and shame enhances our core scientific knowledge and our ability to shape psychological functioning and behavioural responses across differing contexts.

Guilt, shame, and psychopathology

Shame and guilt are widely considered moral emotions that inhibit undesirable behaviours (Campbell et al., 2010; Miceli et al., 2019; Smith et al., 2002). Despite this adaptive function, shame and guilt are associated with a range of psychological disorders, including depression, anxiety, post-traumatic stress disorder, bipolar illness, substance abuse, and eating disorders (Bottera et al., 2020; Gupta et al., 2008; Oluyori, 2013; Dearing et al., 2005; Lindsay-Hartz et al., 1995; 2007; Wright et al., 2008). For example, individuals who experience chronic shame may develop depression, anxiety, and post-traumatic stress disorder (Dearing et al., 2005). Similarly, individuals who experience excessive guilt may struggle with self-forgiveness and experience negative self-worth and self-criticism, which are thought to contribute to the onset of anxiety and depression (Carpenter et al., 2016; Kim et al., 2011). Similarly, individuals who experience guilt proneness appear at a higher risk for developing bipolar illness (Lindsay-Hartz et al., 1995). In addition, limited evidence suggests that individuals who frequently experience shame and guilt may use substance abuse to cope with negative emotions (Havnes et al., 2014; Wiechelt, 2007).

Shame and guilt are also associated with eating disordered behaviours (Berg et al., 2015; Bessenoff & Snow, 2006; Burney & Irwin, 2000; Larison & Pritchard, 2019; Sheehy et al., 2019). Specifically, some studies report a positive association between guilt and eating disorders, such as bulimia and anorexia nervosa (Berg et al., 2013; Berg et al., 2015; De Young et al., 2013; Wedig & Nock, 2010), with shame associated with the onset of these disorders. (Bottera et al., 2020; Gupta et al., 2008; Oluyori, 2013). Here, individuals who experience chronic shame about their appearance or weight are thought to engage in disordered eating patterns to regain, in part, a sense of control.

Notably, guilt and shame also appear to exert an influence on violent behaviours, motivation, and religious beliefs among some individuals (Dahl et al., 2003; Huesmann et al., 2002; Jensen & Gibbons, 2008; Lindsay-Hartz et al., 1995; Tangney, 1995). Whereas shame is associated with adverse outcomes such as violent behaviour and low motivation (Kim et al., 2011), guilt is associated with positive outcomes such as prosocial behaviour and empathy (Gausel & Leach, 2011; Jensen & Gibbons, 2008; Lindsay-Hartz et al., 1995; Tangney, 1995; Shepard & Rabinowitz, 2013). In line with this hypothesis, Huesmann et al. (2003) reported an association between shame and negative outcomes such as violent behaviour and low motivation. This finding was further supported by Jensen and Gibbons (2008), who emphasized the relation between shame and violent behaviour. Similarly, Lindsay-Hartz et al. (1995) found that shame were associated with decreased motivation. By contrast, Tangney (1995) found that guilt was associated with positive outcomes, including prosocial behaviour and empathy.

Taken together, these findings suggest that guilt and shame may exert differential effects in promoting healthy and positive behaviour. Whereas guilt appears linked to beneficial outcomes, shame is associated with negative consequences (Silverman et al., 2019). Further study is required to examine the distinction between guilt and shame and their differing impact on individuals' behaviour, psychological functioning, motivation, and religious beliefs. Such efforts are likely to inform targeted interventions to foster positive behavioural patterns and cultivate a healthy mindset.

Shame and guilt among offending populations

The distinction between guilt and shame appears particularly significant in the context of offending populations, which encompass individuals who are criminally and non-criminally responsible for their offences. Unsurprisingly, an extensive literature has described the presence of offence-related shame and guilt in these populations (Brennan et al., 2018; Chakhssi et al., 2013; Marriott, 2007; Mossière et al., 2020; Rebellon et al., 2010).

Interestingly, the experience of guilt and shame following criminal offences does not align consistently with the magnitude of the actions committed. Here, individuals may grapple with high levels of guilt and shame even after minor offences (Kovacs et al., 2019), suggesting that shame and guilt may exert a shared influence on behaviour, intertwining in response to wrongdoing. Indeed, individuals may feel guilt focused on their actions while also experiencing negative self-evaluation (shame). The complementary nature of these emotions is intuitive, as one's guilt for hurting another

person is likely to trigger shame associated with negative self-perception and concern about others' judgement.

Accordingly, across many contexts, shame and guilt may co-occur with proportional intensity. This is particularly pertinent in criminological cases, where guilt about specific wrongdoing may be associated with an overall evaluation of shame. In other situations, however, a negative self-evaluation may be present without a distinct source of guilt. Here, it may be crucial to differentiate between shame and low self-esteem (Leary & Downs, 1995; Miceli et al., 2018), which may pre-date the criminal occurrence. Interestingly, individuals with a history of criminal offense coming from non-criminal families felt stronger shame and guilt when thinking about their crimes. (Kovacs et al., 2019).

The Current Study

In some individuals, guilt and shame may persist long after committing the offence, exerting lasting effects on their psychological well-being. In a pattern similar to that observed among individuals with no prior criminal records, those with a history of criminal offenses may experience lasting shame and guilt that appears to elevate the risk for the development of mental health conditions, including depression, anxiety, and substance abuse (Brennan et al., 2018; Chakhssi et al., 2013; Marriott, 2007; Mossière et al., 2020; Rebellon et al., 2010). Here, further exploration of shame and guilt in offending populations appears crucial not only to gain insights into the unique challenges and psychological distress experienced by individuals involved in criminal behaviour but also

to develop effective interventions and support systems to address their well-being and facilitate rehabilitation.

To date, however, no one review has synthesized this literature, particularly concerning the distinct roles of guilt and shame in motivating behaviour and influencing psychological functioning among individuals with a history of criminal offense. An enhanced understanding of the distinct influences of shame and guilt among offending populations is expected to provide important insights into the psychological and emotional factors contributing to criminal behaviour and promoting the onset and maintenance of psychological disorders. This, in turn, can inform the development of targeted interventions and support services that address the unique needs of these populations and improve their chances of successful rehabilitation and reintegration. Accordingly, we examined the influence of shame and guilt on motivating behaviour and psychological functioning among offending populations, explicitly focusing on psychopathology and recidivism.

Methods

A scoping review was conducted to map out the existing literature on shame and guilt among offending populations. Scoping reviews are ideal methods for understanding the depth of literature on a specific topic. This review followed the five-step methodological framework developed by Arkey & O'Malley (2005): (i) identification of the research question; (ii) identification of relevant studies; (iii) study selection; (iv) data extraction; and (v) content analysis.

Identification of the research question

The research question was broad enough to capture a range of literature but clearly defined so search strategies could be used. This scoping review had the following research question, "What do w*e know of the impact of shame and guilt on psychopathology and criminal recidivism in the offending population*?" Specifically, our interest focused on how emotional responses of shame and guilt influence individuals psychologically and socially, as well as their rehabilitation trajectories.

Identification of relevant studies and study selection

Five large academic databases were searched: PsycINFO, Web of Science, Sociological Abstracts, Medical Literature Analysis and Retrieval System Online (Medline), and Excerpta Medica Database (Embase). Database searches were completed using the following keyword and word combinations: guilt, shame, and offending adult population. Terms were searched in combination by keyword and subject headings, using proximity searches and truncations to capture variations. The search terms used included: guilt, shame, adult(s), crime(s), criminal(s), offender(s), and felon(s).

Articles were screened into the study if they were of English-language, peer-reviewed quantitative or qualitative studies. Empirical studies focusing on individuals who have committed any criminal act and been legally charged according to their criminal justification or equivalent were included in the review. Shame and guilt had to be explicitly stated as distinct emotional experiences. Thus, studies that did not explicitly

make this distinction or treated shame conceptually distinct from guilt or vice versa were not accepted. Studies that grouped shame and guilt into the umbrella term "moral emotion(s)" without explicitly separating during analysis were excluded. Articles had been peer-reviewed, had been published in English and included the following types of samples: (a) Adults (18+) of either sex who have been convicted of a crime/criminal offence/criminal act by the Criminal Justice or known equivalent, or (b) Young individuals/juveniles (<18years) of either sex who have committed a crime/criminal offence/criminal act, and charged as an adult offence by the Criminal Justice system or known equivalent. Family members, survivors, victims, or witnesses of criminal acts were excluded from the review. No ethical approval was required since all the data were taken from published studies.

Data extraction and content analysis

Independent reviews of the articles were conducted using the Covidence Systematic Review Management approach (Covidence systematic review software, 2022), such that both reviewers read the abstracts and determined whether they complied with the inclusion and exclusion criteria referenced above. Duplicates were eliminated from the sample. The eligibility of the studies that passed the first screening process was then matched between the reviewers, in which any disagreement resulted in a discussion of the article's eligibility to reach a consensus. The search yielded a total of 1158 articles; once duplicates were removed, there was a new total of 467 articles. After the inclusion and exclusion criteria were applied to titles and abstracts and any discrepancies were settled, 92 articles remained (See Figure 1).

Articles were reviewed using an analytic data guide that addressed the following: (i) general article information [including author(s), title, journal information, keywords, year of publication, research location, and study design; and (ii) its purpose (intended audience).

Results

Overview of article characteristics

Following the full-text review, 34 sources were selected for complete analytic data extraction. Of this sample, twenty-one were quantitative in nature; the balance was a blend of qualitative and mixed (quantitative and qualitative) reports. Quantitative studies (n=21) used a variety of self-report questionnaires, including self-report questionnaires and clinician-guided questionnaires such as the Test of Self-Conscious Affect (TOSCA) Scale and the Guilt and Shame Proneness Scale (GASP) (for a summary see Table 2). The remaining sources were qualitative studies (n = 9), review studies (n =1), and mixed-methods quantitative and qualitative studies (n =3). These sources were published between 1995 and 2023. The main themes observed suggested that shame and guilt impacted not only individuals with a history of criminal offense's transition back to society but also maladaptive coping strategies and psychiatric symptomology (See Table 2 for a summary of selected review sources)

Theme 1: Guilt, shame, and self-blame

A strong relation emerged between guilt, shame, and self-blame in the reviewed studies; the directionality of this relation was, at times, contradictory, as reviewed here. The reviewed studies reveal a compelling interrelationship that

often defies straightforward interpretation. While guilt, often linked to internalized attributions and moral reasoning, appears to be associated with a sense of personal responsibility and a propensity for self-examination, shame tends to be intertwined with externalizing coping mechanisms and negative self-perception (Kovacs et al., 2019; Verkade et al., 2020). This paradoxical connection underscores the multifaceted nature of these emotions among criminal offense history, warranting further investigation to grasp their complex interplay fully.

Shame:

Two studies reviewed here suggested that shame among individuals with a history of criminal offense is associated with a preference for externalizing coping mechanisms that involve attributing the cause of one's behaviour or events to external factors (Kovacs et al., 2019; Verkade et al., 2020). Here, these individuals appear less likely than individuals with no prior criminal records to utilize internalizing coping strategies when experiencing shame (Elison et al., 2006; Nathanson, 1992; Schalkwijk et al., 2016). External attributions, such as attributing one's behaviour to environmental or situational factors, are more common among individuals with a criminal offense history. Although mild and transient experiences of shame can have a positive regulatory function, chronic and intense shame tends to be maladaptive and can lead to transgressive behaviour when individuals employ externalizing coping strategies (Deonna et al., 2011; Lewis, 1971; Stuewig et al., 2010; Tangney & Dearing, 2022).

Individuals with a history of criminal offense also demonstrate a tendency to minimize their behaviours, blame others, and view their behaviour as unavoidable given the circumstances (Harris, 2003; Kovacs et al., 2019; Murphy, 2006; Proeve & Howells, 2002; Verkade et al., 2020). Compared to individuals with no prior criminal records, individuals with a history of criminal offense may also exhibit lower levels of moral reasoning (please see below) and stronger self-centeredness (Verkade et al., 2020). Notably, one study failed to reveal an association between shame and self-blame (Kovacs et al., 2019). Accordingly, further research is needed to fully understand the dynamics of shame and self-blame among the offending population.

Guilt:

Empirical evidence consistently demonstrates the link between guilt and the offending population's preference for internalizing coping mechanisms (Blumenthal et al., 1999; Dolan, 1995; Kovacs et al., 2019). Individuals with a history of criminal offense who internalize the cause of their actions tend to assume personal responsibility and attribute their behaviour to internal factors such as character or moral failings. This increased self-blame contributes to a greater inclination towards moral reasoning, as individuals critically evaluate their actions within a moral framework. Internal attributions play a vital role in enhancing moral reasoning among individuals with a history of criminal offense by promoting a sense of agency and personal responsibility, reducing anxiety and guilt, and fostering a more self-determined approach to addressing their actions (Verkade et al., 2020).

Guilt and shame:

The empirical evidence discussed in this section underscores the significant relationship between shame, guilt, and self-blame within the offending population. Kovacs et al. (2019) conducted a comprehensive study that shed light on the interplay between self-blame, shame, guilt, and the general discomfort experienced by individuals with a history of criminal offense. Their findings revealed that self-blame, as a precursor to shame and guilt, was strongly associated with the emergence of negative emotions and distress among individuals with a history of criminal offense. In other words, when these individuals attributed blame to themselves for their actions, it triggered subsequent feelings of shame and guilt, leading to heightened emotional discomfort.

Notably, Kovacs et al. (2019) found that shame had a more pronounced effect on prison adjustment than guilt, suggesting that shame plays a particularly influential role in shaping emotional experiences and stress levels among incarcerated individuals. The experience of shame, characterized by a focus on the self through the eyes of others and self-denigration, appeared to have a more detrimental impact on emotional well-being within the prison environment. This detrimental impact of shame results in the use of maladaptive coping strategies such as venting on emotions, self-blame, and distraction. Contrastingly, guilt was negatively associated with using these strategies (Kovacs et al., 2019).

Notably, the distress arising from shame and guilt can contribute to self-blame, affecting individuals with a history of criminal offenses' ability to forgive

themselves for their transgressions (Harris, 2003; Proeve & Howells, 2002). Interestingly, research in Ghana by Osei-Tutu et al. (2021) revealed that self-forgiveness is positively associated with guilt-proneness and negatively associated with shame-proneness, regardless of the type of offence committed. This finding suggests a consistent pattern across different cultural contexts, highlighting the universality of these associations.

Taken together, these findings emphasize the interplay between shame, guilt, self-blame, and the ability of individuals with a history of criminal offense to forgive themselves. Shame and guilt can impede self-forgiveness, further impacting individuals with a history of criminal offenses psychological well-being.

Theme 2: Guilt, shame, and transition back to society

Individuals with a history of criminal offense, encounter a range of complicated challenges following release with finding housing and employment upon re-entry often identified as the most challenging tasks that individuals with prior convictions face, yet also the foundations for successful reintegration (Gannon & Rose, 2008; Gobbels et al., 2016; Travis & Waul, 2003; Zevitz, 2006). Reintegration may be assisted by the recognition that individuals with a history of criminal offense, have the potential to seek appropriately primary human goods, develop appropriate value systems, construct a positive self-identity, and acquire the adaptive and coping skills required to succeed and maintain psychological wellbeing (Ward & Gannon, 2006).

Here, a consistent body of literature suggests that shame and guilt play a crucial role in the transition of the offending population back to society by influencing the likelihood of recidivism (Barrett et al., 2003; Fitch & Nazaretian, 2019; Gainey & Payne, 2000; Havnes et al., 2014; Jensen & Gibbons, 2002; Murphy, 2006; Robbers, 2009). This influence appears positive and negative, with moral emotions increasing and, in some cases, decreasing the success of individuals with a history of criminal offense rehabilitation process.

Shame:

The relation between shame and recidivism has been explored extensively among former prisoners, highlighting the detrimental impact of shame on post-incarceration experiences and its potential to increase the likelihood of re-engaging in criminal activity. Here, studies consistently demonstrate that shame is associated with adverse long-term outcomes for individuals with prior convictions, including job loss, feelings of worthlessness, and a lack of community involvement (Gainey & Payne, 2000; Robbers, 2009).

Individuals with prior convictions often find themselves in a distressing pattern where their career progression is halted, leading them to accept jobs that do not align with their true skill levels. This frustrating circumstance is tied closely to the experience of shame (Robbers, 2009) where shame emerges from the dissonance between an individual's perceived social identity and societal norms and expectations (Tangney & Dearing, 2002). This dissonance is particularly evident for individuals with prior convictions when their career aspirations clash with limited

job opportunities and discriminatory hiring practices favoring individuals without a criminal history. Consequently, these individuals are often relegated to positions below their potential, eroding their self-worth and triggering humiliation (Ward et al., 1997).

This resultant shame appears to drive, in part, isolation that exacerbates the alienation experienced by individuals with prior convictions, and further limits their access to support networks and positive influences that could facilitate their successful reintegration into the workforce. In such vulnerable states, the risk of recidivism becomes more prominent as a means of survival and coping associated with the financial strains arising from unfulfilling employment (Proeve & Howells, 2009; Robbers, 2009).

An unmet desire for career advancement and associated frustration may also fuel individuals with prior convictions' desperation to engage in money-generating offences. Notably, one study suggests that shame may increase the likelihood among former individuals with a history of criminal offense, of engaging in a wide range of predatory offences against property or people (Fitch & Nazaretian, 2019). These offences span various categories of the criminal code and can involve physically attacking someone, participating in gang fights, stealing money or goods, damaging property, and engaging in fraudulent activities. While these offences may temporarily alleviate the pain of shame and unfulfillment, they also perpetuate a cycle that hampers genuine rehabilitation and reintegration efforts.

It is worth noting, however, that shame can also have a positive motivational value in the context of rehabilitation efforts. For example, higher levels of shame proneness have been associated with increased motivation to participate in rehabilitative programs and are associated with a stronger commitment to reform among incarcerated individuals (Jensen & Gibbons, 2002). In another study, Tangney et al. (2014) found that shame, predicted decreased recidivism and law-abiding behaviours depending on its associated motivations. Here, one author has termed shaming that promotes conformity and reintegrates individuals into society as reintegrative shaming (Tignor et al., 2017). Taken together, these studies highlight the potential of shame as a motivating force in the offending population's aspirations for rehabilitation. Caution is, however, warranted given shame's association with global negative self-evaluation, and the onset of psychopathology, suggesting strongly that shame should not be encouraged as a positive "therapeutic" intervention. Instead, one author has suggested that more integrative and less stigmatizing processes, including emphasizing the offence itself as opposed to the offending person, may produce positive outcomes (Hipple et al., 2015).

The relation between shame and recidivism appears influenced by several factors, including religion, personal beliefs, and the presence of support systems (Jensen & Gibbons, 2002; Proeve & Howells, 2002). In the context of gender differences, peer shaming appears influential in predicting offending behaviour, but parent shaming does not significantly contribute to this outcome. Interestingly,

shame acknowledgement mediates the relation between gender and conformity (Fitch & Nazaretian, 2019).

Among individuals with a history of criminal offense, who have committed sexual offences, shame appears to exert negative impacts on self-esteem and self-perception, influencing their interactions with others (Proeve & Howells, 2002; Robbers, 2019). This behaviour includes a fear of disclosing their crimes (Chui & Cheng, 2013). Here, shame may trigger a defensive reaction aimed at avoiding further humiliation, resulting in a cautious approach to social interactions. Individuals with prior convictions who fear discrimination from their communities may also experience diminished self-worth, impairing their ability to reintegrate successfully (Chui & Cheng, 2012). In prison environments, shame-related concerns may further discourage individuals with a history of criminal offense from participating in group therapy (Murphy, 2006). Moreover, shame may lead to externalization behaviours, such as blaming victims, negatively impacting empathy and potentially increasing the risk of re-offending (Bumby, 2000).

Shame also affects the offending population's personal relationships, both within and outside of prison, thus impacting their ability to rehabilitate and reintegrate into the community. The negative self-perception associated with shame can hinder the rehabilitation journey, particularly among individuals with a history of sexual criminal offense, against children who may experience shame in response to their crime being discovered (Gilbert, 1998; Proeve & Howells, 2002; Ward et al., 1997). Individuals who have committed sexual offenses involving minors may

also display specific attachment styles, such as a preoccupied and fearful attachment styles, which contribute to a lack of intimacy in adult relationships and an increased sensitivity to rejection (Garofalo & Bogaerts, 2019; Staufenberg, 2010; Ward et al., 1997). These attachment styles may also influence this offending population's sexual preoccupations and contribute to their potential disregard for the victims' feelings (Ward et al., 1997).

In a related study, Hudson et al. (1992) used attribution theory to examine the role of shame and guilt in sexual offending relapses. They proposed that an individual with a history of criminal offense, who responds to a lapse with controllable internal attributions experiences guilt, which motivates a commitment to abstinence. By contrast, an individual with a history of criminal offense, who responds with uncontrollable internal attributions, leading to feelings of shame, may give up attempts to cope and experience a complete relapse (Bumby, 2000; Hudson et al., 1992; Proeve & Howells, 2002).

In summary, shame has complex implications for recidivism and the experiences of individuals with a history of criminal offense. It influences conformity, gender differences in offending behaviour, self-esteem, social interactions, and the rehabilitation journey. The specific effects of shame vary depending on the type of offence, attachment styles, and attribution processes.

Guilt:

Guilt has been identified as a significant factor influencing individuals with a history of criminal offense's rehabilitation success and the likelihood of

recidivism (Brown et al., 2018; Proeve & Howells, 2002). Here, guilt is associated with remorse and regret, motivating individuals to take corrective action and make amends for their wrongdoings (Fuller et al., 2019; Osei-Tutu et al., 2021). Guilt is also positively linked to self-forgiveness, which differs from shame (Blumenthal et al., 1999; Fuller et al., 2019; Proeve & Howells, 2002). Individuals with a history of criminal offense, who view forgiveness as a way to restore relationships are more likely to apologize, make amends, and offer restitution, leading to genuine self-forgiveness (Osei-Tutu et al., 2021).

Guilt has also been associated with fearful personality types, characterized by high anxiety levels, low self-esteem, avoidance of social situations, and excessive worry (Blumenthal et al., 1999; Fuller et al., 2019). Fearful individuals may be more prone to experiencing guilt due to their heightened sensitivity to social cues and negative thoughts (Fuller et al., 2019). They may also overestimate the potential negative consequences of their actions, leading to a heightened sensitivity to guilt (Blumenthal et al., 1999).

Notably, guilt-proneness has been found to be inversely related to criminal community connectedness among inmates (Folk et al., 2019; 2018). Whereas individuals with a history of criminal offense, who are less guilt-prone tend to become more connected to the criminal community during incarceration, higher guilt-proneness is associated with feelings of remorse and regret for their crimes (Folk et al., 2019; Tangney et al., 2007). Taken together, these findings suggest that guilt may disrupt or alter individuals with a history of criminal offense's

relationships and their associations within criminal networks, potentially influencing their rehabilitation success.

Guilt also plays a crucial role in the context of relapse among individuals with a history of sexual offenses. Among these individuals, who attribute their relapse to internal factors, acknowledging their responsibility and control over their actions, are more likely to experience guilt (Proeve & Howells, 2002). This experience of guilt enhances their motivation and commitment to abstain from further criminal behaviour, leading to increased confession and active engagement in rehabilitation efforts (Mascolo & Fischer, 1995; Proeve & Howells, 2002).

Theme 3: Guilt, shame, and interactions with the legal system

Guilt:

Interestingly, guilt has been identified as a mediator in promoting appropriate and positive interactions with law enforcement and authority figures, thus having the potential to facilitate a smoother experience within the criminal justice system and to improve the prospects of successful rehabilitation and reintegration into society (Brown et al., 2018). Here, individuals with a history of criminal offense's perceptions of the legitimacy of criminal sanctions and trust in authority impact not only compliance but also subsequent recidivism rates (Brown et al., 2018; Kirk et al., 2011; Makkai & Braithwaite, 1991; Tyler, 2006). Two studies suggest further that treatment suspects receive from the police can influence their perceptions of procedural justice throughout the criminal justice system. Factors such as police politeness, respect, and opportunities for voicing individuals

with a history of criminal offense's views contribute to perceptions of fairness and trust in the system (Baker et al., 2014; Casper et al., 1988). Finally, individuals with a history of criminal offense, who perceive sanctions positively are more likely to comply with them, while perceptions of unfairness, ineffectiveness, or inappropriate administration are associated with increased criminal behaviour (Petersilia & Deschenes, 1994; Sherman, 1993). These perceptions, in turn, can impact cooperative behaviour and the overall sense of fair treatment within the criminal justice system.

In one study, Brown et al. (2018) explored the impact of guilt on individuals with a history of sexual offenses views of the police and the criminal justice system. Higher levels of guilt were associated with positive perceptions of the police and court experiences. These positive perceptions correlated further with enhanced cooperation, such as admitting to the crime during interrogations. In a study involving adult males incarcerated in a Canadian penitentiary for various offenses, feelings of guilt were found to be associated with a higher likelihood of confessing to their crimes (Deslauriers-Varin, Lussier, & St-Yves, 2011). Similarly, Gudjonsson & Sigurdsson (1999) discovered that Individuals with a history of sexual offenses, especially those who abused children, confessed more frequently due to a strong internal need to confess, which correlated with their feelings of guilt. This was further supported by Beauregard & Mieczkowski (2012) revealed that for child molesters, the age at the time of the offense and post-crime feelings of guilt were significantly linked to the decision to confess. These findings highlight

the role of guilt in shaping individuals with a history of criminal offense's perceptions of authority figures and their willingness to cooperate, ultimately promoting endorsement of the legitimacy of criminal sanctions and having the potential to reduce recidivism.

Additional research points to the influence of guilt on the behaviour of individuals with a history of criminal offense, prompting, for example, admissions of guilt and a heightened need to confess, particularly among sexual abusers of children (Beauregard & Mieczkowski, 2012; Deslauriers-Varin et al., 2011; Gudjonsson & Sigurdsson, 2000). For example, Gudjonsson et al. (2011) examined the relation between guilt, specifically remorse, and cooperative behaviour during police interviews, and the likelihood of conviction in court. The study revealed a positive correlation between the expression of remorse and cooperative behaviour during police interviews. This study also reported that remorse was associated with a decreased likelihood of conviction. In a related study, Gaes (2005) found that demonstrating remorse may also lead to more lenient sentences for individuals with a history of criminal offense, where remorse was seen as an indication of an individual's potential for rehabilitation. Notably, this study emphasized the importance of genuine remorse and a sincere desire to make amends. These findings suggest that remorse among individuals with criminal offense history may positively impact legal outcomes. These studies also highlight the role of guilt, mainly through the expression of remorse, in fostering cooperative behaviour with authorities. Individuals with a history of criminal offense, who genuinely express

remorse and are sincerely willing to make amends are more likely to be viewed as receptive to rehabilitation and may receive more favorable treatment within the criminal justice system.

Theme 4: Guilt, shame, projective identification, and aggression

As reviewed, individuals with a history of criminal offense commonly experience guilt and shame in response to their past offending actions. Here, a vast body of evidence suggests that maladaptive coping strategies, including poor emotion regulation and projective identification, are associated with the emergence of guilt and shame among the offending population (Blumenthal et al., 1999; Crisford et al., 2008; Dolan, 1995; Harris, 2003; Murphy, 2006; Proeve & Howells, 2002; Verkade et al., 2020). These coping mechanisms are characterized by difficulties in managing and regulating emotions and the tendency to project unwanted or unacceptable feelings onto others, including through violent and aggressive behaviour.

Indeed, some authors suggest that individuals with a history of criminal offense may resort to violent behaviour as a maladaptive coping strategy in response to guilt and shame. This behaviour is seen as an attempt to regain a sense of control and power, restore self-esteem, and alleviate the distress caused by shame (Baker et al., 2021; Kovacs et al., 2019; Osei-Tutu et al., 2021; Proeve & Howells, 2002). As outlined below, further research is needed to establish a definitive link between violent behaviour and the role of guilt and shame as triggers for such behaviour.

Shame:

A substantial body of literature has examined the association between shame and aggression among the offending population. This relation is characterized by the experience of intense shame among some individuals with a history of criminal offense, which, in turn, is thought to lead individuals to redirect their self-directed hatred toward others (Falcus & Johnson, 2018). When confronted with this overwhelming shame, individuals may experience a sudden loss of self-esteem, triggering defensive actions to prevent further humiliation (Kaplenko et al., 2018; Murphy, 2006).

This connection between shame and aggression appears to be influenced by a sense of confusion between the self and the source of shame-related distress (Lewis, 1971; Piers & Singer, 1953; Teyber & McClure, 2011). This confusion often manifests through a psychological mechanism known as *projective identification* (Akerman & Geraghty, 2016; Falcus & Johnson, 2018; Farmer & Andrews, 2009; Havnes et al., 2014; Murphy, 2006). Projective identification involves individuals projecting their unwanted or unacceptable feelings, thoughts, or traits onto others, attributing those aspects to the external world or individuals. This defense mechanism has been observed among individuals with a history of criminal offense where they appear to engage in unconscious attempts to relieve their shame by assigning it to others or external factors.

Notably, some individuals with a history of criminal offense appear to react with rage in what has been described as an attempt to control underlying self-

damage, shame, or narcissistic injury (Murphy, 2006). Here, Murphy (2006) reported that many individuals with a history of criminal offense, described experiencing rage at the time of the assault; feelings of shame were prominent in this sample. There is a broad consensus that rage is often a response to perceived self-damage, shame, or narcissistic injury (Harris, 2003; Lewis, 1993; Murphy, 2006). Moreover, shame may result in a sudden loss of self-esteem, thought to be associated with downstream defensive actions aimed at preventing further humiliation (Cartwright, 2002; Lansky, 2007; Murphy, 2006).

Within this context, Melloy (1992) suggests that individuals prone to rage-type murders are influenced by primitive defense mechanisms such as denial and projective identification. These individuals may exhibit a desperate need for control, which manifests in projective identification. Murphy (2006) also found evidence of confusion regarding the source of distress and its expression through violence among individuals with a history of criminal offense. A similar pattern has been observed among young violent individuals with criminal offense history, many of whom exhibit low levels of shame and high levels of anger (Farmer & Andrews, 2009).

Critically, research concerning the relation between shame and aggression has focused primarily on the origins of shame-proneness. In line with Murphy (2006) and others' work, Harris (2003) proposed that unresolved shame leads to increased anger and hostility towards others among the offending population. For example, one study explored the recollection of shaming experiences by male

assaultive individuals with a history of criminal offense, charged with domestic abuse (Dutton et al., 1995). This study revealed significant associations between recollections of being shamed by parents and the propensity to exhibit anger, abuse towards spouses (as reported by their partners), and specific personality traits. These findings suggest that memories of shaming experiences may play a more critical role than recollections of physical abuse in shaping what is known as an "abusive personality" among individuals with criminal offense history (Dutton et al., 1995).

The literature on the shame-aggression link among individuals with a history of criminal offense, also suggests that feelings of shame can lead to violent behaviour as individuals attempt to externalize their self-hatred onto others (Gold et al., 2011). This defensive response is thought to prevent further humiliation. Here, several studies suggest that the shame-aggression relation is mediated by confusion between the self and the source of shame, which is transferred through projective identification (Akerman & Geraghty, 2016; Cartwright, 2002; Dutton et al., 1995; Falcus & Johnson, 2018; Kaplenko et al., 2018; Melloy, 1992; Moss, 2003; Murphy, 2006). Unresolved shame may also lead to increased anger and hostility, contributing to the development of coercive and controlling behaviours (Dutton et al., 1995; Falcus & Johnson, 2018; Kaplenko et al., 2018). For instance, Kaplenko et al. (2018) found that higher levels of shame were associated with higher decision-making power and restriction of a partner's behaviour. This need for power

is linked to the offender's perception of victimization and is often viewed as relieving emotional turmoil (Falcus & Johnson, 2018).

Guilt and shame:

Notably, the literature reviewed here suggests that shame and guilt significantly influence aggression projection in the offending population (Akerman & Geraghty, 2016). For example, Akerman & Geraghty (2015) found that group therapy for adult male violent and sexual offenders can evoke feelings of shame and guilt that are further associated with projecting negative feelings onto others. This aggression projection appears to be a common coping strategy employed by individuals with a history of criminal offense to deal with these emotions (Akerman & Geraghty, 2016; Murphy, 2006). Here, it is thought that only when individuals with a history of criminal offense recognize these feelings as part of themselves can they take ownership of their actions and cease the projection of aggression.

Theme 5: Guilt, shame, and social reasoning

Although outside the scope of this review, extensive literature suggests that individuals with a history of criminal offense's experience alterations in core social cognitive processes, including empathy (Covell & Scalora, 2002; Geer et al., 2000; Seidel et al., 2013; Spencer et al., 2015;Winter et al., 2013), theory of mind (Karoglu et al., 2022; Spencer et al., 2015; Winter et al., 2017), emotion recognition (Gardner et al., 2014; Garofalo et al., 2018; Spencer et al., 2015; Robertson et al., 2014) and moral reasoning (Chen & Howitt, 2007; Palmer, 2006; Romeral et al., 2018; Spencer et al., 2015). Experiences of guilt and shame appear to moderate

these core disruptions in social cognition, including empathy and perspective taking, where guilt and shame appear to influence individuals with a history of criminal offense's ability to navigate the social world and to engage in complex social reasoning tasks including moral reasoning.

Shame:

Extensive scholarly research has explored the complex nature of shame, particularly in association with self-perception as viewed through the eyes of others and self-depreciation (Bumby, 2000; Lewis, 1971; Tangney, 1996). For example, adults involved in sexually offensive behaviour may experience not only self-oriented distress related to shame, but also score lower on self-report measures of empathy, including its component parts, emotion recognition, perspective-taking, and emotional empathy (Burke, 2001; Jollife & Farrington, 2004; Marshall et al., 2009; Proeve & Howells, 2002). Externalization responses that involve assigning blame to victims and evading personal responsibility also appear to have the potential to further impede empathy for victims (Farrington, 1998; Miller et al., 1998; Owen et al., 2011; Proeve & Howells, 2002). By contrast, although a weak relationship has been found between cognitive empathy and violent offending (Jollifee, 2014), no significant relation was observed between levels of shame and levels of empathy among *young* violent individuals with a history of criminal offense (18-25) (Owen et al., 2011)

In a related study, Proeve and Howells (2002) explored the role of shame and guilt in inhibiting empathic responses among individuals with a history of

criminal offense. Here shame, described as a self-oriented distress response, appeared to prompt these individuals to employ externalization strategies. This defensive response may involve shifting blame onto victims and evading personal responsibility for actions, a response that appears to downstream impair their capacity to empathize with the experiences and emotions of those they harmed (Jollife & Farrington, 2004; Lamgen et al., 2014). Notably, this inhibition of empathic responses has the potential to further hinder offender rehabilitation and the reestablishment of meaningful interpersonal relationships.

Guilt:

Several studies have highlighted the potentially beneficial role of guilt in promoting the development of empathic concern and perspective-taking abilities among individuals with a history of criminal offense (Proeve & Howells, 2002). Here, guilt may prompt individuals to confront the consequences of their actions, take responsibility for the harm caused, and enhance their ability to empathize with the experiences of victims (Harris, 2003). This ability to acknowledge wrongdoings in relation to genuine remorse may further motivate individuals to seek restitution and engage in prosocial behaviours to make amends (Sheikh & Janoff-Bulman, 2010). Moreover, guilt may serve as a catalyst for cognitive and emotional growth, facilitating a deeper understanding of the impact of one's actions on others and potentially leading to increased empathy (Berndsen & Manstead, 2007; Harris, 2003; Olthof, 2012).

In contrast to shame, which is thought to have the potential to engulf an offender's sense of self, guilt has been examined for its ability to direct an offender's focus toward a critical analysis of their thoughts and behaviours (Bumby, 2000; Parker & Thomas, 2009). In line with this hypothesis, individuals with a history of criminal offense, experiencing guilt appear more inclined to engage in introspection and to examine the consequences of their actions on victims, processes thought to lead to an increased capacity for empathic concern and perspective-taking (Berndsen & Manstead, 2007; Petruccelli et al., 2017).

Notably, guilt has also been associated with a reliance on internalizing coping mechanisms and heightened levels of moral reasoning (Baumeister et al., 1995; Chen et al., 2007; Cohen et al., 2011; Tangney et al., 2007; Verkade et al., 2020). Here, internal attributions that attribute the cause of one's behaviour or events to personal factors appear associated with increased self-blame and increased moral reasoning in individuals with a history of criminal offense (Cohen et al., 2011; Palmer, 2003; Stevenson et al., 2004). Critically, this tendency toward internal attributions may enhance an individual's sense of control over their environment, safeguard self-esteem, and reduce anxiety and guilt (Blumenthal et al., 1999; Dolan, 1995; Gudjonsson, 1984 as cited in Blumenthal et al., 1999; Kovacs et al., 2019).

Theme 6: Guilt, shame, and psychopathology

Various studies have highlighted the relation between guilt, shame, and psychopathology among individuals with criminal offense history. Here,

experiences of unresolved shame and guilt have been associated with post-traumatic stress disorder (PTSD) (Crisford et al., 2008; Mossière & Marche, 2021), suicidal ideations (Murphy, 2006; Proeve & Howells, 2002) and personality disorders and psychopathy (Crisford et al., 2008; Dolan, 1995; Falcus & Johnson, 2018; Johnsson et al., 2014; Nentjes et al., 2017)

Post-traumatic Stress Disorder (PTSD)

Several studies have examined the relation between guilt and shame among the offending population and the development of symptoms of post-traumatic stress disorder (PTSD), particularly about intrusive memories and perceived loss of control following exposure to traumatic events (Baker et al., 2020; Crisford et al., 2008; Mossière & Marche, 2021).

Although PTSD has been traditionally associated with fear-based responses, a widening body of literature identifies guilt and shame as core features of this disorder. Here, Lee, Scragg, and Turner (2001) proposed two pathways to developing guilt in PTSD: schema congruence and schema incongruence. Schema congruence refers to situations where the meaning of the trauma aligns with preexisting guilt schemas. By contrast, schema incongruence involves a "mismatch of meaning" that disrupts existing self or world models. Schema incongruence may apply to individuals with a history of criminal offense who do not view themselves as violent or harmful and appears associated with rumination and intrusive symptoms. By contrast, schema congruence appears most relevant to individuals with a history of criminal offense who already hold beliefs of being responsible for

harm, resulting in shame-laden intrusive symptoms combined with avoidance and rumination.

A significant association has been observed between guilt and offence-related PTSD symptoms. For example, Papanastassiou et al. (2004) reported a significant association between guilt and offence-related PTSD among mentally disordered homicide offender inpatients. Similarly, Baker et al. (2021) found that heightened exposure to traumatic events was associated with increased symptoms of depression, PTSD, distress intolerance, guilt, and shame among individuals with a history of criminal offense. Notably, higher exposure to traumatic interpersonal experiences was uniquely associated with elevations in guilt and shame.

Although the broader literature concerning offense-related memory and trauma has focused primarily on secondary memories and symptoms related to witnessed or experienced trauma among bystanders and victims, recent research has begun to explore the extent to which justice-involved individuals experience PTSD symptoms related to their perpetration of offences. Offence-related guilt and shame have been alluded to in this context, with recent suggestions that shame may play a role in the development of intrusive memories, highlighting the need for additional research in this area (Fine et al., 2023; Grace et al., 2023; Mossiere & Marche, 2021).

Interestingly, Crisford et al. (2008) reported a significant association between offence-related guilt and offence-related PTSD symptoms (e.g., distressing, and intrusive memories related to the traumatic event, losing interest in

activities or hobbies that were previously enjoyed, negative beliefs about oneself, others, or the world), indicating that higher levels of guilt are associated with more severe trauma symptomatology. Taken together, the findings reviewed here highlight the need for further investigation concerning the potentially distinct roles of guilt and shame in the onset and maintenance of PTSD symptoms among individuals with a history of criminal offense.

Suicidal ideation:

Not surprisingly, shame plays a significant role in developing suicidal thoughts among individuals with a history of criminal offense, particularly in cases involving sexual offences. Indeed, when individuals with a history of sexual offenses are disclosed or discussed during interviews, individuals who have committed these offences often report experiencing suicidal ideation (Salter, 1995).

Here, facing the consequences of crimes in a public setting has been associated not only with feelings of depression and shame among individuals with a history of criminal offense but also increased risk of suicidality among this population (Murphy, 2006; Proeve & Howells, 2002), a pattern that appears similar across violent and sexual offences (Bagley & Pritchard, 1999; Baker et al., 2021; Morrison, 1988; Murphy, 2006; Webb et al., 2012; Zhong et al., 2021). Here, Cartwright (2002) describes shame among individuals with a history of criminal offense as associated with a sense of deserving death, causing oneself to die, and fantasies of deserving to die. In line with this hypothesis, Murphy (2006) suggests that shame is linked to an increased belief that one deserves death among

individuals with a history of criminal offense. In his work, these individuals reported feeling as if they were "practically in the land of the dead" before and after committing their crimes.

Individuals with a history of criminal offense, accused of sexually abusing children, may experience suicidal thoughts or express intentions to commit suicide when their actions are exposed to the community. This finding points towards external shame (Bagley & Pritchard, 1999). Notably, these individuals may also have significant concerns about encountering people who are aware of their offences, and their distress appears most pronounced following the disclosure of their crimes and during court proceedings (Bagley & Pritchard, 1999).

Related research by Proeve and Howells (2002) and Wild (1988) supports a strong association between shame and attempted or completed suicide among perpetrators of child sexual abuse. Although case studies of perpetrators of child sexual abuse do not consistently identify shame as the primary factor in attempted or completed suicide, it is believed to contribute to these situations (Morrison, 1988; Wild, 1988). It is important to note here that individuals with a history of criminal offense often conceal past traumatic experiences, with this concealment associated with symptoms such as suicidal intent and depression that appear driven by shame and guilt (Baker et al., 2021). Taken together, these findings further emphasize the importance of addressing shame and guilt in treating individuals with a history of criminal offense, particularly concerning suicidal ideation.

Psychopathy and personality disorder:

Although psychopathy is frequently discussed in the offender literature, its relation to guilt and shame has received limited research attention. Whereas some studies have found a relationship between psychopathy and guilt (Cima et al., 2007; Johnsson et al., 2014; Mossiere et al., 2020; Weizmann-Henelius et al., 2004), others have not (Batson et al., 2010; Nentjes et al.,2017). For example, Cima, Tonnaer, and Lobbestael (2007) found that self-reported psychopathy was associated with reduced implicit guilt in an offender sample. Similarly, Mossiere et al. (2020) found a negative association between self-reported psychopathy and offense-related guilt. By contrast, Batson et al., (2010), found correlations between psychopathy and external attribution of blame, but not between psychopathy and feelings of guilt. Notably, these studies relied heavily on self-report measures; alternate findings may emerge when clinician and observer report measures are included in future research.

Interestingly, guilt and dominance appear strongly linked to antisocial behaviour (Morrison & Gilbert, 2001; Tangney et al., 2011). Here, Nentjes et al. (2017) explored the relation between psychopathy and guilt using self-report measures and an indirect assessment method called the Single Category Implicit Association Test (Sc-IAT). Here, psychopathy was not characterized by reduced implicit guilt (subconscious or unconscious feelings of guilt that individuals may not be aware of or express overtly) but instead was negatively associated with explicit guilt (conscious and overt feelings of guilt that individuals are aware of and

can verbalize or express openly). These results align with earlier studies that assessed psychopathy using the Psychopathy Checklist-Revised (PCL-R) and found a reduced experience of guilt among individuals criminal offense history with heightened levels of psychopathy (Johnsson et al., 2014; Weizmann-Henelius et al., 2004).

In a related study that also found that relatively antisocial individuals with a history of criminal offense expressed less guilt about their crimes (Petruccelli et al., 2017), no relation emerged between interpersonal and affective traits (e.g., callousness, shallow affect, grandiosity; Factor 1 psychopathology) and self-reported guilt, supporting other studies (Fontaine et al., 2014; Hyde et al., 2010; Paciello et al., 2008; Shulman et al., 2011)

It is important to note here that individuals with psychopathy may intentionally downplay their undesirable characteristics, including a lack of guilt, but may also show an inability or lack of motivation to mask these traits (Cheng et al., 2021; Niesten et al., 2015; Watts et al., 2016). Here, the state-like nature of guilt (as opposed to more stable trait-like characteristics) suggests the experience of guilt may not be constant in individuals with psychopathy, much as may be the case in the general population (Tangney et al., 2007).

Notably, psychopaths disrupted emotional ability, which includes an absence of establishing social bonds, emotional connections, shame, or guilt, is closely linked to moral disengagement (Petruccelli et al., 2017), where numerous studies reveal a positive association between psychopathy and moral disengagement

(Fontaine et al., 2014; Hyde et al., 2010; Paciello et al., 2008; Shulman et al., 2011). Moreover, violent individuals with a history of criminal offense, with comorbid Antisocial Personality Disorder (ASPD) and Borderline Personality Disorder (BPD) often exhibit emotional dysregulation, with shame often triggered by experiences of rejection (Howard et al., 2008; Newhill et al., 2012). The use of violence as a means to escape vulnerable emotions such as shame, abandonment, and loneliness has been observed in various personality disorders, including ASPD and BPD (Freestone et al., 2013; Schoenleber & Berembaum, 2012). Shame has also been identified as a significant factor contributing to aggression and violence, where the regulation of shame is essential in addressing personality pathology (Falcus & Johnson, 2018; Schoenleber & Berenbaum, 2012; Velotti et al., 2014).

In summary, the relation between guilt, shame, psychopathy, and antisocial behavior appears complex and, at times, inconsistent. Psychopathy is characterized by a reduced experience of moral emotions, including guilt, and the association between guilt and psychopathy may vary depending on specific psychopathy factors. Individuals with psychopathy often display reduced guilt and moral disengagement. Shame plays a significant role in various personality disorders and can contribute to aggressive and violent behaviours. Addressing shame and guilt is crucial in treating the offending population, particularly those with personality disorders and psychopathic traits.

Theme 7: Guilt, shame, treatment, and intervention outcomes

As described, guilt and shame are complex emotions that can impact individuals with a history of criminal offense's motivation and readiness for treatment (Brown et al., 2018; Fuller et al., 2019; O'Brien & Daffern, 2017; Sheldon et al., 2010; Wild et al., 2016). Whereas guilt encourages attempts to change harmful behaviour, shame may hinder readiness for change. Interestingly, guilt has been associated with increased therapeutic engagement, positive interactions with authority figures, and reduced recidivism (Brown et al., 2018; Fuller et al., 2019; O'Brien & Daffern, 2017; Sheldon et al., 2010; Wild et al., 2016). By contrast, shame may negatively impact treatment engagement (Fuller et al., 2019; O'Brien & Daffern, 2017; Proeve & Howells, 2002). Addressing and managing guilt and shame within treatment programs can enhance engagement and improve rehabilitation outcomes. Indeed, careful consideration of these emotions appears necessary to optimize outcomes for individuals with a history of criminal offense (Brown et al., 2018; Fuller et al., 2019; Loeffler et al., 2009; O'Brien & Daffern, 2017; Gudjonsson et al., 2011; Marshall et al., 2009; Murphy, 2006; Sheldon et al., 2010; Ward et al., 2004; Wild et al., 2016).

Shame and Guilt:

Guilt and shame are emotions characterized by self-blame (Tangney, 2007). They differ, however, in focus with shame directed at the self and guilt directed at the behaviour (Lewis, 1971; Tangney et al., 1996; Terroni & Deonna, 2008). Both emotions can be considered traits (i.e., proneness) and more transient states

associated with specific situations (Tangney & Dearing, 2002). Shame is associated with externalizing blame and avoiding shame-inducing situations, protecting self-identity (Lindsay-Hartz, 1984; Tangney et al., 1996; Tangney et al., 2014). By contrast, guilt is linked to remorse and regret, motivating actions to repair the harm (McAlinden, 2005; Tangney et al., 2011; Tangney et al., 2014; Sheldon et al., 2010; Wild et al., 2016). Accordingly, shame may be incompatible with motivation and readiness due to the desire to deny or escape, which could lead to withdrawal (Tangney & Dearing, 2002).

Drieschner et al. (2004) propose a model suggesting that guilt and shame impact motivation and readiness for treatment. It does not, however, specify whether these emotions assist or hinder treatment. In contrast with other theoretical accounts of guilt and shame, Ward (2004) multifactor offender readiness model suggests that whereas shame inhibits readiness to change behaviour, guilt encourages attempts to understand and change harmful behaviour (Ward, 2004). Critically, whereas guilt has been associated with increased therapeutic engagement in the general prison population, shame has been linked to the non-completion of treatment (Sheldon et al., 2010; Sturgess et al., 2015; Wild et al., 2016). These associations remain to be explored in forensic mental health inpatient settings for individuals with non-criminal legal involvement.

Shame and guilt may act as external motivators, facilitating access to treatment and promoting active participation in rehabilitation programs (Brown et al., 2018; Fuller et al., 2019; O'Brien & Daffern, 2017; Wild et al., 2016).

Integrating strategies to address and manage these emotions within treatment programs may thus enhance engagement and improve rehabilitation outcomes. For example, individuals with a history of criminal offense, experiencing shame and guilt may be prompted to reflect on their actions, feel remorse, and genuinely desire redemption. This awareness may further prompt willingness to confront past actions, acknowledge the harm caused, and actively pursue treatment to address their behaviour (Sheldon et al., 2010).

Motivation and readiness for treatment/intervention are crucial factors influencing the capacity to benefit from treatment (Drieschner et al., 2004; Sheldon et al., 2010; Wild et al., 2016; Viets et al., 2002). Whereas motivation refers to internal factors driving behaviour change, readiness encompasses both internal and external factors influencing engagement in the change process (Howells & Day, 2003; McMurran & Ward, 2010). Shame and guilt have been described as "breaking through" resistance and ambivalence, thus prompting individuals to confront the consequences of their actions. These emotions are also thought to foster personal responsibility, drive individuals to seek help and engage in rehabilitation programs for growth and recovery. Indeed, the offending population experiencing these emotions are likelier to engage in introspection, demonstrate remorse, and strongly desire redemption (Seaward et al., 2021; Sheldon et al., 2010).

Although some studies suggest that guilt and shame are associated with positive treatment outcomes, not all studies support their facilitative role. Here,

guilt and shame may also contribute to the non-completion of treatment, particularly when associated with affective problems, embarrassment, and fear related to working in a group (McMurran & McCulloch, 2007; Sheldon et al., 2010). In such situations, level of readiness for treatment may further influence engagement and completion rates, ultimately affecting treatment outcomes (Casey et al., 2008; Day, 2007; Day et al., 2009; McMurran & Theodosi, 2007; Simpson & Knight, 2007; Wormith & Olver, 2002). Notably, accurate models of engagement are necessary to assess individuals' level of involvement in therapeutic intervention and may influence study outcomes. Finally, Wild et al. (2016) found that legally mandated (e.g., not criminally responsible) individuals with a history of criminal offense, who strongly endorsed feelings of shame and guilt at admission exhibited higher levels of motivation and enhanced cognitive involvement in treatment compared to legally-mandated clients with low motivation, suggesting that guilt and shame may also serve as motivators for treatment engagement among specific individuals.

Therapeutic approaches for individuals with a history of criminal offense, have highlighted the importance of moving individuals from shame to guilt, emphasizing condemnation of their actions rather than themselves (Gold et al., 2011; Proeve & Howells, 2002). This approach aims to increase individuals' sense of responsibility for their actions, promoting confession, reparation, and seeking forgiveness. By targeting self-esteem and distinguishing individuals with a history

of criminal offense, from their inappropriate behaviour, therapy aims to decrease shame and increase self-esteem (Proeve & Howells, 2002).

In a related study, O'Brien, and Daffern (2017) investigated the association between guilt, shame, and internal motivation to participate in violence intervention programs. Their findings suggest that guilt and shame relate positively to individuals with a history of criminal offense's internal desire to engage in treatment. Specifically, the individuals, who endorsed guilt and shame related to their violent offending behaviour demonstrated higher internal motivation for treatment engagement. By contrast, denial, and minimization, negatively correlated with internal motivation, were unrelated to external motivators that would facilitate engagement with treatment. Taken together, these findings suggest that guilt and shame can foster an internal desire to engage in treatment among individuals' criminal offense history.

By contrast, one study found that guilt and shame hurt treatment engagement and completion. Specifically, Murphy (2006) found that guilt and shame were among the most common reasons for non-completion of treatment in a dangerous and severe personality disorder unit. The personal distress associated with guilt and shame may contribute to treatment non-completion. Accordingly, practitioners should carefully consider the role of shame and guilt in offender treatment and rehabilitation, aiming to titrate levels of guilt (but not shame, which can be associated with emotional overwhelming) to prevent emotional overwhelm or a "paralyzing" effect on individuals. Finally, it is unclear whether guilt and

shame are adequately distinguished across the treatment and intervention outcome literature synthesized here.

Shame:

Limited research suggests that shame can harm individuals with a history of criminal offense's engagement in treatment programs, primarily due to a desire to withdraw socially and a cautious approach to community engagement (Fuller et al., 2019; O'Brien & Daffern, 2017; Proeve & Howells, 2002). This defensive and cautious stance may hinder successful engagement with treatment and impede the therapeutic process (Proeve & Howells, 2002). It is important to note, however, that some evidence suggests that shame can motivate individuals with a history of criminal offense, to take reparative action and make amends for their offences (Ferrito et al., 2012). Nonetheless, the potential adverse impact of shame on the therapeutic process calls for efforts to minimize this effect and better understand the challenges associated with shame in treatment settings (Gilbert, 2010). Further exploration of this area is warranted to enhance treatment engagement and optimize offender outcomes (Fuller et al., 2019).

Guilt:

Contrary to the potentially negative impact of shame, guilt has been found to positively influence individuals with a history of criminal offense's engagement in treatment and rehabilitation programs. Several studies have reported that guilt promotes a desire to seek reparative actions and is associated with increased motivation and readiness for intervention programs (Brown et al., 2018; Fuller et

al., 2019; O'Brien & Daffern, 2017; Sheldon et al., 2010; Wild et al., 2016). For example, in a study among forensic male patients in a secure hospital, offence-related guilt was positively correlated with motivation and readiness for psychological treatment (Fuller et al., 2019).

The findings align with the understanding that guilt serves as a motivator to make amends and change, thereby potentially alleviating feelings of guilt and guarding against their recurrence (Tangney et al. et al., 2011). Nonetheless, guilt-proneness, as a trait is not consistently associated with motivation or readiness (Fuller et al., 2019).

Although guilt affects rehabilitation outcomes positively, some studies have revealed a contrasting pattern of findings. For example, one study focused on incarcerated individuals enrolled in opioid maintenance treatment found that guilt was positively associated with relapse (Havnes et al., 2014). In this context, some participants deliberately resorted to using illegal substances as a way to reduce their feelings of guilt and associated traumatic memories from their violent offences (Havnes et al., 2014). This suggests that guilt, in this specific context, may be intertwined with maladaptive coping mechanisms and contribute to relapse.

Cognitive-behavioural approaches to treatment often focus on the understanding of offending behaviour, particularly in the context of sexual offences, emphasizing the role of distorted attitudes in maintaining such behaviours (Blumenthal et al., 1999; Ciardha & Ward, 2012; Friestad, 2012; Harrison et al., 2020; Sneddon et al., 2020). Individuals with a history of criminal offense appear to

frequently employ blame-shifting strategies, attributing their behaviour to societal factors or victims' provocation, to reduce guilt and anxiety and maintain self-esteem (Blumenthal et al., 1999; Sneddon et al., 2020). Intriguingly, one study found a negative association between rape-related cognitive distortions and feelings of guilt among individuals with a history of sexual offenses, with distorted attitudes and beliefs (Blumenthal et al., 1999). These findings suggest that individuals with a history of criminal offense, with distorted attitudes may experience less guilt regarding their actions.

Discussion

The present scoping review aimed to synthesize and analyze the existing literature on the relation between shame and guilt and the mental health outcomes of individuals who have committed offences. The primary objective of the review was to identify the key themes, gaps, and directions for future research in this area. The literature review revealed that shame and guilt are multifaceted emotions that can substantially impact the mental health of individuals who have committed offences. The evidence suggests that while excessive levels of shame and guilt can result in adverse outcomes such as depression, anxiety, and self-harm, effectively managed levels of these emotions can lead to positive outcomes such as introspection, motivation, and remorse.

In addition, this review highlights the need for further research in this area, particularly studies that utilize qualitative methodologies, long-term follow-up, and a more diverse sample of individuals with a history of criminal offense. In conclusion, the findings of this scoping review suggest that shame and guilt play a complex role in the

mental health of individuals who have committed offences. The review also highlights the need for further research to enhance our understanding of the underlying mechanisms of this relationship and to inform effective intervention strategies for individuals who have committed offences.

Shame

The existing research literature highlights shame's vital role in the psychological and social functioning of individuals who have committed offences. Here, shame appears to strongly influence the offender's response to others, particularly in building relationships post-offence. This often leads to defensive behaviours, resulting in a lack of introspection, self-hatred, and externalizing behaviours such as blaming others (Blumenthal et al., 1999; Crisford et al., 2008; Dolan, 1995; Harris, 2003; Murphy, 2006; Proeve & Howells, 2002; Verkade et al., 2020). Moreover, shame has been shown to negatively impact the offender's self-perception, leading to anger, mistrust, and a more cautious approach to social interactions (Baker et al., 2020; Kovacs et al., 2019; Osei-Tutu et al., 2021; Proeve & Howells, 2002). The literature also indicates that shame is frequently associated with negative future-oriented thinking, such as worrying about one's future and building relationships, which may ultimately culminate in suicidal thoughts and behaviours (Murphy, 2006; Proeve & Howells, 2002).

In conclusion, the existing research strongly suggests that shame plays a significant role in the psychological and social functioning of individuals who have committed offences and has detrimental effects on their mental health, social interactions,

and self-perception, thus having the potential to impede rehabilitation efforts and to impact negatively on rates of recidivism.

Guilt

The existing research literature highlights guilt's significant role in the psychological and social functioning of individuals who have committed offences. Guilt appears to strongly influence the offender's self-focused behaviours, leading to internalizing behaviours such as self-blame, self-forgiveness, empathy, and a sense of responsibility for their actions.

One of the key findings of the present review is that guilt can impact the offender's engagement in legally mandated treatment programs (Barrett et al., 2003; Fitch & Nazaretian, 2019; Gainey & Payne, 2000; Havnes et al., 2014; Jensen & Gibbons, 2002; Murphy, 2006; Robbers, 2009) Here, research suggests that guilt can act as a motivational factor, increasing the offender's willingness to participate in treatment and become cognitively engaged (Sheldon et al., 2010; Wild et al., 2016). In addition, guilt appears to result in increased cooperative behaviours during court sessions and police interrogations (Brown et al., 2018). Finally, guilt is a negative prognostic factor in personality disorders and antisocial traits. Guilt is typically absent in individuals with antisocial personality disorder (ASPD) and psychopathy (Watts et al., 2016). As such, individuals with a history of criminal offense, who experience and successfully manage guilt tend to exhibit fewer personality pathologies and traits.

In sum, the extant research suggests that guilt plays a crucial role in the psychological and social functioning of individuals who have committed offences. It can

positively affect their mental health, engagement in treatment and cooperation with the legal system. Guilt alone may not be adequate in changing an offender's behaviour, but its management should be combined with other interventions to achieve optimal outcomes.

Shame versus Guilt

The current body of literature reviewed here highlights the differential roles that shame and guilt play in the psychological and social functioning of individuals who have committed offences. It appears well-established that shame is a crucial mediator of antisocial behaviours and personality pathology, where it tends to evoke maladaptive coping mechanisms (Crisford et al., 2008; Dolan, 1995; Falcus & Johnson, 2018; Johnsson et al., 2014; Nentjes et al., 2017). Moreover, shame appears to increase the severity of symptoms associated with guilt, including intrusive memories, depression, and post-traumatic stress disorder (PTSD; Crisford et al., 2008; Mossière & Marche, 2021). Despite the differences between shame and guilt, the literature suggests that both emotions are associated with increased recidivism rates. However, the exact nature of this relation remains unclear, with contradictory studies suggesting that these emotions may discourage re-offending by reinforcing the decision to not re-offend.

In conclusion, it has become increasingly evident that shame and guilt are complex emotions with positive and negative effects on the psychological and social functioning of individuals who have committed offences. Further investigation is needed to fully understand the relation between these emotions, the symptoms caused by guilt, and recidivism rates. It is important to note here that the current findings are based on a relatively limited scope of research in this area, with more studies urgently needed to

advance our understanding of this field.

Limitations

Several limitations should be acknowledged when interpreting the findings of this scoping review. Firstly, the inclusion of articles relied on a citation trail, which may have resulted in a potential omission of relevant studies that needed to be captured in the initial search. Using standardized search terms in the database further limited the inclusion of articles, potentially overlooking studies that used different terminology. A more comprehensive approach could have been employed to address this limitation by searching a broader range of healthcare and criminal justice databases. Another important limitation is the predominance of correlational or cross-sectional studies, which provide valuable insights but cannot establish causality or determine the direction of effects. Longitudinal designs are needed in future research to understand better the temporal dynamics and long-term consequences of shame and guilt among the offending population.

In addition, the characterization of samples in the included studies often lacked detailed information on participants' trauma history. This limited information may influence the observed outcomes and restrict the generalizability of the findings. Future studies should strive to collect comprehensive data on participants' trauma experiences to understand better the role of trauma in the relationship between shame, guilt, and other psychological outcomes. Furthermore, it is important to acknowledge that this review was restricted to studies published in English, which introduces potential language bias and

excludes relevant research conducted in other languages. Future reviews could consider incorporating studies published in multiple languages to ensure a more inclusive examination of the topic.

Another limitation of this scoping review is the need for more variety in the types of offences investigated in the included studies. The majority of the studies focused on specific types of offences, such as sex offences or violent crimes, while other types of offences were less represented. This limited scope of offences restricts the generalizability of the findings to a broader range of criminal behaviours. By focusing primarily on specific types of offences, the review may not capture the full spectrum of shame and guilt experiences across different criminal behaviours. Individuals with a history of criminal offense, engaged in various types of offences may experience shame and guilt differently based on the nature of their crimes. Therefore, it is essential to consider a broader range of offences to understand how shame and guilt operate in different offending populations.

The lack of variety in the offences investigated also hinders the ability to compare and contrast the impact of shame and guilt across different types of individuals with a history of criminal offense. Different offences may elicit unique feelings of shame and guilt due to variations in societal perceptions, legal consequences, and personal moral values associated with specific crimes. By examining a wider range of offences, researchers can gain insights into the nuanced experiences of shame and guilt among individuals with a history of criminal offense and identify potential differences or commonalities across offence types.

Future Directions

Given these limitations, it is critical to interpret the findings of this scoping review cautiously and recognize the need for further research that addresses these limitations. Future studies employing longitudinal designs, comprehensive sample characterization, and a broader range of databases will contribute to a more robust understanding of the complex relationships between shame, guilt, and various outcomes in the context of offender populations. Here, future research should include a more diverse range of offences to capture the full spectrum of criminal behaviours. This could involve investigating offences such as property crimes, drug-related offences, white-collar crimes, or other types of non-violent offences. By incorporating a broader range of offences, researchers can enhance the ecological validity of their findings and develop a more comprehensive understanding of shame and guilt in the context of different criminal behaviours. To advance our understanding of shame and guilt among the offending population, future research should consider several key areas. Firstly, it is important to investigate the underlying mechanisms and processes through which shame and guilt influence offender behaviour and psychological well-being. Exploring cognitive, affective, and behavioural mediators can provide insights into the pathways linking these emotions to maladaptive outcomes.

Secondly, employing longitudinal and experimental designs can help unravel the temporal dynamics and causal relationships between shame, guilt, and offender outcomes. Longitudinal studies can examine the development and fluctuations of shame and guilt

over time and their associations with subsequent offending behaviours and rehabilitation progress. Experimental designs, on the other hand, allow for the manipulation of shame and guilt levels to determine their impact on relevant outcomes. In addition, cultural and contextual factors should consider understanding how they shape the experience and expression of shame and guilt among individuals with a history of criminal offense. Cultural variations in the perception and interpretation of these emotions can influence their effects on behaviour and the effectiveness of interventions. Thus, research should investigate how cultural and contextual factors interact with shame and guilt to inform the development of culturally sensitive interventions.

Furthermore, exploring objective markers or physiological correlates of shame and guilt in the offending population would be valuable. Integrating self-report measures with biomarkers, neuroimaging techniques, or other physiological measures can provide a more comprehensive understanding of the biological and psychological underpinnings of shame and guilt. By addressing these areas, we can enhance our understanding of shame and guilt in the context of offending, leading to the development of targeted interventions that promote offender rehabilitation, reduce recidivism, and improve overall well-being.

Implications

The clinical implications of recognizing the presence and impact of shame and guilt in the context of offending are highly significant. Incorporating shame and guilt management techniques into treatment programs can be instrumental in helping individuals with a history of criminal offense, develop healthier coping strategies,

reducing self-blame, and promoting self-forgiveness. This can positively affect individuals with a history of criminal offense's mental health outcomes and increase their engagement in rehabilitation programs. By addressing the relationship between shame, guilt, and aggression, interventions can also be tailored to target shame-related externalization strategies and facilitate the development of empathy and perspective-taking skills. Such interventions can promote prosocial behaviours and enhance the offender's capacity for remorse and restoration of interpersonal relationships.

Furthermore, considering the role of shame and guilt in the context of post-traumatic stress disorder (PTSD) among individuals with a history of criminal offense, who have experienced trauma can be particularly beneficial. Incorporating trauma-informed approaches that explicitly address shame and guilt as part of therapy can help the offending population, process, and integrate their traumatic experiences. By targeting these specific emotions, interventions can assist in reducing PTSD symptoms and facilitating overall recovery.

In summary, the findings of this scoping review provide strong evidence for the presence and impact of shame and guilt in offending populations. The clinical implications of understanding and addressing these emotions are substantial. By implementing tailored treatment approaches that address shame and guilt, interventions have the potential to support individuals with a history of criminal offense, in their recovery, reduce the likelihood of re-offending offending, and enhance their overall well-being. However, further research is necessary to deepen our understanding of these emotions and their effects to improve interventions' effectiveness in this population.

Conclusion

In conclusion, this study provides an overview of the current research on the role of shame and guilt in the offending population and its implications for mental health. The scoping review identified key themes such as rehabilitation success, coping mechanisms, and pathology. The findings highlight the significance of shame and guilt in the offending population and their impact on mental health. Most importantly, this review displayed that shame and guilt do, in fact, exist among the offending population, and there are many shared consequences with the general population. However, further research is needed to address several unresolved questions, including the distinction between explicit and implicit shame and guilt, and understanding individual differences in responses to these emotions. Additionally, there is a need to reconcile conflicting findings in the literature and fill gaps in our knowledge.

Acknowledgements:

This study was supported, in part, by Canadian Institutes of Health Research grants to MCM. MCM is supported by the Homewood Chair in Mental Health and Trauma at McMaster University; funds associated with this Chair contributed to supporting this research.

***Footnote*:** Inclusion Criteria: Studies that grouped shame and guilt into the umbrella term "moral emotion(s)" without explicitly separating during analysis were excluded. This is because shame and guilt tend to be misinterpreted as the same emotion or merged in much emotional literature. For this scoping review to achieve the best analysis of the

different experiences, guilt and shame should be treated individually and as separate entities.

Conflicts of Interests: None to declare.

Tables and Figures | Study One

Figure 1. Identification of studies via databases

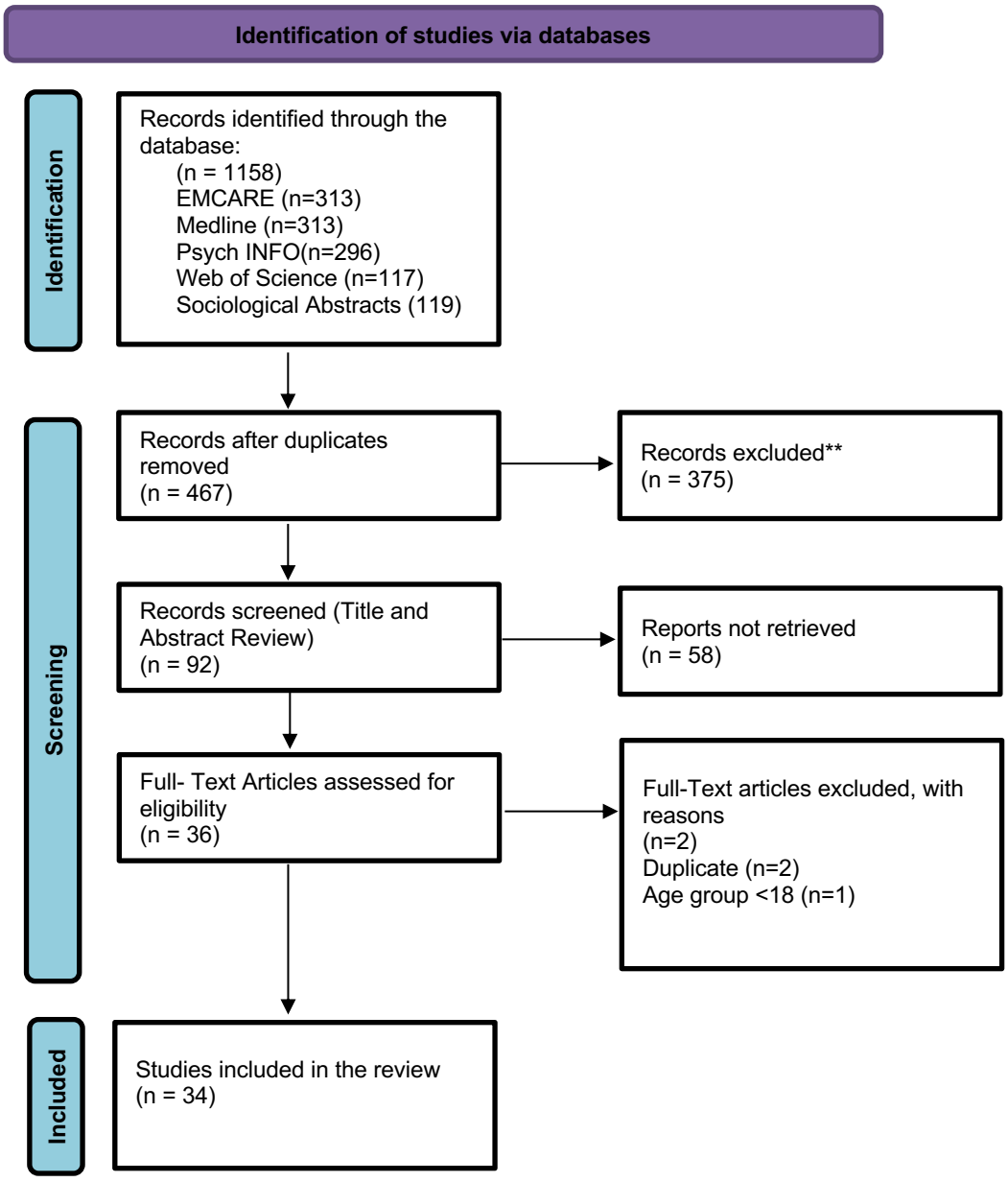

Table 1. Summary of studies.

Author	Name of article	Location	Publication	Type of Study	Target Audience	Population	Research Methodologies
Randy R. Gainey and Brian K. Payne	Understanding the Experience of House Arrest With Electronic Monitoring: An Analysis of Quantitative and Qualitative Data	United States	2000	Qualitative and Quantitative	Criminal Justice System	individuals with a history of criminal offense, on electronic monitoring	Questionnaires – 24 item survey
Geraldine Akerman and Kate Anya Geraghty	An exploration of clients' experiences of group therapy	United Kingdom	2016	Qualitative	Therapists	Violent and Sexual Offenders (Males)	Focus Group
Denis Murphy	Homophobia and Psychotic Crimes of Violence	United Kingdom	2006	Qualitative	Criminal Justice System and Therapists	Hospital In patient with paranoid psychosis	Narratives
Kerry Sheldon, Kevin Howells, and Gita Patel	An empirical evaluation of reasons for non-completion of treatment in a dangerous and severe personality disorder unit	United Kingdom	2010	Quantitative	Health Care services	high secure severe personality disordered population	Electric Case Notes
Marianne Barrett, Robin J. Wilson, and Carmen Long	Measuring Motivation to Change in Sexual Offenders from Institutional Intake to Community Treatment	Toronto, Ontario	2003	Quantitative	Correctional System	Federally Sentenced Sexual Offenders	Questionnaires (PsychopathyChecklist-Revised (PCL-R) and Goal Attainment Scaling protocol

Malte Johnsson, Benny Andersson, Marta Wallinious, Bjorn Hofvander, Ola Stanlberg, Henrik Anckarsater, Eva Billstedt &Susanna Radovic	Blame attribution and guilt feelings in violent offenders	Sweden	2014	Quantitative	Health Care services	Violent Offenders	Questionnaires (Gudjonsson Blame Attribution Inventory–Revised (GBAI-R), Psychopathy Checklist–Revised (PCL-R), Structured Clinical Interview for Axis II Disorders (SCID-II)
Craig Falcus and Darren Johnson	The Violent Accounts of Men Diagnosed with Comorbid Antisocial	United Kingdom	2018	Qualitative	Correctional System	Life sentenced prisoners diagnosed with comorbid antisocial personality disorder and borderline personality disorders	Interviews
Tamsin Owen & Simone Fox	Experiences of Shame and Empathy in Violent and Non-Violent Young Offenders	United Kingdom	2011	Quantitative	Health Care services and Correctional System	Young offenders from the Young offender's Institution (Violent and not violent crimes)	Questionnaires (The experiences of shame scale (ESS), empathy quotient (EQ), The quick test (QT)

T. Cameron Wild Ph.D, Yan Yuan, Brian R. Rush, Karen A. Urbanoski	Client Engagement in Legally Mandated Addiction Treatment	Canada	2016	Quantitative and Qualitative	Health Care services	Legally-Mandated Addiction Treatment participants	Observational and self-reported questionnaires (Substance Problem Scale (SPS), Treatment Entry Questionnaire (TEQ), MacArthur Perceived Coercion Scale (MPCS))
Stephen Blumenthal, Gisli Gudjonsson, Jan Burns	Cognitive Distortions and Blame Attribution in Sex offenders against adults and children	United States	1999	Quantitative	Correctional System and Health care services	Sex offenders	Questionnaires (MOLEST Scale, RAPE Scale, BAI, Other-Deception and Self-Deception)
Danielle E. Baker, Morgan Hill, Kaitlyn Chamberlain, Lauren Hurd, Marie Karlsson, Melissa Zienlinski, Maegan Calvert, and Ana J. Bridges	Interpersonal vs. Non-Interpersonal Cumulative Traumas and Psyc	United States	2021	Quantitative	Health Care services	Incarcerated Women for nonviolent offenses	Questionnaires (Personal Feelings Questionnaire-2 (PFQ-2), Posttraumatic Distress Scale (PDS), Patient Health Questionnaire (PHQ), Posttraumatic Checklist for DSM-5 Civilian Version (PCL-5), etc.)

I. Petruccelli, C. Barabaranelli, V. Costantino, A. Gherardini, S. Grilli, G.Craparo & D'Urso	Moral Disengagement and Psychopathy _ A Study on Offenders in It	Italy	2017	Quantitative	Health Care services	Sex offenders	Questionnaires (Moral Disengagement Scale, Italian adaptation of the PCL-R)
Annik M. Mossiere and Tammy Marche	Emotionality during and After the Commissions of an Offence: A look at Offence-Related shame and Intrusive Memories in Justice-Involved Adult Males	Canada	2021	Quantitative	Researchers and Clinicians	Justice-Involved males	Questionnaires (Trauma related shame inventory (TRSI), Impact of event scale (IES), Gudjonsson blame attribution inventory – revised (GBAI-R), etc.)
Johanna B. Folk, Debra J. Mashek, Jeffrey B. Stuewig, June P. Tangney, Kelly E. Moore & Brany L. Blasko	Changes in Jail Inmates' community connectedness across the period of incarceration	USA	2019	Quantitative and Qualitative	Clinicians and Rehabilitation	Jail Inmates	Questionnaires and interviews (ICS scale)
Elly Farmer and Bernice Andrews	Shameless yet angry_ shame and its relationship to anger in mal	United Kingdom	2009	Quantitative	Health Care services/Interventions	Young offenders (Male)	Questionnaires (Experiences of Shame Scale (ESS), Trait Anger Scale (T-Anger), e depression subscale (HADS-D), Marlowe Crowne Social Desirability Scale short version C (MC-C))

Marion Verkade, Julie Karsten, Frans Koenraadt, and Frans Schalkwijk	Conscience as a Regulatory Function: An integrative Theory put to the test	Netherlands	2020	Quantitative	Correctional System and Health care services	Patients in a forensic psychiatric treatment institution	Questionnaires (IRI, TOSCA, CoSS, HIT)
Zsuzsanna Kovacs, Bernadette Kun, Mark D. Griffiths, Zsolt Demetrovics	A longitudinal study of adaption to prison after initial incarceration	United Kingdom	2019	Quantitative	Clinicians and Rehabilitation	Adult male offenders	Questionnaires (Offence-Related Shame and Guilt Scale (ORSGS), Coping Strategy Preference Inventory(CSPI), Symptom Checklist 90 Revised (SCL-90R))
Annabella Osei-Tutu, Richard G. Cowden, Charlotte O. Kwakye-Nuako, Jeremiah Gadze, Seth Oppong, and Everett L., Worthington Jr.	Self-Forgiveness Among Incarcerated Individuals in Ghana_ Relat	South Africa	2021	Quantitative	Rehabilitation	Incarcerated individuals	Questionnaires (Test of Self-Conscious Affect—Socially Deviant Version (TOSCA-SD), Heartland Forgiveness Scale (HFS))
Donald G. Dutton, Cynthia van Ginkel & Andrew Starzomski	The Role of Shame and Guilt in the Intergenerational Transmission of Abusiveness	British Columbia	1995	Quantitative	Rehabilitation	court-referred and self-referred males based on prior histories of wife assault.	Questionnaires (Egna Minnen Betraffande Uppfostran (EMBU))

KENNETH D. JENSEN and STEPHEN G. GIBBONS	Shame and Religion as Factors in the Rehabilitation of Serious Offenders	United States	2008	Qualitative	Rehabilitation	adult ex-offenders, all having served lengthy sentences for serious crimes	Interviews
Lieke Nentjes, David P. Bernstein, Maaike Cima, & Reinout W. Wiers	Implicit vs. explicit dimensions of guilt and dominance in criminal psychopathy	Netherlands	2017	Quantitative	Clinicians and Rehabilitation	f 43 psychopathic offenders, 42 non psychopathic offenders, and 26 nonoffender controls	Questionnaires (DSM-IV Axis I disorders (SCID), Levenson Self-Report Psychopathy Scale (LSRP), Structured Inter-view for DSM-IV PDs, PCL-R, ASQ, Guilt Sc-IAT and guilt induction, GBAI-R)
Jeannette Fuller, James Tapp, & Simon Draycott	Are guilt and shame in male forensic patients associated with treatment motivation and readiness?	United Kingdom	2019	Quantitative	Clinicians and Rehabilitation	Individuals from forensic mental health services	Questionnaires (TOSCA-SD, Offence-Related Shame and Guilt Scale (ORSGS), Patient Motivation Inventory)

Annik M. Mossière & Tammy Marche	Emotionality during and after the Commissions of an Offence: A Look at Offence-Related Shame and Intrusive Memories in Justice-Involved Adult Males	United States	2021	Quantitative	Clinicians and Rehabilitation	adult forensic psychiatric sample	Questionnaires (Impact of event scale (IES), Trauma related shame inventory (TRSI), Gudjonsson blame attribution inventory revised (GBAI-R), Instrumentality-Reactivity of the offence questionnaire (I-ROQ))
Sarah J. Brown, Carlo Tramontano, Nadine Mckillop, Stephen Smallbone & Richard Wortley	Sex Offenders' Perceptions of the Police and Courts Are There Spill-Over Effects?	United Kingdom	2018	Quantitative	Police training and practices	adult males incarcerated for sexual offenses	Confidential surve
Ingrid Amalia Havnes, Thomas Clausen, Christina Bruxand Anne-Lise Middelthon	The role of substance use and morality in violent crime - a qualitative study among imprisoned individuals in opioid maintenance treatment	Norway	2014	Qualitative	Clinicians and Rehabilitation	OMT at the time of imprisonment for sus-pected crime.	Interviews

Hannah Kaplenko, MA Jennifer E. Loveland, PhD Chitra Raghavan	Relationships Between Shame, Restrictiveness, Authoritativeness, and Coercive Control in Men Mandated to a Domestic Violence Offenders Program	United States, NY	2018	Quantitative	Clinicians and Rehabilitation	men mandated to attend a domestic violence offenders' program	Questionnaires (The Shame Inventory, The Dominance Scale, Interpersonal Relationship Rating Scale (IRRS))
Hannah Crisford , Hayley Dare & Michael Evangeli	Offence-related posttraumatic stress disorder (PTSD) symptomatology and guilt in mentally disordered violent and sexual offenders	United Kingdom	2008	Quantitative	Clinicians and Rehabilitation	Inpatients at a regional and local secure unit	Questionnaires (QT, DAPS, GBAI, TRGI, Positive and Negative Affect Scale)
BRIDGET DOLAN & Merton Probation Centre Staff Team	The attribution of blame for criminal acts: relationship with personality disorders and mood	London	1995	Quantitative	rehabilitation	Males referred for assessment to an intensive probation programme	Questionnaires (Gudjonsson Blame Attribution Inventory (BAI), Irritability, Depression and Anxiety Scale, Personality Diagnostic Questionnaire-Revised (PDQ-R))
Monica L. P. Robbers	Sex Offenders and Disintegrative Shaming	Virginia	2009	Qualitative	Researchers and Sex offender policy	Registered sex offenders	opened ended questions/forum
Michael Proeve & Kevin Howells	Shame and Guilt in Child Sexual Offenders	Australia	2002	Literature Review	Treatment	Sex offenders	Narrative

Kate O'Brien & Michael Daffern	An Exploration of Responsivity among Violent Offenders: Predicting Access to Treatment, Treatment Engagement and Programme Completion	Australia	2016	Qualitative	Treatment	violent offenders referred for a group-based multi-module treatment programme in medium- and high-security correctional facilities in Victoria, Australia.	Case Files
Wing Hong Chui and Kevin Kwok-Yin Cheng	The mark of an ex-prisoner: Perceived Discrimination and Self-Sigma of a young man after prison in Hong Kong	China	2013	Qualitative	rehabilitation	Ex-Prisoners	Interviews
Nathan Harris	Reassessing the dimensionality of the moral emotions	United Kingdom	2003	Quantitative	Researchers and Clinicians	drink-driving offenders	Questionnaires (Self-report measures of shame, guilt and embarrassment)
Chivon H. Fitch & Zavin Nazaretian	Examining gender differences in reintegrative shaming theory: the role of shame acknowledgment	United states	2019	Qualitative	Literature	National Youth Survey Series	The National Youth Survey

Chapter 3: The development and validation of a tool to screen for moral injury among individuals deemed not criminally responsible

The work in the following chapter is being prepared for submission for publication.

The previous chapter highlights the crucial roles of shame and guilt in the mental health and psychological functioning of the offending population. Shame consistently relates to adverse outcomes, fostering defensive behaviors, self-loathing, and externalizing conduct like blaming others. For individuals with a history of criminal offense, shame leads to overly cautious social behavior rooted in negative self-perceptions. On the other hand, guilt prompts constructive responses such as self-forgiveness, empathy, and assuming responsibility, linked to heightened cooperative behaviors. Despite their differences, both emotions can contribute to recidivism risk.

Building on this understanding, this chapter addresses the underexplored domain of MI in justice-involved individuals, particularly those classified as Not Criminally Responsible (NCR) due to Mental Disorder. It will focus on the development and validation of the Moral Injury Screener in the Offending Population NCR (MIO-NCR). MIO-NCR emerge as a natural extension of witnessing how shame and guilt, core symptoms MI manifest within this population, alongside their consequences.

The development and validation of a tool to screen for moral injury among individuals deemed not criminally responsible

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Abstract

Background: Moral injury (MI) has received increasing attention, but its exploration in justice-involved individuals, particularly those deemed NCR due to Mental Disorder, is limited. To address this gap, we developed and validated the Moral Injury Screener in the Offending Population NCR (MIO-NCR), the first self-report measure for assessing MI in this population. The MIO-NCR integrates phenomenological and syndromal perspectives to screen for MI in the forensic psychiatric setting.

Methods: Our study aimed to assess the psychometric properties of the MIO-NCR scale. We recruited 174 NCR participants from four forensic psychiatry programs in Ontario. Participants completed various measures, including those assessing exposure to morally injurious events, self-reported levels of empathy, shame and guilt, psychiatric symptom severity, prior trauma exposure and emotion regulation. We also assessed common facets of personality and insight in these participants.

Results: The preliminary results of the MIO-NCR showed strong criterion and construct validity for a six-item screening scale. Exploratory factor analysis identified two underlying factors: betrayal and guilt, aligning well with Jinkerson's (2016) syndrome definition of moral injury. The betrayal factor aligned closely with existing literature suggesting perceived transgressions by oneself and others are integral to morally injurious experiences.

Conclusions: Our study emphasizes the centrality of guilt and betrayal in moral injuries incurred by individuals deemed NCR and is in keeping with emerging syndromal definitions of moral injury. The MIO-NCR is a psychometrically sound screening tool for the presence of moral injury in the NCR population.

Keywords: moral injury; Not Criminally Responsible (NCR); forensic psychiatric population, offense-related experiences; betrayal; guilt; emotional consequences; syndromal perspective, psychometric properties; moral conflict; scale development; assessment

Introduction

Moral injury

Moral injury (MI) is a multifaceted psychological concept that has recently gained recognition (Drescher et al., 2011; Jinkerson, 2016; Litz et al., 2009). It involves the experience of psychological, emotional, and spiritual distress that arises from violating deeply held moral beliefs and values (Frankfurt & Frazier, 2015; McCarthy, & Deady, 2008). Unlike traditional descriptions of trauma, which primarily focus on physical harm or threat, MI centers on the inner conflict and anguish individuals undergo when they witness or partake in events that challenge their sense of right and wrong values (Drescher et al., 2011; Frankfurt & Frazier, 2015; Gert & Gert, 2017; Jinkerson, 2016). At its core, MI entails the recognition of a moral transgression, either committed by oneself or witnessed in others, and the subsequent emotional and existential consequences that follow (Jinkerson, 2016). Such exposure has been associated with profound feelings of guilt, shame, and a loss of trust in oneself, others, and societal systems (Jinkerson, 2016). It can also trigger existential and spiritual conflicts, prompting individuals to question their identity, purpose, and the meaning of their experiences (Jinkerson, 2016). Empirical studies have supported the association between morally injurious events, shame/guilt syndromes, and spiritual crises (Griffen et al., 2019; Fontana & Rosenheck, 2004; Harris, 2003). For example, research involving veterans with PTSD has revealed distress clusters that suggest a potential link between MI and PTSD (Fontana & Rosenheck, 2004). Other studies have found positive associations between potentially morally injurious events and guilt and spiritual crisis or loss of meaning in life (Bryan et al., 2018; Marx et al., 2010;

McEwen et al., 2020; Nazarov et al., 2015). Additionally, Stein and colleagues (2012) demonstrated how MI events are linked to emotional responses in trauma-affected individuals, with service members experiencing higher levels of guilt and reexperiencing related to morally injurious events (Stein et al., 2012). Finally, MI has been linked to suicidal ideation and behavior, highlighting the severity of emotional distress experienced by individuals facing moral conflicts (Bryan et al., 2018; Hendin & Haas, 1991; Stein et al., 2012). Beyond feelings of guilt and shame, extant descriptions of MI include experiences of existential and spiritual crises and a loss of trust in oneself and others (Førde et al., 2008; Fourie, 2015; Frankfurt et al., 2016; Griffin et al., 2019; Hoffman et al., 2018; 2019; Jinkerson, 2016; Levi-Belz et al., 2020; Litz et al., 2009; Papazoglou et al., 2020; Papazoglou & Chopko, 2017; Shay, 2014). MI is also strongly associated with various psychological problems, including depression, anxiety, intrusive thoughts, and images. Notably, individuals with MI may resort to attempts at self-punishment, manifesting through isolation, excessive alcohol or substance use, and self-sabotaging behaviors (Bryan et al., 2018; Crisford et al., 2008; Griffin et al., 2019; Proeve & Howells, 2002; Shay, 2014). Social problems, like isolation and self-harm, are also common consequences of MI (Bryan et al., 2018; Litz et al., 2009; Nash & Litz, 2013). The syndromal definition of MI allows researchers to explore and characterize MI across diverse populations beyond its initial military context (Crisford et al., 2008; Jinkerson, 2016). This broader perspective enhances our understanding of the relevance and implications of MI in various settings and populations. As a complex and evolving concept, continued research is essential to grasp the nuances and consequences of MI

better and develop appropriate interventions and support for those grappling with the emotional aftermath of moral conflicts.

Moral injury in forensics populations and NCR

Recent research has examined MI in various populations, including youth, teachers exposed to violence, refugees, healthcare providers, and public safety personnel, where chronic exposure to potential morally injurious events may lead to heightened experiences of moral pain and distress, increasing the likelihood of developing MI (Currier et al., 2015; Førde & Aasland, 2008; Fourie, 2015; Huffman & Rittenmeyer, 2012; Lee et al., 2001; Nickerson et al., 2018; Papazoglou et al., 2020; Papazoglou & Chopko, 2017; Roth et al., 2022, 2023). This study aims to explore the potential presence of MI in another vulnerable population: the forensic psychiatric population. Not Criminally Responsible (NCR) individuals, due to a mental disorder, may experience a painful moral conflict between their typical demeanor and offense-related behavior (Roth et al., 2021). Despite such knowledge, MI remains largely unexamined in this context, presenting an opportunity to understand emotionally relevant experiences and potential barriers to long-term rehabilitation**.** Limited research has attempted to differentiate the unique contributions of shame, guilt, and other morally relevant emotions in the experience of MI among justice-involved populations (Roth et al., 2021). Our group (Roth et al., 2021) explored the moral and emotional experiences of individuals within the forensic psychiatric population who were NCR and examined the presence of symptoms consistent with MI. They found evidence supporting the existence of core and of secondary MI symptoms within this context, including guilt, shame, negative self-

appraisals, behavioral issues, anxiety, and depression. Here, participants reported profound feelings of guilt, shame, remorse, and regret related to their offenses, as well as self-directed anger and a loss of trust in their own morality. Coping mechanisms identified increased substance use, with some individuals reporting suicidal thoughts (Roth et al., 2021).

This study provided the first empirical demonstration of MI symptoms in justice-involved individuals found NCR, highlighting the consequences of moral pain associated with criminal offenses. Critically, these findings resonate with traditional definitions of MI, differentiating between experiences of moral perpetration and moral betrayals. Here, individuals within the forensic psychiatric population describe unique experiences that have evoked profound moral pain about their involvement with the forensic system (Crocker et al, 2015; Roth et al., 2021). Their emotional struggles are further compounded by perceptions of insufficient support and belief from loved ones and caregivers, and a sense of enduring an unjust and indefinite sentence (Crocker et al., 2015; Roth et al., 2021). Importantly, this study marks the first attempt to employ a symptom-based definition of MI, adapted from military contexts, to explore its applicability across different populations. The findings provide preliminary empirical support for the utility of a syndromal definition of MI in cross-population research, although a standardized measure for MI in this specific population is still lacking.

Existing Measures for MI

Numerous self-report questionnaires have been developed to assess Moral Injury (MI), focusing on military and war-related experiences. These assessments vary in their approach, with some identifying potentially morally injurious events (PMIEs) through checklists, while others inquire about reactions associated with MI, such as guilt, shame, and betrayal. Prominent questionnaires targeting war-related events include the Moral Injury Events Scale (MIES) by Nash et al. (2013) and the Moral Injury Questionnaire (MIQ) by Currier et al. (2015). MIES concentrates on war-related events, including perpetration by oneself, others, and experiences of betrayal. The MIQ captures morally injurious events and associated symptoms, delving into violations of deeply held moral beliefs and feelings of betrayal. Additionally, modified versions of MIQ include inquiries about common reactions, such as guilt, shame, difficulty forgiving oneself and others, and withdrawal (Braitman et al., 2018).

For assessing MI symptoms specifically in military personnel, the Moral Injury Symptoms Scale-Military Version-Long Form (MISS-M-LF) (Williamson et al., 2018) and the Expressions of Moral Injury Scale-Military Version (EMIS-M) (Currier et al., 2017) were introduced. Shorter versions of these scales, the MISS-M-SF (Koenig et al., 2018) and a 4-item short version of EMIS-M (Bryan et al., 2018), were subsequently developed. However, these existing scales primarily target combat experiences and focus on self- and other-directed moral emotions related to military contexts. While the syndromal approach identifies a generalized symptom profile of MI that transcends different populations, the phenomenological approach emphasizes the uniqueness of

individual experiences and contextual moral challenges. Integrating both perspectives in an innovative assessment tool could offer a more comprehensive understanding of MI within diverse populations, including vulnerable groups like the forensic psychiatric population.

The present study

Through this research, we sought to establish a reliable and valid screening tool that captures the distinct moral challenges experienced by individuals deemed NCR and provides an initial assessment of offence-related MI. Such a tool was deemed necessary to measure MI among this population and promote targeted research and interventions to address MI, reduce reoffending risk, and promote well-being among forensic individuals with a history of criminal offense. Here, we evaluate the factor structure and psychometric properties of the MIO-NCR, designed as the first self-report screening measure of MI among the NCR population. The MIO-NCR assesses the presence of MI among individuals found NCR and is intended as a clinical screening tool to assess for MI. As a screening tool, it is intended that additional follow-up measures, such as clinical interview and/ or a more detailed MI scale will be used in follow-up to this screening measure.

We expected that scores on the MIO-NCR would correlate strongly with existing measures of psychological functioning. Specifically, we predicted that MIO-NCR scores would correlate positively with existing measures of moral injury, guilt, and shame, and negatively with an existing measure of insight.

Method

Participants

A total of 174 participants were recruited from in-patient programs at four forensic psychiatry programs in Ontario, namely St. Joseph Hamilton Healthcare (lead site), the Centre for Addictions and Mental Health (CAMH), Ontario Shores Centre for Mental Health Sciences, and Waypoint Centre for Mental Health Care. Among the participants, 19 identified as female and 155 as male, with an average age of 39 years (SD=10.54). The distribution across the sites was as follows: 65 participants from St. Joseph Healthcare Hamilton, 54 participants from CAMH, 27 participants from Ontario Shores Centre for Mental Health Sciences, and 28 participants from Waypoint Centre for Mental Health Care. To be included in the study, participants needed to meet specific criteria, including providing informed consent and being Canadian males and females above the age of 18 who were proficient in English communication. All were current forensic in- or out-patients. Finally, participants needed to be psychiatrically stable, as assessed by the clinical team overseeing care. Exclusion criteria included an inability to read, write, and communicate in English and psychiatric instability, such as being in active psychosis, actively suicidal, or experiencing unmanaged symptoms.

Patient-participants will have been deemed to meet criteria for the NCR classification on account of mental disorder following the perpetration of a Criminal Code violation and mandated to treatment. While mental health characteristics exhibit diversity, the cohort of forensic patients encompassed in this study showcases a distribution of

primary diagnoses as follows: 64.0% were diagnosed with Schizophrenia, 21.5% with Schizoaffective Disorder, 2.3% with Delusional Disorder, 5.8% with Psychosis NOS, and 5.2% with Bipolar Disorder. The spectrum of remaining diagnoses, including conditions such as Substance Abuse Disorders, Depression, Attention and Behavior Disorders, Antisocial Personality Disorder, and Paraphilias, collectively constitutes the remaining portion. Four participants were excluded due to incomplete data (<75% completed). However, excluded participants did not significantly differ from the retained participants on any demographic measure. The study adhered to strict ethical guidelines and was approved by all participating sites' local research ethics boards. Participants were informed about the opportunity to participate in psychological research by their care team, and informed written consent was obtained from each participant by a research team member not involved in their clinical care.

Measures

Moral Injury Screener for the Offending populations NCR(MIO-NCR): The MIO-NCR represents a novel, self-report measure informed by first-person accounts regarding the phenomenology of MI. MIONCR items were developed based on themes identified across first-person reports (Roth et al., 2021), descriptions in the literature, and clinical expertise (Roth et al., 2021). The MIO-NCR includes constructs described in Jinkerson (2016) framework such as guilt, shame, and loss of trust. Initially, 63 items were categorized across 6 domains: Shame; Guilt; Loss of Trust; Existential/ Spiritual crisis; Emotional Sequelae (e.g., anger, anxiety, and depression); and Behavioural Sequelae (e.g., re-experiencing moral conflict, self-harm tendencies, and social problems). Given

the hypothesized significance of insight in the NCR population during recovery in relation to MI, insight items were included in the scale. Respondents were asked to reflect on these experiences since their index offense, on a five-point Likert-type scale (0 =Strongly Disagree; 5=Strongly Agree). The 63 item self-reported screened for the presence and intensity of moral and emotional distress resulting from an individual with a history of criminal offense's experience of their index offence as morally injurious.

Other Self-Report Measures

Adult Hope Scale (AHS):

AHS, a firmly rooted assessment comprising 12 items, is adeptly constructed to quantify an individual's hope level, showcasing impressive internal reliability (0.853; Snyder et al., 1991). Dually structured, the scale incorporates two pivotal dimensions: Agency, gauging goal-directed vigor, and Pathways, scrutinizing the formulation of plans and strategies for goal achievement. This instrument emerges as a beacon of understanding, shedding light on an individual's hopefulness and their aptitude to envision and strive for favorable life outcomes.

Adverse Childhood Events Questionnaire (ACE):

ACE scale, comprising 10 self-report items, delves into frequently encountered adverse events during early years, encompassing instances like physical or sexual abuse and neglect (Felitti et al., 1998). This insightful questionnaire illuminates the spectrum of traumatic childhood experiences, offering pivotal insights into their potential influence on subsequent development and overall well-being. Impressively, it demonstrates strong internal consistency, boasting a reliability coefficient of 0.906 (Mei et al., 2022).

Beck Cognitive Insight Scale (BCIS):

BCIS was meticulously crafted to gauge two pivotal dimensions of patients' cognitive processes: their capacity for introspection and their level of confidence in interpreting personal experiences (Beck et al., 2004). This self-report questionnaire comprises 15 items, skillfully subjected to a principal components analysis to unveil two distinct subscales. The initial 9-item self-reflectiveness subscale adeptly captures individuals' aptitude for introspective and contemplative self-analysis. The subsequent 6-item self-certainty subscale effectively quantifies the depth of assurance individuals possess in their interpretations. Additionally, BCIS demonstrated reliability among outpatients with schizophrenia and schizoaffective disorder, as evidenced by a robust alpha coefficient of 0.827 (Kao et al., 2010).

Big Five Inventory (BFI):

BFI, a comprehensive evaluation comprising 44 items, is skillfully crafted to assess an individual's personality traits grounded in the Big Five model encompassing extraversion, neuroticism, agreeableness, conscientiousness, and openness (John, Donahue, & Kentle, 1991). This instrument offers a panoramic insight into an individual's distinctive personality attributes and remains extensively employed in personality research, boasting robust internal consistency with coefficient alphas typically ranging from .70 to .80 across its scales (John, Donahue, & Kentle, 1991).

Depression Anxiety Stress Scale – 21 (DASS-21):

DASS-21 is a comprehensive self-report measure that evaluates emotional states related to depression, anxiety, and stress. This quantitative assessment assesses distress

along three dimensions without providing clinical diagnoses. The scale consists of 21 statements, and participants rate the extent to which each statement applies to their experiences over the past week using a 4-point Likert scale, ranging from 0 (Never) to 3 (Almost Always). The DASS-21 provides three separate scores, one for depression, one for anxiety, and one for stress, offering valuable insights into individuals' emotional well-being and levels of distress with internal consistency ranging from α = 0.73-0.92 (Lovibond & Lovibond, 1995). Additionally, the scale provides severity labels for each dimension, categorizing distress as mild, moderate, severe, or extremely severe, allowing for a comprehensive understanding of emotional states.

Difficulties in Emotion Regulation Scale (DERS):

DERS is a highly regarded self-report assessment tool that aims to capture individuals' subjective abilities in emotion regulation. It is rooted in a well-established model of emotion regulation which holds significant clinical relevance. The DERS provides valuable insights into individuals' challenges and struggles with managing their emotions effectively, making it a widely utilized instrument in research and clinical settings with a robust internal consistency (α = 0.95; Gratz & Roemer, 2004).

Guilt and Shame Proneness Scale (GASP):

GASP is a 16-item measure specifically designed to examine individual differences in the propensity to experience guilt and shame in response to various personal transgressions with an internal consistency (α =0.92; Cohen et al., 2011). The scale offers valuable insights into the extent to which individuals are prone to feelings of guilt and shame when reflecting on their own actions and behaviors. By assessing guilt

and shame proneness across a range of scenarios, the GASP provides a deeper understanding of the emotional responses individuals have towards their own moral and ethical conduct.

Integration of Stressful Life Experiences Scale (ISLES):

ISLES is a 16-item assessment that aims to gauge an individual's level of meaning-making following the experience of a stressful life event (Holland et al., 2010). This scale explores an individual's ability to orient themselves in the world after the event and comprehend the impact of the stressful experience. The ISLES offers valuable information about how individuals process and integrate challenging life events into their overall life narrative. Notably, it has demonstrated robust internal consistency ($\alpha = 0.94$, Niemeyer et al., 2021), attesting to its reliability.

Interpersonal Reactivity Index (IRI):

IRI, a widely employed self-report assessment, effectively measures empathy levels within individuals (Davis, 1990). With a comprehensive compilation of 28 items, the IRI provides an in-depth exploration of various dimensions of empathy, including perspective-taking (PT), empathic concern (EC), fantasy (FS), and personal distress (PD). Notably, its internal consistency shines with strong values for each dimension (EC: 0.86, FS: 0.82, PT: 0.83, & PD: 0.76), along with a robust total score of 0.87 for the IRI-MS (Davis, 1990), solidifying its reliability.

Moral Injury Events Scale (MIES):

MIES comprises nine self-report statements meticulously crafted to explore instances of perceived transgressions committed by oneself or others. It uniquely delves

into perceived betrayals involving both military and nonmilitary individuals, as meticulously detailed by Bryan et al. (2016), and boasts excellent internal consistency (α =*0.90*; Nash et al., 2013). With a distinct focus on assessing experiences of moral injury (MI), the scale casts light on the intricate psychological aftermath of such occurrences, spanning both military and nonmilitary realms. While predominantly featured in non-military literature, the scale has been adeptly tailored through careful adjustments to accommodate the nuances of the NCR population. These adaptations encompass a skillful rephrasing of items, ensuring their seamless relevance to this specific demographic.

PTSD Checklist for DSM-5 (PCL-5):

PCL-5 is a self-report questionnaire designed to measure the severity of PTSD symptoms based on the diagnostic criteria outlined in the DSM-5. The questionnaire assesses symptoms across four domains: Intrusive symptoms, avoidance, negative alterations in mood and cognitions, and alterations in arousal and reactivity. Additionally, this modified version includes additional items to evaluate the presence and severity of dissociative symptoms, which represent a distinct subtype of PTSD and has shown strong internal consistency (α = *0.94*) (Blevins et al., 2015). The PCL-5 provides a comprehensive assessment tool for identifying and understanding the range of PTSD symptoms experienced by individuals, including those related to dissociation.

Procedures

Data collection involved a series of single-session group administrations where participants independently completed study questionnaires. A study team member guided the participants through the questionnaires, and the entire process took approximately 40-60 minutes. Following completion of self-report questionnaires, a research team member conducted onsite medical chart reviews of each individual participant to gather information concerning variables that may be included in covariate analyses, including medical and criminal history information (See Table 1 for a summary of the demographic and clinical characteristics of the study sample).

Data Analysis:

The study thoroughly evaluated the MIO-NCR's factor structure and psychometric properties through a blend of exploratory and confirmatory factor analyses, internal consistency analysis, and correlation assessments for construct validity. The main objective was to establish the instrument's reliability and validity in measuring adverse outcomes associated with MI. To ensure the factorability of the data, the Kaiser-Meyer-Olkin (KMO) measure was employed, with a recommended cutoff of KMO ≥ 0.60 as per Kaiser's guidelines. Additionally, Bartlett's test of sphericity was used to evaluate the inter-item correlations' sufficiency for factor analysis. Determining the appropriate number of factors to extract was approached with two methods: inspecting the scree plot derived from the unreduced correlation matrix and utilizing the parallel analysis technique, which consistently supported a 6-factor solution.

Factor extraction and rotation were conducted using exploratory factor analysis (EFA) with principal axis factoring and varimax rotation, enhancing the interpretability of the factors. Each item was thoroughly assessed during the analysis based on theoretical relevance, communalities, item loadings, and the absence of significant cross-loadings. Items with loadings lower than 0.45 were excluded from the final model. The exploratory factor analysis (EFA) was performed on the covariance matrix of the 63-item MIO-NCR scale, considering factor loadings and communalities above .50 and cross-loadings below .35 to identify robust and straightforward structures, following guidelines by Floyd & Widaman (1995).

The measurement model's fit was evaluated using multiple fit indices, including Chi-square ($\boldsymbol{x}^2$), Chi-square/df ratio, Goodness-of-fit index (CFI), Root-mean-square error of approximation (RMSEA), and Root Mean Squared Error (RMSE). To meet established criteria for good model fit, the Chi-square/df values should be ≤ 3, CFI values ≥ 0.9, and RMSEA values < 0.10 (Hair et al., 2010; Schumacker & Lomax, 2010; Wang & Wang, 2012). To assess the internal consistency of the MIO-NCR subscales, Cronbach's alpha values were calculated, offering insight into the reliability of the subscales based on the internal consistency of the items within each subscale. Furthermore, to establish construct validity, Spearman's correlations were conducted between MIO-NCR scores and related measures (e.g., guilt, shame, symptoms of PTSD) and unrelated measures (emotion regulation, perspective), providing evidence concerning whether the MIO-NCR scores aligned with expected patterns according to theoretical assumptions. In addition, given the intriguing possibility of the emergence of MI as

patients gain a deeper understanding of their behaviors during the process of recovery, the correlation between insight levels (assessed using BCIS) and MIO-NCR was calculated.

Results

Factorability of Data

The factorability of these data for the MIO-NCR scale was assessed through the Kaiser-Meyer-Olkin (KMO) measure, with a suggested cutoff of KMO ≥ 0.60 according to Kaiser's guidelines. The overall Measure of Sampling Adequacy (MSA) yielded a value of 0.77, indicating that the data were suitable for factor analysis. Additionally, Bartlett's test of sphericity was conducted, and the obtained significance level ($p < 0.05$) indicated sufficient inter-item correlations, further supporting the appropriateness of factor analysis. Based on these results, the data were deemed suitable for proceeding with the exploratory factor analysis (EFA).

Exploratory Analysis Results

The EFA was performed in a stepwise manner to determine the optimal item count and factor structure of the 63-item MIO-NCR scale. Two methods were employed to determine the number of factors to extract. Firstly, a scree plot based on the unreduced correlation matrix suggested retaining six factors.

Secondly, the parallel analysis technique consistently indicated a 6-factor solution as well, providing further support for this structure. Subsequently, an EFA was run, specifying a 6-factor solution for the MIO-NCR scale. However, to optimize the factor structure and improve interpretability, each item was carefully evaluated based on theory,

communalities, low power (minimum 5-10 participants per item), and low item loadings. As a result, 23 items were retained, distributed across six factors: "Existential Crisis" (5 items), "Guilt" (3 items), "Betrayals" (3 items), "Anger" (3 items), Self- harm (2 items) and "Shame" (7 items). The final model accounted for 47.9% of the total variance. "Self-harm," was dropped due to sensitivity of the population.

The factor loadings for each item in the final 6-factor solution were presented in Table 4. The correlation matrix was utilized to assess the internal consistency and structure of the MIO-NCR scale, identify potential issues such as item redundancy and multicollinearity, and provide evidence for construct validity. Throughout the analysis, items were carefully evaluated and retained based on multiple criteria, including theoretical relevance, communalities, item loadings, absence of significant cross-loadings, and retaining a minimum of three salient loadings per factor. This process ensured establishing a robust and interpretable factor structure for the MIO-NCR scale.

Confirmatory Factor Analysis (CFA):

Initially, the measurement model was specified with five latent factors: Shame, Guilt, Anger, Existential Crisis, and Betrayal, based on the results of the exploratory factor analysis (EFA). However, the goodness-of-fit indices indicated that this model did not fit the data well. The CFI and TLI values were below the recommended threshold of 0.90, indicating inadequate capture of relationships among the observed variables. Additionally, the SRMR value was relatively high at 0.090, suggesting significant unexplained variance in the model. To improve the model fit, loadings lower than 0.45 were excluded, resulting in a final model with four factors: Existential Crisis (3 items),

Guilt (3 items), Anger (3 items), and Shame (3 items), totaling 12 items. Despite this modification, the revised model still needed to achieve a better fit. The CFI and TLI values remained below the recommended threshold at 0.867 and 0.829, respectively, indicating a suboptimal fit. The SRMR value decreased to 0.075 but still suggested the presence of unexplained variance in the model. Based on these results, the measurement model, both the initial five-factor model and the revised four-factor model, did not adequately capture the relationships among the observed variables and did not fit the data well. Further adjustments and refinements may be necessary to improve the model's fit and enhance its ability to assess the latent constructs effectively.

CFA for the Modified Model:

According to Jinkerson's syndrome model of MI, the initial investigation in our study focused on a 2-factor model comprising shame and betrayal as key dimensions. However, the results indicated that this model did not adequately fit the data, as evidenced by a suboptimal Comparative Fit Index (CFI) of 0.866, a Tucker-Lewis Index (TLI) of 0.823, and a relatively high Standardized Root Mean Square Residual (SRMR) of 0.090. To refine our understanding of MI, we explored the integration of guilt and betrayal in the model, leading to a more appropriate framework. We observed a remarkable improvement in model fit after modifying the measurement model and testing the two-factor model involving guilt and betrayal. The Comparative Fit Index (CFI) significantly increased to 0.982, the Tucker-Lewis Index (TLI) reached 0.966, and the Standardized Root Mean Square Residual (SRMR) substantially decreased to 0.045. These compelling findings indicate a robust fit between the hypothesized model and the collected data,

underscoring the model's effectiveness in capturing the intricate relationships between guilt and betrayal. Based on the refined model, the final version of the MIO-NCR scale consists of a concise set of six items: three representing the Guilt factor and three representing the Betrayal factor (see Figure 1).

Reliability and Validity

Internal Consistency of MIONCR Subscales:

The MIO-NCR subscales exhibited minimal internal consistency with a Cronbach's alpha coefficient of 0.60 (MIO-NCR), 0.65 (MIO-NCR betrayal subscale), and 0.776 (MIO-NCR guilt subscale) based on the standardized items. The scale comprised 6 items, and despite attempts to improve the reliability through item deletion, Cronbach's alpha could not be enhanced.

Criterion Validity:

The study revealed compelling evidence of criterion validity, with notable positive correlations observed between MIO-NCR scores and the Moral Injury Event Scale (MIES) ($r = .17$, $p < 0.01$, see Figure 2). Furthermore, the MIO-NCR betrayal subscale demonstrated a significant positive correlation with MIES ($r = 0.21$, $p < 0.01$, see Figure 3). These findings highlight the MIO-NCR's ability to effectively capture and assess experiences of MI, particularly about feelings of betrayal, thereby establishing its criterion validity.

Convergent Validity

The study demonstrated significant correlations between the MIO-NCR Total score and the Posttraumatic Stress Disorder Checklist for DSM-5 (PCL5) ($r = 0.16$, $p <$

0.05), as well as the Difficulties in Emotion Regulation Scale (DERS) ($r = 0.18$, $p < 0.05$), DERS ($r = 0.17$, $p < 0.05$), and PCL5 ($r = 0.22$, $p < 0.01$). However, no significant correlations were observed between the MIO-NCR guilt subscale and either MIES, DERS, or PCL5. Interestingly, the study found no significant correlations between the MIO-NCR scales and the Guilt and Shame Proneness Scale (GASP).

Discriminant Validity:

Our findings also supported the divergent validity of the MIO-NCR scale. We observed negligible correlations between the MIO-NCR total score and perspective taking (PT), with a non-significant relationship ($p > 0.05$). However, there were low negligible correlations with depression ($r = 0.16$, $p < 0.05$), stress ($r = 0.17$, $p < 0.05$) and anxiety ($r = 0.24$, $p < 0.01$). Similarly, the MIO-NCR betrayal subscale demonstrated no significant correlations with perspective taking (PT), indicating its distinctiveness from this construct. However, there were correlations with depression ($r = 0.24$, $p < 0.01$), anxiety ($r = 0.28$, $p < 0.001$), and stress ($r = 0.26$, $p < 0.001$). Furthermore, the MIO-NCR guilt subscale displayed negligible correlations with PT and DASS, with p-values greater than 0.10, reinforcing its independence from these unrelated constructs.

The total scores of BCIS and MIO-NCR show a negligible negative association ($r = -0.026$, $p > 0.05$). Similarly, the MIO-NCR betrayal subscale displays a weak negative relationship (-0.064, $p > 0.05$), and the MIO-NCR guilt subscale demonstrates a slight positive association ($r = 0.033$, $p > 0.05$). These findings collectively indicate an absence of substantial monotonic relationships between the variables (See Figure 4 for a

scatterplot). Notably, the observed negative relationships hold little statistical significance and need to be investigated further; however, this is beyond the scope of this study.

In addition, it is essential to acknowledge that due to time constraints, the findings about ACEs and BFI were not included in the analyses presented. While these aspects were not thoroughly examined in this study, they remain important considerations for future research in understanding the broader landscape of factors influencing disordered behavior.

Discussion

This study aimed to validate the MIO-NCR scale, a newly developed screening tool for assessing the presence of MI in the forensic psychiatric population. By exploring correlations with related constructs such as PTSD symptoms, MIES, and difficulties in emotion regulation, we gained valuable insights into the emotional consequences of MI within this specific population. The MIO-NCR scale demonstrated promising psychometric properties, making it the first instrument specifically designed to capture morally injurious experiences in the NCR population, highlighting the importance of addressing feelings of betrayal in this context. Our integrative approach, which combines phenomenological and syndromal perspectives guided by theory and clinical expertise, represents a significant advancement in the study of MI in the forensic psychiatric population. Our preliminary results show promising evidence of the validity and reliability of the MIO-NCR scale, shedding light on the emotional consequences of MI and the unique experiences of individuals within this population (Roth et al., 2021). The results revealed positive correlations between the MIO-NCR scale and constructs related

to MI, particularly PTSD symptoms, with the betrayal subfactor showing a robust association (Schorr et al., 2018; Shay, 2014; Stein et al., 2012). This finding underscores the significance of addressing the emotional aftermath of betrayal in the context of MI.

Existence of MI Core Symptoms

Betrayal:

The betrayal subscale aligns with existing literature emphasizing perceived transgressions by self and others as integral dimensions of morally injurious experiences (Schorr et al., 2018; Shay, 2014; Stein et al., 2012). This subscale contains items that display moral pain due to perceived betrayals from trusted individuals, including healthcare providers and the forensic system (e.g., I have felt betrayed by healthcare providers, I have felt betrayed by the forensic system). This can ultimately result in individuals perceiving a breach of trust or a letdown from trusted individuals, causing them to internalize the negative experiences as a core aspect of their identity (e.g., I feel like I am defined by what happened). The emotional aftermath of betrayal can trigger intense self-blame, shaping their self-perception and contributing to the distressing sense of being defined by past actions or events. Our findings emphasize the need to measure MI by considering morally relevant transgressions, including nuanced instances of betrayal, to accurately capture this population's unique experiences of moral pain and injury. Frequent exposure to moral transgressions could gradually diminish the NCR population's perceptions of their inherent goodness and the reliability of others, potentially causing them to scrutinize their strategic choices and the ethical nature of

directives provided by authority figures. This creates a contrast between their work-related behavior, moral values, and beliefs, potentially triggering chronic moral pain and symptoms of MI if left unresolved (Roth et al., 2021)

Guilt:

The guilt subscale which is crucial in capturing the affective symptoms associated with MI, aligning with emerging syndromal definitions of MI that emphasize guilt, shame, and anger (Jinkerson, 2016; Koenig et al., 2018). In the NCR population, responses such as "I am aware of my past behaviors and its impact on my current situation" (item 12), "I've taken steps to make sure nothing like the offence ever happens again" (item 60), and "I feel like I've learned a lot" (item 62) from the MIO-NCR scale exemplify the guilt consequence of MI. These individuals often grapple with a heightened awareness of their past behaviors, deeply recognizing the profound impact these actions have on their current situation. This heightened awareness is often accompanied by intense feelings of guilt and self-blame, as they perceive their actions as irreversibly defining their identity (Tangney et al., 2011; 2007). As a consequence of this guilt, they may take proactive steps to prevent any recurrence of the offense, demonstrating a commitment to personal growth and rehabilitation (Brown et al., 2018; Fuller et al., 2019; Osei-Tutu et al., 2021; Proeve & Howells, 2002;). The feeling of having learned signifies their recognition of the gravity of their actions and a willingness to confront the moral implications of their past behaviors, further underscoring the presence of guilt as a central emotional consequence in the NCR population (Proeve & Howells, 2002).

Emotional Impact of MI in the NCR Population

Our study aimed to validate the MIO-NCR scale, designed to assess MI within the forensic psychiatric population and provide insights into its emotional consequences (Roth et al., 2021). The results revealed positive correlations between the MIO-NCR scale and constructs related to MI, particularly PTSD symptoms, with the betrayal subfactor showing a robust association (Papanastassiou, 2004; Shay, 2014; Stein et al., 2012). This finding underscores the significance of addressing the emotional aftermath of betrayal in the context of MI. Furthermore, our analysis revealed a moderate correlation between the MIO-NCR and MIES, indicating a meaningful relation between exposure to morally injurious events and subsequent negative changes and recovery outcomes (Roth et al., 2021). While the correlations may not be as strong as initially hypothesized, they remain statistically significant, supporting that morally injurious events can profoundly impact an individual's psychological well-being and recovery process (Protopopescu et al., 2021). This validates the MIO-NCR as a suitable measure of MI in the NCR population. In contrast, both the MIO-NCR total score and the betrayal subscale exhibited minimal correlations with depression, anxiety, and stress (Protopopescu et al., 2021). These deviations from initial hypotheses highlight the unique emotional responses within the forensic psychiatric population. One possible explanation could be attributed to the distinct coping mechanisms and emotional reactions of individuals within this population to MI events, leading to varying associations with broader psychological distress measures (Roth et al., 2021).

Moreover, the MIO-NCR's specificity in capturing guilt and betrayal experiences arising from MI sets it apart from measures like GASP, which assesses guilt and shame in a broader context (Roth et al., 2021). This distinction explains why correlations with GASP may appear weaker, emphasizing the importance of the MIO-NCR's first-person perspective items (e.g., "I am aware of my past behaviors and their impact on my current situation") in directly assessing personal experiences related to MI events. These findings provide valuable insights into the emotional impact of MI within the NCR population, offering researchers and clinicians an innovative tool that integrates phenomenological and syndromal perspectives. The MIO-NCR scale enables a comprehensive understanding of MI experiences in this population, capturing their unique emotional challenges and nuanced affective symptoms (Roth et al., 2021).

However, a cautious interpretation of these findings is required, considering the study's sample size, measurement properties, and the specific characteristics of the forensic psychiatric population (Protopopescu et al., 2021). Although the MIES may not fully capture the complexities of MI within this population, the MIO-NCR's meaningful associations with constructs closely related to MI highlight its value in assessing the emotional consequences of MI experiences within forensic psychiatric settings (Roth et al., 2021).

Conclusion

The development of the MIO-NCR screener marks a significant milestone in assesssing MI among the forensic psychiatric population. By combining insights from prior research and adopting both phenomenological and syndromal perspectives, we have

created a robust and sensitive screening tool that effectively captures the distinct facets of MI in the NCR context. The MIO-NCR is a first step in understanding the emotional aftermath individuals experience following morally injurious events.

Limitations

Despite providing valuable insights into the relevance of MI in the forensic NCR population and the potential usefulness of the MIO-NCR scale, this study has certain limitations that warrant consideration. Firstly, scale development is a multi-phased process, and this study represents an initial step, offering a preliminary evaluation of the MIO-NCR scale's validity and reliability. Further research and validation are necessary to fully establish the scale's psychometric properties and suitability for use in the NCR population. Secondly, the self-report nature of data collection may have influenced the observed correlations between the MIO-NCR scale and other mental health measures, potentially impacting participants' subjective reporting. Incorporating complementary assessment methods, such as clinician-rated measures, could provide a more comprehensive understanding of the relationships between MI and other psychological constructs.

Moreover, the relatively low correlations between certain constructs may be attributed to the sample size and statistical power limitations. Enlarging the sample size would enhance the statistical power and improve the precision of the observed correlations, leading to more robust findings. Additionally, the study's sample primarily consisted of individuals from the NCR population, limiting the generalizability of the

results. Replicating these findings in diverse populations, considering various factors such as the type of offence, adverse childhood experiences, relationship to the victims, and specific diagnoses, will provide a more comprehensive understanding of MI's impact across different contexts. By addressing these limitations and conducting further research, we can strengthen our understanding of MI in the forensic NCR population and the utility of the MIO-NCR scale. Expanding the investigation's scope and improving the scale's psychometric properties will yield more precise insights into the complexities of MI and its implications for individuals in various populations.

Future Directions and Clinical Implications

In our upcoming endeavors with the MIO-NCR, our aim is to craft a comprehensive assessment tool that goes beyond merely screening for Moral Injury (MI) symptoms. We envision a tool encompassing additional facets of MI among individuals deemed NCR, as initially outlined by Roth et al. (2021). This endeavor is poised to bolster the development of precisely tailored MI interventions that address the unique needs of forensic psychiatric patients. Furthermore, our findings illuminate insights into the profound impact of MI, carrying profound implications for the forensic psychiatric populations' physical and psychological well-being. Of particular significance is our revelation of a compelling correlation between MI and PTSD, particularly the betrayal subfactor—a noteworthy discovery that warrants meticulous replication and in-depth exploration. By unraveling the intricate mechanisms binding MI and PTSD, we forge pathways for precise interventions within the realm of forensic psychiatry and beyond,

encompassing various contexts grappling with traumatic events. Future research should undoubtedly investigate the test-retest reliability of the measure.

A true landmark of our study resides in the creation of the MIO-NCR, an innovative tool purpose-built to screen for MI within the intricate landscape of forensic psychiatry. By encapsulating the morally injurious experiences of forensic psychiatric patients, the MIO-NCR emerges as a pivotal instrument not only for screening but also, with subsequent validation, for ongoing monitoring of MI throughout the recovery journey.

Tables | Study Two

Table 1
Participant Demographics (*N*=172)

Demographic Category	Count
Gender	
Male-identified	151
Female-identified	19
Age (years)	23-75
NCR Duration	
Shortest duration	Approximately 0 years and 4 months
Longest duration	Approximately 35 years and 7 months
Index Offense	
Violent with Personal	122
Violent with Non-Personal	18
Nonviolent with Personal	13
Nonviolent with Non-Personal	22
Race	
Caucasian/White	77
Aboriginal	0
Black/African-Canadian	30
Asian	9
Hispanic	2
Other	18
Unknown	19
Education	
Up to Grade 8	13
Grade 9 - Grade 13	87
Some Postsecondary	30

Postsecondary completed - College/Diploma Program	6
Postsecondary completed - University/Degree Program	8
Unknown	27
History of Childhood Abuse	
Yes	116
No	31
Unknown	24
History of Substance	
No	26
Yes - Alcohol and Drugs	75
Yes - Alcohol Only	5
Yes - Drugs Only	45
Yes - Not Specified	19
Unknown	1
Primary Diagnosis	
Schizophrenia	110
Schizoaffective Disorder	37
Delusional Disorder	4
Psychosis NOS	10
Bipolar Disorder	9
Substance Abuse Disorder - Alcohol Related	1
Substance Abuse Disorder - Drug Related	1
Substance Abuse Disorder NOS	1
Depression	3
Attention and Behaviour Disorder (ADHD, Conduct Disorder, Oppositional Defiant Disorder)	1
Antisocial Personality Disorder	1

Paraphilia (Pedophilia, Sexual Sadism, Fetishism, Exhibitionism, Frotteurism, Transvestic Fetishism, Paraphilia NOS)	3
Secondary Diagnosis	
Schizophrenia	7
Schizoaffective Disorder	3
Psychosis NOS	1
Bipolar Disorder	6
Substance Abuse Disorder - Alcohol Related	5
Substance Abuse Disorder - Drug Related	69
Substance Abuse Disorder NOS	11
Depression	1
Anxiety Disorder (Panic Disorder, Specific Phobia)	2
Attention and Behaviour Disorder (ADHD, Conduct Disorder, Oppositional Defiant Disorder)	1
Mental Retardation (Intellectual Disability)	1
Schizotypal Personality Disorder	1
Antisocial Personality Disorder	11
Does not have a secondary diagnosis	34

Table 2: External Measures

Measure	References
Moral Injury Events Scale (MIES)	Bryan et al., 2016; Nash et al., 2013
PTSD Checklist for DSM-5 (PCL-5) modified version	Blevins et al., 2015
Interpersonal Reactivity Index (IRI)	Davis, 1980
Guilt and Shame Proneness Scale (GASP)	Cohen et al., 2011
Adult Hope Scale (AHS)	Snyder et al., 1991
Integration of Stressful Life Experiences Scale (ISLES)	Holland et al., 2010
Adverse Childhood Events Questionnaire (ACE)	Felitti et al., 1998
Difficulties in Emotion Regulation Scale (DERS-18)	Victor & Klonsky, 2016
Big Five Inventory (BFI)	John, Donahue, & Kentle, 1991
Beck Cognitive Insight Scale (BCIS)	Beck et al., 2004
Depression Anxiety and Stress Scale (DASS-21)	Lovibond & Lovibond, 1995

Table 3a: Correlation Matrix (Variables Mioncr_9 to Mioncr_23)

	mioncr_9	mioncr_11	mioncr_12	mioncr_13	mioncr_14	mioncr_23
mioncr_9	**1.000**					
mioncr_11	0.281	**1.000**				
mioncr_12	-0.156	0.018	**1.000**			
mioncr_13	0.281	0.282	0.268	**1.000**		
mioncr_14	0.285	0.155	0.167	0.389	**1.000**	
mioncr_23	0.139	0.091	0.202	0.327	0.145	**1.000**

Table 3b: Correlation Matrix (Variables Mioncr_25 to Mioncr_40)

	mioncr_25	mioncr_27	mioncr_31	mioncr_35	mioncr_37	mioncr_40
mioncr_25	**1.000**					
mioncr_27	0.209	**1.000**				
mioncr_31	-0.005	0.071	**1.000**			
mioncr_35	-0.018	0.175	0.230	**1.000**		
mioncr_37	0.223	0.192	0.222	0.462	**1.000**	
mioncr_40	0.372	0.106	0.261	0.257	0.365	**1.000**

Table 3c: Correlation Matrix (Variables mioncr_42 to mioncr_58)

	mioncr_42	mioncr_44	mioncr_50	mioncr_52	mioncr_54	mioncr_55
mioncr_42	**1.000**					
mioncr_44	0.124	**1.000**				
mioncr_50	0.183	0.015	**1.000**			
mioncr_52	0.120	0.289	0.000	**1.000**		
mioncr_54	0.195	0.283	0.128	0.049	**1.000**	
mioncr_55	0.550	0.209	0.183	0.334	0.188	**1.000**

Table 3d: Correlation Matrix (Variables mioncr_58 to mioncr_62)

	mioncr_58	**mioncr_59**	**mioncr_60**	**mioncr_61**	**mioncr_62**
mioncr_58	1.000	-0.029	0.209	-0.059	0.200
mioncr_59	-0.029	1.000	-0.059	0.200	0.116
mioncr_60	0.209	-0.059	1.000	0.116	-0.018
mioncr_61	-0.059	0.200	0.116	1.000	0.281
mioncr_62	0.200	0.116	-0.018	0.281	1.000

Table 4: MIO-NCR Factor Loadings

Item	F1	F 2	F3	F5	F6
9. I feel others are to blame for what happened.	----	----	----	----	0.31
14. I worry that I have no purpose in life.	----	----	----	----	0.69
27. I spend a lot of time worrying about my future.	----	----	----	----	0.46
35. I have a hard time moving forward with my life because of how I feel about myself.	----	----	----	----	0.7
44. I feel worthless.	----	----	----	----	0.45
50. I feel embarrassed of myself.	----	----	----	----	0.44
55. I feel like no one will understand what I'm going through.	----	----	----	----	0.34
12. I am aware of my past behaviors and its impact on my current situation	----	0.79	----	----	----
60. I've taken steps to make sure nothing like the offence ever happens again.	----	0.74	----	----	----
62. I feel like I've learned a lot.	----	0.73	----	----	----
13. I find it hard to stop thinking about what happened	0.52	----	----	----	----

23. I worry that I'll get sick and do something hurtful again	0.51	----	----	----	----
25. I never thought I was capable of doing what I did.	0.37	----	----	----	----
37. I worry that I'll never be able to get over what happened	0.48	----	----	----	----
40. It makes me feel very badly that I can't make amends for what happened.	0.49	----	----	----	----
58. I believe that my actions were harmful to others.	----	----	----	0.56	----
59. I think I am a bad person for doing what I did.	----	----	----	0.57	----
61. I feel angry at myself when I think about what I did.	----	----	----	0.50	----
11. I have felt betrayed by healthcare providers.	----	----	0.76	----	----
52. I have felt betrayed by the forensic system.	----	----	0.75	----	----
54. I feel like I am defined by what happened.	----	----	0.33	----	----

Note. F= Factors

Figure 1. Hierarchical factor structure and standardized factor loadings of the 2-factor CFA model.

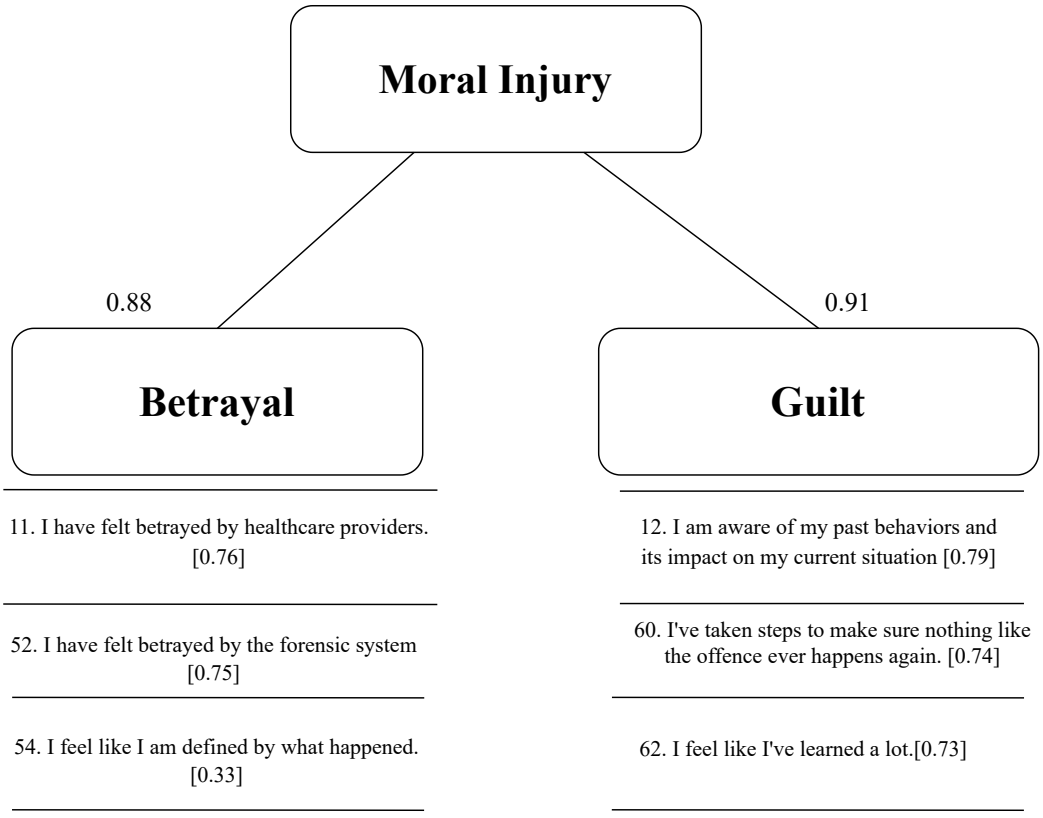


Figure 2
Correlation Matrix for MIO-NCR Total and External Measures

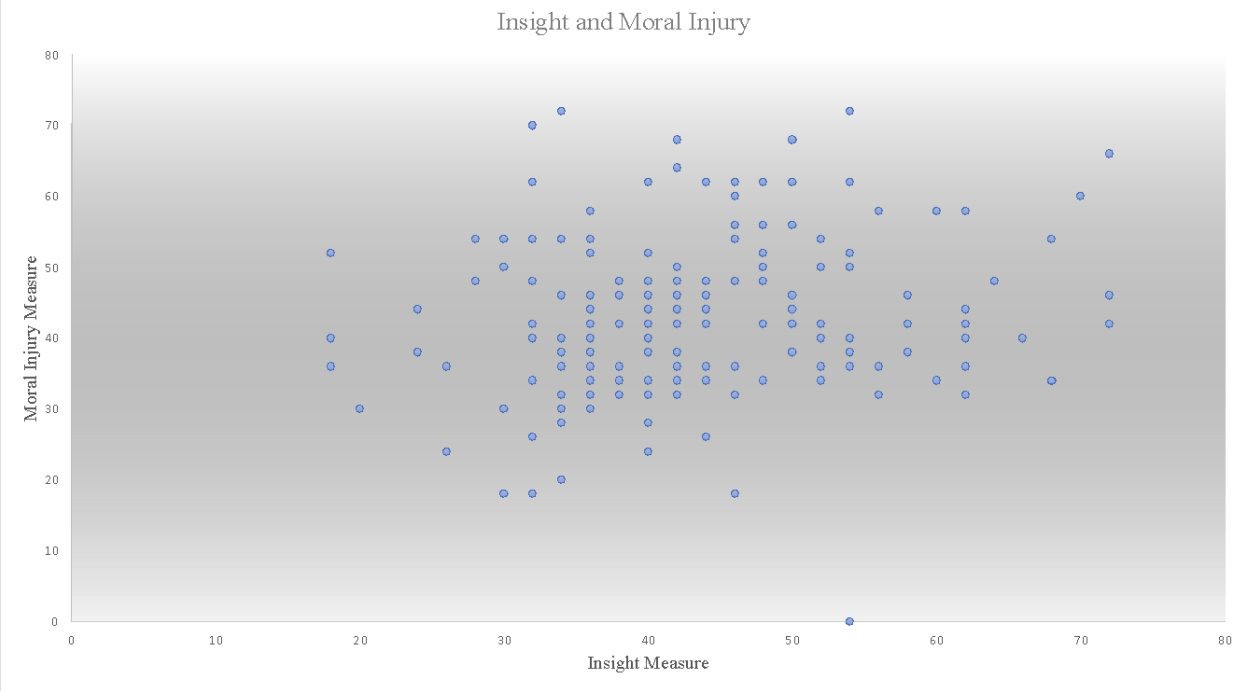
Variable	MIO-NCR Total	PCL5	DERS	GASP	MIES	PT	Depression	Anxiety	Stress
MIO-NCR Total	1.00	0.16*	0.17*	0.06	0.17*	-	0.16*	0.24**	0.17*
PCL5	0.16*	1.00	0.5***	...	0.02	0.03	0.59***	0.7***	0.66***
DERS	0.17*	0.5***	1.00	...	0.05	0.03	0.42***	0.36***	0.5***
GASP	0.06	0.12*	0.13	1.00	0.16	0.39***	0.08	0.03	0.88
MIES	0.17*	0.02	0.05	0.16	1.00	0.14	0.05	0.05	0.09
PT	-	0.03	0.03	0.39***	0.14	1.00	-0.13	-0.03	-0.1
Depression	0.16*	0.59***	0.42***	0.08	0.05	-0.13	1.00	-	-
Anxiety	0.24**	0.7***	0.36***	0.03	0.05	-0.03	-	1.00	-
Stress	0.17*	0.66***	0.5***	0.88	0.09	-0.1	-	-	1.00

Figure 3
Correlation Matrix for the MIO-NCR Betrayal and Guilt subscale and External measures

Construct and Criteria Validity

Variable	MIO-NCR Betrayal	PCL5	DERS	GASP	MIES	PT	Depression	Anxiety	Stress
MIO-NCR Betrayal	1.00	0.22**	0.17*	-0.01	0.21**	-	0.24**	0.28**	0.26**
MIO-NCR Guilt	-	0.01	0.07	0.09	0.02	-	-0.01	0.07	-0.02

Figure 4
Insight and Moral Injury (*N*= 170)



Note: Insight measure was Beck Insight Scale (BCIS) total score, and the Moral Injury measure was the MIO-NCR total scale.

Chapter 4: Conclusions

4.1 Summary of Findings

In Study 1 (Chapter 2), we aimed to comprehensively analyze the existing literature on the relationship between shame and guilt and the mental health outcomes of individuals who have committed offences. The primary objective of the review was to identify key themes, gaps, and potential directions for future research in this critical area. The review revealed that shame and guilt are complex emotions with multifaceted impacts on the mental health of individuals who have committed offences. Excessive levels of shame were found to lead to adverse outcomes such as depression, anxiety, and self-harm, often resulting in defensive behaviors and a lack of introspection. On the other hand, effectively managed levels of shame and guilt were associated with positive outcomes, including introspection, motivation, and remorse. The existing research highlights the crucial role of shame in the psychological and social functioning of these individuals. Shame strongly influences their response to others and affects the building of relationships post-offence, leading to defensive behaviors and self-hatred. It negatively impacts their self-perception, contributing to anger, mistrust, and cautiousness in social interactions. Shame is also associated with negative future-oriented thinking, including worries about the future, and building relationships, which may lead to suicidal thoughts and behaviors.

Likewise, guilt plays a significant role in the psychological and social functioning of individuals who have committed offences. It leads to self-focused behaviors such as self-blame, self-forgiveness, empathy, and a sense of responsibility for their actions. Guilt

can act as a motivational factor, increasing individuals with a history of criminal offense's willingness to participate in treatment and become more engaged cognitively. It also results in increased cooperative behaviors during court sessions and police interrogations. Furthermore, guilt is an adverse prognostic factor in personality disorders and antisocial traits, and its management can lead to fewer personality pathologies and traits. The comparison between shame and guilt shows that they have differential roles in these individuals' psychological and social functioning. Shame tends to mediate antisocial behaviors and personality pathology and exacerbates guilt-related symptoms, including depression and PTSD. While shame and guilt are associated with increased recidivism rates, the exact nature of this relationship remains unclear, with contradictory findings on whether these emotions discourage or reinforce re-offending.

This comprehensive review sheds light on the profound impact of shame and guilt on the mental health of individuals who have committed offences. It unequivocally demonstrates that the offending population indeed experiences these emotions. The intricate interplay of shame and guilt emphasizes the necessity for further research to fully comprehend their relationship, the effects of guilt symptoms, and their potential implications for recidivism rates. As the field progresses, conducting more in-depth studies that delve into the nuances of shame and guilt becomes imperative in guiding targeted interventions and providing essential support for this vulnerable population.

In Study 2 (Chapter 3), we embarked on a pioneering effort to devise and validate a groundbreaking screener tailored for identifying moral injury within the forensic psychiatric Not Criminally Responsible (NCR) population. Our approach was

underpinned by a robust theoretical foundation bolstered by the enlightening findings of Roth et al. (2021), which illuminated distinct parallels between the NCR demographic and Jinkerson's (2016) conceptualization of moral injury. Drawing inspiration from this alignment, we synthesized phenomenological and syndromal perspectives, guided by theoretical constructs and clinical expertise, to shape the MIO-NCR. This innovative tool, designed to gauge moral injury in the unique context of forensic psychiatry and NCR individuals, offers an intricate comprehension of their moral and emotional encounters. In crafting the MIO-NCR, we meticulously examined existing literature on moral distress within NCR populations and leveraged established measures of constructs such as shame, anger, and moral injury from diverse settings. Collaborating closely with content experts and clinical practitioners steeped in the nuances of moral injury, trauma, and PTSD within the NCR milieu, we distilled beliefs, attitudes, emotions, and behaviors resonant with morally injured individuals in this specific population. Rigorously selecting candidate items, informed by these expert perspectives, ensured a comprehensive coverage of moral injury facets germane to forensic psychiatric NCR individuals. The scale development and validation process yielded a promising 6-item scale with encouraging psychometric attributes. While further research is warranted to establish its validity and reliability firmly, preliminary findings affirm notable internal consistency, criterion, and construct validity. The robust fit of the 2-factor model firmly supports the moral injury concept and its symptom structure, accentuating the significance of betrayal and guilt domains.

A pivotal revelation emerged from the MIO-NCR's assessment—the profound impact of betrayal in the forensic psychiatric population. Perceived betrayals by trusted entities, including healthcare providers and the forensic system, induced intense moral distress, exerting a profound toll on psychological well-being and emotional equilibrium. Moreover, the scale adeptly gauged affective symptoms intrinsic to moral injury, notably guilt, rooted in the perception of being defined by committed offenses. The robust association with the betrayal subfactor underscored the need to address the emotional aftermath of betrayal in the context of MI, particularly its nexus with PTSD symptoms. While correlations with broader psychological distress metrics were less pronounced than anticipated, this divergence could be attributed to the forensic psychiatric cohort's unique characteristics and coping mechanisms. We also examined the relationship between insight and MIO-NCR, hypothesizing an interplay between co-occurring MI and mental health struggles, as insight is gained. While a negative correlation emerged, statistical significance was not attained. This avenue warrants further exploration, although it extends beyond the scope of the present study.

The MIO-NCR scale introduces a pioneering tool that skillfully merges phenomenological and syndromal perspectives, enhancing MI assessment in the forensic psychiatric NCR realm. With a comprehensive approach rooted in both theory and empirical insights, the MIO-NCR holds immense potential to enhance assessment practices to address the moral challenges NCR individuals face in the forensic psychiatric setting.

4.2 Limitations

Several limitations should be acknowledged when interpreting the findings from the scoping review. Firstly, the inclusion of articles relied on a citation trail, which might have resulted in potential omissions of relevant studies that needed to be captured in the initial search. Employing a more comprehensive approach by searching a broader range of healthcare and criminal justice databases could have addressed this limitation and ensured a more comprehensive coverage of relevant literature. Another critical limitation stems from the predominance of correlational or cross-sectional studies among the included articles. While these studies provided valuable insights, they could not establish causality or determine the direction of effects. Future research should prioritize longitudinal designs to understand better the temporal dynamics and long-term consequences of shame and guilt among the offending population.

Furthermore, the characterization of samples in the included studies often lacked detailed information on participants' trauma history. This lack of comprehensive data may influence the observed outcomes and limit the generalizability of the findings. Future studies should strive to collect more detailed information on participants' trauma experiences to better understand the role of trauma in shaping the relationship between shame, guilt, and other psychological outcomes. Additionally, it is essential to acknowledge that the review was limited to studies published in English, introducing potential language bias, and excluding relevant research conducted in other languages. Future reviews could consider incorporating studies published in multiple languages to ensure a more inclusive examination of the topic, Another limitation of the scoping

review was the need for more variety in the types of offences investigated in the included studies. The majority of the studies focused on specific types of offences, such as sex offences or violent crimes, while other types of offences were underrepresented. This limited scope may restrict the generalizability of the findings to a broader range of criminal behaviours. Researchers can gain insights into how shame and guilt operate across different offending populations by including a wider range of offences in future research. Different types of offences may elicit unique feelings of shame and guilt due to variations in societal perceptions, legal consequences, and personal moral values associated with specific crimes. Furthermore, the study focusing primarily on specific types of offences might not fully capture the diversity of shame and guilt experiences across different criminal behaviours. A broader examination of offences would enable a more comprehensive understanding of how shame and guilt manifest in various offending populations and identify potential differences or commonalities across offence types.

Regarding the MIO-NCR scale development and validation study, it is crucial to recognize that scale development is a multi-phased process, including item piloting and extensive psychometric testing. The current study represents an initial step in this process, offering a preliminary evaluation of the MIO-NCR scale's validity and reliability. Further research and validation are necessary to fully establish the scale's psychometric properties and its suitability for use in the NCR population. The self-report nature of data collection may have influenced the observed correlations between the MIO-NCR scale and other mental health measures, such as PTSD, guilt, and shame. While we demonstrated divergent and convergent validity with these constructs, it is essential to acknowledge the

potential impact of participants' subjective reporting on these associations. Future studies may consider incorporating complementary assessment methods, such as clinician-rated measures, to better understand the relationships between moral injury and other psychological constructs. Moreover, the relatively low correlations between certain constructs in the study may be attributed to the sample size and statistical power limitations. Enlarging the sample size would enhance the statistical power and improve the precision of the observed correlations, yielding more robust findings.

Furthermore, the generalizability of the results may be limited due to the study's sample primarily consisting of individuals from the NCR population as a whole, without considering other potentially influential factors. To enhance the applicability of the findings, it is crucial to replicate the study's results, considering various factors such as the type of offence, adverse childhood experiences, relationship to the victims, and specific diagnoses. Such a comprehensive approach will provide a deeper and more nuanced understanding of the impact of moral injury across different contexts.

To strengthen our comprehension of MI in the forensic NCR population and the usefulness of the MIO-NCR scale, it is essential to address these limitations and conduct further research. By broadening the scope of investigation and refining the scale's psychometric properties, we can gain more precise insights into the complexities of moral injury and its implications for individuals in various populations. This continued effort will contribute significantly to developing targeted interventions and support for those affected by moral injury, fostering better outcomes and well-being for this vulnerable population.

4.3 Implications and Future Directions

The current study represents a groundbreaking endeavor in the field of MI research within the unique context of forensic psychiatry. By shedding light on the significance of shame and guilt in offending behavior and their implications for mental health outcomes, this research underscores the importance of discerning the distinct characteristics of these moral emotions. Moreover, it establishes that the offending population does indeed experience these emotions and their consequences, paving the way for further exploration in this area. Moving forward, expanding this research to encompass different types of offenses and populations. Investigating the variations of MI experiences among diverse groups of individuals with a history of criminal offense, would contribute to a more comprehensive understanding of the phenomenon and its impact on psychological functioning. This, in turn, could potentially bolster the recognition and significance of MI in this field.

Furthermore, the correlation between MI and PTSD demands further exploration among the NCR population. Understanding the interplay between these two constructs could present new avenues for trauma-informed approaches that can aid individuals in processing and integrating their traumatic experiences, ultimately promoting overall recovery and well-being. In addition, the potential negative correlation observed between insight and MI requires deeper investigation. Examining the intricate relationship between these variables could unveil valuable insights into the co-occurrence of MI and mental health struggles, potentially informing targeted interventions and treatment strategies.

The development and validation of the MIO-NCR scale mark a significant advancement in MI research, providing a precise and sensitive tool for assessing MI within the forensic psychiatric population. Nevertheless, future studies should continue to test the MIO-NCR with large and diverse forensic NCR populations to refine further and expand the scope of MI experiences. In conclusion, future directions should continue to explore MI in the forensic psychiatric population, building on the existing evidence of its prevalence and impact. As our understanding deepens, research in this field will foster a greater appreciation for the complexity of moral emotions and recognize the existence of MI.

4.4 General Conclusions

Moral emotions, such as shame and guilt, play influential roles in shaping behavior, moral decision-making, and psychological functioning. In this study, we addressed the significance of offense-related shame and guilt in the context of offending populations and further validated their manifestation and consequences. Recognizing the importance of these moral emotions, we examined the dimensions of moral injury and its symptoms, particularly among NCR due to Mental Disorders. The first part of our investigation involved an extensive review of the influence of shame and guilt on behavior and psychological functioning among individuals with a history of criminal offense. We established that shame is linked to detrimental outcomes, fostering defensive behaviors and externalizing tendencies, while guilt evokes more constructive responses, including responsibility-taking and empathic concern. Both emotions, however, hold implications for recidivism risk.

In the next phase of our investigation, we introduced MIO-NCR, a novel self-report tool designed to assess moral injury in NCR individuals. Through a comprehensive psychometric analysis, we validated the MIO-NCR, revealing its robust criterion and construct validity. Our findings identified two distinct factors—betrayal and guilt—aligning with the syndromal perspective of moral injury, underscoring the centrality of betrayal and guilt in moral injuries experienced by NCR individuals.

Our study emphasized the critical role of shame and guilt in the offending population, emphasizing their consequences and the value of acknowledging moral injury and its core symptoms. By gaining deeper insights into moral injury within this context, we contribute to a comprehensive understanding of the complex interplay between moral emotions, psychopathology, and recidivism. This thesis ultimately aims to advance knowledge about moral injury in the NCR population, shedding light on the potential for rehabilitation and interventions to address these emotional and psychological challenges.

References | Chapter 1 (General Introduction)

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