



Conceptualization of moral injury: A socio-cognitive perspective

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ABSTRACT

As research into moral injury (MI) develops, a clearer conceptualization is needed to support further research and development of treatments. This article draws on the existing MI literature and proposes a new model for its conceptualization. The authors propose that central to MI is deterioration in the relationship with self, others, and humanity, leading to global belief and behavioural changes. A definition of what is, and is not, a potentially morally injurious event (PMIE) is also presented, and the authors argue that events need to be high stakes and threaten previously held beliefs, regardless of the event's outcome. The model highlights key predisposing factors that may influence the later development and maintenance of MI, such as adverse childhood experiences and factors surrounding the event. By considering what distinguishes PMIEs from *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.) posttraumatic stress disorder criterion A events and what factors may lead to MI, a better understanding of MI development and treatment can be considered.

Key words: adverse childhood experiences, conceptualization, military, moral injury, PMIE, posttraumatic stress disorder, potentially morally injurious event, PTSD, treatment, Veterans

RÉSUMÉ

Tandis que les recherches sur le préjudice moral (PM) prend de l'expansion, une conceptualisation plus claire s'impose pour appuyer les futures recherches et l'élaboration de traitements. Cet article s'appuie sur la littérature existante sur le préjudice moral et propose un nouveau modèle pour sa conceptualisation. Les auteur(e)s avancent qu'au cœur des PM se trouve la détérioration de la relation avec soi, autrui et l'humanité, qui entraîne des changements globaux aux croyances et aux comportements. Les auteur(e)s présentent également une définition de ce que sont et ne sont pas des événements au potentiel préjudiciable sur le plan moral (ÉPPM) et soutiennent que ceux-ci doivent être liés à de grands enjeux et menacer des croyances antérieures, quelle qu'en soit l'issue. Le modèle fait ressortir les principaux facteurs prédisposants qui peuvent influencer sur la future apparition et la persistance des PM, tels que les expériences négatives de l'enfance et les facteurs entourant l'événement. Au moment d'évaluer ce qui distingue les ÉPPM des événements répondant au critère A du trouble de stress post-traumatique du *Manuel diagnostique et statistique des troubles mentaux* (5e édition), ainsi que les facteurs susceptibles de provoquer des PM, on peut envisager de mieux comprendre l'apparition et le traitement des PM.

Mots-clés : conceptualisation, ÉPPM, expériences négatives de l'enfance, événements au potentiel préjudiciable sur le plan moral, militaire, préjudice moral, traitement, trouble de stress post-traumatique, TSPT, vétéran(e)s

LAY SUMMARY

This article looks at how moral injury (MI) may develop by considering what event features may be especially salient and cause MI and what experiences an individual may have after an event that might lead to the occurrence of a MI. It proposes that the beliefs someone has about themselves, others, and the world can be shaped by experiences in childhood and early life. Once an individual has experienced a potentially morally injurious event (PMIE) — for example, witnessing something that violates deeply held moral or ethical codes but being unable to stop it, doing something that violates these ethical codes, or experiencing a significant betrayal — they may try to make sense of it by changing the way they see the world, themselves, and others. This can lead to problems in the individual's relationship with themselves and others, leading to feelings of shame and guilt and withdrawal from other people. Finally, for an event to be a PMIE, it must significantly challenge strongly held moral beliefs and a sense of right and wrong.

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INTRODUCTION

In recent years, the literature on moral injury (MI) has developed rapidly, yet there is an ongoing lack of a clear conceptualization of MI.^{1,2} Litz et al. suggest that MI stems from dissonance between beliefs about what is right or wrong and perceived goodness of self, stemming from perpetrating, failing to prevent, witnessing, or learning about acts that “transgress deeply held moral beliefs and expectations” or bearing witness to an aftermath of “violence and human carnage.”^{3(p.700)} More recent research from Yeterian et al. suggests that intra-personal and interpersonal relationships are affected after exposure to a potentially morally injurious event (PMIE), with the breadth and depth of these changes being indicative of MI.⁴ Another author discusses MI among survivors of rape in terms of a diminishment of an individual’s moral value.⁵ Shay defines MI as being a betrayal of what’s right by oneself or a legitimate authority in a high-stakes situation; however, what constitutes a high-stakes situation is not further defined.⁶ Farnsworth et al. propose that MI is “expanded social, psychological and spiritual suffering stemming from costly or unworkable attempts to manage, control or cope with the experience of moral pain.”^{7(p.5)} Although this is not an exhaustive list of definitions, it highlights the various theoretical standpoints from which much MI research has been conducted.

The authors here propose that MI can be defined as a substantial degradation in or breakdown of an individual’s relationship with self, others, and humanity. This definition speaks to a common thread of suffering that runs through existing definitions,^{3,5-7} but it also draws attention to defining MI in terms of the impact on the individual who experienced it rather than the type of event experienced. In this definition, relationship with others refers to interpersonal relationships with friends, family, and peers (e.g., the people in my life would reject me if they knew what I did), whereas relationship with humanity refers to the individual’s relationship with humans more broadly (e.g., what humans are capable of is disgusting).

This proposed definition encompasses the differing paradigms of betrayal, witnessing, and perpetration-based PMIEs found in previous research.¹ Notably, this definition allows for all types of PMIE, including events that would not fit well into current diagnostic criteria for posttraumatic stress disorder (PTSD; e.g., raiding homes of terrified innocent civilians).⁸ This definition also provides a linguistically simple phrasing,

allowing space for the inclusion of spiritual or religious belief changes that can be experienced in MI and are lacking in existing definitions.⁹ Moreover, the use of degradation here can describe both an individual whose previously held positive beliefs about the self and others may have been shattered by exposure to a PMIE and also those who may have previously held negative views of self and others that were confirmed or reinforced by PMIE exposure.

To conceptualize MI and its development and maintenance, the authors developed a novel socio-cognitive model of MI (Figure 1).

KEY PREDISPOSING FACTORS

This model proposes that key predisposing factors may influence later development of MI after exposure to PMIEs. Early life experiences have been shown to shape moral development and are considered in this model.^{10,11} Adverse child experiences (ACEs) have been shown to affect both intra-personal and interpersonal beliefs and relationship development.^{12,13} There is also evidence of a relationship between ACEs and later reporting of MI, suggesting that alterations in beliefs about the self, world, and others resulting from these experiences may be a predisposing factor in the development of MI.¹⁴ In consideration of this definition of MI, this could explain why individuals who already have maladaptive beliefs may develop MI after exposure to a PMIE and those who do not have maladaptive beliefs do not. For example, a child who witnessed domestic violence may be vulnerable to MI as an adult if they are involved in a later PMIE in which they are unable to prevent violence to others; the PMIE could confirm a maladaptive belief from childhood that they are a weak or bad person for not being able to protect others.

In addition to early life experiences, other precipitating factors have been hypothesised to heighten the risk of MI. Studies have found that a lack of social support at the time of a PMIE may increase the risk of experiencing a MI, whereas empathic and understanding support after an event is helpful.¹⁵ Moreover, individuals who experience other concurrent stressors when exposed to a PMIE, such as personal bereavement, appear to also be at higher risk of developing MI.¹⁵ Finally, research suggests that feeling unprepared for the emotional and psychological impact of decisions made during PMIE may also heighten the risk of developing MI.¹⁵

COGNITIVE APPRAISAL PATTERNS

Crucial to the understanding of the development, maintenance, and treatment of MI is understanding the cognitive appraisal patterns common to MI and the impact they can have on the degradation of one's relationship with self, others, and humanity. Increased appraisals of self-blame have been shown to lead to an increase

in MI-related symptoms.¹⁶ Moreover, appraisals can reflect how an individual believes they should have acted, according to their existing moral foundation, regardless of the situation and what was a justifiable course of action.¹⁷ It should also be noted that some appraisals of PMIEs, such as "someone I trusted betrayed me," can be accurate.¹⁸ For clinicians, although this appraisal

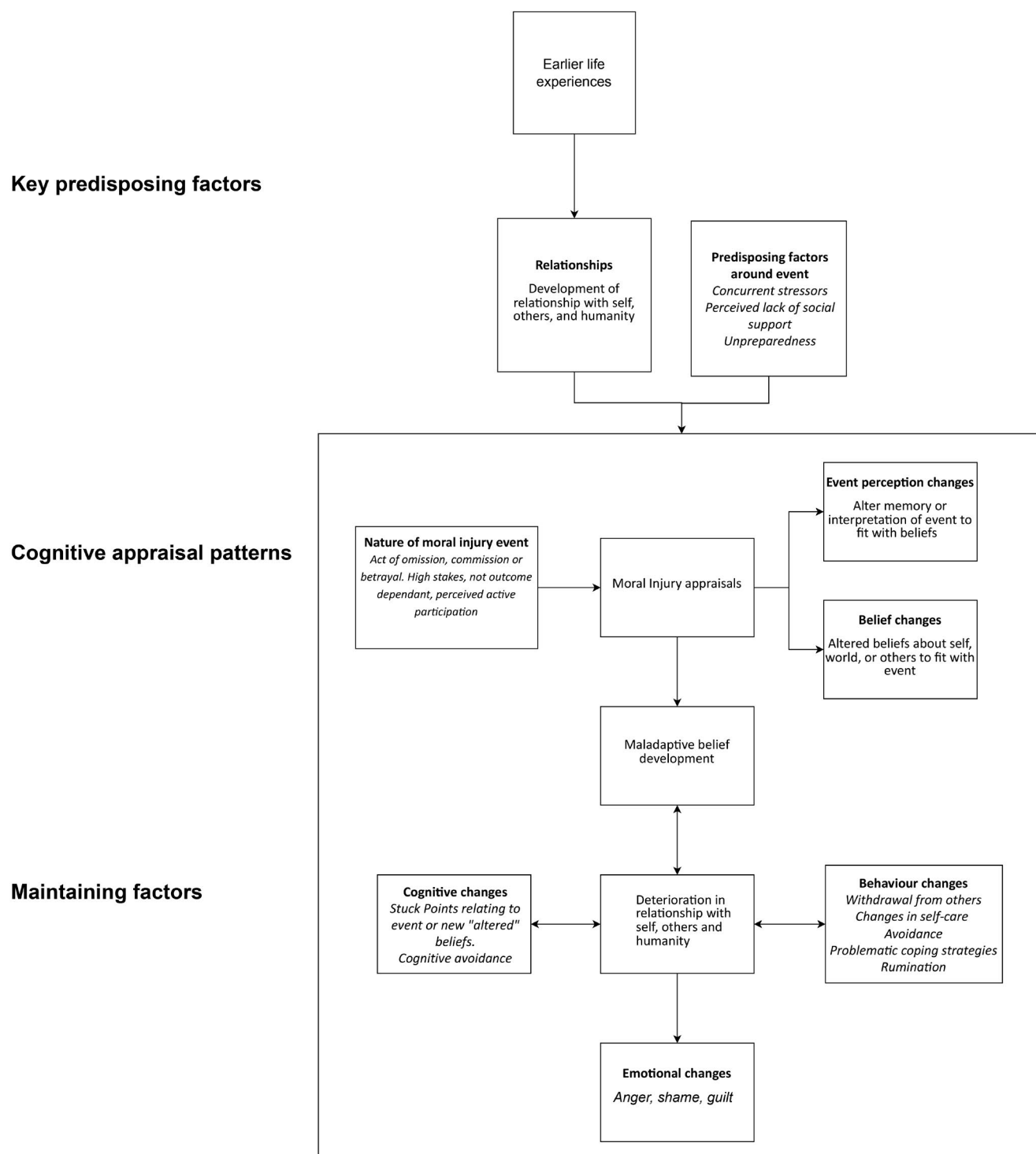


Figure 1. Socio-cognitive model of moral injury

may lead to the development of maladaptive beliefs and feelings of anger, shame, and guilt that could be a target of treatment, it is not an erroneous appraisal that would be targeted for challenge itself. Studies have found that PMIEs can affect an individual's appraisal of themselves, others, and the world in ways similar to PTSD.¹⁵ However, compared with a trauma-exposed sample who typically expressed appraisals of ongoing threat,¹⁹ those exposed to a PMIE held global perceptions about the world being an evil place and about themselves as bad, and they described a loss of faith in humanity.¹⁵ Nash et al. found that MI and PTSD present with significant cognitive differences that must be considered in the development of MI treatments.²⁰ Nonetheless, after classically traumatic events, models of PTSD show how individuals either interpret an event in a way that complements their existing beliefs or adapt their beliefs to make sense of it, described as assimilating or over-accommodating.²¹ This cognitive pattern was a beneficial consideration in the formulation and treatment of MI.²² It is worth noting that, although MI research is growing rapidly, most samples are small and largely consist of military or health care populations, highlighting a need for studies with larger, more varied populations to thoroughly conceptualize MI and develop treatments.

MAINTAINING FACTORS

In addition to the factors that may lead to MI, there are also several potential maintaining factors. Both rumination and problem-focused thoughts are common among those with MI, and they are hypothesized to be a key mediating factor between PMIE exposure and the development of mental health difficulties.²³ Put another way, morally injured people with strong negative cognitions may be more likely to develop formal mental health problems such as PTSD or depression.²⁴ Those with MI report a decline in self-compassion and self-care practices and neglect of health, diet, and personal hygiene because of depressive symptoms or feeling undeserving of care after a PMIE.²⁵ Individuals with MI may also struggle at work, because changes in beliefs about others and those in authority can have a negative impact on work behaviour and interactions.²⁶ MI-related cognitions (e.g., "I am a monster") and symptoms can cause significant disruptions to family functioning.²⁶ For example, individuals may increasingly struggle to manage distress at home, causing them to lose their tempers more easily, withdraw, and have

difficulty empathizing with family members, resulting in relationship breakdowns.²⁵

These maintaining factors may also have a confirmatory effect. Evidence has shown that being deprived of social interaction may lead to depression;²⁷ thus, the consequences of social withdrawal (e.g., feelings of isolation) could provide further confirmatory evidence to individuals that they are unworthy of love or friendship and that others are better off without them. Lack of self-care, or an increase in self-risk, may also provide further evidence that they are unworthy of care and increase feelings of self-disgust or worthlessness, and evidence suggests that poor self-care can both stem from and maintain depressive symptoms.²⁸ In consideration of the global attributions of beliefs in MI, these maintaining behaviours would fit with long-term changes in relationships with self, others, and the community, as well as spiritual beliefs,²⁹ particularly because these behaviours may be maintained or escalate over time.

DISTINCTIVENESS OF PMIES

Finally, the authors propose here potential features of events that set PMIEs apart from other traumas. PMIEs tend to fall into one of three categories: acts of omission, acts of transgression, or acts of betrayal.³⁰ Events need to provoke significant transgression of moral values and dissonance with moral beliefs, mirroring the later degradation in relationships with self, others, and humanity as a whole. This definition of MI allows for the impact these different types of events can have on relationships with self, others, and humanity. For example, transgressive acts may particularly lead to a breakdown in relationships with self or others, and acts of betrayal may especially disrupt relationships with others and humanity.

To constitute a PMIE, the authors propose that an event must be high stakes, whatever the outcome. Considering the significant belief changes leading to profound changes in relationship with self, others, and humanity, it seems appropriate to suggest that events need to be high stakes when there is a significant likelihood that strongly held beliefs or schemas will be dissonant with the PMIE itself. Distinct from the categories of high-stakes trauma events considered in a PTSD diagnosis,⁸ in a PMIE, one's deeply held beliefs of right and wrong are at stake. This may include events in which one's actions have high-stakes or potentially serious consequences (e.g., providing coordinates to drop a bomb) or events that result in considerable

devastation (e.g., seeing deceased children in the streets of a war zone). Support for this definition is evidenced in studies of MI with various populations.¹

Studies examining MI among military samples, child protective service workers, health care workers, police, educators, and refugees often report exposure to high-stakes events, and the development of MI can reflect a cumulative exposure to PMIEs over time.¹ Several studies have also shown that MI is commonly experienced by those who are exposed to events involving victims from a vulnerable population (e.g., children, older adults) who are at higher risk of harm and less able to protect themselves.¹² Moreover, MI does not seem to depend on the outcome of the PMIE. For example, a Veteran who mistakenly shot at a child in a war zone but missed may experience MI similar to actually killing or injuring the child. A health care worker who was unable to deliver the most effective life-saving treatment for a patient as a result of lack of resources may experience MI even if the patient recovered. Therefore, although the authors propose that PMIEs need to be high stakes, a poor outcome is not required for a MI to occur. This is evidenced in studies of journalists, for example, who step out of their roles to actively help others, as opposed to observing suffering without providing assistance, who were found to be at increased risk of developing MI.³¹

Conclusion

The proposed model is relevant to how treatments for MI might be developed. First, assessment of early life experiences and the context of PMIE is relevant to MI treatment and can help patients and therapists foster a shared understanding of these factors in later MI development. Second, defining the nature of PMIEs can help therapists to better identify when MI may or may not be present when assessing patient history. Finally, by considering MI as a fundamental degradation in relationships with self, humanity, and others, treatment that targets maintaining factors, as well as exploring predisposing factors and maladaptive belief formation, can be better tailored to the unique presentation of MI. However, although this model is briefly outlined here, significant further research and discussion are needed. It is worth noting that, although MI research is growing rapidly, samples in current literature are often small and drawn largely from military populations,¹ highlighting a need for larger and more varied clinical populations for a thorough conceptualization of MI and treatment development.

AUTHOR INFORMATION

Amanda Bonson, PgDip, BSc(Hons) is a cognitive-behavioural therapist treating and contributing to research on psycho-traumatology, specifically moral injury. She works as a research therapist in the research department of Combat Stress.

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Vicky Aldridge is a clinical psychologist who has worked in the mental health field for more than 10 years with various client groups. She is a senior team member at Combat Stress, a Veteran's mental health charity, and works across the clinical and research departments. Her passion is for working with people with trauma-related difficulties, and she has a keen interest in moral injury, having previously published her own research in this area.

Neil Greenberg, MD, FRCPsych, is an ex-military consultant psychiatrist who served for 23 years as Royal Navy Commando. He is a senior team member in the King's Centre for Military Health Research and a principal investigator in a nationally funded health protection research unit. He has a long-standing interest in occupational mental health and leads on the World Psychiatric Association's position statement on mental health in the workplace. Greenberg has published more than 300 scientific papers and book chapters.

Victoria Williamson, PhD, is a researcher with interest in psycho-traumatology and co-designing accessible mental health interventions.

COMPETING INTERESTS

The authors have no competing interests to declare

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