



Moral Injury: alertering

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'Moral injury', in het Nederlands ook wel 'moreel trauma' genoemd, is een begrip dat verwijst naar de psychosociale klachten die mensen kunnen ontwikkelen wanneer zij ervaringen hebben meegemaakt waarin belangrijke morele verwachtingen en overtuigingen worden geschonden.

Elke maand zet de ARQ-bibliotheek nieuwe publicaties over *Moral Injury* op deze lijst.

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Deze attendering hoort bij het [themadossier Moral Injury](#).

Aboulhosn, R. (2023). *Relationship between combat exposure, potentially morally injurious events, and mental health outcomes in ex-combat fighters during the Lebanese civil war* [Thesis].

<https://scholarhub.balamand.edu.lb/handle/uob/7024>

The Lebanese civil war was considered an example of one of the most traumatic experience the Lebanese went through. In addition, owing to the brutality, which existed at the time, the Lebanese Civil war caused a substantial number of casualties. This study examined the association between exposure to combat experiences and potentially morally injurious events with the mental health of ex-fighters during the Lebanese civil war. The study utilized a quantitative research method, based on a survey method design and a deductive approach to analyzing the collected data from respondents who were involved in the civil war in Lebanon. The participants were recruited through non-probability sampling. Convenient sampling was used since the population we are recruiting is difficult to approach, snowball sampling was also used. The total number of participants was 40 from various locations in Lebanon with the majority in Mount Lebanon. Combat experiences was measured using the Combat experiences subscales of the Deployment Resiliency Risk Inventory-2 (DDRI-2), exposure to morally injurious events was measured using the Moral Injury Event Scale (MIES), and the mental health conditions was measured using the Depression, Anxiety and Stress Scale - 21 Items (DASS-21). Participants were recruited through snowball sampling. Analysis of the collected data indicated that the combination of the two independent variables, the higher exposure to combat experiences and potentially morally injurious events, has a significant influence on the mental health of ex-combat fighters in the civil war ($r^2 = 0.17$, $p\text{-value} = 0.032$). The analysis indicated that potentially morally injurious events have a moderate positive correlation with mental health outcomes ($r^2 = 0.169$, $p\text{-value} = 0.009$) and exposure to combat experiences indicated a weak positive correlation with mental health of ex-combat fighters ($r^2 = 0.018$, $p\text{-value} = 0.422$). In addition, the higher exposure to combat experiences has a weak positive correlation to potentially morally injurious events ($r^2 = 0.001$, $p\text{-value} = 0.818$). It is suggested that addressing moral injury is crucial in reducing mental health problems in ex-combat fighters. This study emphasizes the need to provide appropriate services and therapies to ex-combat fighters suffering from mental health issues. All these initiations are crucial for limiting or reducing the mental health problems of those ex-combats.

Andrews, K., Roth, S. L., Lloyd, C., Protopopescu, A., O'Connor, C., Lanius, R. A., & McKinnon, M. C. (2023). Development and preliminary evaluation of the Moral Injury Assessment for survivors of abuse. *Traumatology*, No Pagination Specified-No Pagination Specified. <https://doi.org/10.1037/trm0000475> Survivors of abuse (SoA) are exposed to violations of their trust and moral standards leading to the risk of experiencing significant psychological, spiritual, and behavioral suffering. However, little research has examined these experiences of moral injury (MI) in this population. Further, to our knowledge, there are no existing tools to measure MI in SoA. The Moral Injury Assessment for Survivors of Abuse was developed over multiple stages including literature review, focus groups with SoA, and consultations with clinical and research experts in relevant disciplines. The tool was piloted with 188 Canadian and American adult participants ($M = 33.5$ years old, standard deviation, $SD = 9.2$; 55% male-identified) and an exploratory factor analysis was conducted. Four distinct factors emerged that explained 60% of total

variance: intergenerational transmission of trauma, emotional sequelae, self-blame, and betrayals. Further, the scale demonstrated strong internal reliability (total score: Cronbach's $\alpha = .93$), item-total correlations, and construct validity when compared to relevant measures of psychological distress. These findings present important preliminary insight into the unique experiences of MI within the SoA population and provide a foundation for future validation studies. Ultimately, it can potentially provide an additional tool for clinicians in developing tailored assessments and treatment plans for SoA. (PsycInfo Database Record (c) 2023 APA, all rights reserved)

Békés, V., Szabó, D., Lévy, E. E., Salgó, E., & Unoka, Z. (2023). Moral Injury and Shame Mediate the Relationship Between Childhood Trauma and Borderline Personality Disorder, PTSD, and Complex PTSD Symptoms in Psychiatric Inpatients. *Journal of Personality Disorders*, 37(4), 406–423. <https://doi.org/10.1521/pedi.2023.37.4.406>

Moral injury (MI) has received increased research attention in the past decades. However, despite its detrimental mental health consequences, MI has not been studied in psychiatric patients. We aimed to establish the relationship between childhood trauma, MI, and borderline personality disorder (BPD), posttraumatic stress disorder (PTSD), and disturbances in self-organization symptoms (DSO), a core diagnostic criterion of complex PTSD besides PTSD symptoms, and shame as a moral emotion in an inpatient psychiatric sample (N = 240). We found that the impact of childhood trauma on present BPD, PTSD, and DSO symptoms was mediated by MI and shame; the models accounted for up to 31% of variance in symptomatology. To our knowledge, this study is the first to investigate MI in a psychiatric sample, and our results highlight the importance of considering MI as a critical factor of patient experiences in relation to childhood trauma that potentially contributes to the development of psychiatric symptoms.

Berdida, D. J. E. (2023). The mediating roles of moral courage and moral resilience between nurses' moral distress and moral injury: An online cross-sectional study. *Nurse Education in Practice*, 71, 103730. <https://doi.org/10.1016/j.nepr.2023.103730>

Aims To investigate the mediating role of moral resilience and moral courage in the association between moral distress and moral injury. **Background** There is a preponderance of nursing literature about moral distress, moral resilience, moral courage and moral injury. However, examining moral resilience and moral courage as mediators remain underreported during the COVID-19 pandemic and in the context of a developing nation. **Design** Correlational, cross-sectional design compliant with the STROBE guidelines. **Methods** A convenience sample of nurses (n = 412) from the Philippines were recruited using social media platforms (e.g., Facebook, Messenger, Twitter). Four self-report and validated scales (8-item Moral-Distress Appraisal Scale, 21-item Nurses' Moral Courage Scale, 17-item Rushton Moral Resilience Scale and 10-item Moral Injury Symptom Scale: Healthcare Professionals Version) were used to collect data from January to July 2022. Pearson's r, bivariate analysis and multistage regression analyses were used for data analysis. **Results** This study afforded a model that depicted the interrelationships of moral distress, moral resilience, moral courage and moral injury. Moral distress has a negative impact on moral resilience and moral courage while positively affecting moral injury. Moral resilience positively influences moral courage while having a negative impact on moral injury. Moral courage has an indirect impact on moral injury. Finally, moral resilience and moral courage demonstrated a mediating effect between moral distress and moral injury. **Conclusions** Healthcare organizations, policymakers and nurse managers should include policies and programs that include improving approaches to modifying workplace conditions and evaluating nurses' moral resilience and courage. Nurse managers need to advocate ethics education and professionalism. Nurses must practice self-care strategies to strengthen morally resilient and courageous therapeutic practices.

Borges, L. M., Desai, A., Barnes, S. M., & Johnson, J. P. S. (2022). The Role of Social Determinants of Health in Moral Injury: Implications and Future Directions. *Current Treatment Options in Psychiatry*, 9(3), 202–214. <https://doi.org/10.1007/s40501-022-00272-4>

Purpose of Review: Exposure to potentially morally injurious events (PMIEs) and the development of moral injury have yet to be conceptualized as they relate to social determinants of health (SDoH). **Recent Findings:** In this paper, the extant literature on moral injury and SDoH is reviewed. Specific individual-level SDoH, including gender, sex, sexual orientation, race, and ethnicity, are explored relative to PMIEs and moral injury. The relationship among environmental SDoH, including childhood environment, justice involvement, and homelessness, is described. **Summary:** Assessment and treatment implications are discussed, and future research directions highlighting the need for additional work addressing health inequities in moral injury are presented.

Borges, L. M., Holliman, B. D., Farnsworth, J. K., & Barnes, S. M. (2023a). Perceptions of Military Experience Among Veterans Reporting Lifetime Warzone Moral Injury. *The Journal of Nervous and Mental Disease*, 211(10), 796. <https://doi.org/10.1097/NMD.0000000000001676>
Exposures to potentially morally injurious events (PMIEs) and possible moral injury are risk factors for a range of difficulties impacting individual functioning. Although exposure to PMIEs is a somewhat common product of war, qualitative methods to understand Veterans' experiences of moral injury and Veterans Affairs treatment are limited. To better characterize Veterans' experiences, 14 male warzone Veterans who reported moral injury post-warzone deployment and completed posttraumatic stress disorder treatment in the past year were asked to describe their military service as part of a qualitative study. Through thematic analysis, we found two moral injury-consistent themes and four subthemes. The first theme was "military experiences were associated with morally questioning one's self" with subthemes of "moral shift" and "depersonalization." The second theme was "military experiences were associated with morally questioning others" with subthemes of "disillusionment" and "resignation." Based on these findings, we conclude with a discussion of treatment implications for moral injury.

Bow, S. M. A., Schröder-Bäck, P., Norcliffe-Brown, D., Wilson, J., & Tahzib, F. (2023). Moral distress and injury in the public health professional workforce during the COVID-19 pandemic. *Journal of Public Health*, 45(3), 697–705. <https://doi.org/10.1093/pubmed/fdad010>
There is growing concern about moral distress and injury associated with the COVID-19 pandemic in healthcare professions. This study aimed to quantify the nature, frequency, severity and duration of the problem in the public health professional workforce. Between 14 December 2021 and 23 February 2022, Faculty of Public Health (FPH) members were surveyed about their experiences of moral distress before and during the pandemic. In total, 629 FPH members responded, of which, 405 (64%; 95% confidence interval [95%CI] = 61–68%) reported one or more experience of moral distress associated with their own action (or inaction), and 163 (26%; 95%CI = 23–29%) reported experiencing moral distress associated with a colleague's or organization's action (or inaction) since the start of the pandemic. The majority reported moral distress being more frequent during the pandemic and that the effects endured for over a week. In total, 56 respondents (9% of total sample, 14% of those with moral distress), reported moral injury severe enough to require time off work and/or therapeutic help. Moral distress and injury are significant problems in the UK public health professional workforce, exacerbated by the COVID-19 pandemic. There is urgent need to understand the causes and potential options for its prevention, amelioration and care.

Campbell, B. M., Knipp, M. A., Anwar, S. S., & Hoopsick, R. A. (n.d.). Moral injury and substance use among United States healthcare workers. *Stress and Health*, n/a(n/a). <https://doi.org/10.1002/smi.3321>
Moral injury (i.e., perpetrating, witnessing, failing to prevent, or being a victim of acts that transgress one's moral beliefs, values, or ethics) has largely been studied in military-connected populations and is associated with a range of adverse psychological sequelae. Emerging literature suggests that healthcare workers also experience moral injury, particularly in the context of the ongoing COVID-19 pandemic. However, it is not known if moral injury contributes to substance use among healthcare workers or whether these effects might differ by gender, race/ethnicity, or occupational level. In March 2022, we collected self-reported pilot data from a diverse sample of US healthcare workers (N = 200) We

examined the cross-sectional relationships between moral injury and several measures of substance use (i.e., current non-medical use of prescription drugs [NMUPD], current cannabis use, current use of other illicit drugs, and hazardous drinking) using separate logistic regression models. Next, we used separate interaction models to examine if any of these relations differed by gender, race/ethnicity, or occupational level. In main effects models, healthcare workers reporting greater moral injury had greater odds of current NMUPD (adjusted odds ratio (aOR) = 1.07; $p < 0.001$), current use of other illicit drugs (aOR = 1.09; $p < 0.01$), and hazardous drinking (aOR = 1.07; $p < 0.01$). These relations did not differ by race/ethnicity or occupational level ($ps > 0.05$); however, men were more likely to report current NMUPD and hazardous drinking ($ps < 0.05$) in the presence of high moral injury than women healthcare workers. Our findings suggest that healthcare workers experience substantial distress related to morally injurious events, which may affect their likelihood of NMUPD, cannabis use, use of other illicit drugs, and hazardous drinking, and that men in healthcare may be particularly at risk. Healthcare organizations should address systemic issues driving moral injury (e.g., resource shortages, lack of psychosocial support) to prevent substance-related harms among healthcare workers.

Chew, Q. H., Lee, T.-S., & Sim, K. (2023). Moral injury and associated context, contributors and consequences within mental healthcare professionals: a scoping review. *Postgraduate Medicine*, 0(0), 1–23. <https://doi.org/10.1080/00325481.2023.2266007>

Objectives: We sought to examine the contributory factors as well as consequences of moral injury amongst healthcare workers within mental healthcare settings. **Methods:** Several databases were searched for relevant studies from database inception until May 2023. Keywords and concepts included moral injury and distress in mental healthcare and psychiatry. We identified 961 studies, of which 48 were assessed for eligibility. Eventually, 35 studies were included in the review. Papers were selected for inclusion if 1) they included mental healthcare professionals (MHP) regardless of practice setting, 2) moral injury as experienced by MHP was one of their main variables of interest, 3) were written in English. Year of publication, location of study, participant characteristics, study design, settings in which injury occur (context), factors contributing to moral injury (contributors), and its effects on MHP (consequences) were extracted from the studies. **Results:** The majority of studies were conducted in the West ($n = 26$, 74.3%). Contributors to moral injury were found at the individual (e.g. poor competence), practice setting (e.g. lack of resources), and organizational levels (e.g. inconsistent policies). Moral injury had negative repercussions for the individual (e.g. psychological and physical symptoms), healthcare teams (e.g. lack of trust and empathy), and healthcare system (e.g. staff attrition). **Conclusions:** Seen through the moral habitability framework, interventions must include an acknowledgment of the influence of various factors on the ability of MHP to enact their moral agency, and seek to establish safe moral communities within a supportive moral climate.

Clarke, J. (2023). *Moral Challenges in Mental Health and Social Care Workers: A Relational Perspective*. <https://ore.exeter.ac.uk/repository/handle/10871/133917>

SYSTEMATIC REVIEW: Background: Experiences of moral distress in mental health workers may lower their wellbeing, contributing to staffing shortages which negatively impact on the quality and safety of service delivery and patient care. Attempts to alleviate moral distress by enhancing the resilience of individual workers overlook the fundamentally relational and power-based nature of workplace ethics. There is a need to understand how mental health workers can be supported to cope with moral distress. This systematic review sought to address the question: What does the qualitative literature tell us about how mental health workers experience and cope with moral distress? **Methods:** To be included in the systematic review, a study had to (i) involve mental health workers as sole participants (ii) who talked about their experiences of coping with moral injury or moral distress, (iii) use qualitative data collection and analysis methods, (iv) be published in the English language, and (v) be an empirical piece of academic research. Databases were searched on 15th of April 2022 (OVID Medline, OVID PsychInfo, OVID APA PsycExtra, Scopus and Web of Science). The quality of included studies were assessed using the CASP tool. Results were synthesised using the methodology

of thematic synthesis. Results: There were 11 studies suitable for inclusion in the review, encompassing 238 participants working in various mental health roles and services. All studies were from wealthy developed nations, 10 of which have predominantly white populations. Thematic synthesis produced two analytical themes encompassing how mental health workers can be supported to cope with moral distress: Power Dynamics Exacerbate Moral Distress, and Collaborative Systems Alleviate Moral Distress. 12 Conclusions: Moral distress should be understood systemically, and interventions should focus on enhancing mental health workers' moral agency by modifying the culture of the organisations in which they work. Keywords: moral distress, mental health workers, qualitative, power, systems

EMPIRICAL PAPER: Background: Staff shortage problems in the UK social care sector have impacted the quality of care provided to older people. It has been hypothesised that care workers are leaving their roles because of the traumatic challenges they experienced during the COVID-19 pandemic, which may have led to an experience of moral injury (MI), an underdefined concept which has considerable overlap with the concepts of burnout and PTSD. Whilst pandemic-related MI received considerable attention in healthcare workers, it was yet to be investigated in social care workers, despite them seeming to have faced similar Potentially Morally Injurious Events (PMIEs). This qualitative study aimed to understand how carers experienced pandemic-related PMIEs. Methods: Sixty-five participants with experience of directly providing care to older people as a care worker in a UK residential care home from March 2020 onwards were recruited through social media, and screened for exposure to PMIEs. Six participants with high PMIE exposure completed online semistructured interviews exploring their experiences. Interview transcripts were analysed using interpretive phenomenological analysis. Findings: Three overarching themes were developed: 1) A Thankless Sacrifice; 2) Powerless yet Responsible; 3) Disappointed and Abandoned by People with Power. In all three themes, participants' experiences encompassed strong moral emotions, unhelpful power-dynamics, and other interpersonal challenges. Findings indicated that some carers had more distressing experiences of PMIEs than others. Discussion: Findings emphasised the unique relational phenomenology of the MI experience, thereby differentiating the concept from burnout and PTSD. Although moral injury remains conceptually fuzzy, the construct provides a useful new frame for understanding the unique phenomenology of care workers' experiences during the pandemic. Keywords: moral injury, moral distress, social care workers, carers, IPA

Cuthbertson, J., & Penney, G. (2023). Ethical Decision Making in Disaster and Emergency Management: A Systematic Review of the Literature. *Prehospital and Disaster Medicine*, 38(5), 622–627. <https://doi.org/10.1017/S1049023X23006325>

Ethical decision making in disaster and emergency management requires more than good intentions; it also asks for careful consideration and an explicit, systematic approach. The decisions made by leaders and the effects they have in a disaster must carry the confidence of the community to which they serve. Such decisions are critical in settings where resources are scarce; when decisions are perceived as unjust, the consequences may erode public trust, result in moral injury to staff, and cause community division. To understand how decisions in these settings are informed by ethics, a systematic literature review was conducted to determine what ethical guidance informs decision making in disaster and emergency management. This study found evidence of ethical guidance to inform decision making in disaster management in the humanitarian system, based on humanitarian principles. Evidence of the application of an ethical framework to guide or reference decision making was varied or absent in other emergency management agencies or systems. Development and validation of ethical frameworks to support decision making in disaster management practice is recommended.

DeBeer, B. B., Mignogna, J., Nance, M., Bahraini, N., Penzenik, M., & Brenner, L. A. (2023). COVID-19 and Lifetime Experiences of Trauma, Moral Injury, and Institutional Betrayal Among Healthcare Providers. *Journal of Occupational and Environmental Medicine*, 65(9), 745. <https://doi.org/10.1097/JOM.0000000000002891>

Objective: The aim of the study is to increase understanding regarding healthcare provider experiences with psychological trauma, moral injury, and institutional betrayal, both over the lifetime and during the COVID-19 pandemic. **Methods:** The study employed a cross-sectional design to understand traumatic experiences, moral injury, and institutional betrayal among medical and mental health providers. Participants were asked to identify an index trauma, and experiences were coded qualitatively using categories for traumatic events, moral injury, and institutional betrayal. **Results:** Results revealed that experiences of trauma, moral injury, and institutional betrayal were common in relation to the pandemic, as were pre-pandemic histories of traumatic exposures. Findings indicate that trauma exposure was a work hazard for healthcare providers during the pandemic, which could result in negative long-term mental health outcomes. **Conclusions:** Future research is needed to explore potential long-term negative outcomes among healthcare providers.

DeMoulin, D., Harris, J. I., McGovern, P. M., Beebe, T. J., Church, T. R., & Kim, H. (2023). Moral Injury: Need and Development of a Measurement Scale for Firefighters. *Current Treatment Options in Psychiatry*. <https://doi.org/10.1007/s40501-023-00305-6>

Moral injury is extensively studied among trauma-exposed veterans. Two measurement scales are available to screen for symptoms of moral injury among trauma-exposed veterans; however, no measurement scale exists screening for symptoms of moral injury among trauma-exposed firefighters. The objective of this study aims to address the gap in available instruments by developing a moral injury assessment scale for firefighters. Through this project, a psychometrically accepted moral injury scale will be available to researchers, clinicians, and fire organizations to assess moral injury in trauma-exposed firefighters. Military studies found that moral injury and posttraumatic stress disorder (PTSD) are distinct constructs and can co-exist. PTSD is prevalent in firefighters and despite subject experts expressing the need to expand research efforts to first responders (e.g., firefighters), no moral injury scale is available assessing these symptoms. Exploratory themes are recently emerging in these occupations. The EMIS-F yielded almost perfect interrater reliability across raters (.97). Psychometric properties of the EMIS-F were comparable to the military version, yielding excellent internal consistency ($\omega = 0.94$), in addition to the self-directed ($\omega = 0.92$) and others-directed ($\omega = 0.89$) moral injury subscales. Inter-item and item-total correlations are within acceptable ranges ($\rho = 0.30-0.73$) to empirically conclude the EMIS-F measures a unidimensional construct. Item-total correlations did not detract from the consistency of the overall scale and independently demonstrated positive correlations with the EMIS-F ($\rho = .62-.79$). The EMIS-F demonstrated strong convergent validity with validated measures of PTSD ($\rho = .61$), depression ($\rho = .50$), and suicide ideation ($\rho = .38$), and evidence of divergent validity with strong support systems ($\rho = -.14$).

Evans, W. R., Smigelsky, M. A., Frankfurt, S. B., Antal, C. J., Yeomans, P. D., Check, C., & Bhatt-Mackin, S. M. (2023). Emerging Interventions for Moral Injury: Expanding Pathways to Moral Healing. *Current Treatment Options in Psychiatry*. <https://doi.org/10.1007/s40501-023-00303-8>

Over the past decade, empirical efforts have deepened and broadened to develop, evaluate, and refine effective interventions for moral injury. Much of the early work primarily made use of individual therapy in cognitive-behavioral models that had demonstrated effectiveness in the treatment of trauma. However, treatment development has moved beyond adaptations of trauma treatments to specifically target responses to moral pain and facilitate moral healing. In this paper, we present four distinct interventions while highlighting similarities across the approaches that point to potential shared qualities and processes of moral healing.

Fino, E., Daniels, J. K., Micheli, G., Gazineo, D., Godino, L., Imbriaco, G., Antognoli, M., Sist, L., Regnano, D., Decaro, R., Guberti, M., & Mazzetti, M. (2023). Moral injury in a global health emergency: a validation study of the Italian version of the Moral Injury Events Scale adjusted to the healthcare setting. *European Journal of Psychotraumatology*, 14(2), 2263316. <https://doi.org/10.1080/20008066.2023.2263316>

Background: When exposed to events that transgress one's moral beliefs, a plethora of negative consequences may follow, which are captured by the concept of moral injury (MI). Despite its relevance to experiences of healthcare workers during a global health emergency, there is lack of validated MI instruments adapted to the healthcare setting. **Objective:** The present study aims to provide a validation of the Italian version of the Moral Injury Events Scale (MIES) adjusted to the healthcare setting by assessing its factor structure, internal consistency and construct validity. **Methods:** A sample of 794 healthcare workers (46% nurses, 51% female) engaged in hospital facilities during the COVID-19 pandemic in Italy completed measures of MI, PTSD, anxiety, depression, burnout, meaning in life and positive affect. **Results:** Using an exploratory structural equation modelling (ESEM) we assessed the scale factor structure for the entire sample and separately for nurse professional and female healthcare worker groups. Findings support a three-factor solution: Factor 1 'perceived transgressions by others'; Factor 2 'perceived transgressions by self'; and Factor 3 'perceived betrayals by others'. Findings also indicate some level of convergence with measures of PTSD, anxiety, depression and burnout. **Conclusion:** Results suggest that the MIES may be useful in capturing unique experiences of moral injury amongst healthcare workers engaged in a global health emergency. The low range correlations with measures of psychological distress might potentially indicate that MI, which captures cognitive value judgements rather than manifest symptomatology, may uniquely explain a certain amount of variance. Implications for the development of new empirically derived and theoretical guided tools are discussed, highlighting the need for future research to examine the role of individualising and social binding moral principles in gaining a more nuanced understanding of moral injury experiences amongst healthcare professionals across different socio-cultural settings. The Italian validation of the MIES adapted to the healthcare setting yielded a three-factor structure: (a) 'perceived transgressions by self'; (b) 'perceived transgressions by others'; (c) 'perceived betrayals by others'. Findings suggest that the MIES may be useful in capturing unique experiences of moral injury amongst healthcare workers engaged in a global health emergency. Future research should consider the role of individualising and social binding moral principles in shaping moral injury experiences among healthcare professionals across different socio-cultural settings.

Greene, T., Harju-Seppänen, J., Billings, J., Brewin, C., Murphy, D., Bloomfield, M., (2023). Exposure to potentially morally injurious events in U.K. Health and social care workers during COVID-19: associations with PTSD and complex PTSD. *Psychological Trauma: Theory, Research, Practice, and Policy*. <https://doi.org/10.1037/tra0001519>

OBJECTIVE: Health and social care workers (HSCWs) have been shown to be at risk of exposure to potentially morally injurious events (PMIEs) and mental health problems during the COVID-19 pandemic. This study aimed to examine associations between exposure to PMIEs and meeting threshold criteria for probable posttraumatic stress disorder (PTSD) and probable complex PTSD (CPTSD) in U.K. HSCWs immediately after the peak of the first COVID-19 wave. **METHOD:** Frontline HSCWs from across the United Kingdom working in diverse roles in hospitals, nursing or care homes, and other community settings were recruited to the Frontline-COVID study via social media. Participants (n = 1,056) completed a cross-sectional online survey (May 27, 2020-July 23, 2020) which assessed exposure to PMIEs (nine-item Moral Injury Events Scale), and meeting symptom thresholds for probable PTSD and probable CPTSD (International Trauma Questionnaire). **RESULTS:** PMIEs related to witnessing others' wrongful actions and betrayal events were more commonly endorsed than perceived self-transgressions. The rate of probable International Classification of Diseases, 11th Revision (ICD-11) PTSD was 8.3%, and of probable ICD-11 CPTSD was 14.2%. Betrayal-related PMIEs were a significant predictor of probable PTSD or probable CPTSD, together with having been redeployed during the pandemic. The only variable that differentially predicted probable CPTSD as compared with probable PTSD was not having had reliable access to personal protective equipment; none of the PMIE types were differential predictors for screening positive for probable PTSD versus probable CPTSD. **CONCLUSIONS:** Exposure to PMIEs could be important for PTSD and CPTSD development. Interventions for moral injury in HSCWs should be investigated. [Author Abstract]

Khan, A. J., Griffin, B. J., & Maguen, S. (2023). A Review of Research on Moral Injury and Suicide Risk. *Current Treatment Options in Psychiatry*, 10(3), 259–287. <https://doi.org/10.1007/s40501-023-00293-7>
This review summarizes empirical studies investigating the associations between moral injury and suicide-related outcomes. Recent Findings: A total of 47 studies met inclusion criteria and were reviewed. Samples included military, veteran, and civilian populations. Overall, more exposure to potentially morally injurious events (PMIE) and greater morally injurious symptom severity were both related to increased risk for suicide-related outcomes, including suicidal ideation and suicide attempt[s], and composite suicide-related variables. The strength of the association depended on the population, assessments used to measure moral injury and suicide-related outcomes, and covariates included in the model. Mediators and moderators of the association were identified including depression, posttraumatic stress, hopelessness, guilt, shame, social support, and resilience. Summary: Moral injury confers a unique risk for suicide-related outcomes even after accounting for formalized psychiatric diagnosis. Suicide prevention programs for military service members, veterans, and civilians working in high-stress environments may benefit from targeted interventions to address moral injury. While suicide-related outcomes have not been included in efficacy trials of moral injury interventions, mediators and moderators of the association between moral injury and suicide-related outcomes are potential targets for therapeutic change, including disclosure, self-forgiveness, and meaning-making.

Kirov, D. (2023). *Event Centrality as a Mediator of the Relationship between Shame, Guilt and PTSD Symptoms* [Master Thesis]. <https://studenttheses.uu.nl/handle/20.500.12932/45149>
The present study aimed to explore PTSD symptoms in the context of moral injury. More specifically, it examined whether shame and guilt are significantly associated with event centrality and PTSD symptoms and whether event centrality mediates the relationship between shame, guilt and PTSD symptoms. Event centrality is defined as the degree to which an event is seen as self-defining, how often one considers and thinks back to it, and also the degree to which it influences their interpretations of past and current experiences. The sample of this study consisted of 336 people with a mean age of 22.3 years. Participants responded to an online survey containing an emotional memory recall task, an event centrality questionnaire and a PTSD symptom questionnaire. The findings indicated a significant positive association between shame and guilt, and that event centrality fully mediated the association between shame and guilt and PTSD symptoms. Conclusions were: negative moral emotions may play a significant role as a mechanism behind PTSD symptoms following experience of PMIEs, although further research is encouraged to clarify this relationship. Subjective peritraumatic experiences should not be underestimated when attempting to predict PTSD symptoms following a PMIE.

Lathan, E. C., Powers, A., Kottakis, A., Guelfo, A., Siegle, G. J., Turner, J. A., Turner, M. D., Yakkanti, V., Jain, J., Mekawi, Y., Teer, A. P., Currier, J. M., & Fani, N. (2023). Civilian moral injury: associations with trauma type and high-frequency heart rate variability in two trauma-exposed community-based samples. *Psychological Medicine*, 53(11), 5136–5145. <https://doi.org/10.1017/S003329172200215X>
Background: Moral injury exposure (MIE) and distress (MID) may indirectly affect the relationship between trauma exposure and alterations in autonomic regulation [assessed via high-frequency heart rate variability (hfHRV)] in civilians, but this has not been tested in prior research. We conducted two exploratory studies to examine trauma types' associations with MIE and MID among civilian medical patients (Study 1) and explore how these facets may indirectly affect the relationship between trauma type and hfHRV among civilians seeking mental health services (Study 2). Methods: Participants recruited from a public hospital and/or community advertisements (Study 1, n = 72, 87.5% Black, 83.3% women; Study 2, n = 46, 71.7% Black, 97.8% women) completed measures assessing trauma type, MIE, and MID. In Study 1, trauma types that emerged as significant correlates of MIE and MID were entered into separate linear regression analyses. Trauma types identified were included as predictors in indirect effects models with MIE or MID as the mediator and resting hfHRV (assayed via electrocardiography) as the outcome. Results: Childhood sexual abuse emerged as the only significant predictor of MIE, b =

0.38, $p < 0.001$; childhood sexual abuse, $b = 0.26$, $p < 0.05$, and adulthood sexual assault, $b = 0.23$, $p < 0.05$ were significant predictors of MID. Participants with greater MIE and MID demonstrated lower hfHRV. Adulthood sexual assault showed an indirect effect on hfHRV through MID, $B = -0.10$, $s.e. = 0.06$, 95%CI (-0.232 to -0.005). Conclusions: Moral injury was uniquely associated with sexual violence and lower hfHRV in civilians. Data highlight moral injury as a pathway through which autonomic dysregulation may emerge and its salience for trauma treatment selection.

Levi-Belz, Y., & Zerach, G. (2023). "How can they treat it if they can't identify it?": Mental health professionals' knowledge and perspectives of moral injury. *Psychological Trauma: Theory, Research, Practice, and Policy*, 15(Suppl 2), S436–S445. <https://doi.org/10.1037/tra0001206>
Objective: Moral injury (MI) is a stressor-related phenomenon that may entail long-term ramifications. However, no study to date has examined mental health professionals' (MHPs') knowledge and treatment perspectives regarding patients with MI. This study aims to shed light on MHPs' perspectives in an experimental design using a manipulation concerning a hypothetical patient. Method: The sample included 846 MHPs who were presented with one of four vignettes of a virtual patient with differential clinical conditions. Participants were then posed several questions regarding the patient's clinical condition, their willingness to treat, and their knowledge regarding MI. Results: Most participants reported no knowledge regarding MI. MHPs receiving MI-related scenarios were less willing to treat and more willing to refer the patient out than MHPs receiving non-MI scenarios. Professional seniority and training concerning MI contributed to greater familiarity with MI. Conclusion: The findings highlight that MHPs have minimal knowledge of MI, which may relate to their reluctance to treat patients with the psychological manifestations of MI. (PsycInfo Database Record (c) 2023 APA, all rights reserved)

MacLean, C. E., & Densley, J. A. (2023). Moral Injury, Compound Officer Trauma, and Officer Mental Health. In C. E. MacLean & J. A. Densley (Eds.), *Police, Prosecutors, Courts, and the Constitution: Toward Ending the "Awful but Lawful" Era* (pp. 27–40). Springer International Publishing. https://doi.org/10.1007/978-3-031-39082-1_3

Moral injury is suffered when a person violates their moral or ethical beliefs and must soldier on. And ethical trauma is felt when a person has dueling obligations to successfully "fight crime" while acting ethically, but also knows they are free to engage in all manner of court-authorized deception and misconduct. Compound trauma occurs when a person has not yet resolved some earlier trauma when they are confronted by the next trauma. That is the life of a police officer today: do the right thing, protect businesses, and enforce the law, but remember you are free to lie and deceive with impunity. This chapter examines the consequences of this paradox.

McDaniel, J. T., Redner, R., Jayawardene, W., Haun, J., Clapp, J., Che, D., Renzaglia, K., & Abou-Jabal, D. (2023). Moral Injury is a Risk Factor for Substance Use and Suicidality Among US Military Veterans with and without Traumatic Brain Injury. *Journal of Religion and Health*. <https://doi.org/10.1007/s10943-023-01905-5>

A national survey of United States veterans was conducted, yielding 252 veterans with Traumatic Brain Injury (TBI) and 1235 veterans without TBI. Participants were asked questions about moral injury, suicidality, substance use, and other sociodemographic variables. Multivariable linear regression analysis was used to examine the previously described relationships. Increasing severity of moral injury was associated with higher scores on the substance use tool ($b = 0.02$, $p = 0.04$), although the magnitude of effect was not different from those without TBI ($Z = -0.57$, $p = 0.72$). Increasing severity of moral injury was positively associated with suicidal behavior scores ($b = 0.10$, $p < 0.01$). The strength of this relationship was stronger in veterans with TBI than those without TBI ($Z = 1.78$, $p = 0.04$). Rehabilitation programs that treat veterans for TBI may need to consider the evaluation of moral injury given its association with adverse events in this population.

McDaniel, J. T., Seamone, E. R., & Xenakis, S. N. (eds) (2023). [*Preventing and Treating the Invisible Wounds of War: Combat Trauma, Moral Injury, and Psychological Health*](#). Oxford University Press. [Table of Contents](#)

This volume provides several perspectives that help practitioners, advocates, and policymakers understand the impact of historical and recent wars on U.S. Military veterans. The chapters address newly recognized conditions, such as moral injury, military sexual trauma, and remote combat trauma as precursors to more serious diagnosable mental health disorders with the goal of addressing how these conditions can be identified and mitigated in future combat operations. The chapters also provide new insights on calculating the costs of wars in terms of dollars spent on treating mental health conditions, the intergenerational impact of combat trauma on families and future generations, and involvement in the criminal justice system of those who do not receive treatment due to discharge characterizations from military misconduct.

Nurse, K., & Baird, H. (2023). Situations of moral injury and ambiguity will always go on in healthcare: it is how we deal with them that is important. *BMJ Leader*, leader. <https://doi.org/10.1136/leader-2022-000691>

The article explores the concepts of moral distress and moral injury experienced by healthcare professionals, from the perspective of two junior doctors, in the National Health Service. It highlights the daily challenges faced by doctors due to insufficient resources, staff shortages and time constraints, leading to an inability to provide the expected level of care, which if not addressed can result in long-term psychological harm and impaired functioning.

O'Garro, K.-G., & Koenig, H. (2023). Spiritually integrated cognitive processing therapy for moral injury in the setting of PTSD: initial evidence of therapeutic efficacy. *Journal of Nervous and Mental Disease*. <https://doi.org/10.1097/NMD.0000000000001686>

After defining the syndrome of moral injury (MI), reviewing its relationship to posttraumatic stress disorder (PTSD), and examining its psychological consequences and impact on functioning, we describe a new psychotherapeutic treatment for MI called spiritually integrated cognitive processing therapy (SICPT). SICPT builds on cognitive processing therapy (CPT), a commonly used trauma-focused treatment for PTSD. To our knowledge, SICPT is the first one-on-one individualized psychotherapeutic treatment that integrates a person's spiritual and religious beliefs into the treatment for MI, using the latter to work through and process the psychological, spiritual, and religious symptoms of this condition. Here, we describe the initial results obtained from a single-group experimental study examining the treatment of three patients with significant symptoms of both MI and PTSD. Given the effects of SICPT on reducing both MI and PTSD symptoms, we have decided to report these early results before study completion to alert the scientific community about this potentially effective new treatment. [Author Abstract]

Phelps, A. J., Madden, K., Carleton, R. N., Johnson, L., Carey, L. B., Mercier, J.-M., Mellor, A., Baills, J., Forbes, D., Devenish-Mearns, P., Hosseiny, F., & Dell, L. (2023). Towards a Holistic Model of Care for Moral Injury: An Australian and New Zealand Investigation into the Role of Police Chaplains in Supporting Police Members following exposure to Moral Transgression. *Journal of Religion and Health*. <https://doi.org/10.1007/s10943-023-01908-2>

Police members can be exposed to morally transgressive events with potential for lasting psychosocial and spiritual harm. Through interviews with police members and police chaplains across Australia and New Zealand, this qualitative study explores the current role that police chaplains play in supporting members exposed to morally transgressive events. The availability of chaplains across police services and the close alignment between the support they offer, and the support sought by police, indicates they have an important role. However, a holistic approach should also consider organizational factors, the role of leaders, and access to evidence-based treatment in collaboration with mental health practitioners.

Potts, G. W., & Abadal, L. M. (2023). Moral Injury in Refugee Communities: The Connection Between Displacement and Disorientation. In A. Farhadi, M. Grzegorzewski, & A. J. Masys (Eds.), *The Great Power Competition Volume 5: The Russian Invasion of Ukraine and Implications for the Central Region* (pp. 239–253). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-40451-1_12

This chapter demonstrates the role that displacement can play in generating moral injury (MI) within refugee communities. To better understand the consequences of displacement, it considers how individuals' identities and values are formed through their local communities. While there are many reasons that displacement ought to be understood as a potentially morally injurious experience (PMIE), particular attention is given to the negative effects of disorientation, which are associated with displacement. The chapter uncovers multiple facets of disorientation, such as despair, confusion, and apathy. Understanding the morally injurious consequences of displacement marks an important first step toward better serving refugee communities, particularly those citizens of Ukraine who have been forced to flee their homes in the wake of Russian aggression.

Schuhmann, C., Pleizier, T., Walton, M., & Körver, J. (2023). How Military Chaplains Strengthen the Moral Resilience of Soldiers and Veterans: Results From a Case Studies Project in the Netherlands. *Pastoral Psychology*. <https://doi.org/10.1007/s11089-023-01097-5>

In spiritual care research, studies on military chaplaincy are underrepresented, and most available studies center on moral injury. This article contributes to the existing literature on spiritual care in the military by presenting a study of 13 case descriptions of spiritual care provision by military chaplains from the Netherlands. These were analyzed using the framework method, a qualitative method of systematically searching for patterns in data sets, in order to answer the question: How do military chaplains contribute to the moral resilience of soldiers and veterans experiencing moral stress? The analytical framework was constructed on the basis of Doehring's (Pastoral Psychology, 64(5), 635–649, 2015) conceptual understanding of moral resilience as the outcome of processes of spiritual integration of moral stress in caregiving relationships. This study shows that soldiers experience moral stress when core values associated with 'being a soldier' conflict with expectations or actions of soldiers themselves or of others, with the way the military organization functions, or with the spiritual notion of 'being a good, loving and lovable human being'. In their responses to moral stress, chaplains contribute to moral resilience by engaging in co-creating spiritual orienting frameworks which accommodate a sense of goodness of self and others and allow for nuanced, biographically rooted moral views. Soldiers experience conversations and brief encounters with chaplains as relational 'moments of goodness', which may also contribute to moral resilience.

Williamson, V., Murphy, D., Bonson, A., Aldridge, V., Serfioti, D., & Greenberg, N. (2023). Restore and Rebuild (R&R) – a feasibility pilot study of a co-designed intervention for moral injury-related mental health difficulties. *European Journal of Psychotraumatology*, 14(2), 2256204.

<https://doi.org/10.1080/20008066.2023.2256204>

Evidence before this study: Moral injury can negatively impact the mental health of military veterans. Currently no validated treatment for moral injury related mental health difficulties exists for UK military personnel/veterans. Added value of this study: Restore and Rebuild (R&R) is a co-designed psychotherapy for moral injury-related mental health difficulties. This study provides the first evidence that R&R treatment is associated with a significant improvement in patient symptoms of PTSD, depression, alcohol misuse and moral injury related distress. R&R was feasible to deliver, acceptable to patients and well tolerated. Implications of all the available evidence: These results provide preliminary evidence that veterans struggling with moral injury related mental health can benefit from R&R treatment. With further evaluation, R&R may be beneficial to other occupational groups affected by moral injury.

Zasiekina, L., Zasiekin, S., Link to external site, Kuperman, V., (2023). Post-traumatic stress disorder and moral injury among Ukrainian civilians during the ongoing war. *Journal of Community Health*, 1–9. <https://doi.org/10.1007/s10900-023-01225-5>

While severity of post-traumatic stress disorder (PTSD) symptoms and moral injury among civilians affected by armed conflicts is generally understudied, even less research exists on civilian populations during an active war. This paper reports a large-scale study that administered standard assessments of PTSD and moral injury severity, as well as rich demographic questionnaires, to nearly 1300 Ukrainian civilians during the ongoing Russian invasion. Analyses revealed an extremely high prevalence of severe PTSD symptoms and moral injury, relative to both proposed clinical cut-offs and to earlier measurements from a similar population. Further regression analyses identified risk factors and protective factors. Greater severity of PTSD symptoms was observed among women, older and forcibly displaced individuals, and individuals from geographic regions under Russian occupation. Higher education correlated with milder PTSD symptoms. Moral injury was particularly strong in younger individuals. The present study is one of the first to report a large scale set of psychological data collected from the civilian population of Ukraine during the ongoing Russian invasion. It is obvious from the scope and long-term nature of the atrocities that psychological treatment of the civilian population will be required both presently, while the hostilities are ongoing, and in the future. This data contributes to a detailed understanding of the psychological response to traumatic stress, including its overall prevalence and presence in specific demographically and geographically defined civilian groups. [Author Abstract]

Zerach, G., Levinstein, Y., & Levi-Belz, Y. (2023). Longitudinal associations between transgressions of moral beliefs and suicidal ideation among recently discharged veterans. *Psychiatry Research*, 327, 115392. <https://doi.org/10.1016/j.psychres.2023.115392>

We evaluated longitudinal associations between subjective appraisals of transgressions of moral beliefs, values, and expectations (potential morally injurious events; PMIEs) and suicidal ideation (SI) among recently discharged combat veterans. Participants were 374 active-duty Israeli combatants who participated in a five-year longitudinal study with four measurement points: T1- one year before enlistment, T2- one month before discharge from army service, and then again six months and twelve months following discharge (T3 and T4, respectively). A history of lifetime suicidal ideation and behavior was associated with higher levels of subjective appraisals of PMIEs, as compared to no history of suicidal ideation and behavior. Above and beyond pre-enlistment personal characteristics, cross-lagged pathway analyses indicated significant bi-directional pathways between subjective appraisals of PMIEs and SI. For all PMIEs dimensions, SI was associated with greater subjective appraisals of PMIEs, on subsequent measurement. However, cross-lagged effects of PMIEs-‘other’ (T2) predicting SI (T3) and PMIEs-‘betrayal’ (T3) predicting SI (T4) were also found. Our findings are the first to provide evidence of longitudinal, temporal associations between subjective appraisals of PMIEs and SI, which might serve as potential intervention targets among recently discharged traumatized veterans.