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Moral Injury: alertering

Updates 5 december 2022

Nationaal Psychotrauma Centrum

'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.
Wilt u liever een mail ontvangen met referenties naar geselecteerde publicaties, geef dan uw e-mailadres door aan de ARQ-bibliotheek. Ook voor eerdere updates kunt u mailen naar de ARQ-bibliotheek.

1.
Abadal, L. M. and G. W. Potts (2022). "A MacIntyrean account of chronic moral injury: Assessing the implications of bad management and marginalized practices at work." Frontiers in Sociology **7**: 1019804. https://dx.doi.org/10.3389/fsoc.2022.1019804

In this article, we engage with a theory of management advanced by MacIntyrean scholars of business ethics and organization studies to develop an account of "chronic moral injury" in the workplace. In contrast to what we call "acute moral injury," which focuses on grave, traumatic events, chronic moral injury results from poor institutional form-when an individual desiring excellence must function within a vicious institution that impedes the acquisition of virtues and marginalizes practices. In other words, chronic moral injury occurs when practitioners who pursue excellence in their practice work within corrupt or malformed organizations. To demonstrate this point, we recount the events associated with the rise and fall of the biotech company, Theranos. This case study advances an empirical contribution to MacIntyrean studies by demonstrating how chronic moral injury can happen under such conditions and what the negative consequences may entail for workers.

2.
Copeland, L. A., et al. (2022). "Emergence of probable PTSD among U.S. veterans over the military-to-civilian transition." Psychological Trauma:Theory, Pesearch, Practice and Policy **04**: 04. https://dx.doi.org/10.1037/tra0001329

OBJECTIVE: Despite theorizing that posttraumatic stress disorder (PTSD) symptomatology may be exacerbated during the military-to-civilian transition, little research has delved into the trajectory of trauma-related symptomatology or the impact of diverse factors on timing of PTSD onset. To understand risk and protective factors for PTSD during the transition into civilian life, this study examined demographic, experiential, and psychosocial characteristics that may explain variation in PTSD symptoms and timing of onset.
METHOD: A nationwide sample representing 48,965 U.S. veterans separating from military service in fall 2016 responded to six Web-based surveys over 3 years. Assessments included PTSD symptoms, stress, warfare exposures, military sexual trauma, moral injury events, resilience, and social support. Multivariable models estimated covariates of positive PTSD screen or symptoms.
RESULTS: Trauma exposure during military service was high at 59%. Probable PTSD was detected in 26% of the sample at baseline, with additional cases in each survey wave for an overall rate of 30%. Meeting criteria for probable PTSD covaried with current stress, female gender, and minority race/ethnicity; baseline psychological resilience and concurrent social support mitigated the risk. PTSD symptoms

correlated positively with stress levels at current and previous time points. Social support was protective but only when contemporaneous with the PTSD symptoms.
CONCLUSIONS: This study illustrates the need for ongoing social support for veterans coping with symptoms of PTSD, life stressors, and postmilitary trauma, suggesting a countervailing influence of psychological resilience and contemporaneous (but not historical) social support on symptom exacerbation. (PsycInfo Database Record (c) 2022 APA, all rights reserved).

3.
Dekker, S. W. A., et al. (2022). "Repentance as Rebuke: Betrayal and Moral Injury in Safety Engineering." Science and Engineering Ethics **28**(6): 56. 10.1007/s11948-022-00412-2

Following other contributions about the MAX accidents to this journal, this paper explores the role of betrayal and moral injury in safety engineering related to the U.S. federal regulator's role in approving the Boeing 737MAX—a plane involved in two crashes that together killed 346 people. It discusses the tension between humility and hubris when engineers are faced with complex systems that create ambiguity, uncertain judgements, and equivocal test results from unstructured situations. It considers the relationship between moral injury, principled outrage and rebuke when the technology ends up involved in disasters. It examines the corporate backdrop against which calls for enhanced employee voice are typically made, and argues that when engineers need to rely on various protections and moral inducements to 'speak up,' then the ethical essence of engineering—skepticism, testing, checking, and questioning—has already failed.

4.
Devitt, S. K. (2022). "Bad, mad and cooked apples: Responsibility for unlawful targeting in human-AI military teams." arXiv preprint arXiv:2211.06326. https://doi.org/10.48550/arXiv.2211.06326

A Nation's responsibility is to predict in advance and protect human wellbeing in conflict including protection from moral injury and unjust attribution of responsibility for their actions. This position paper considers responsibility for unlawful killings by human AI teams drawing on a metaphor from Neta Crawford's chapter, When Soldiers Snap: Bad Apples and Mad Apples, in Accountability for Killing: Moral responsibility for collateral damage in America's post 911 wars. This paper contends that although militaries may have some bad apples responsible for war crimes and some mad apples unable to be responsible for their actions during a conflict, increasingly militaries may cook their good apples by putting them in untenable decision making environments with AI. A cooked apple may be pushed beyond reasonable limits leading to a loss of situational awareness, cognitive overload, loss of agency and autonomy leading to automation bias. In these cases, moral responsibility and perhaps even legal responsibility for unlawful deaths may be contested for cooked apples, risking operators becoming moral crumple zones and or suffering moral injury from being part of larger human AI systems authorised by the state. Nations are responsible for minimising risks to humans within reasonable bounds and compliance with legal obligations in human AI military teams, and the military systems used to make or implement decisions. The paper suggests that best practise WHS frameworks might be drawn on in development, acquisition and training ahead of deployment of systems in conflicts to predict and mitigate risks of human AI military teams.

5.

Fainstad, T., et al. (2022). "Effect of a Novel Online Group-Coaching Program to Reduce Burnout in Female Resident Physicians: A Randomized Clinical Trial." JAMA Network Open **5**(5). https://doi.org/10.1001/jamanetworkopen.2022.10752

Importance Female resident physicians are disproportionately affected by burnout, which can have serious consequences for their well-being and career trajectory. Growing evidence supports the use of professional coaching to reduce burnout in resident physicians, yet individual coaching is resource intensive and infeasible for many training programs. Objective To assess whether a structured professional group-coaching program for female resident physicians would lead to decreased burnout. Design, Setting, and Participants This pilot randomized clinical trial was conducted from January 1 to June 30, 2021, among 101 female resident physicians in graduate medical education at the University of Colorado who voluntarily enrolled in the trial after a recruitment period. Surveys were administered to participants before and after the intervention. Intervention With the use of a computer-generated 1:1 algorithm, 50 participants were randomly assigned to the intervention group and 51 participants were randomly assigned to the control group. The intervention group was offered a 6-month, web-based group-coaching program, Better Together Physician Coaching, developed and facilitated by trained life coaches and physicians. The control group received residency training as usual, with no coaching during the study. The control group was offered the 6-month coaching program after study completion. Main Outcomes and Measures The primary outcome of burnout was measured using the Maslach Burnout Inventory, defined by 3 Likert-type 7-point subscales: emotional exhaustion, depersonalization, and professional accomplishment. Higher scores on the emotional exhaustion and depersonalization subscales and lower scores on the professional accomplishment subscale indicate higher burnout. Secondary outcomes of impostor syndrome, self-compassion, and moral injury were assessed using the Young Impostor Syndrome Scale, Neff's Self-Compassion Scale–Short Form, and the Moral Injury Symptom Scale–Healthcare Professionals, respectively. An intention-to-treat analysis was performed. Results Among the 101 female residents in the study, the mean (SD) age was 29.4 (2.3) years, 96 (95.0%) identified as heterosexual, and 81 (80.2%) identified as White. There were 19 residents (18.8%) from surgical subspecialties, with a range of training levels represented. After 6 months of professional coaching, emotional exhaustion decreased in the intervention group by a mean (SE) of 3.26 (1.25) points compared with a mean (SE) increase of 1.07 (1.12) points in the control group by the end of the study (P = .01). The intervention group experienced a significant reduction in presence of impostor syndrome compared with controls (mean [SE], −1.16 [0.31] vs 0.11 [0.27] points;P = .003). Self-compassion scores increased in the intervention group by a mean (SE) of 5.55 (0.89) points compared with a mean (SE) reduction of 1.32 (0.80) points in the control group (P < .001). No statistically significant differences in depersonalization, professional accomplishment, or moral injury scores were observed. Owing to the differential follow-up response rates in the treatment groups (88.2% in the control group [45 of 51]; 68.0% in the intervention group [34 of 50]), a sensitivity analysis was performed to account for the missing outcomes, with similar findings. Conclusions and Relevance In this randomized clinical trial, professional coaching reduced emotional exhaustion and impostor syndrome scores and increased self-compassion scores among female resident physicians. Trial Registration ClinicalTrials.gov Identifier:NCT05280964

6.

Fischer, I. C., et al. (2022). "Downstream consequences of moral distress in COVID-19 frontline healthcare workers: Longitudinal associations with moral injury-related guilt." General Hospital Psychiatry **79**: 158-161. https://doi.org/10.1016/j.genhosppsych.2022.11.003

Objective To examine the longitudinal associations between dimensions of COVID-19 pandemic-related moral distress (MD) and moral injury (MI)-related guilt in a large sample of frontline COVID-19 healthcare workers (FHCWs).Methods: Data from a diverse occupational cohort of 786 COVID-19 FHCWs were collected during the initial peak of the COVID-19 pandemic in New York City and again 7 months later. Baseline MD and MI-related guilt at follow-up were assessed in three domains: family-, work-, and infection-related. Social support was evaluated as a potential moderator of associations between MD and MI-related guilt. Results A total of 66.8% of FHCWs reported moderate-or-greater levels of MI-related guilt, the most prevalent of which were family (59.9%) or work-related (29.4%). MD was robustly predictive of guilt in a domain-specific manner. Further, among FHCWs with high levels of work-related MD, those with greater perceptions of supervisor support were less likely to develop work-related guilt 7 months later. Discussion

7.
Hanna, P., et al. (2022). "UK Higher Education staff experiences of moral injury during the COVID-19 pandemic." Higher Education. 10.1007/s10734-022-00956-z

Jonathan Shay argued that social, relational, and institutional contexts were central to understanding moral injury and conceptualised moral injury as a normative response to the betrayal of an individual's understanding of what is right by a more senior/authoritative "other". Using the conceptual lens of moral injury, this paper investigates academic staff experiences of HE during the COVID-19 pandemic and explores the rapid transition back to face-to-face teaching that took place in autumn 2020. To collect data, we used an online survey that opened in January 2021 and ran until the end of March 2021. A total of 663 complete questionnaires were received across the survey period. The questionnaire was comprised of ten topic-related questions, each of which included follow-up sub-questions and also invited participants to write in additional information. The majority of participants felt that during the course of the COVID-19 pandemic, they had acted in ways that put their own health and wellbeing at risk. Of those who had acted in ways that put their health and wellbeing at risk, they believed that their senior management were the most responsible for them acting in such ways, followed by the UK government. Qualitative data showed a systemic absence of leadership in the sector during the time, a sense of betrayal of staff and students by senior management and the government, and feelings of compulsion to act in ways which put lives at risk. On the basis of these results, we argue that there could be synergies between the situation facing healthcare staff and academics during the pandemic. Many of the experiences of HE academic staff during the pandemic reported to us in this research are resonant with the concepts of betrayal and moral injury and resulted in affective responses which we understand here in relation to feelings of guilt, shame, and anger, leading ultimately to poor mental health and wellbeing. This paper discusses implications for the HE sector going forward.

8.
Hearty, K. (2022). "Closing the ranks: Bondedness, sense of self and moral injury during legacy case prosecutions." Irish Journal of Sociology **0**(0): 07916035221138515. 10.1177/07916035221138515

This article represents an entry point for the sociological study of protests by British Army veterans opposed to legacy case prosecutions arsing out of the conflict in the North of Ireland. Acknowledging the lack of sociological analysis when compared with recent legal, criminological and political studies, it uses insights from military sociology, the sociology of emotions, and the social movement literature to understand how and why veterans have mobilised against these prosecutions. It argues that veterans have resorted to taking collective action for three reasons: out of loyalty to the handful of veterans currently facing prosecution; because these prosecutions challenge their self-image as peacekeepers; and because of their sense of betrayal by the British government. In making this argument, the article highlights how political and moral contestation over past political violence touches on collective and individual identities constructed during that violence, social solidarity within groups impacted by that violence, and different expectations of post-conflict justice in its aftermath.

9.
Henderson, D. (2022). Experiences of Potentially Morally Injurious Events among New Zealand Defence Force Personnel, Te Herenga Waka-Victoria University of Wellington. **Master of Science in Psychology**.10.26686/wgtn.21547680

Help-seeking for mental health concerns, and the barriers that individuals encounter that prevent them from help-seeking, are particularly important to address within the military. Among other reasons, untreated mental health concerns have been associated with increased homelessness, alcohol abuse, and relationship breakdowns (Dandeker, et al., 2003; As cited in Walker, 2010). Within the New Zealand Defence Force (NZDF) context, barriers to help-seeking have been associated with experiencing greater psychological distress (Hom, et al., 2020). One specific form of distress that has the potential to impact the overall well-being of NZDF personnel is moral injury - the harm that occurs to individuals when an event occurs that conflicts with that individual's personal beliefs or morals (MacDonald, et al., 2018).

The purpose of this research is to identify the impact of moral injury on NZDF personnel, and specifically how it impacts help-seeking behaviours. The role of guilt and shame was examined as the driving force behind this relationship. A survey of 4092 NZDF personnel was examined, 1947 of whom had been deployed. Of the deployed individuals, 23.6% had reported exposure to a potentially morally injurious event (PMIE), and 18.2% had experienced guilt or shame over an event whilst on deployment. Counter to expectations, there was no significant relationship found between PMIEs and future help-seeking intentions, nor did guilt mediate the relationship between PMIEs and help-seeking. However, concerns regarding the impact that help-seeking would have on one's career (professional concerns) functioned as a suppressor variable and, once included, accounted for 36.2% of the relationship between PMIEs and help-seeking. Further, emotions of guilt and shame were found to account for 49.2% of the variance in PMIEs and the barrier of professional concerns. These findings suggest that the role that guilt and shame have on the relationship between PMIEs and help-seeking occurs indirectly, through the relationship between PMIEs and career concerns.

The role of guilt and shame was complex, and included associations with help-seeking - for individuals who held professional concerns, help-seeking decreased. However, for individuals who held less professional concerns, help-seeking increased. Guilt and shame also protected against the relationship between PMIEs with distress and mental health concerns in a moderation, and enhanced relationship

warmth for individuals who had experienced a PMIE. This suggests that experiencing guilt and shame whilst on deployment may also have positive implications on an individual's overall well-being, as opposed to a purely negative impact. The protective aspect of guilt and shame should be further explored within soldiers' pre-deployment training, so they are better prepared for the possibility of experiencing these adverse emotions, and to explain how both guilt and shame can serve a beneficial purpose.

10.
Hollis, J., et al. (2022). "The shaping of moral injury among UK military veterans of the wars in Afghanistan and Iraq." Psychology and Psychotherapy: Theory, Research and Practice **n/a**(n/a). https://doi.org/10.1111/papt.12434

Abstract Objective Research on 'moral injury'—the psychological wound experienced by military personnel and other 'functionaries' whose moral values are violated—has proliferated in recent years. Many psychological researchers, including those in the UK, have subscribed to an increasingly individualised operationalisation of moral injury, with medicalised criteria that closely mirrors PTSD. This trend carries assumptions that have not been comprehensively verified by empirical research. This study aims to explore UK military veterans' experiences of, and challenges to, their moral values in relation to their deployment experiences, without prematurely foreclosing exploration of wider systemic influences. Method Twelve UK military veterans who served in Afghanistan and/or Iraq were interviewed, and the data were analysed thematically and reflexively. Results Three inter-related themes were generated: (1) 'you've been undermined', (2) 'how am I involved in this?' and (3) 'civilianised'. Conclusions The analysis suggests that several assumptions privileged in moral injury research may be empirically contradicted, at least in relation to the experiences of UK military veterans. These assumptions include that moral injury is exclusively driven by individual, episodic acts of commission and omission, invariably leads to guilt and necessarily bifurcates into variants of either perpetration or betrayal. Instead, participants understood the moral violations they experienced as socially contingent. Rather than 'treating' moral injury as a disorder of thinking and feeling located within an individual, the socially contextualised understanding of moral injury indicated by this study's findings may prompt the development of psychological and social interventions that understand moral injury as the fallout of what occurs between people and within systems.

11.
Khanna, K. (2023). Moral Distress and Injury. Understanding and Cultivating Well-being for the Pediatrician: A compilation of the latest evidence in pediatrician well-being science. S. Webber, J. Babal and M. A. Moreno. Cham, Springer International Publishing**:** 155-171.10.1007/978-3-031-10843-3_8

Moral challenges have clear impacts on physician well-being. The concept of moral injury emerged from work with combat veterans. Existing diagnostic categories did not adequately capture the psychological challenges and distress seen in soldiers returning from war. The concept of moral injury was later applied to augment the understanding of physician distress, with the aim of considering varying etiologies of the symptoms of distress seen in healthcare workers. Healthcare worker moral injury occurs when physicians are repeatedly asked to participate in or witness acts which are not in accordance with their personal moral compass. System changes which acknowledge these distinct drivers of physician distress will be needed to improve physician well-being and enhance individual self-resilience.

12.
La Fleur, R. E. (2022). "The Effects of Moral Injury: Invisible Wounds of Healthcare Workers and the Challenges of Mattering Post Pandemic." Medical Research Archives **10**(11). 10.18103/mra.v10i11.3295

The COVID-19 pandemic has put extreme stress on the health care system globally, leading to workforce shortages as well as increased health care worker burnout, exhaustion, moral injury and many forms of traumas. These pandemic-related difficulties have taken place in the context of overwhelming pre-existing workforce challenges and inconsistencies, as well as in a workforce where burnout, stress, and mental health problems were already at high occurrences. Many health care workers experienced being furloughed or having their hours reduced, particularly early in the pandemic when nations were trying to implement mitigation protocols. Total employment in the healthcare industry declined during the early months of the pandemic but has gradually recovered since summer 2020. Federal, state, and local governments took significant action to address the need for prevention and treatment services that arose from COVID-19. This led to the disruptions in health care delivery and finances as a result of the pandemic through supplemental funding from federal relief legislation and easing many regulatory requirements. Even after the pandemic, many of the effects the pandemic has had on the health care workforce will likely persist.   This paper takes a closer look at the power of mattering, the effects of moral injury as related to healthcare workers and the tools needed to begin the healing process.   Keywords: Moral Injury, Healthcare workers, Mattering, Productivity, Healing, Pandemic

13.
LeClaire, M., et al. (2022). "Prevalence, components and consequences of moral injury: preliminary validation of a new brief measure." PREPRINT (Version 1) available at Research Square. https://doi.org/10.21203/rs.3.rs-2222013/v1

Aim

The aim of this study was to design and use a parsimonious survey tool to use in real time to assess moral injury and describe how moral injury relates to burnout and intent to leave the job. The Moral Injury Quotient (MIQ) is derived from this 6-item tool.

Findings

The MIQ metric has good performance characteristics and captures a substantiative portion of moral injury. It is related to clinically meaningful changes; each 10-point increase in the MIQ was associated with 125% increased odds of burnout ($p < 0.001$) and 50% increased odds of intending to leave the job ($p < 0.001$).

Conclusions

Measuring and addressing moral injury has major workforce implications. This metric is an “off the shelf” tool that may be helpful in busy clinical settings to assess, implement improvements, and reassess for reductions in moral injury.

14.
Lloyd, A., et al. (2022). "P-205 Struggling for agency and morality in the face of repeated moral injury amongst palliative care nurses working during the COVID-19 pandemic: A narrative study." BMJ Supportive & Palliative Care **12**(Suppl 3): A86-A87. 10.1136/spcare-2022-HUNC.219

Background Palliative care nurses have been required to adopt physical distancing measures and the increased use of personal protective equipment impacting face-to-face communication with patients and relatives and to severely restrict visiting during the COVID-19 pandemic. What is unclear is how nurses managed and coped, over the time frame, with the resulting moral distress and moral injury.Methods This study explored the changing personal and professional experiences of, and responses to delivering nursing care in a palliative care unit, under the imposed pandemic restrictions, through narratives. In-depth narrative focused interviews were undertaken. Interviews were transcribed verbatim and analysed using a narrative approach to consider the shape as well as content of the individual accounts given and to elucidate common themes.Results Thirteen palliative care nurses who were working in a hospice in-patient unit in the UK before and during the pandemic were recruited. Moral distress and injury was evident in all the accounts with narratives suggesting three different responses occurred. These were acceptance, resistance and defiance and defeat. How nurses were able to reconcile themselves and their sense of morality to the experiences underpinned the narratives. Nurses struggled with not being able to care for patients and their families in a way that they were used to and that felt intuitive and many described personal as well as professional affront.Conclusions Restrictions had a considerable impact on palliative care nurses at a professional and personal level in their ability to communicate with and provide care for patients and their families which led to moral distress and injury. How they managed this and made sense of what happened affected their capacity to cope, with those unable to reconcile their experiences being profoundly impacted and losing hope for the future.

15.
Looi, J. C., et al. (2022). "Psychiatrist and trainee moral injury during the organisational long COVID of Australian acute psychiatric inpatient services." Australasian Psychiatry **0**(0): 10398562221142448. 10.1177/10398562221142448

ObjectiveThis paper provides a commentary on the risk of moral injury amongst psychiatrists and trainees working in the acute psychiatric hospital sector, during the third winter of the COVID-19 pandemic.ConclusionsMoral injuries arise from observing, causing or failing to prevent adverse outcomes that transgress core ethical and moral values. Potentially, morally injurious events (PMIEs) are more prevalent and potent while demand on acute hospitals is heightened with the emergence of highly infectious SARS-CoV-2-Omicron subvariants (BA.4 and BA.5). Acute hospital inpatient services were already facing extraordinary stresses in the context of increasingly depleted infrastructure and staffing related to the pandemic. These stresses have a high potential to be morally injurious. It is essential to immediately fund additional staff and resources and address workplace health and safety, to seek to arrest a spiral of moral injury and burnout amongst psychiatrists and trainees. We discuss recommended support strategies.

16.

Maguen, S. and S. Norman (2022). "Moral injury." PTSD Research Quarterly **33**(1): 1-9. https://www.proquest.com/scholarly-journals/moral-injury/docview/2741314628/se-2?accountid=28179
https://www.ptsd.va.gov/publications/rq_docs/V33N1.pdf

Over the past decade, the concept of moral injury has garnered a great deal of attention from Veterans, clinicians, researchers, and the general public. The concept resonates with many because it captures the emotional and spiritual pain that can occur when deeply held values are violated. Yet, there is a great deal of work to do to understand the underpinnings of moral injury and how to best identify, measure, and effectively intervene to improve its core emotional, cognitive, and behavioral symptoms. Below we summarize what we know about moral injury and identify critical areas for further research.

17.
Marks, I. R., et al. (2022). "Ethical challenges faced by healthcare workers in pediatric oncology care during the COVID-19 pandemic in Australia." Pediatric Blood & Cancer: e30114. https://dx.doi.org/10.1002/pbc.30114

OBJECTIVE: This qualitative study examined ethical challenges reported by healthcare professionals (HCPs) working in a large Australian pediatric oncology center during a period of strict COVID-19 restrictions.
METHODS: We conducted semi-structured interviews with 21 HCPs who provided pediatric cancer care during the pandemic in 2020, during strict lockdown periods. Interviews examined the difficulties they faced, as well as their own ethical evaluation of the impact of COVID-19 policies on oncology care. Data were analyzed using inductive content analysis and thematic analysis.
RESULTS: HCPs faced several challenges, primarily originating from hospital restrictions, which led to changes in usual clinical practices. These challenges included delivering care with personal protective equipment (PPE), the impact of a one-parent visitation policy, changes in psychosocial and allied health services, and COVID-19 swabbing policies. Overall, there was consensus from participants that hospital restrictions were justified and, while difficult, HCPs simply had to provide the best care possible given the circumstances. However, participants described decreased capacity to deliver holistic patient care and, in some instances, a tendency to avoid ethical reflection. Lastly, there was a consistent theme of shame and sense of responsibility underlying some participants' anxiety around inadvertently transmitting COVID-19 to immunocompromised patients.
CONCLUSION: Our findings show that many staff felt unease at the disruptions in patient care due to COVID-19 restrictions. Some HCPs indicated a degree of moral distress, with a possibility of moral injury among some HCPs. A focus on ethical recovery could assist in preventing any ongoing difficulties among HCPs because of their experiences.

18.
Peris, J., et al. (2022). "“It’s all very well for politicians in Whitehall to run a war, but they're not on the ground”: U.K. military veterans’ experiences of betrayal-based moral injury." Traumatology: No Pagination Specified-No Pagination Specified. 10.1037/trm0000421

Moral injury (MI) has recently gained traction in the literature on military veteran distress; however, research often fails to distinguish between two widely cited yet distinct definitions of MI. The two definitions conceptualize mainly perpetration-based experiences and betrayal-based experiences,

which have been shown to have different outcomes. U.K. research has mainly conceptualized MI using a perpetration-based model, and it is unclear to what extent a betrayal-based model is relevant to this population. Therefore, through 15 interviews, this study aimed to explore how U.K. military veterans describe their moral beliefs and explore ways in which these were transgressed, in relation to their military service, through the conceptualization of betrayal-based MI. Utilizing reflexive thematic analysis, this article constructed two main themes in relation to our participants experiences of MI: (a) "what's right"—a military moral compass and (b) betrayal of what's right by leaders and systems. Through these themes, our analysis highlights the ways in which participants make sense of what they see as right, or moral, followed by an exploration of the ways in which this was transgressed or betrayed during their time in the military. The findings in this article demonstrate the usefulness of understanding U.K. military veterans' experiences through the conceptual and analytical lens of betrayal-based MI. We conclude with the suggestions that future research should delineate between perpetration and betrayal-based MI to understand the complexities and nuances of experiences and that interventions would benefit from considering specific components of betrayal-based MI when working with military veterans. (PsycInfo Database Record (c) 2022 APA, all rights reserved)

19.
Pfeffer, C., et al. (2022). "Moral injury in human rights advocates." Psychological Trauma:Theory, Pesearch, Practice and Policy **01**: 01. https://dx.doi.org/10.1037/tra0001404

OBJECTIVE: Human rights advocates investigate, document, and combat abuses of individuals and groups around the world and are routinely exposed to events that can be seen as potentially morally injurious. However, few studies have examined the unique risk factors for poor mental health outcomes among this population, and none has explored the impact of moral injury, which is particularly germane given the relevance of this concept arising from the occupational exposure to morally injurious events inherent to human rights work.
METHOD: To address this deficit, we first conducted an exploratory factor analysis on a set of questions about moral injury that had previously been administered to a sample of human rights advocates. Based on this analysis, we modified and reduced these items and identified two constituent subscales. Next, we collected data on a new sample to replicate the factor structure of the reduced scale and to validate the subscales. Finally, we examined the relationship between the two subscales of the reduced moral injury scale and related concepts including posttraumatic stress disorder (PTSD), self-efficacy, and perfectionism in the original sample of human rights advocates.
RESULTS: As predicted, moral injury was associated with PTSD symptom severity and, independently, with self-efficacy and perfectionism.
CONCLUSIONS: The findings add to a growing body of research demonstrating the application of moral injury to civilian populations, particularly those systematically exposed to PMIEs who engage in work to address injustice and violence. (PsycInfo Database Record (c) 2022 APA, all rights reserved).

20.
Pilbeam, C. and S. Snow (2022). "'Thank you for helping me remember a nightmare I wanted to forget': qualitative interviews exploring experiences of death and dying during COVID-19 in the UK for nurses redeployed to ICU." Mortality: 1-17. 10.1080/13576275.2022.2144356

ABSTRACTIntensive Care Units (ICUs) became key end-of-life spaces during the Covid-19 pandemic in the UK. Many nurses were redeployed to ICU from other specialities, navigating changing

roles, priorities, and risks. Limited resources including time, equipment, and staffing widened nurses? responsibilities; the virus? infectious nature restricted family visits, even at end of life. Emerging literature explores ICU deaths during Covid-19, but little focuses on nurses? experiences, especially those redeployed. Here, we explore how redeployed nurses negotiated these competing demands on their emotional and physical resources, and undertook meaning-making, by integrating a framework of ?sensemaking? with theories of coping. Drawing on interviews with six nurses from two UK-based longitudinal qualitative studies we detail profound shifts that uniquely challenged nurses? sense of identity, duty, and purpose. This included adopting untested caring protocols, de-prioritising ?non-essential? care, and establishing communication rituals with patients/families. Understanding how nurses negotiated and performed their roles when paradigms of care were dramatically destabilised is vital to supporting workforce recovery from burnout, moral injury, and moral distress. This research also provides important learning for the management of future emergency responses and extends knowledge of how lived experience maps onto theoretical knowledge.

21.
Schröder-Bäck, P., et al. (2022). "Moral Injury as a Challenge in a Value-driven Profession–Insights from Ethics for the Education and Training of Police Agents." https://www.researchgate.net/. https://www.researchgate.net/profile/Peter-Schroeder-Baeck/publication/365302684_Moral_Injury_as_a_Challenge_in_a_Value-driven_Profession_-_Insights_from_Ethics_for_the_Education_and_Training_of_Police_Agents/links/636e35d754eb5f547cc3c48d/Moral-Injury-as-a-Challenge-in-a-Value-driven-Profession-Insights-from-Ethics-for-the-Education-and-Training-of-Police-Agents.pdf

Police and law enforcement agents in their professional work can, at times, face and experience situations which put them at risk of suffering from moral distress and moral injury. Moral distress and moral injury result from the discrepancy of one's moral norms and values, on the one hand, and the organisational policy that a police and law enforcement agent has to implement, or the actual professional conduct she is performing, on the other hand. For example, a police officer using force to protect herself (or others), or being unable to help arriving at an accident, crime scene, or in a conflict situation. In this chapter, we first explore moral distress and moral injury from an ethical perspective. Then, since the concepts of moral conflict and moral dilemma are key to understanding moral injury, they are explained from a normative point of view. A brief exploration of the (philosophical) concept of the conscience follows. The second focus of this chapter is on the role of ethics, and particularly ethics education, in police conflict management and use of force training. One approach of how ethical theories, traditions and insights can help to frame moral conflicts and dilemmas is presented. The potential role of ethics in the prevention and healing of moral suffering is sketched. It is argued that – even basic – knowledge of ethical theories and recognising the underlying dimensions of moral conflicts and dilemmas can help one to better understand professional conduct and to deal with different layers of responsibility for the outcome of (in)actions. This understanding is important for reflecting on individual professional conduct – but also for police organisations to better deal with the challenges of moral stress and injury and support for their officers and agents.

22.
Senior, X. V. (2022). Helpful or Harmful: The Impact of Shame and Guilt on Concealment in Adulthood Following Childhood Trauma. The College of Psychology and Liberal Arts. Melbourne, Florida, Florida

Institute of Technology. **Doctor of Psychology**, https://repository.lib.fit.edu/bitstream/handle/11141/3585/SENIOR-DOCTORALRESEARCHPROJECTDRP-2024.pdf?sequence=1&isAllowed=y

The current study aimed to examine the moderating role of shame and guilt in the associations between types of childhood maltreatment and levels of self-concealment. Childhood maltreatment has been linked to emotions such as shame and guilt that elicit schemas of self-doubt, incompetence, and failure (Cohen et al., (2011). When an individual internalizes these thoughts and emotions, they may act in maladaptive ways such as avoidance, fear, dissociation, and possible concealment within adulthood (Dorahy & Clearwater, 2012, Smetana et al., 2019). De Seve et al. (2020) recently found that shame proved to be a mediator in the relationship between self-concealment and feelings of inferiority, further emphasizing the importance of research on shame and guilt within self-concealment
A hierarchical regression was utilized to examine if shame and guilt moderates the relationship between various types of childhood maltreatment (e.g., physical abuse, physical neglect, sexual abuse, and emotional abuse) and level of concealment. Participants ranged in age from 19-64 years old and were recruited on a volunteer basis via social media platforms and local organizations and schools. Participants completed the self-report measures of the Childhood Trauma Questionnaire (CTQ), The Test of Self-Conscious Affect (TOSCA), The Adverse Childhood Experiences Questionnaire (ACE-Q), and The Self Concealment Scale (SCS) through Qualtrics.
The present study utilized the data collected from the CTQ, ACE-Q, TOSCA, and SCS. The study consisted of 68 participants. 50% of participants identified as male (n = 34), 47% identified as female (n = 32). Among this sample 57 of the participants endorsed a history of childhood trauma while 19 participants endorsed no history of childhood trauma. It was hypothesized that participants who scored higher on shame, compared to guilt, would also score significantly higher on level of concealment, and this hypothesis was supported. Significant negative correlations were also found between emotional neglect as well as sexual abuse and concealment, suggesting a relationship between childhood trauma and concealment. It should also be noted that although it was hypothesized that the participants who reported childhood trauma would display higher levels on concealment on the SCS than the control group, a control group was unable to be formed due to the prevalence of childhood trauma in the sample.
While it was hypothesized that shame would moderate the relationship between childhood trauma and level of concealment, as assessed with the CTQ, ACE-Q, and TOSCA-3, a moderated regression analysis found this interaction to be non-significant. These findings suggest that concealment may serve as a barrier to individuals disclosing feelings of shame. Due to a previous confirmed mediation between shame and feelings of inferiority, it can be suggested that the items meant to endorse shame on the TOSCA-3 elicited feelings of inferiority resulting in the individual concealing this information. In addition to clinical implications, these results suggest that future research should incorporate considerations of the role of concealment in participant expression of shame.

23.
Shapiro, M. O., et al. (2022). "Moral injury and suicidal ideation among female national guard members: Indirect effects of perceived burdensomeness and thwarted belongingness." Traumatology: No Pagination Specified-No Pagination Specified. 10.1037/trm0000424

Numerous reports have linked moral injury (i.e., experience or perpetration of a morally unjust event) with suicidal ideation and outcomes; however, little is known regarding mechanisms that may

influence this association. According to empirically supported theories of suicide, thwarted belongingness and perceived burdensomeness may lead to increased suicidal ideation. Furthermore, nascent research has linked thwarted belongingness and perceived burdensomeness with moral injury. However, no work to date has examined whether thwarted belongingness and perceived burdensomeness explain the association between moral injury and suicidal ideation. The current sample consisted of 151 female National Guard members recruited as part of a larger research study. Results indicated a significant association between moral injury and suicidal ideation that was indirect through thwarted belongingness and perceived burdensomeness. These findings highlight important and malleable mechanisms that may lead to increased suicide risk among women exposed to morally injurious events. Furthermore, this work extends our current understanding of moral injury and suicide by examining these constructs among a sample of female service members. (PsycInfo Database Record (c) 2022 APA, all rights reserved)

24.
Sivanathan, M., et al. (2022). "Development of Content for a Virtual Reality Simulation to Understand and Mitigate Moral Distress in Healthcare Workers." Cureus **14**(11). 10.7759/cureus.31240

Background
In high-stakes situations, healthcare workers are prone to suffer moral injury, the psychological, social, and spiritual impact of events involving betrayal or transgression of one's own deeply held moral beliefs and values. As a result, this may negatively impact their capacity to provide adequate levels of care to patients. There is a lack of educational resources catered to help healthcare workers navigate ethical situations in clinical settings that may lead to or worsen moral distress. The aim of this report is to describe the methodology of development and resulting outcomes in the form of an educational resource that includes a virtual reality (VR) simulation to help healthcare workers understand and mitigate moral distress as a result of internal and external constraints at their workplaces.

Methodology
A study using a method outlining a set of constraint parameters, followed by ideation utilizing design thinking (DT), and concluding with a consensus-building exercise using Delphi methodology (DM) with a group of 13 experts in healthcare simulation, VR, psychiatry, psychology, and nursing. The constraints parameters included technology use (VR), use of experiential learning theory, and duration of the intervention (15 minutes). A DT process was performed to generate and expand on ideas on the scenario and intervention of a possible VR simulation which were funneled into a three-round DM to define the foundations of the VR simulation. Average, standard deviations, and free-text comments in the DM were used to assess the inclusion of the produced requirements. Finally, a focus group interview was conducted with the same experts to draft the VR simulation.

Results
Within the specified constraints, the DT process produced 33 ideas for the VR simulation scenario and intervention that served as a starting point to short-list the requirements in Round 1. In Rounds 1 to 2, 25 items were removed, needed revising, and/or were retained for the subsequent rounds, which resulted in eight items at the end of Round 2. Round 2 also required specialists to provide descriptions of potential scenarios and interventions, in which five were submitted. In Round 3, experts rated the descriptions as somewhat candidate to use in the final VR simulation, and the open feedback in this

round proposed combining the elements from each of the descriptions. Using this data, a prototype of the VR simulation was developed by the project team together with VR designers.

Conclusions
This development demonstrated the feasibility of using the constraints-ideation-consensus approach to define the content of a possible VR simulation to serve as an educational resource for healthcare workers on how to understand and mitigate moral distress in the workplace. The methodology described in this development may be applied to the design of simulation training for other skills, thereby advancing healthcare training and the quality of care delivered to the greater society.

25.
Stovall, M. and L. Hansen (2021). "Suicide risk, changing jobs, or leaving the nursing profession in the aftermath of a patient safety incident." Worldviews on Evidence-Based Nursing **18**(5): 264-272. https://dx.doi.org/10.1111/wvn.12534

Background: Nursing retention is a concern for healthcare systems, hospital administrators, and nurses who have spent considerable time and money to achieve educational goals. Nearly, 33% of nurses will drop out in the 2 years practice. Those who stay in practice face an increased risk of suicide when compared the general population. Aims: To examine the relationship between nurse sociodemographic data and unique study variables with potential morally injurious outcomes (i.e., dropping out variables: changing jobs, intention to leave the profession, or suicidal thinking). Methods: A descriptive, correlational study design was used to characterize the relationship between the sociodemographic data of 216 registered nurses (RNs) and patient safety and the suicidal behavioral questionnaire. Results: RNs involved in a patient safety incident (PSI) considered changing jobs when the degree of harm was death ($p < .001$) or was unknown ($p < .05$) when compared with no harm. RNs were more likely to consider leaving the profession when the degree of harm to the patient was permanent ($p < .01$) or the patient died ($p < .05$) when compared with having no harm. RNs future suicidal thinking (i.e., their self-reported likelihood of future suicidal behavior) was statistically significant when degree of harm to the patient was death ($p < .05$) as a result of a PSI (95% CI [1.11, 8.71]) when compared with no harm. The RNs who had suicidal thoughts over the past year compared with those without and the RNs with future suicidal thinking compared with those without, may respond differently in the aftermath of a PSI. Linking evidence to action: This study served as a pioneering effort to the current understanding between nurse characteristics and patient harm and "dropping out" outcomes in RNs involved in PSIs. RNs involved with PSIs that led to more harm were more likely to change jobs, consider leaving the profession, or contemplate future suicide. These findings have important implications for nurses, administrative managers in healthcare organizations, and researchers. (PsycInfo Database Record (c) 2022 APA, all rights reserved)

26.
Weber, M. C., et al. (2022). "Moral injury and psychosocial functioning in health care workers during the COVID-19 pandemic." Psychological Services: No Pagination Specified-No Pagination Specified. 10.1037/ser0000718

Studies of moral injury among nonmilitary samples are scarce despite repeated calls to examine the prevalence and outcomes of moral injury among civilian frontline workers. The purpose of this study was to describe the prevalence of moral injury and to examine its association with psychosocial

functioning among health care workers during the COVID-19 pandemic. We surveyed health care workers (N = 480), assessing exposure to potentially morally injurious events (PMIEs) and psychosocial functioning. Data were analyzed using latent class analysis (LCA) to explore patterns of PMIE exposure (i.e., classes) and corresponding psychosocial functioning. The minimal exposure class, who denied PMIE exposure, accounted for 22% of health care workers. The moral injury-other class included those who had witnessed PMIEs for which others were responsible and felt betrayed (26%). The moral injury-self class comprised those who felt they transgressed their own values in addition to witnessing others' transgressions and feeling betrayed (11%). The betrayal-only class included those who felt betrayed by government and community members but otherwise denied PMIE exposure (41%). Those assigned to the moral injury-self class were the most impaired on a psychosocial functioning composite, followed by those assigned to the moral injury-other and betrayal-only classes, and finally the minimal exposure class. Moral injury is prevalent and impairing for health care workers, which establishes a need for interventions with health care workers in organized care settings. (PsycInfo Database Record (c) 2022 APA, all rights reserved)

27.
Woods, D. D., et al. (2022). "Repentance as Rebuke: Betrayal and Moral Injury in Safety Engineering." Science and Engineering Ethics **28**(6): 1-13.

Following other contributions about the MAX accidents to this journal, this paper explores the role of betrayal and moral injury in safety engineering related to the U.S. federal regulator's role in approving the Boeing 737MAX-a plane involved in two crashes that together killed 346 people. It discusses the tension between humility and hubris when engineers are faced with complex systems that create ambiguity, uncertain judgements, and equivocal test results from unstructured situations. It considers the relationship between moral injury, principled outrage and rebuke when the technology ends up involved in disasters. It examines the corporate backdrop against which calls for enhanced employee voice are typically made, and argues that when engineers need to rely on various protections and moral inducements to 'speak up,' then the ethical essence of engineering-skepticism, testing, checking, and questioning-has already failed.