

# Moral Injury and the Promise of MDMA-Assisted Therapy for PTSD

AMY LEHRNER, PH.D., AND RACHEL YEHUDA, PH.D.



MARCO\* JOINED THE ARMY FOR many reasons: to be a part of a family with common purpose and values, to defend his country, and to protect those more vulnerable. When he was deployed to Iraq, Marco believed that he would be fighting in a just war and upholding his core values. He returned haunted by the many times he stormed into people's homes at night, turning the house upside down looking for weapons, taking fathers away from crying families to military prisons. He remembers convoys that were mobbed by hungry civilians hoping for handouts, whom he and his fellow soldiers beat back with clubs. He remembers his rage and hunger for revenge after friends were killed and his violence against locals who might have harbored insurgents. He witnessed and participated in the death of civilians, women, and children. Marco was affected by combat with opposing forces, certainly, but his pain is rooted in a deep sense of guilt and shame over actions he took that violated his core beliefs about right and wrong. He judges himself harshly, believing that he deserves to suffer and that any self-forgiveness represents a slippery moral slope towards justification of acts he believes are unforgivable. He fears that he is a monster, capable of horrible violence, and that he must keep this part of himself hidden to protect others, as well as himself. He believes that if anyone knew about his actions, they would condemn him. He has lost his faith in God, withdrawn from his family, and lives in a world of isolation and pain.

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The concept of moral injury is not new (Shay, 2014), but it has received increased attention in the United States after decades of war in Iraq and Afghanistan. Moral injury has been called a wounding of the soul, a scar that will always be borne. In academic research, moral injury has most recently been defined as “perpetrating, failing to prevent, bearing witness to, or learning about acts that transgress deeply held moral beliefs and expectations” (Litz et al., 2009). For many Veterans, war zone experiences, including the killing of others, violates moral or religious beliefs and creates a profound sense of internal alienation and conflict. These experiences may also include receiving orders or supporting actions that were perceived as unjust or immoral, and witnessing or perpetrating atrocities. One national survey of U.S. combat Veterans found that 11% reported moral transgressions, 26% reported witnessing transgressions by others, and 26% reported betrayal of moral code by trusted authorities (Wisco et al., 2017). Similarly, refugees and survivors of genocidal violence may struggle to reconcile themselves with things they did to survive, which may include betrayal of others and their own moral compass (Nickerson et al., 2015).

Moral injury, although it often occurs in the context of life threat and heightened physiological arousal, is distinct from posttraumatic stress disorder (PTSD) in the critical aspects of perpetration, complicity, or transgression. The moral and spiritual conflict that ensues can be distinguished from the helplessness and powerlessness associated with the traumatic victimization that leads to PTSD. For many reasons, this construct has received much less attention than PTSD, even though combat related guilt and the presence of moral injury have been associated with increased risk for suicide, poorer mental health, and reduced quality of life in Veterans and refugees (Hendin & Haas, 1991; Maguen et al., 2012; Nickerson et al., 2015). To recognize the guilt and shame of soldiers challenges the narrative of bravery, service, and sacrifice that militaries and nations promote in order to support volunteer armed services and communicate the honor of fighting for one's country. To acknowledge the pain of moral injury requires a reckoning with humanity's dark side — with things that we humans can do when threatened, when angry, when trying to survive. We ask our soldiers to shoulder and carry this knowledge, but as a society we cringe at bearing witness, at considering our own complicity, and at the question of how to hold compassion and to bring healing to these wounds of the soul.

As indications for MDMA-assisted therapy expand, there is excitement about its potential for treating moral injury. The Center for Psychedelic Psychotherapy and Trauma Research, in collaboration with MAPS, is conducting a trial of MDMA-assisted therapy for Veterans with PTSD in a Veterans Affairs outpatient clinic setting. This study includes assessments of moral injury and self compassion which will provide the first data on the impact of MDMA-assisted therapy on this construct. The two currently promoted gold standard psychotherapies for PTSD, Prolonged Exposure (PE; Foa et al., 2007) and Cognitive Processing Therapy (CPT; Resick et al., 2016), are grounded in fear conditioning and cognitive models of PTSD, respectively. The fear conditioning model postulates that during a life-threatening trauma, hypothalamic-pituitary-axis activation associated with the fight-flight-freeze response contributes to a pairing of multiple contextual stimuli (e.g., dark alley, odor of garbage, cold temperature) with the trauma memory, which in turn leads to avoidance of trauma cues and emotions. The cognitive model postulates that PTSD is driven not by the traumatic experience itself, but by distorted or maladaptive thoughts or appraisals about the event (e.g., “it was all my fault,” “men cannot be trusted,” or “crowds are dangerous”). Neither of these models encompass the core conflict of betrayal of one's own moral compass, which is neither fear-based nor a reflection of distorted or inaccurate thoughts about the event.

PE and CPT involve either the repeated recounting of trauma memories in order to extinguish conditioned responses to trauma cues and process primary emotions, or the collaborative evaluation of trauma related cognitions in order to arrive at more balanced and reality-based assessments. Neither of these approaches explicitly grapple with the experience of perpetration or collusion that is embedded in moral injury. In fact, many individuals complete these treatments without ever being asked about or disclosing their deeply shameful experiences of moral injury. Recounting in detail the perpetration of a morally repugnant act, as in PE, may only exacerbate feelings of shame and self-loathing. Suggesting that the anguish over killing another represents a cognitive distortion, using cognitive restructuring in CPT, is likely to be deeply invalidating. Contextualizing this act does not change the fact that it happened, nor does it absolve the person from responsibility. When someone has crossed a line that they cannot undo, they need this anguish validated, rather than having their behavior excused or minimized. This anguish may be the last indicator they have of their own goodness and decency.

Morality and spirituality are social experiences; they reflect shared norms and values, rituals and beliefs. Social emotions such as shame and guilt can function to promote prosocial behavior and encourage repair and amends when such norms are violated. All major religions address wrongdoing and offer paths towards forgiveness and redemption. But when individuals feel that their actions are unforgivable, their transgressions unacceptable, and amends impossible, the path to healing becomes murky. This person begins to feel like an inhuman monster and to self-exile from the community. Shame produces an impulse to hide because to be shunned and expelled from the society of decent people is one of the worst punishments that humans can levy. The experience of shame is one of self-condemnation, but it is rooted in the judgment of the other. This deep shame — and associated emotions of guilt, fear, anger, or self-hatred — is a profoundly difficult experience to explore in therapy. The fear of condemnation by the other, and the desire to avoid such emotional pain, lead many to never seek healing for such wounds, even after years of therapy.



Recently developed therapies for moral injury, such as Adaptive Disclosure (Litz et al., 2017) and Impact of Killing (Maguen et al., 2017), were developed based on the insight that for these injuries, healing requires an acknowledgment of transgression, a true expression of remorse, and a process of self-forgiveness and compassion. These treatments may provide a framework for a path to recovery, but unfortunately, the very nature of moral injury can prevent those who need treatment the most from engaging in them. The profound shame, self-loathing, and fear of judgment from a therapist often leaves patients unable to share their morally injurious experiences in the first place, or to open themselves to the possibility of forgiveness and redemption, ultimately reinforcing a sense of hopelessness and despair.

MDMA-assisted therapy holds the potential to unlock these barriers and open the path towards healing from moral injury. The conceptualization of moral injury as a web of moral and spiritual conflicts that block acceptance and self-forgiveness demands development of treatments that can help patients face and untangle this complex web. The empathogenic effects of MDMA (Kuypers et al, 2017), which brings forth feelings of safety, trust, and compassion, are precisely what is needed to address the shame and self-punishment of moral injury with a compassionate other. Where moral injury creates isolation and profound alienation, MDMA may allow for the healing connection required to tend to the wounds left by betrayal of one's core morality. MDMA-assisted therapy may thus help patients tolerate disclosure, face the potential for judgment by the therapist, and then take in the therapist's acknowledgment of their pain and their humanity. MDMA-assisted therapy may help patients find and ultimately embrace the seeds of self-forgiveness and self-compassion within themselves.

In working to find self-forgiveness, therapies for moral injury often include imaginary engagements with a respected moral authority, with those who have been wronged, and with earlier versions of the self. These strategies seek to help patients gain perspective and internalize a compassionate other. For many this work also involves questions of faith and spirituality, an exploration of the possibility of forgiveness and acceptance. The transpersonal experiences facilitated by MDMA, in which people may engage with parts of self, with absent others, and with spiritual connection, have the potential to heighten and catalyze these experiential approaches to healing, where therapists so often fear to tread.

Meaningful treatment for moral injury involves a painstaking walk through a field full of landmines, carefully balancing the importance of honoring the underlying values that were violated while letting go of the self-punishment and loathing that impede self-forgiveness and block opportunities to move forward and live by those values. MDMA-assisted therapy for moral injury remains to be further developed and studied, but the window of tolerance for intense and distressing emotions and memories opened by MDMA holds the promise of experiencing safety in disclosure and an opportunity to grapple honestly with these conflicts without being shut down by shame. As therapists, study participants, and patients take courage to seek the darkest places together, we look forward to the opportunity for MDMA-assisted therapy to help shine a light of healing and compassion.

\* *Marco represents a composite of Veterans with moral injury*

## References

- Foa, E., Hembree, E., & Rothbaum, B. O. (2007). Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences therapist guide. *Oxford University Press*.
- Foa EB, Riggs DS, Massie ED, Yarczower M: The impact of fear activation and anger on the efficacy of exposure treatment for post-traumatic stress disorder. *Behav Ther* 1995;26:487-499.
- Hendin, H. & Haas, A. P. (1991). Suicide and guilt as manifestations of PTSD in Vietnam combat Veterans. *American Journal of Psychiatry*, 148, 586-591.
- Kuypers, K. P., Dolder, P. C., Ramaekers, J. G., & Liechti, M. E. (2017). Multifaceted empathy of healthy volunteers after single doses of MDMA: a pooled sample of placebo-controlled studies. *Journal of Psychopharmacology*, 31(5), 589-598.
- Litz, B. T., Lebowitz, L., Gray, M. J., & Nash, W. P. (2017). Adaptive disclosure: A new treatment for military trauma, loss, and moral injury. *Guilford Publications*.
- Litz, B. T., Stein, N., Delaney, E., Lebowitz, L., Nash, W. P., Silva, C., & Maguen, S. (2009). Moral injury and moral repair in war Veterans: A preliminary model and intervention strategy. *Clinical Psychology Review*, 29, 695-706.
- Maguen, S., Burkman, K., Madden, E., Dihn, J., Bosch, J., Keyser, J., Schmitz, M., & Neylan, T. (2017). Impact of killing in war: A randomized, controlled pilot study. *Journal of Clinical Psychology*, 73(9), 997-1012.
- Maguen, S., Metzler, T. J., Bosch, J., Marmar, C. R., Knight, S. J., & Neylan, T. C. (2012). Killing in combat may be independently associated with suicidal ideation. *Depression & Anxiety*, 29(11), 918-23.
- Nickerson, A., Schnyder, U., Bryant, R. A., Schick, M., Mueller, J., & Morina, N. (2015). Moral injury in traumatized refugees. *Psychotherapy and Psychosomatics*, 84(2), 122-123.
- Resick, P. A., Monson, C. M., & Chard, K. M. (2016). Cognitive processing therapy for PTSD: A comprehensive manual. *Guilford Publications*.
- Shay, J. (2014). Moral injury. *Psychoanalytic Psychology*, 31(2), 182.
- Wisco, B. E., Marx, B. P., May, C. L., Martini, B., Krystal, J. H., Southwick, S. M., & Pietrzak, R. H. (2017). Moral injury in US combat veterans: Results from the national health and resilience in veterans study. *Depression & Anxiety*, 34(4), 340-347.

AMY LEHRNER, PH.D., is an Assistant Professor in the Department of Psychiatry at Icahn School of Medicine at Mount Sinai (ISMMS), and a Clinical Psychologist in Trauma & Readjustment Services (PTSD) at JJP VAMC. She received her Ph.D. in Clinical/Community Psychology from the University of Illinois at Urbana-Champaign, and began a postdoctoral clinical research fellowship in the Yehuda lab in 2011. During that time, Dr. Lehrner developed an interest in PTSD treatment development and biological correlates of PTSD. As a member of the ISMMS Yehuda lab since 2011, she has participated in research on the effects of the Holocaust and PTSD on second generation survivors and on the treatment and biology of PTSD in U.S. combat Veterans. Prior to joining Dr. Rachel Yehuda's lab, Dr. Lehrner conducted research and advocacy on intimate partner violence. She is currently supported by a VA Mentored Career Development Award (Dr. Yehuda is the primary mentor) that combines her interests in relationships and intimacy with trauma and PTSD, focusing on the effects of warzone stressors on subsequent sexual functioning and intimacy. She plans to continue to build a program of research that takes a comprehensive, psychobiological approach to PTSD and intimate relationships, investigating both basic mechanisms and therapeutic interventions.

RACHEL YEHUDA, PH.D., is a Professor and Vice Chair of Psychiatry, and Professor of Neuroscience at the Icahn School of Medicine at Mount Sinai. She is also the Mental Health Patient Care Center Director at the Bronx Veterans Affairs. She has published several hundred scientific papers and compiled over 10 books examining diverse aspects of traumatic stress, and has studied PTSD and resilience in combat Veterans, survivors of genocide, interpersonal violence and terrorism, as well as in animal models. Her work has focused on neuroendocrinology, neuroimaging, genomic and molecular biological studies of trauma, experimental therapeutics (pharmacological and psychotherapy trials), biomarkers, genetic and epigenetic heritability, gender differences, and suicide.