

Why We Don't Ride: Equine Assisted Psychotherapy, Military Veterans and Moral Injury

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Abstract

While programs using horses with war veterans proliferate few aim specifically at Moral Injury. Many believe that riding horses constitutes therapy for Post-Traumatic Stress Disorder. While there may be a benefit because the movement of the horse is regulating to the nervous system, this practice is contraindicated for warriors with Moral Injury which we see as separate and distinct from PTSD, and not a disorder. Our definition of Moral Injury is that it is an existential/spiritual crisis that is the result of having been trained to override the instinctual aversion to the taking of human life.

It can also be the consequence of having perpetrated acts during combat operations, necessary at the time for survival, that damage one's conscience or moral compass. To the extent that warriors may have both PTSD and Moral Injury, the latter requires a different clinical approach. Warriors who attend Trauma and Resiliency Resources Inc.'s Warrior Camp® program do not ride nor do they have access to halters, lead lines or other instruments of domination or control.

Our work at TRR is in accordance with the EAGALA model of Equine Assisted Psychotherapy. This method best suits warriors with Moral Injury because it allows for a more robust use of the horse's capacity for nonjudgmental intuitive mirroring. In particular, a horse's ability to intuitively target post-war attachment disruptions caused by morally injurious combat experiences is best employed when the veterans keep their feet on the ground.

Keywords: Combat; Conscience; Equine; Equine assisted psychotherapy; Moral injury; Post traumatic stress disorder; PTSD; Warriors; War veterans

Introduction

In recent years there has been an explosion of interest in horses. We see this in a multitude of cultural expressions: television and magazine ads selling everything from clothing to perfume to medication; the return of the play *Equus*, originally staged in 1973; the growth of therapeutic riding programs used to treat everything from children with autism to war veterans with Post-traumatic Stress Disorder (PTSD) and Traumatic Brain Injury (TBI). While therapeutic horse riding/horsemanship programs proliferate in the United States and elsewhere, we suggest that such programs do not appropriately address the post-war psychological challenges of military veterans [1-3].

The war veterans we treat at Trauma and Resiliency Resources, Inc. do not ride horses at our Warrior Camp® program. Suffering from post-war traumatic disturbances of various kinds, most especially the Moral Injury that is a result of killing and/or witnessing killing in combat, war veterans relate to and with horses best when the veterans' feet remain on the ground, as illustrated by the non-riding approach of EAGALA-model Equine Assisted Psychotherapy and Learning (EAP/L). This article focuses on the rationale behind our non-riding approach and what we think this approach offers to the warriors with whom we work.

Horses as Partners in Psychotherapy

Horses, for millennia, have been revered for their mystery and grace, and their capacity to interact with human beings. It may have been the social response to the film, *The Horse Whisperer*, that reignited interest in this phenomenon. Director Robert Redford's sensitive portrayal of the relationship between a traumatized horse and a traumatized young girl captured the hearts and the imaginations of many, including psychotherapists. The horse, in all of its manifestations, has emerged as a pivotal image [4].

The appeal of this image and its ability to communicate something at a profound level has everything to do with characteristics of the horse. Given their elusive spirit, their physical power and their great beauty, horses elicit in us a primal desire to associate with their species [5]. Perhaps horses, as animals of prey, inspire in humans, who are predators, an innate need to be reacquainted with our opposite natures-our more passive sides. Horses have a tendency to submit, whether due to brutal pressure or compassionate leadership. Because of the inherent duality between predator and prey, our proximity to horses seems to open in the human heart an impulse to be softer, quieter and more present not only with the horses but also with ourselves [6].

Some of us have begun to use the horse's instinctive "horse sense" in the psychotherapeutic process with our clients. Horses in therapy sessions bear witness to whatever is present to them, and they respond. Moving about freely in an enclosed arena, horses often choose to engage in ways that are intuitively helpful. They give us feedback

through body language and movement, mirroring what they sense as the client's deepest feelings and intentions [7]. This mirroring can be almost imperceptible to the untrained eye. However, many psychotherapists are now working collaboratively with equine specialists who have trained eyes. Through the observations that equine professionals report about the horse's behavior, the psychotherapist gains deeper access to the inner world of the client; an inner world that may not yet be known to the client, or, if known, may have been difficult for the client to articulate [8].

This experience can surpass the meaning of a basic talk therapy session confined to an office. Significantly, the client, rather than sitting stationary in a chair, moves about the arena with the horse, and the movement decreases arousal in the client. Further, the client cannot help but notice that the horse stays "with" them by remaining profoundly attentive. Even if the horse's behavior towards the client seems less than positive (walking away, for example), the client is apt to listen to the horse's message without shame, embarrassment, or defensiveness. This facilitates a powerful exchange in which the client and the horse work together to craft meaning within the context of a unique, nonjudgmental, relationship. All of this work takes place with the client's feet on the ground [9-11].

Equine Assisted Psychotherapy with Combat Veterans

Because many "traditional" therapeutic approaches miss the mark when it comes to the existential crises faced by our nation's war veterans, working with horses represents a welcomed alternative. Every day, it seems, another equine program emerges as a treatment for war veterans, and many of these programs focus on horsemanship and/or the riding of horses. However, riding/horsemanship programs typically do not require the presence of a licensed mental health professional even though many of these programs now promote themselves as "treatment" for PTSD and TBI, two of the signature injuries of our veterans from Vietnam to Iraq/Afghanistan [12-15]. Yet, therapeutic riding/horsemanship alone does not, and cannot, treat either injury adequately. Although we do not refute the benefits of mounted work in certain contexts (for children with cerebral palsy and autism as an example), riding a horse is not psychotherapy, and people with war trauma need psychotherapy. Treatment of combat-related trauma requires a profound grasp of the various symptoms that embed themselves in a traumatized person's nervous system and psyche, a knowledge of the specific skills required to treat and resolve these symptoms at their roots, and an attentiveness to the impact of Moral Injury on the lives of many war fighters. Moral Injury represents a spiritual and existential crisis, a moral quandary that resides deep within a person's soul as a response to the experience of the act of killing and/or witnessing the gruesome deaths of other human beings on the battlefield. Horse professionals alone, no matter how sincere their desire to help may be, cannot adequately and safely address, let alone treat, the symptoms of PTSD or TBI, or especially Moral Injury [16].

At Trauma and Resiliency Resources, Inc. (TRR), we base our equine work during Warrior Camp® on an understanding that warriors return from the battlefield in a state of predatory aggression, which represents a state of adaptation necessary for survival and effectiveness in war. We see our mission as the facilitation of the warriors' transition from the battlefield to reintegration with the civilian population at home by helping them relearn how to be with their families and to return to life in society with all the complexity inherent in responsible citizenship [17-19]. We do this by healing the trauma of war through

the use of evidence-based therapies, including EAGALA-model Equine Assisted Psychotherapy, within the context of a community of warriors and clinicians. EAGALA, the Equine Assisted Growth and Learning Association, designates TRR's Warrior Camp® as a Military Service Provider, which means we meet certain standards required for working with a military veteran population [20].

EAGALA's requirement that there be a team of qualified professionals working with clients at all times stipulates that the team consists of one human member who is credentialed as a licensed mental health professional (the MH) and one human member who is an equine specialist (the ES). The mental health professional (Psychologists, Psychiatrists, Social Workers, or Counselors) must meet and maintain professional standards required for licensure in their respective fields and in their state of licensure, and the equine specialists must produce evidence of a minimum of 6,000 hours of professional experience with horses. No EAGALA-model session takes place without the presence of both an MH and ES, and the ES must be inside the arena at any time a client is working with a horse. One or more horses make up the third component of each EAGALA therapy team [21-23].

The majority of programs not following the EAGALA model stand in sharp contrast to the strict requirements outlined above as they do not require the presence of a licensed mental health professional during equine sessions. Thus, it is likely that most non-EAGALA programs throughout the United States who engage in the treatment of traumatized military veterans conduct their work without the presence and expert guidance of a person trained and credentialed specifically to work with psychological trauma.

Rightfully, this concerns those of us who work with war veterans.

Warriors return from war in a state of heightened nervous system arousal characterized by hyper vigilance, exaggerated startle reflex, sleep disturbance, flashbacks and nightmares, and intense anger, as well as withdrawal from family and friends leading to social isolation. These most visible symptoms of combat-related post-traumatic stress are among the easiest symptoms to treat without the use of pharmaceuticals that serve only to mask symptoms without actually getting to the root problem. PTSD sequelae on the hyper arousal spectrum can be calmed through breathing, relaxation, mindfulness-based stress reduction training, and with yoga. Nightmares, flashbacks and intrusive memories can be treated with EMDR (Eye Movement Desensitization and Reprocessing) therapy and/or other trauma therapies. PTSD sequelae on the hypo arousal spectrum can also be addressed with these modalities as well as through grounding and movement so that warriors who present as numb and dissociated can be brought gently back into the embodied experience of the present moment [24].

Why We Do Not Ride Horses

Although one could argue that working with horses both on the ground and while riding can serve to regulate the nervous system of the post-combat veteran and that both modes of horse work can begin the healing of post-war attachment disruption (the result of having lost friends and fellow warriors from their closely knit and interdependent combat units), our rejection of horse riding during psychotherapy sessions has a compelling rationale [25].

First, Equine Assisted Psychotherapy is just that psychotherapy. The goal of psychotherapy is to assist the client in working through

something that has brought them to treatment, or, at the very least, to enhance awareness and insight into a life challenge. Within the context of the therapy session, correcting or instructing the client contravenes these goals—it is not helpful for a psychotherapy client to think he is doing something wrong in therapy. This is antithetical to the goals of treatment. Yet, horse riding inevitably sets up such an environment. When one places a human being on a 1200+ pound animal, invariably the rider needs a great deal of instruction: sit up/forward, lean back in the saddle/relax your shoulders, keep your heels down, look up, breathe, loosen up on the reins, etc. The list of correctives, driven by safety concerns, is endless [26].

Second, a program that puts a client on a horse's back eliminates eye contact between horse and rider. This is not unlike the psychoanalytic tradition in which the client lies on a couch, facing away from the analyst. Needless to say, psychoanalysis is not considered a viable approach to psychological trauma anymore, and this may be a key reason why.

Third, and perhaps the most important reason we do not ride horses at Warrior Camp®, is that we consider the horses to be an integral part of the therapy team. And we do not ride our therapists. In our program horses are valued “as they are” so that they may contribute to the therapeutic process in a very intentional and unique way—on their own terms.

Moral Injury

Lately, war fighters have begun to speak openly about Moral Injury. Litz et al. define Moral Injury as, “perpetrating, failing to prevent, bearing witness to, or learning about acts that transgress deeply held moral beliefs and expectations”. Moral Injury neither fits within the diagnostic scope of PTSD nor represents another sort of psychological disorder, adjustment or otherwise; it falls outside of the diagnostic criteria of any post-trauma syndromes. TRR's definition of Moral Injury is that it is an existential and/or spiritual crisis that can be the consequence of having been trained to override the intrinsic human aversion to killing other human beings. Moral Injury represents an ethical response which is not pathological. As described by Drescher, Nieuwsma, and Swales [27].

The construct of moral injury reflects the fact that service members may be called upon in the course of their duties to inflict immense devastation with powerful weapons resulting in injury and death within the close confines of civilian cities and villages. For many of those veterans, though fear of dying was an element of trauma, the burden of exposure to violence and inflicting harm is even more consequential.

Many warriors describe the experience of Moral Injury in terms of “soul-loss.” Unlike PTSD an experience of living under a constant sense of threat when no threat actually exists. Moral Injury, from deep within the conscience, sounds a real, substantial, truth-based alarm concerning the violation and transgression of foundational and constitutive religious/spiritual/ethical tenets that make up the innate human moral compass [28-30]. In combat, “Thou shalt not kill” and “Do unto others as you would have others do unto you” turn to ashes in the crucible of war. This sense of contamination, and loss of soul, unlike PTSD, represents a real condition of the soul rather than the imagined threat produced in a traumatized and overactive sympathetic nervous system. Moral Injury does not emerge from the hippocampus and amygdala getting locked in a self-referential feedback loop, but

rather this injury of the soul comes out of a deep connection with and awareness of having truly transgressed.

The most significant chasm separating Moral Injury from PTSD is that when the human heart speaks to the war veteran about sin and guilt, it speaks the truth, but when the overly activated sympathetic nervous system of the PTSD sufferer screams “danger!” from within the amygdala/hippocampus feedback loop, that danger/threat usually represents a baseless fear. The sin/guilt felt in the conscience signals a real soul-sickness, whereas what drives PTSD emerges from a “fight/flight” response in the brain that has become stuck in the “on” position even when there exists no legitimate threat in the present moment. Both conditions can be addressed, but they represent different facets of post-war experience.

It may trouble readers to hear that our nation's warriors return from our legally sanctioned and lawfully justified wars feeling guilty of moral transgression. How can a person feel sinful when he has obeyed lawful orders? Unless the warrior has committed a recognized war crime, why would that warrior feel guilty? Karl Marlantes, a Vietnam veteran and celebrated author explains, killing someone without splitting oneself from the feelings that the act engenders requires an effort of supreme consciousness that, quite frankly, is beyond most humans. Killing is what warriors do for society, then when they return home, society doesn't generally acknowledge that the act it asked them to do created a deep split in the psyche, a psychological and spiritual weight most of them will stumble beneath the rest of their lives. Warriors must learn how to integrate the experience of killing, to put the pieces of their psyche back together again. For the most part, they have been left to do this on their own [31].

Warriors must learn how to integrate the person they once were before the act of killing or facilitating the killing or maiming of other humans in combat with the person they now see in the mirror in the aftermath of going to and returning from war. They cannot be left to do this on their own because the legacy of that strategy looks like substance abuse, domestic violence, psychosomatic suffering beyond imagination, and an unprecedented suicide rate among service members and veterans. Moreover, although we have learned some lessons since the Vietnam War in terms of welcoming home our war fighters rather than ignoring or shaming them, we do damage to our present-day warriors with the parades and flag-waving. The banal offering, “Thank you for your service,” and the accolades offered to those we designate as “heroes” appear to many warriors as meaningless verbiage from civilians who have no idea what they are thanking war veterans for (and would not thank them if they did). Like the New York City firefighters in the aftermath of the events of 9/11, military veterans insist that the heroes are the ones who died in action [32]. We, in fact, wound our returning warriors when we force titles and commendations upon them, not allowing them to NOT feel like heroes. If we look at all of this with honesty, we realize that, more often than not, we praise our warriors out of our own guilt: the knowledge of having sent such good men and women, many of them teenagers, into a confrontation with evil.

Why do warriors feel morally contaminated? Because they have traversed the bloody landscapes of the moral sewer of war wherein they have been asked to perpetrate and witness the most brutal of human experiences. In the words of a 4-tour Iraq and Afghanistan veteran, When you realize that you are sweating, bleeding, sacrificing, and losing close friends in gruesome explosions and inside burning vehicles, not for your family, friends, and fellow Americans, but rather for the foreign policy failures of a bunch of guys who wear \$2500 suits

and who pay not one ounce of price for their failures, it makes you pretty mad, and when the adrenaline from the anger wears off, then comes the darkness of a depression that words cannot adequately express. Especially if you have had to kill people in a war that had no moral base whatsoever. At one point in Iraq the insurgents were using children playing soccer in the road to stop convoys in an ambush kill zone. The directive from senior leaders? DO NOT STOP. I know guys who ran over children to avoid ambushes. Yeah, those guys are really internally disturbed and VERY angry [33].

Not all war veterans feel this way. Experiences differ. Yet, many do, and, given this scenario, putting warriors on horses when the warriors suffer from Moral Injury does more harm than good, and this should inspire great caution. Here is why.

Why Moral Injury and Horse Riding Do Not Mix Well

Warriors suffer from Moral Injury because they have perpetrated violence in combat, usually by killing or maiming enemy combatants and/or innocent civilians, or by witnessing the massive violence they either caused or were unable to prevent. Further, they often return from this experience both morally injured and psychologically locked into a state of the "fight" part of the fight/flight response (having been trained not to go into flight mode, but to press forward in the face of danger and death). The fight response is an expression of predatory aggression, a primitive sympathetic nervous system defensive response designed for survival of the individual. This fight condition is heightened post trauma.

Horses, as animals of prey, sit on the edge of a state of "flight" at all times. This hard-wired sympathetic nervous system response biologically precedes the fight response, so when in danger all prey animals attempt first to flee, turning to fight only if flight does not succeed in distancing them from the predator [34].

Humans and horses have had a multi-layered relationship for millennia. Horses have plowed our fields, herded our cattle, taken us to war, won us olympic medals, entertained us and made some of us very wealthy. In exchange, we have been loving companions and sometimes brutal handlers. We do not often think about this relationship from the horse's perspective.

Consider what happens for the horse as we prepare it to be ridden. First, we cross tie it using lead lines (ropes) that connect its halter to rings on the opposite sides of the barn walkway so that the horse cannot move much while we tack (equip) it. Then we groom with brushes. Next, we place a saddle pad on its back to cushion the saddle, and then we place a saddle, made of dead animal hide, on top of the saddle pad. Then, is a cinching of the girth tight around the horse's belly (to keep the saddle from slipping). At this point, the horse is being compressed between the top of its back and the bottom of its belly the two areas on a horse's body that are most vulnerable to attack by a predator, typically a mountain lion or coyote. Next, we replace the halter with a bridle that includes a metallic bit that rests on the bars of the horse's mouth in an interdental region where there are no teeth. The bit enables communication between rider and horse by establishing contact between the horse's mouth, another especially sensitive area, and the reins held by the rider.

Clearly, bits are now much more humane than they used to be, but the fact remains that with a bit in its mouth the horse can be controlled and thus compelled to do whatever the rider wants to do, and to go wherever the rider wants to go. Further, a bit in a horse's mouth

stimulates the biting response, and biting is a primitive, aggressive, and defensive act.

By putting a horse in this position, in the context of equipping it for riding, and then placing a warrior on its back-what have we done? Communication between horse and rider is now facilitated by contact with exquisitely sensitive areas of the horse: its mouth, back and side/under belly. We have rendered a horse docile and submissive, and put a warrior in the position of control and dominance. We have established a predator/prey relationship. And for a war veteran, we have evoked the experience of being a perpetrator in control of a victim. Within the context of this duality, morally injured military veterans, struggling with feelings of worthlessness, self-hatred and inner evil because of what they have done or witnessed in combat, are being obstructed from the deep healing of soul that they so desperately need [35].

Contrast the experience of putting a traumatized war veteran on a horse with what happens when warriors work with horses while the warriors stay on the ground and in eye contact with them.

First, the horse moves about freely and with liberty, meaning it carries no equipment and is not tethered or in any way restricted with respect to movement, and the horse has free reign to work in the entire enclosure, usually an arena ranging from 80 × 100 feet in diameter to as large as 100 × 200 feet. The horse can approach the warrior, not approach the warrior, moving towards or away from warriors at will. The human members of the therapy team invite the warrior (without any symbols or instruments of control) to interact with the horse, and the therapy team members observe what happens in the attempt at encounter. The trained observer can see in that activity the warrior's pattern of establishing relationship. How does she form attachments to others, i.e., how does she make contact? Does he stand in one spot waiting for or expecting the horse to come to him? Does she approach the horse from the head, side, or rear? Does he touch the horse and where? Does she get frustrated easily? Does he get mad at the horse for not responding? Does she attempt to use force to get the horse to move? Is the warrior able to problem solve and try different methods? Does he look to the human team members for help? In a warrior's first interaction with a horse everything about his way of relating to others in his world becomes visible. Often, the warrior will identify with some aspect of the horse's behavior: "He's just like my daughter, my First Sergeant, my mom, my battle buddy....."

Using metaphor what or who the horse's behavior represents to the warrior, as well as the warrior's real-time present moment experience of that particular horse and what that horse brings to the session the equine specialist and the psychotherapist help the warrior to notice her way of being with this animal, and this opens the door to subtle shifts in the warrior's own behavior. This, then, becomes the new subject of observation: how does this shift impact the horse and in what ways? Often, people remain unconscious of the way they orchestrate their environments and patterns of behaving in order to craft an experience of the world, and these same people wonder why they feel "stuck" in unhelpful and unfulfilling modes of being. Sometimes, the entire equine assisted psychotherapy session focuses on this: noticing who one is in relation to another, the patterned ways in which people recreate what we least desire the life we least wish to live and what can happen if we try something new. Shifting one's stance and seeing what happens inside the arena with the horse can open new vistas into how a warrior might create the same types of shifts outside the arena with people.

In all of this, neither the warrior nor the horse experience the predator/prey duality that characterizes any experience where a human sits on a horse's back and controls it from its mouth. This relationship allows an intuitive "right-brain-to-right-brain" communication between horse and human that remains unimpeded by dominance, control and forced submission. Because warriors return from combat in predator mode, sitting in a predatory position on a prey animal obfuscates the potential for the horse to address the warrior face to face on equal terms without a forced agenda. As a fundamental tenet of our work with returning warriors, we believe that the best work between horse and war-traumatized warriors takes place when the humans remain off the horses and on the ground.

Conclusion

Warriors face a great challenge when they return from combat. In transitioning from the battlefield to the community from war zone to home front they need to find ways to make sense of and come to terms with the daunting totality of their experiences as war fighters so they can embrace the entire journey, including and maybe especially the ugliness and horror of it, being able to assimilate the profound loss of innocence that results from inflicting massive damage on other human beings and witnessing the grotesque maiming and death of fellow warriors. Regulating the nervous system of the combat veteran is actually the simpler part of healing the trauma of war. Addressing the bankruptcy of the soul that is the stuff of Moral Injury remains far more elusive and complicated.

At TRR's Warrior Camp®, although we do treat war trauma, we pay particular attention to opportunities to engage in benevolent "witnessing" as a therapeutic intervention for Moral Injury. Facing the irrevocable acts of violence directly so that they can be felt, understood, embraced, integrated, and articulated, establishes a path to the healing of that part of the warrior that has been shattered. Interacting with horses at liberty untethered, unbridled, unsaddled and uninhibited allows the horses' nonjudgmental and forgiving nature to unfold as an engaging and open invitation to a warrior to begin the painful process of truly coming home.

References

1. Boudreau T (2004) The morally injured <http://www.massreview.org/sites/default/files/Boudreau.pdf>.
2. Bica CM (2014) Blood on all our hands: Don't thank me for my service redux. Truthout.org Retrieved from [<http://www.truth-out.org/news/item/>]
3. Brock RN, Lettini G (2012) Soul repair: Recovering from moral injury after war. Boston: Beacon Press.
4. Center for Constitutional Rights (2013) The right to heal: Holding the US accountable for the human costs of war. Retrieved from www.righttoheal.org.
5. Copland L (2013) Staff Perspective: On Moral Injury (blog post). Center for Deployment Psychology. Retrieved from [<http://www.deploymentpsych.org/blog/staffperspective-moral-injury>].
6. Currier JM, Holland JM, Drescher K, Foy D (2013) Initial psychometric evaluation of the moral injury questionnaire-military version. *Clin Psychol Psychother* 22: 54-63.
7. Dao J (2011) After combat, the unexpected perils of coming home. *New York Times*. Retrieved from [<http://www.nytimes.com/2011/05/29/us/29soldiers.html>].
8. Drescher KD, Foy DW, Kelly C, Leshner A, Schutz K, et al. (2011) An exploration of the viability and usefulness of the construct of moral injury in war veterans. *Traumatology* 17: 8-13.
9. Harris JL, Park CL, Currier JM, Usset TJ, Voecks CD (2015) Moral injury and psycho-spiritual development: considering the developmental context. *Spirituality clin prac* 2: 256-266.
10. Hynes HP (2013) The Iraq war and moral injury. Truthout.org. Retrieved from [<http://truth-out.org/news/item/15218-the-iraq-war-and-moral-injury>].
11. Jamail D (2009) The will to resist: Soldiers who refuse to fight in Iraq and Afghanistan. Chicago, IL: Haymarket Books.
12. Jones A (2013) They were soldiers: How the wounded return from America's wars-the untold story. Chicago, IL: Haymarket Books/Dispatch Books.
13. Kaplan S (2013) Military begins to acknowledge moral injury. New England Public Radio.
14. Litz BT, Stein N, Delaney E, Lebowitz L, Nash WP, et al. (2009) Moral injury and moral repair in war veterans: A preliminary model and intervention strategy. *Clin Psychol Rev* 29: 695-706.
15. MacNair RM (2002) Perpetration-induced traumatic stress in combat veterans. *Peace and Conflict: J Peace Psychol* 8: 63-72.
16. Maguen S, Litz B (2012) Moral injury in veterans of war. *PTSD Research Quarterly* 23: 1-6.
17. Maguen S, Lucenko BA, Reger MA, Gahm GA, Litz BT, et al. (2010) The impact of reported direct and indirect killing on mental health symptoms in Iraq War veterans. *J Trauma Stress* 23: 86-90.
18. Maguen S, Luxton DD, Skopp NA, Gahm GA, Reger MA, et al. (2011) Killing in combat, mental health symptoms, and suicidal ideation in Iraq War Veterans. *J Anxiety Disord* 25: 563-567.
19. Maguen S, Metzler TJ, Litz BT, Seal KH, Knight SJ, et al. (2009) The impact of killing in war on mental health symptoms and related functioning. *J Trauma Stress* 22: 435-443.
20. Maguen S, Vogt DS, King LA, King DW, Litz BT, et al. (2011) The impact of killing on mental health symptoms in Gulf War veterans. *Psychol Trauma: Theory, Research Practice and Policy* 3: 21-26.
21. Marx BP, Foley KM, Feinstein BA, Wolf EJ, Kaloupek DG, et al. (2010) Combat-related guilt mediates the relations between exposure to combat-related abusive violence and psychiatric diagnoses. *Depress Anxiety* 27: 287-293.
22. Nash WP, Marino Carper TL, Mills MA, Au T, Goldsmith A, et al. (2013) Psychometric evaluation of the moral injury events scale. *Mil Med* 178: 646-652.
23. Powers K (2012) The yellow birds. New York: Little, Brown and Company.
24. Russell MC (2008) War-related medically unexplained symptoms, prevalence and treatment: Utilizing EMDR within the armed services. *J EMDR Prac Res* 2: 212-225.
25. Shay J (1994) Achilles in Vietnam: Combat trauma and the undoing of character. New York: Atheneum.
26. Shay J (2002) Odysseus in America: Combat trauma and the trials of homecoming. New York: Scribner.
27. Silver D (2011) Beyond PTSD: Soldiers have injured souls. Truthout.org. Retrieved from [<http://www.truth-out.org/news/item/beyond-ptsd-soldiers-have-injured-souls>].
28. Tick E (2014) The moral trauma of "21st century warriors." Truthout.org. Retrieved from [<http://truth-out.org/opinion/item/27419-the-moral-trauma-of-21st-century-warriors>].
29. Van Buren P (2014) What they died for. Truthout.org (6/29/14). Retrieved from [<http://www.truth-out.org/news/item/24583-what-they-died-for>].
30. Vargas AF, Hanson T, Kraus D, Drescher K, Foy D (2013) Moral injury themes in combat veterans' narrative responses from the national Vietnam Veterans' Readjustment Study. *Traumatology* 19: 243-250.
31. Whitman-Bradley B, Lazare S, Whitman-Bradley C (2011) About face: Military resisters turn against war. Oakland, CA: PM Press.
32. Wood D (2014) The grunts: Damned if they kill, damned if they don't. The Huffington Post. Retrieved from [<http://projects.huffingtonpost.com/moral-injury/the-grunts>].

33. Wood D (2014) The recruits: When right and wrong are hard to tell apart. *The Huffington Post*. Retrieved from [<http://projects.huffingtonpost.com/moral-injury/the-recruits>].
34. Wood D (2014) Healing: Can we treat moral wounds? *The Huffington Post*. Retrieved from [<http://projects.huffingtonpost.com/moral-injury/healing>].
35. Beckham JC, Feldman ME, Kirby AC (1998) Atrocities exposure in Vietnam combat veterans with chronic posttraumatic stress disorder: Relationship to combat exposure, symptom severity, guilt and interpersonal violence. *J Trauma Stress* 11: 777-785.