Author’s Note: I thank my extraordinarily able research assistant, Elise LeCrone, who has survived torture by endnote without experiencing visible signs of PTSD. I would like also to thank my fellow participants at the conference “Untold Stories/Hidden Wounds: War Trauma and its Treatment” (October 12-14, 2012, at the Erikson Institute for Education and Research of the Austen Riggs Center, Stockbridge, MA), as well as our editor, Dr. Christina Biedermann. Parts of this manuscript have been previously published as part of a blog produced by the Hoover Institute. Correspondence concerning this paper should be sent to: jstern@hsph.harvard.edu.
Abstract

The wars on terrorism are exposing our military personnel to unprecedented levels of psychological injury. And yet, nearly a decade in, we remain unprepared to handle the growing numbers of personnel seeking treatment. Several factors seem to be implicated. The first is our defense personnel policy. By choosing an approach that requires longer and more frequent redeployments, we have inadvertently increased the risk to our troops of sustaining psychological wounds, including moral injury. Second, in the wars on terrorism, combatants do not wear identifying marks. They often hide among civilians, increasing the risk of inadvertent civilian casualties, another source of moral injury. Third, and perhaps ironically, when military personnel know that they have hit their target— as is the case with drone pilots and among personnel involved in close combat— they are at greater risk to develop post traumatic stress disorder, even when the target is a known enemy combatant. Meanwhile, military suicides have reached a record high, outnumbering combat deaths in Afghanistan. As we get better at keeping wounded warriors alive, we need to get better, and more serious, about developing tools for healing injuries to the mind and brain. The article proposes that research focus on therapies tailored to mitigate shame and guilt, the hallmarks of moral injury.

*Keywords*: Moral injury, Killing, Noncombatant, Perpetrator, Delayed-onset PTSD
PTSD: Policy Issues

Individuals who volunteer to defend their country know they are putting their lives at risk, but the troops and their families are only just beginning to understand the extent to which they are putting their mental health at risk. Because of advances in medical technology and body armor, soldiers are surviving combat situations that would have killed them in the past, but then returning with traumatic brain injuries and memories of mind-breaking horrors. Many of these soldiers will end up with post-traumatic stress disorder (PTSD). Untreated PTSD and major depression among service members and veterans is extremely costly, both for the affected individuals and for society at large. In the year 2012, military suicides reached a record high, outnumbering combat deaths in Afghanistan (Chappell, 2013), significant here in that PTSD is considered a risk factor for suicide (Panagiotti, Gooding, & Terrier, 2009). As we get better at keeping wounded warriors alive, we need to get better, and more serious, about developing tools for healing injuries to the mind and brain that are often equally as destructive as more visible wounds.

The Psychological Injuries of War

Approximately twenty percent of military personnel returning from Iraq and Afghanistan have been diagnosed with post traumatic stress disorder (PTSD) or major depression (Invisible Wounds of War, 2008). But this may be an underestimate, as the symptoms of psychological injury can take years or decades to manifest. For example, delayed-onset PTSD accounts for some 40 percent of PTSD in Vietnam veterans (Schnurr, Lunney, Sengupta, & Waelde, 2003), and it has been estimated that 78 percent of those diagnosed would never reach full symptom remission (Schnurr et al., 2003).
While some question whether cases of delayed-onset PTSD are actually instances of malingering, it is worth noting that delayed-onset PTSD is also observed after severe injury unrelated to combat. One study of non-combat related severe injuries found that 53 percent of those diagnosed with PTSD experienced delayed onset (O’Donnell et al., 2013).

According to data collected by the Army, less than half of those estimated to be symptomatic are seeking treatment, in large measure because of stigma (Tyson, 2006). But it is not only stigma that prevents military personnel from seeking and receiving medical care and compensation. The backlog in disability cases before the Veteran’s Affairs Administration (VA)—which exceeded 900,000 in January 2013—is another significant factor (“VA’s disability claims backlog tops 900,000,” 2013). One of the reasons the VA is so overwhelmed is that many Vietnam veterans are just now seeking treatment for delayed-onset PTSD associated with that war, decades after its end.

Failure to recognize PTSD and provide treatment can be dangerous, as it is a risk factor for domestic violence (Taft et al, 2005) and suicide (Panagiotti, Gooding, & Terrier, 2009). In 2012, 349 military personnel—active duty and reservists—committed suicide (Chappell, 2013). According to the VA, the risk among veterans is even higher: in 2009 and 2010, war veterans committed suicide at an average rate of 22 suicides per day, totaling 8,030 suicides per year (Kemp & Bossarte, 2012), and veterans account for about 20 percent of the 30,000 American suicides annually (Cesur, Sabia & Tekin, 2011).

There is nothing new about veterans suffering psychologically and spiritually when they return from war. What we now call “post traumatic stress disorder” has received different labels at different times, most of them unflattering (“DSM-5
Diagnostic Criteria for PTSD,” 2013). These include “war neurosis,” “malingering,” “battle fatigue,” and “shell shock.” Three thousand years ago, an Egyptian veteran named Hori wrote about the feelings he experienced before returning to the battlefield: “Shuddering seizes you, the hair on your head stands on end, your soul lies in your hand.” Herodotus described an Athenian warrior who permanently lost his sight when the soldier standing next to him was killed, although the blinded soldier “was wounded in no part of his body.” He also told of Aristodemus, who was so shaken by his experience in war that he was nicknamed “the Trembler.” Like a growing number of veterans of the wars in Iraq and Afghanistan, Aristodemus would eventually commit suicide (Bentley, 2005, p.1).

However, when compared with previous wars, deployments in the war on terrorism have been more frequent and breaks between tours shorter. Nearly 13,000 soldiers have spent three to four cumulative years in Iraq or Afghanistan. Military historians call the frequency and cumulative length of the troops’ tours of duty historically unprecedented (Zoroya, 2010) and cite redeployment as a major risk factor for PTSD (Kline et al., 2010).

**Recognizing Shame**

Ironically, when military personnel are trained for combat, they are required to develop qualities of toughness and courage that may well evolve into symptoms of PTSD when they return to civilian life. Warriors must be able to dissociate, to cut off emotion. A soldier who collapses in tears because one of his comrades was killed or because he saw the remains of a shattered baby on the sidewalk would put his own life and the lives of others at risk. Military personnel must also be hypervigilant, to rapidly scan their
environment rapidly and respond immediately to threats. These qualities—the capacity to block emotion and to sustain a heightened state of vigilance—keep military personnel alive and allow them to protect their comrades.

I know about these altered states of mind from personal experience. As I’ve written about in my memoir, *Denial*, I was raped at gunpoint at age 15, and years later, was diagnosed with PTSD. While there are many differences between the sequelae of rape at gunpoint and the experience of participating in war, some of the symptoms—the experience of altered mental states, for example—are remarkably similar. I know from my own experience that numbness and hypervigilance keep you alive when you’re literally under the gun. I have also learned that numbing can be useful in high-stress work, especially work that involves physical danger. It enabled me to travel to Pakistan to interview terrorists, for example—something I imagine I would not have been able to do if I weren’t suffering from symptoms of PTSD. Indeed, for some persons with PTSD, danger can become a kind of addictive drug (J. Stern, personal communication).

The problem is that the same hypervigilance and emotional detachment that keep a soldier alive when he is at war or that allowed me to work in highly dangerous situations can become maladaptive out of context. Hypervigilance and detachment are criteria for a diagnosis of PTSD as defined in DSM-5 (“DSM-5 Diagnostic Criteria for PTSD,” 2013). The soldier may imagine that bags on the side of the road are body bags; he may throw himself on the floor when he hears a car backfiring (J. Stern, personal communication, 2004). In the moment that a person’s life is threatened, vigilance and a separation of thought and feeling may be necessary to sustain life, but if this separation becomes a habit, it seems to me, we are only half alive.
When I was first diagnosed with PTSD, I rejected the diagnosis, just as many veterans do. I assumed that only military personnel were susceptible to the injury. Perhaps surprisingly, epidemiological studies show the risk of developing PTSD is significantly higher after rape than after exposure to combat. The likelihood that a man who is raped will be diagnosed with PTSD is 46.6 percent, while a man who has been exposed to combat has only a 38.8 percent likelihood of developing PTSD (Kessler, 1999). Additionally, the lifetime prevalence of PTSD among those for whom rape was either their only or their “most upsetting” trauma is 65 percent (Kessler, 1999). Among victims of torture, the risk is even greater: Moisander and Edston’s (2003) study found the prevalence of PTSD among torture victims was at least 69 percent and reached as high as 92 percent, depending on country of origin.

Among military personnel, combat exposure and life threat are not the most significant risk factors for PTSD. It turns out that killing is more relevant. Service members who have killed, or who believe they have killed, are more susceptible to PTSD than those who were exposed to combat but did not kill (MacNair, 2002). And, those who kill non-combatants, or who commit atrocities, are even more vulnerable to developing PTSD (MacNair, 2001; Macnair 2002; Maguen et al., 2013; Nickerson, Aderka, Bryant, Litz, & Hoffman, 2011). Unethical behavior, including killing of noncombatants, has been found to increase with the length of deployment (Office of the Surgeon, Multi-National Corps-Iraq, Office of the Command Surgeon, & Office of The Surgeon General, United States Army Medical Command, 2008). Self-reported killing, whether in compliance with the laws of war or not, has also been identified as a risk

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1 Data for women in combat was not given in the Kessler (1999) study.
factor for chronic PTSD among Vietnam veterans (Litz et al., 2009). In a study of the psychology of killing, military psychologist David Grossman found that without desensitization training, most soldiers will not fire at enemies at close range. Nearly 80 percent of riflemen refused to fire at an exposed enemy in World War II, even to save their lives or the lives of their compatriots; Grossman found a similar tendency in earlier wars. After extensive operant conditioning, however, the non-firing rate in Vietnam went down. Grossman argues that the rate of PTSD increased as a direct result of this operant conditioning: the more soldiers killed, the more they were susceptible to developing PTSD (Grossman, 1995).

Why should rape and torture be more associated with PTSD than combat or “ordinary” assault, including life threat? Why would military personnel who kill enemy combatants be at greater risk for PTSD than those who experienced threats to their lives, but did not kill? And why would the killing of non-combatants or the perpetration of atrocities be even more risky than killing enemy soldiers? Most tellingly, pilots of unmanned aerial vehicles, or “drones,” are also susceptible to PTSD, even though they are thousands of miles from the battlefield. The rate of mental-health problems among drone pilots is the same as the rate among pilots deployed to Iraq and Afghanistan (Dao, 2013).

Perhaps what distinguishes these more risky events—rape and killing— is that perpetrators (and victims) are also susceptible to shame and guilt, emotions which may be important in explaining these events’ long-lasting impacts. Judith Herman (2007), who has studied PTSD among victims of violence for many years, has referred to PTSD as a shame disorder.
A number of studies have assessed the impact of *moral injury*—the psychological, spiritual, and emotional wounds that arise from the ethical challenges faced by military personnel, especially in guerilla warfare in urban environments where it is harder to distinguish enemy combatants from civilians. This term was first applied to military personnel by Jonathan Shay (as cited in “Moral Injury: The Psychological Wounds of War,” 2012). Litz et al. (2009), who study the impact and treatment of moral injury on returning war veterans, define potentially morally injurious experiences as those involving “perpetrating, failing to prevent, bearing witness to, or learning about acts that transgress deeply held moral beliefs and expectations” (p. 700). They have found that moral injury, as they define it, does indeed increase the risk of developing PTSD.

Moreover, Litz and colleagues are hypothesizing that treatments designed to extinguish fear, such as prolonged exposure therapy, and to help patients think differently about the trauma and develop coping skills, such as established protocols for cognitive behavior therapy, may not be fully suited to healing these moral or spiritual wounds. They are now proposing a new treatment, Adaptive Disclosure, that essentially has military personnel imagining themselves speaking with a benevolent authority to address issues of culpability, guilt, and shame (Drescher et al., 2011; Litz et al., 2009; Steenkamp & Litz, 2013). From my perspective and experience, regardless of modality or intervention, the therapist’s most crucial role is to help the patient recover faith in humanity and in herself, even after witnessing evil in herself or others.

**Conclusion: A Call for Policy Change**

The wars on terrorism are exposing our military personnel to unprecedented levels of psychological injury. PTSD is now the most widespread injury suffered by returning
troops, and yet, nearly a decade in, we remain unprepared to handle the growing numbers of personnel seeking treatment. Several factors seem to be increasing the risk of developing PTSD and the shame and guilt often accompanying it. The first is our defense personnel policy. By choosing an approach that requires longer and more frequent redeployments, we have inadvertently increased the risk to our troops of sustaining psychological wounds. Second, in the wars on terrorism, combatants do not wear identifying marks. They often hide among civilians, increasing the risk of inadvertent civilian casualties, a source of moral injury. Third, and perhaps most ironically, are advances in military technology. When military personnel know that they have hit their target— as is the case with drone pilots and among personnel involved in close combat— they are at greater risk for developing PTSD, even when the target is a known enemy combatant.

A study by the National Bureau of Economic Research found lower-bound health care costs of $1.5 to $2.7 billion for combat-induced PTSD for veterans returning from Iraq and Afghanistan (Cesur, Sabia, & Tekin, 2011). Lost productivity is also significant in that, according to RAND, it accounts for more than half the costs of PTSD and major depression (Invisible Wounds of War, 2008). Even with its limitations as conceptualized, evidence-based treatment would pay for itself within two years because it would reduce medical and mortality costs and veterans could get back to work (Invisible Wounds of War, 2008). As moral injury is increasingly recognized, even more effective treatments designed to address shame and guilt might be devised, researched, and made accessible (Sheehan-Miles, 2013). The National Defense Authorization Act for Fiscal Year 2013 (2012) included provisions to improve veterans’ access to mental health care, including
making it possible for non-VA mental-health providers to volunteer their time. This expansion of providers could in and of itself facilitate more novel treatments, such as mind-body medicine, or those exploring the restoration of hope.\(^2\) The most painful part of moral injury, at least for me, was the temporary loss of faith or hope.

Finally, and perhaps most importantly, more leadership is required to remove the stigma of psychological wounds. The President might begin by bestowing purple hearts on those veterans whose wounds are not visible, recognizing the powerful and enduring impact of traumatic war experience.

\(^2\) For more on the use of faith in psychotherapy, see Kenneth Reich, 2013.
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doi:10.1037/0022-006X.73.1.151

