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Moral Injury: A Mechanism for War-Related Psychological Trauma in Military Family Members

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Abstract Recent research has provided compelling evidence of mental health problems in military spouses and children, including post-traumatic stress disorder (PTSD), related to the war-zone deployments, combat exposures, and post-deployment mental health symptoms experienced by military service members in the family. One obstacle to further research and federal programs targeting the psychological health of military family members has been the lack of a clear, compelling, and testable model to explain how war-zone events can result in psychological trauma in military spouses and children. In this article, we propose a possible mechanism for deployment-related psychological trauma in military spouses and children based on the concept of moral injury, a model that has been developed to better understand how service members and veterans may develop PTSD and other serious mental and behavioral problems in the wake of war-zone events that inflict damage to moral belief systems rather by threatening personal life and safety. After describing means of adapting the moral injury model to family systems, we discuss the clinical implications of moral injury, and describe a model for its psychological treatment.

Keywords Post-traumatic stress disorder · Military families · Deployment · Belief systems · Theoretical models

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Introduction

The last decade has witnessed an explosion of research and new federal programs addressing the psychological health needs of military service members returning from the wars in Iraq and Afghanistan. Along with traumatic brain injury, post-traumatic stress disorder (PTSD) has been labeled one of the signature wounds of these wars (Tanielian and Jaycox 2008), and both the Department of Defense and Department of Veterans Affairs have made significant strides in preventing, identifying, and treating PTSD in service members and veterans (Institute of Medicine 2012). In contrast, the psychological health needs of military spouses and children have garnered much less attention, either in research or targeted programs. Both the congressionally mandated Defense Health Board Task Force on Mental Health (2007) and the President's Commission on Care for America's Returning Wounded Warriors (2007) recommended increased federal spending on training and support for military and veteran families, but in both cases the stated goal was to better enable civilian spouses to support the health of their active-duty military family members, not their own or that of their children.

Recent research has provided compelling evidence of mental health problems in military spouses and children, including PTSD, related to the war-zone deployments, combat exposures, and post-deployment mental health symptoms experienced by military spouses and parents (Davis 2010; de Burgh et al. 2011; Dirkswager et al. 2005; Esposito-Smythers et al. 2011; Gorman et al. 2010; Klaric et al. 2012; Lester et al. 2010; MacDermid Wadsworth et al. 2013; Mansfield et al. 2010, 2011; O'Toole et al. 2010; Paris et al. 2010; Pemberton et al. 2012; Reed et al. 2011; Verdeli et al. 2011). One obstacle to advancing military family mental health science and programs, identified by a few recent investigators, is the paucity of compelling, testable models to explain the mechanisms by which the deployment of military service members to war zones may result in enduring psychological distress or dysfunction in their spouses and children left behind. Especially with respect to the signature psychological wound of war, PTSD, it remains unclear how civilian family members could possibly be traumatized by war-zone events to which they seem to have no direct, personal exposure.

In this article, we propose a possible mechanism for deployment-related psychological trauma in military spouses and children based on the concept of moral injury, a model that has been developed to better understand how service members and veterans may develop PTSD and other serious mental and behavioral problems in the wake of war-zone events that inflict damage to moral belief systems rather threaten personal life and safety (Litz et al. 2009; Nash et al. 2010). After explaining the concept of moral injury and reviewing its support in the literature and application to military service members, we describe a potential adaptation of that model to military spouses and children, taking family systems and developmental stages into account. We then offer examples of potentially morally injurious events in the lives of military spouses and children, and discuss implications for clinical care and future research.

Previous Models to Explain Mental Health Problems in Military Family Members

In their study of 205 wives of Israeli combat veterans, Solomon et al. (1992) offered three possible theories to explain their observed correlations between service members' combat experiences or subsequent PTSD symptoms and their spouses' observed somatic and psychiatric symptoms: (1) military spouses may be self-selected for pre-existing psychopathology through a process of assortative mating; (2) the PTSD symptoms of traumatized war veterans may, themselves, serve as chronic stressors for their spouses; and (3) wives may experience "secondary traumatization" through empathic identification with their combat-exposed veteran husbands. The authors favored the theory of secondary traumatization since the psychiatric symptoms of wives in their study correlated not only with husbands' current PTSD symptom severity, but also with the apparent severity of their past war-zone stress reactions independent of current PTSD. Maloney (1988) had previously suggested that wives of combat veterans with PTSD may empathically internalize the stressor imagery of their traumatized partners, causing them to be vicariously traumatized by events they never personally witnessed. Rosenheck and Nathan (1985) proposed that children of combat veterans with PTSD may also be traumatized secondarily, both through disruption of family functioning caused by parental PTSD symptoms and more directly through re-enactments of war-zone traumas in the home.

In their review of research on mental health problems in spouses and children of primarily Vietnam-era veterans with combat-related PTSD, Galovski and Lyons (2004) concluded that current PTSD symptoms in service members or veterans—such as numbing, emotional withdrawal, and anger or violence—predicted mental health problems in spouses and children more strongly than did service members' combat experiences, and that family environments and family functioning moderated the relationship between veterans' PTSD symptom burden and mental health problems in their spouses and children. Recent studies largely support the hypothesis that military or veteran family members' mental health and behavioral problems are the result of the cumulative stress burden placed on them by service members' or veterans' PTSD symptoms (Caska and Renshaw 2011; Renshaw et al. 2011), and that family processes are crucial moderators of this effect (MacDermid Wadsworth et al. 2013; Nelson Goff and Smith 2005; Sheppard et al. 2010).

PTSD Rates in Military and Veteran Family Members

Current conceptions of secondary traumatization or compassion fatigue (Figley 1998) as the cumulative stress burden of living with and caring for a family member with PTSD seem to leave little room for military and veteran spouses or children to develop PTSD, themselves, as a result of war-zone or other deployment-related events. The literature is not very illuminating on this point, since few studies have specifically examined rates of PTSD in military and veteran spouses and children, or predictors of family members' PTSD. In one recent exception, Renshaw et al. (2011) found that 170 of 190 wives (89.4 %) of male service members with probable PTSD experienced at least one PTSD symptom, themselves, and 23.7 % endorsed

enough criteria at the moderate level of severity on the PTSD checklist (PCL) to likely also meet criteria for PTSD. Of the wives who endorsed at least one PTSD symptom, 24.7 % indicated their husbands' military experiences contributed to their own PTSD symptoms, and 12.9 % reported that their sole trauma was their husbands' military experience. In another study, Klaric et al. (2012) found that 40.3 % of 154 wives of PTSD-diagnosed war veterans met criteria for probable PTSD using the Harvard Trauma Questionnaire, while only 6.5 % of 77 wives of war veterans who did not suffer from PTSD met similar criteria. Their methodology did not assess likely sources of PTSD in wives of war veterans. We are aware of no studies of PTSD rates in children of combat-exposed service members or veterans.

Is Fear Conditioning the Only Possible Mechanism of Trauma?

Post-traumatic stress disorder is unique among mental disorder diagnoses in its explicit linking of current symptoms with one or more presumably etiologic stressor events. Despite more than three decades of research and multiple revisions of the diagnostic criteria for PTSD, it remains unclear what stressor types are capable of inducing post-traumatic stress symptoms, and how directly and immediately they must be experienced (Friedman et al. 2011; Weathers and Keane 2007). In keeping with prevailing conceptions of PTSD as a disorder of Pavlovian fear conditioning or neural fear circuitry (Bryant et al. 2011; Friedman et al. 2011; Johnson et al. 2012; Mahan and Ressler 2012), the diagnostic criteria for PTSD in DSM-IV-TR (APA 2000) required exposure to "an event or events that involve actual or threatened death or serious injury, or a threat to the physical integrity of others" (the A1 criterion), to which the person must respond with "intense fear, hopelessness, or horror" (the A2 criterion). DSM-5 (APA 2013) eliminated the peritraumatic emotional response (A2) criterion and redefined the A1 stressor criterion (now simply the A Criterion) more broadly, adding the possibility of merely learning that a traumatic event occurred to a close family member or close friend, but still required the event to involve direct or indirect exposure to actual or threatened death, serious injury, or sexual violation—all events that may be expected to evoke a fear response. Applying the fear-conditioning model of PTSD and either DSM-IV-TR or proposed DSM-V criteria to military spouses and children seems to require that they experience generalized fear responses to war-zone events even though these events are experienced only in their imaginations and in retrospect, through stories they hear from news media, friends, family, and sparse communications with their deployed spouse or parent, and that these fear responses be of sufficient magnitude to trigger enduring cardinal symptoms of PTSD. Whether this is possible is an empirical question that has yet to be answered. We believe that a larger question is whether fear conditioning is the only mechanism by which events can be traumatic—and more to the point for this article—whether war-zone events can precipitate PTSD symptoms in military family members through some mechanism other than fear.

Event Types that Correlate with Subsequent PTSD

Potentially fear-evoking stressor experiences that threaten lives and safety are certainly highly correlated with PTSD in both veterans and non-military civilians (Gray et al. 2004; Kilpatrick et al. 2009; Marmar et al. 2006), and exposure to life-endangering combat events is a robust predictor of PTSD in military personnel deployed to war zones (Hassija et al. 2012; Hoge et al. 2004; Smith et al. 2008). Yet, a number of other studies have found significant PTSD symptoms in persons whose major stressors did not involve a close brush with death or serious injury (Weathers and Keane 2007). The so-called non-A1 stressors that have been found to correlate with subsequent PTSD in civilian populations include the non-violent death of loved ones, chronic illnesses, sexual harassment, marital divorce or separation, arrest or incarceration, relationship infidelity, bullying, and other distressing social events (Breslau and Kessler 2001; Carelton et al. 2011; Gold et al. 2005; Kilpatrick et al. 1998; Long et al. 2008; Prigerson et al. 2009; Shrira et al. 2012). Studies in military populations have found PTSD to correlate with a number of stressor types other than threats to personal safety, including participation in or witnessing atrocities, the loss of close personal friends, malevolent environments, and the act of killing, itself (Currier and Holand 2012; King et al. 1995; Maguen et al. 2010). Furthermore, military personnel who develop PTSD following exposure to combat-related traumatic events may be as likely to experience peritraumatic anger as fear, helplessness, or horror (Adler et al. 2008).

Moral Injury: Psychological Trauma Through Violation of Deeply Held Moral Beliefs

The idea that psychological injury can result from transgressions, during war, of deeply held moral and ethical beliefs and expectations is far from new. Ancient Greek tragedies, often written and performed by combat veterans, spoke of *miasma*—a moral pollution or defilement arising from participation in war, whose cure was believed to be *katharsis*, a ritual social cleansing (Meagher 2006). In his

exploration of the parallels between the experiences of Homer's Achilles and modern Vietnam veterans, Shay (1994) focused on betrayals of "what's right" as central to war-zone trauma. Shay (2002, 2011) later defined moral injury more specifically as the psychological consequence of a betrayal of what's right by someone who holds legitimate authority in a high-stakes situation. Shay's conception of morally injured veterans as victims of others' wrongdoing mirrors views found elsewhere in the mental health and ethics literature regarding the central role in trauma of breaches in social moral contracts and damage to belief systems (Bernstein 2005; Herman 1992; Janoff-Bulman 1992; Walker 2006). The literature on the phenomenology of stress in combat also holds many descriptions of enduring distress and alterations in functioning following events in which combatants perceive *themselves* to have violated, through action or inaction, their own moral codes. Examples include enduring guilt felt by Civil War soldiers over atrocities they committed on and off the battlefield (Dean 1997), and by World War II aircrews who bombed civilian targets (Grinker and Spegel 1945). Early descriptions of the Post-Vietnam Syndrome in veterans included distress over their own war-zone brutality and killing, as well as over perceived betrayals by leaders and the nation that sent them to war (Friedman 1981). Focusing arguably more on perpetration than victimization in their recent conceptual review, Litz et al. (2009) defined *moral injury* in war veterans as the enduring consequences of perpetrating, failing to prevent, bearing witness to, or learning about acts that transgress deeply held moral beliefs and expectations. Central to the concept of moral injury is an event that is not only inconsistent with previous moral expectations, but which has the power to negate them. Moral injury is not merely a state of cognitive dissonance, but a state of loss of trust in previously deeply held beliefs about one's own or others' ability to keep our shared moral covenant.

In their recent qualitative study of the phenomenology of moral injury, Drescher et al. (2011) interviewed 23 Department of Defense and Veterans Affairs health care and religious ministry professionals who universally agreed that the concept of moral injury was needed to inform their work with combat veterans, and that current conceptions of PTSD did not adequately encompass the morally injurious aspects of combat. In 2007, Marine Corps leaders convened a working group of warfighters and their mental health and religious ministry advisors to develop consensus policies for combat stress control (Nash 2011). One of the products of this working group was the enumeration of four possible sources of stress injuries in service and family members, including threats to life and safety, losses, situations that provoke "inner conflict," and cumulative wear and tear. In the current Navy and Marine Corps doctrinal publication, *Combat and Operational Stress Control*, inner conflict is defined as "stress arising due to moral damage from carrying out or bearing witness to acts or failures to act that violate deeply held belief systems" (Marine Corps Combat Development Command 2010, pp. 1–11). Although defined in words similar to moral injury, the term "inner conflict" is sometimes preferred for training of service members in the Marine Corps because the potential synonym, moral injury, is perceived by some to be pejorative (McCloskey 2011). Whether the result is termed moral injury or inner conflict, stressor events that have the potential to violate deeply held moral beliefs and expectations were recently identified by a federal interagency working group as important targets for future research and surveillance in military and veteran populations, including their families (Nash et al. 2010).

Phenomenology of Moral Injury in Service Members and Veterans

Although the concept of moral injury is literally as old as sin, it has only very recently drawn the interest of mental health researchers, clinicians, and developers of military prevention programs.

Potentially Morally Injurious Events in Warzones

In their qualitative study, Drescher et al. (2011) asked experienced DoD and VA mental health and religious ministry personnel "What types of war-zone events might contribute to moral injury?" Respondents identified the following broad categories of potentially morally injurious events in war zones: betrayal, disproportionate violence, incidents involving civilians, and within-ranks violence. Betrayals, according to respondents, can be perpetrated by leaders, peers, trusted civilians (e.g., significant others), or oneself by failing to live up to one's own moral standards. Examples of disproportionate violence included mistreatment of enemy combatants, acts of revenge, and wanton destruction of civilian property. Examples of within-ranks violence included military sexual trauma, friendly fire, and fragging.

In a first step toward a more quantitative approach, Nash et al. (2013) developed and evaluated the psychometric properties of the Moral Injury Events Scale (MIES), a 9-item Likert-scale self-report questionnaire for potentially morally injurious events. Scale items were constructed by expert consensus and include questions about seeing things that are morally wrong, acting in ways that violate moral values, or feeling betrayed by others who were once trusted. The MIES was found by exploratory and confirmatory factor analyses to be comprised of two factors:

transgressions of moral codes by self or others, and betrayals of trust. As will be discussed below, scores on the MIES in 533 infantry Marines who recently returned from combat deployments to Iraq or Afghanistan correlated with PTSD symptoms and other markers of psychological distress and dysfunction, but they did *not* correlate significantly with scores on self-report measures of exposure to life-threatening combat events, confirming that potentially morally injurious events can be discriminated from events that threaten life and safety.

Possible Signs and Symptoms of Moral Injury

Drescher et al. (2011) also asked experienced military and VA mental health and religious ministry professionals what they thought the characteristic signs and symptoms of moral injury might be. The following themes emerged: social and behavioral problems, trust issues, spiritual and existential issues, psychological problems, and self-deprecation. Reported social and behavioral problems possibly associated with moral injury ranged from social withdrawal and alienation to aggression, misconduct, and sociopathy. Possible spiritual and existential symptoms included loss of religious faith, loss of trust in morality, loss of meaning, and fatalism. Possible psychological symptoms included depression, anxiety, and anger, while the characteristic self-deprecating emotions and cognitions thought to be associated with moral injury included shame, guilt, self-loathing, and feeling damaged.

After reviewing the literature related to transgressions of moral beliefs, Litz et al. (2009) developed a model of moral injury that assigned a central role to shame, guilt, and self-destructive impulses, and their perpetuation because of an inability to forgive oneself for failing to live up to one's own moral expectations. Similarly, intense anger and impulses to seek revenge are central in moral injuries resulting from others' acts or failures to act that seem to violate communally shared moral values, and these emotions and cognitions are maintained through an inability to forgive perceived perpetrators. In this model, the intensity of the central emotions of shame, guilt, and anger, and the potentially destructive impulses and cognitions that accompany them triggers avoidance behaviors similar to those characteristic of PTSD caused by fear conditioning. The close association of distressing emotions and cognitions to the details of morally injurious events is apparent in the unwanted re-experiencing of these events in nightmares, flashbacks, images, and other intrusive recollections, similar to those characteristic of fear-based PTSD.

This model of moral injury in service members and veterans has not yet been empirically tested. In support of the model, Nash et al. (2013) found that higher levels of self-reported exposure to potentially morally injurious events, using the MIES, among recently deployed Marine ground combatants correlated positively and significantly with depression, anxiety, and PTSD symptom burden, and negatively with perceived interpersonal support.

Incidence of Moral Injury in Treatment-Seeking Service Members and Veterans

Little research has yet been done to assess the epidemiology of moral injury in combat-exposed service members of veterans. Two recent cognitive-behavioral therapy outcome studies attempted to categorize the index events of treatment-seeking service members and veterans as primarily related to life threat, loss, or moral injury, based on expert consensus. In a pilot study of Adaptive Disclosure, a novel cognitive-behavioral therapy for combat-related PTSD that includes specific techniques for loss and moral injury, Gray et al. (2011) found that 19 of 44 participants (43 %) described index traumatic events that met the Litz et al. (2009) definition of moral injury. In a different multisite treatment outcome study, Stein et al. (2012) found that 12 % of the index traumas of 122 enrolled service members met the definition for self-perpetrated moral injury events, while 22 % described index traumas in which someone else perpetrated a morally injurious event.

Adapting the Moral Injury Model to Military Families: A Developmental and Systems Perspective

Moral Injury as a Developmentally Inappropriate Challenge to Moral Cognition

Moral beliefs and values, like other cognitive schemas, develop throughout life through an iterative process of stepwise assimilation and accommodation—through small and palatable alterations of deeply held moral beliefs to incorporate new information obtained from credible sources, and through altering perspectives on events and interactions with others so that they seem to better conform to existing moral expectations. At every stage of development, it is likely that more information is always available than can possibly be assimilated or accommodated without risking fracture to fundamental moral schemas, so denial may always also be necessary to protect moral schemas from confronting, too destructively or too early in development, cold realities such as the certainty of death or everyone's potential for violence.

Moral cognitive development is not a process performed by a person of any age in isolation. In the ideal, it occurs in a holding environment maintained by major social and spiritual support systems, including family, immediate community, and religion and spirituality, as depicted in

Fig. 1. Moral beliefs and values shared across social boundaries, as a moral covenant, not only make social interactions predictable and meaningful, they lay a foundation for enduring relationships of trust and safety.

From this perspective, moral injury can be conceptualized as the consequence of a challenge to moral belief systems that exceeds the information-processing capacity of the person at their current stage of development, given available social and spiritual resources. The relative toxicity of potentially morally injurious events may correlate not only with how violently they appear to contradict existing moral schemas, but also the extent to which they compromise the ability of existing social and spiritual supports to maintain a secure holding environment. In this model, one would expect moral injuries resulting from perceived betrayals by those most trusted, such as family members, to be among the most egregious, as depicted in Fig. 2.

Potential Agents of Moral Injury in Military Spouses and Children

Even in the absence of research regarding moral injury and potentially morally injurious events in military or veteran family members, the model presented here suggests a number of potential agents and scenarios of moral injury in the lives of military spouses and children. Focusing on each person's developing moral schemas as the target for moral injury, Fig. 3 depicts potential agents of moral injury, as both direct (primary) and indirect (secondary) effects of war. Military spouses and children can experience potentially morally injurious wartime events *directly* through news media, stories shared by family members and friends, and other interactions in the community. In this model, information about war communicated to a military family member by a military parent or spouse is considered a direct impact of war to the extent that information would conflict with moral beliefs no matter how it was received. Visual images of death and carnage, especially of women and children, and knowledge about brutal acts are examples of direct impacts of war on moral schemas.

Indirect impacts of war on developing moral schemas, in contrast, constitute *betrayals* of trust, through actions or failures to act, perceived to be committed by members of one's moral covenant, including family members, teachers, community leaders, a deity, or oneself. For example, a military parent may inflict indirect moral injury on a child through emotional withdrawal, violence, or self-destructive

Fig. 1 A systems model of moral development across the lifespan

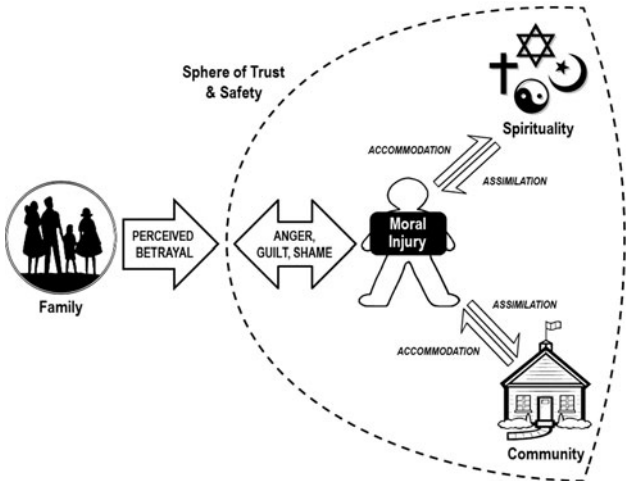

Fig. 2 Moral injury resulting from a perceived betrayal of trust by a family member

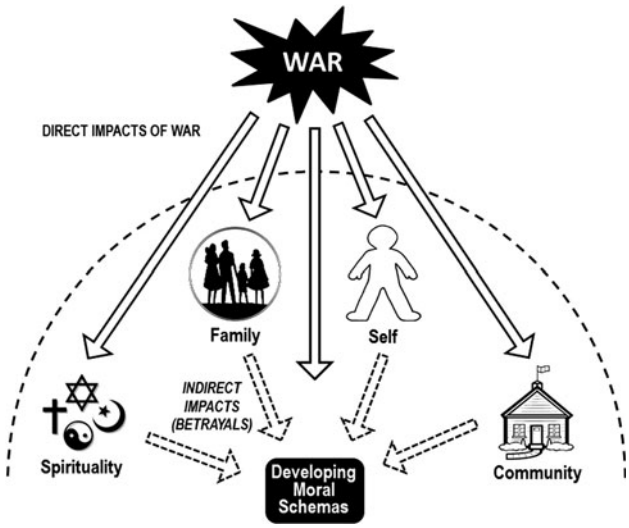

Fig. 3 Direct and indirect morally injurious impacts of war

behaviors. Perhaps the most morally damaging and quintessential betrayals of trust by a family member are suicide or homicide. Community leaders, most especially those in the military, may be agents of indirect wartime moral injury through their perceived failures to honor their commitments to service members, veterans, and their families. Deities may be perceived to inflict moral injury to the extent they permit evil to exist in the world. Most powerful of all wartime betrayals may be those which persons accuse themselves of committing, whether rightly or wrongly. Examples of common self-inflicted moral injuries in military spouses include marital infidelity and neglect or abuse of their children. In the murky moral universe of children, self-inflicted moral injuries may range from real betrayals of promises, such as by seriously acting out at home or in school, to imagined betrayals such as blaming themselves for changes in their parents' behavior, divorce, or even the death or injury of a family member. To the extent members of families are interdependent, moral injuries resulting from betrayals of trust within the family can be transmitted and retransmitted between family members like waves generated by the fall of a rock in a small pond.

Implications for Clinical Care

No research has yet shed much light on the natural history of moral injuries, including the normal trajectories of their symptoms over time or the degree to which they respond to existing biological, psychological, or social treatments. Since moral injury must surely be a component of many mental health problems in service members and their spouses and children, and since many of these mental health problems respond well to existing treatments, it may be concluded that existing treatments are helpful for moral injury to some extent, even if this was never intended. On the other hand, to the extent moral injury represents a unique mechanism of psychological injury and a unique constellation of symptoms, optimally effective treatments for moral injury must also have unique features.

Forgiveness is Central to Recovering from Moral Injury

One way to conceptualize the goals for the treatment of moral injury, and to compare them to those for the overlapping problems of fear-based trauma and loss, is to identify what specific healing process must be facilitated by helpful interventions in each of these three types of psychological injuries. Viewed through this lens, the central process of recovering from a fear-based trauma involving life threat may be the restoration of a sense of safety in a dangerous world, and the central process of healing from the loss of a cherished person or object may be relearning and reconnecting with the world in the absence of that which was lost. In moral injury, the central process of healing is *forgiveness*, either of the self or of others, depending on who is assigned blame for the morally injurious event (Litz et al. 2009). The differences between these three putative recovery processes may have significance for planning and delivering clinical care. For example, pure exposure treatment of a fear-based life-threat trauma may succeed because, according to learning theory, it pairs the experience of safety in the therapist's office with repeated and detailed recall of the trauma stimulus. In contrast, the therapy situation does not automatically provide sufficient corrective experience in terms of forgiveness for the guilt, shame, and anger of moral injury to extinguish through repeated reliving.

Forgiving requires strenuous emotional, cognitive, social, and spiritual work, including sustaining compassion, attaining wisdom, and forgoing talionic justice such as might be found in acts of revenge. There are likely many pathways that lead to forgiveness, and little is known about what interventions best promote forgiveness. Respondents in Drescher et al.'s study proposed the following interventions as possibly helpful for moral injury: spiritual faith, religious rituals, life transformations, making amends, community service, disclosure, and cognitive restructuring.

A Model for the Treatment of Moral Injury in Service Members and Veterans

A novel cognitive-behavioral therapy for combat-related PTSD entitled Adaptive Disclosure, currently undergoing a randomized controlled clinical trial, includes techniques designed specifically to address moral injury (Gray et al. 2011; Litz et al. 2009; Steenkamp et al. 2011) as well as loss and fear-mediated trauma. Based on the pilot of Adaptive Disclosure at Camp Pendleton in California, and our clinical experience in various settings, we offer the following procedure for the treatment of moral injury in service members, veterans, and their spouses and older children.

Establish Trust

Trust and rapport are essential for the success of any treatment, but they are perhaps especially crucial for the treatment of moral injury because breaches of trust may be one of the cardinal features of moral injury. Furthermore, higher levels of trust may be required in the therapeutic setting to overcome barriers to disclosure posed by shame, guilt, and anger.

Detailed Disclosure of Morally Injurious Events

As with other types of trauma, cognitive, emotional, and behavioral avoidance likely play a major role in sustaining moral injury symptoms, and re-experiencing moral injury memories in their entirety may be a necessary first step toward constructively processing them. The intense shame, guilt, and anger attached to moral injury memories may serve as formidable obstacles to full disclosure. It is exceedingly rare, in our experience, for persons suffering moral injuries to be fully cognizant of their worst, most distressing experiences during their initial therapeutic encounter. Patience, persistence, and a truly neutral stance are required.

Imaginal Dialog with a Compassionate Moral Authority

After unearthing the details of a morally injurious event and helping the service member or veteran to articulate the meaning and implication of the experience, Adaptive Disclosure employs a modified *empty-chair* exercise to target guilt, shame, and anger to promote a corrective processing of morally injurious memories. We ask the service member or veteran to have a real-time conversation with an imagined compassionate, generous, supportive, and forgiving moral authority figure (e.g., parent, coach, leader, teacher, etc.). During this conversation, the patient plays both the roles of confessor and mentor, answering his or her own statements of blame and condemnation with rational contextualizing and compassion in order to promote forgiveness and acceptance without avoiding or minimizing.

Apportioning Blame

Morally injured persons may tend to assign themselves or others they view as culpable 100 % of the blame for events that violated deeply held moral beliefs. However much such exaggerated blame may be unfair and destructive, we believe it is equally unhelpful to suggest to morally injured persons that no one is at fault. In real life, each person's culpability is usually somewhere between none and all, and many people share responsibility for any outcome. To encourage a rational and fair apportioning of blame, we suggest making a detailed list of all persons and entities that might possibly bear partial responsibility for an event, and assigning each person or entity their share of the blame, from 0 to 100 %, making sure that the total of all assigned shares of blame adds up to no more than 100 %. As a simplified example, the suicide of a service member may be deemed to be 80 % the fault of the person who committed suicide, with the remaining 20 % shared by military leaders, family members, medical providers, and the nation as a whole. The absence of malicious intention does not protect persons or entities from their share of the blame. If that were credibly true, no one would ever apologize for a mistake that hurt someone else.

Make or Seek Amends

Morally injurious events cannot be undone—the bell cannot be unrung—but forgiveness may be made more possible if all attempts are made to make or seek symbolic reparations from the major persons and entities assigned a share of blame in the previous step. Making amends for one's own share of blame, however small, may be necessary for self-forgiveness. Devising ways to make or seek amends requires creativity, and because acts of reparation are largely symbolic, they only work if they are meaningful to the morally injured person. A pitfall to be avoided in this sometimes very lengthy process of making or seeking amends is the substitution of punishment for reparations, whether of oneself or someone else. The ultimate self-punishment is suicide, and the ultimate punishment of another is homicide. Either or both may seem like justice, but neither leads to forgiveness. Reparations must be made or sought compassionately rather than in anger or desperation.

Acceptance

Depending on the nature of the moral injury and the apportionment of blame for the event which caused it, the process of making or seeking amends may takes years or even a lifetime. Along the way, deliberate compassion toward oneself or others may gradually promote acceptance and forgiveness.

Adapting Moral Injury Treatment to Children and Family Systems

The approach to individual treatment of moral injuries in service members and veterans described above has obvious limitations in its applicability to children and family systems. It was not designed as a systems intervention, but rather as an individual cognitive-behavioral therapy intentionally operating outside existing social systems such as the family, church, community, and military units. Adapting these principles of treatment to a family system requires, first and foremost, an abiding focus on family dynamics, including the quality of communication, trust, and the sharing of narratives and beliefs. In a systems approach to the treatment of moral injury, the family becomes the agent of recovery and healing, regardless to what extent family members contributed to moral injuries through their actions or failures to act. If a family member

blames him or herself for a perceived moral transgression, the family can powerfully encourage self-forgiveness, as long as neither the self-accuser's guilt and shame, nor other family members' anger, are too great.

Another significant difference between individual and family-oriented treatment is the extent to which full disclosure of potentially morally injurious events is encouraged. As long as the therapist can refrain from moral judgment or outrage upon hearing about perceived moral transgressions, such disclosures in individual therapy sessions may do no additional harm. In a family treatment setting, on the other hand, disclosures have the potential to inflict additional moral injuries on other family members who now must share these burdens. Restoring trust and communication, and encouraging mutual forgiveness, seem central to a family system approach to moral injury treatment.

The model for individual treatment of moral injury described above also fails to take into account the ages and developmental levels of children in the family. For adults and children capable of formal cognitive operations, meaning making may be as fundamental to recovery as forgiveness, but younger children may not yet be capable of either.

On the other hand, certain components of the approach to treatment described here can be adapted easily to working with families. Regardless of age, every family member can benefit from an empathic but realistic appraisal of their own and others' culpability for perceived moral transgressions. And sharing the job of making amends may accelerate the difficult process of forgiving. To the extent morally injurious events affecting family members involve betrayals of trust within the family, an important goal may be to promote an atmosphere of mutual trust and compassion sufficient to permit full disclosure and processing of these events during family sessions.

Conclusions

One obstacle to research and federal programs targeting the psychological health of military family members may be the lack of a clear, compelling, and testable model to explain how war-zone events can result in psychological trauma in military spouses and children. Given the prevailing conception of psychological trauma as fear conditioning, it is hard to understand how military family members may be traumatized by war-zone events occurring halfway around the world. An emerging model to explain how events may be traumatic even though they do not involve direct threats to life and safety is the concept of moral injury, which may be defined as the enduring consequences of perpetrating, failing to prevent, bearing witness to, or learning about acts that transgress deeply held moral beliefs and expectations. To the extent they participate morally in military operations and their aftermath, while subscribing to military values and ideals, military spouses and children may be as vulnerable to moral injury as military service members. Research on the phenomenology, natural history, and treatment of moral injury has only just begun, and so far, no research has targeted moral injury in military family members. Nevertheless, the conceptual model of moral injury suggests specific techniques for promoting recovery and healing from moral injury that may be as useful in military spouses and older children as they appear to be service members and veterans, as long as developmental and family systems factors are taken fully into account.

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