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Military Culture Considerations in Prolonged Exposure Therapy With Active-Duty Military Service Members

Brittany N. Hall-Clark, Edward C. Wright, Brooke A. Fina, Tabatha H. Blount, Wyatt R. Evans, Patricia K. Carreño, Alan L. Peterson, Edna B. Foa, for the STRONG STAR Consortium

Department of Psychiatry, University of Texas Health Science Center at San Antonio, 7550 IH-10 West, Suite 1325, San Antonio, TX 78229, Home Base, A Red Sox Foundation and Massachusetts General Hospital Program, One Bowdoin Square, Suite 101, Boston, MA 02114, Department of Psychiatry, Harvard Medical School, 2 West, Room 305, 401 Park Drive, Boston, MA 02215, Research & Development Service, South Texas Veterans Health Care System, 7400 Merton Minter Boulevard, San Antonio, TX 78229, Department of Psychology, The University of Texas at San Antonio, One UTSA Circle, San Antonio, TX 78249, Department of Psychiatry, University of Pennsylvania, 3535 Market Street, 6th Floor, Philadelphia, Pennsylvania 19104

Over 15 years of combat deployments to Afghanistan, Iraq, and surrounding locations have increased the risk of posttraumatic stress disorder (PTSD) in active-duty military service members, significantly amplifying the need for effective treatments within the military health care system. While effective evidence-based treatments for PTSD exist, results have not been as robust for service members and veterans as those found with civilians, suggesting that there are unique factors that may make PTSD in active military personnel more challenging to treat. Few clinical articles address military cultural aspects of the delivery of Prolonged Exposure therapy, especially with an active-duty military population. The aim of this paper is to highlight the role of military culture and lifestyle in PTSD symptom expression and recovery, and to provide clinical strategies to successfully conduct Prolonged Exposure with active-duty service members. Strategies to overcome logistical difficulties and clinical techniques to address common themes that emerge in working with military populations are delineated. Case examples are provided to illustrate concepts.

Over 15 years of combat deployments to Afghanistan, Iraq, and surrounding locations have increased the risk of posttraumatic stress disorder (PTSD) in active-duty military service members (Hoge, Riviere, Wilk, Herrell, & Weathers, 2014; Vasterling et al., 2010. Though prevalence rates range substantially by specific military subgroup (Ramchand, Rudavsky, Grant, Tanielian, & Jaycox, 2015), an estimated 10% to 18% of service members will develop PTSD following deployment and combat exposure (Hoge et al., 2014). This elevated risk has significantly amplified the need for effective PTSD treatments within the military health-care system. With over 30 years of empirical support, Prolonged Exposure (PE) is one of the most efficacious treatments for PTSD (Institute of Medicine, 2008; Powers, Halpern, Ferenschak, Gillihan, & Foa, 2010; Peterson, Luethcke, Borah, Borah, & Young-McCaughan, 2011). Previous PE studies document significant post-treatment decreases in PTSD symptoms and comorbid depression in civilian and veteran populations (e.g., Bisson et al., 2007; Institute of Medicine, 2008), with up to 80% of civilians losing their PTSD diagnoses. Initial findings indicate that exposure-based therapy such as PE is effective for treating deployment-related PTSD in active-duty military personnel (Cigrang, Peterson, & Schobitz, 2005; Cigrang et al., 2011, 2015; 2017; Foa et al., 2018). However, the results for veterans have not been as robust as those found with civilians (Steenkamp, Litz, Hoge, & Marmar, 2015), suggesting that there are unique factors that may

Abbreviations: AAR = After Action Report; C = clinician; CHU = containerized housing unit; DFAC = dining facility; FOB = forward operating base; IED = improvised explosive device; IOP = intensive outpatient program; NCO = non-commissioned officer; OEF = Operation Enduring Freedom; OIF = Operation Iraqi Freedom; OND = Operation New Dawn; PE = Prolonged Exposure; PTSD = posttraumatic stress disorder; SGT = sergeant; SPC = specialist; SSG = staff sergeant.

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make PTSD more challenging to treat among military populations. In order to help optimize PE outcomes for personnel with PTSD, it is essential to provide treatment that is congruent with military culture.

Active-duty service members have particular strengths and contend with unique logistical and cultural challenges that may have an impact on the delivery of PE. Few clinical articles address military cultural aspects of the delivery of PE, especially with an active-duty military population (Blount, Cigrang, Foa, Ford, & Peterson, 2014; Fina, Wright, Lichner, Borah, Foa, for the STRONG STAR Consortium, 2014; Peterson, Foa, & Riggs, 2011). This paper addresses both challenges in turn. The paper begins with an overview of Army culture (Meyer, McCarroll, & Ursano, 2017) highlighting core values, guiding principles, and tenets that are likely to influence treatment. Next, logistical obstacles that military personnel face when seeking evidence-based care for PTSD are identified and ways that clinicians can help overcome these barriers are discussed. The second half of the paper highlights the role of military culture in PTSD symptom expression and recovery and provides clinical strategies for successfully addressing military-related themes in PE. Many of these observations and recommendations are derived from the authors' first-hand experiences treating deployment-related PTSD in active-duty service members. Collectively, the authors have treated and provided consultation on hundreds of PTSD cases using PE with military personnel. Several of the authors served as research therapists for the largest randomized clinical trial of deployment-related PE to date under the direction of Drs. Alan Peterson and Edna Foa and the South Texas Organizational Network Guiding Studies of Trauma and Resilience (STRONG STAR) Consortium. Importantly, this paper focuses on active-duty military personnel with post-9/11 deployment-related trauma, including those who have served in Operations Enduring Freedom, Iraqi Freedom, and New Dawn (OEF/OIF/OND). The clinical experiences of the authors are primarily with active-duty U.S. Army personnel, and clinical examples will focus on the Army. While these principles may be applicable to military personnel from other branches, it is important to note that there are cultural distinctions between branches of military service that should be considered. For further reference about characteristics of military culture, readers are directed to a recently published book titled *U.S. Army Culture: An Introduction for Behavioral Health Researchers* (Meyer et al., 2017) and the Center for Deployment Psychology website (http://deploymentpsych.org).

Overview of Standard PE

PE is typically delivered in 8 to 15 treatment sessions lasting 90 minutes each and consists of four primary interventions: (a) in vivo exposure, and (b) imaginal exposure followed by processing of the experience, (c) psychoeducation, (d) breathing retraining (Foa, Hembree, & Rothbaum, 2007). The goals of PE are to help patients emotionally process their traumatic experiences to correct inaccurate cognitions that are maintaining their symptoms, and modify behavior to overcome avoidance and reengage with life activities. Session 1 involves a presentation of the rationale for the efficacy of PE with PTSD, an interview on the index trauma, and a breathing retraining exercise. Session 2 focuses on psychoeducation about common reactions of trauma and begins the in vivo hierarchy and exposure. Session 3 introduces imaginal exposure to the trauma memory and processing of the experience. Sessions 4 and beyond involve review of in vivo exposure and imaginal exposure homework, a 30- to 45-minute imaginal exposure followed by processing, and the assignment of additional homework. In the final session, the patient's progress is examined, relapse prevention strategies are reviewed, and plans for further improvement or maintenance are discussed. All sessions are audiotaped to facilitate between-session exposure and processing. In vivo and imaginal exposure exercises are assigned as homework assignments. For a more extensive review of PE see the published manual (Foa et al., 2007).

Overview of Army Culture

In recent years, there has been increasing recognition of military culture and its potential influence on mental health treatment (e.g. Litz, 2014; Yamada, Atuel, & Weiss, 2013). Each branch of the military upholds a set of core values, guidelines, norms and expectations for behavior that can influence service members' attitudes, beliefs, decisions, and behaviors. For instance, the seven core values of the Army include loyalty, duty, respect, selfless service, honor, integrity, and personal courage (https://www.army.mil/values/; Meyer et al., 2017). Loyalty is pledged to the US Constitution, the Army, one's unit, and other soldiers. Duty refers to fulfilling one's obligations with integrity and as a team. Respect involves treating others with respect and dignity and having respect for one's self. Selfless service encourages soldiers to put the welfare of the United States, the Army, and one's subordinates ahead of one's self. Honor is embodied by living Army values in one's day-to-day life. Integrity involves engaging in moral and legal behaviors. Personal courage is demonstrated by facing fear, danger, or adversity. It is common for soldiers to refer to these core values during treatment, in describing their motivations or how they have felt demoralized in the aftermath of trauma. Understanding that Army core values are a significant part of the culture can help clinicians better conceptualize and connect with their patients. At times, patients may express feelings that they are weak for needing help or fears that others will think less of them for

going to therapy. In recent years, the Army has made many efforts to improve the prevention, diagnosis and treatment of behavioral health issues (Landers, 2017) and to reduce the stigma of seeking health care, and much programming has been incorporated to encourage soldiers to seek help. For example, routine health screenings such as the Post-Deployment Health Assessment and Reassessment, unit and leadership briefings about suicide prevention and mental health resources, and incorporation of emotional wellness in health and wellness programs have been implemented. However, attitudes towards mental health remain variable and soldiers may encounter leadership that is less than supportive in terms of seeking care or have concerns about how mental health treatment will affect their careers and security clearances. Acknowledging that this stigma exists is important, while emphasizing that seeking treatment is a way to optimize functioning as both a soldier and family member.

Evident in its core values and doctrines, the Army can be described as a collectivistic and interdependent culture, which may contrast with mainstream American culture, which tends to be individualistic. The process of enculturation into the Army redefines one's self-conceptualization from that of an individual to one of a soldier. Army cultural mores are instilled beginning at Basic Combat Training and reinforced throughout the Army career. Those entering the Army are socialized to formal doctrines and oaths that reflect the Army's mission, values, and guiding principles. One such component of military culture is the Army Warrior ethos: "I will always place the mission first, I will never accept defeat, I will never quit, and I will never leave a fallen comrade." An ethos represents defining characteristics of a group that inform the group's beliefs and actions. Military culture values and principles are also instilled through the use of creeds, including the Warrior's Creed, NCO's Creed, Ranger's Creed, and an Army Civilian Corps Creed. Significant events are marked by recitations of oaths and reminders of the promises to serve the nation, the Army, and others.

Military organizations, such as the U.S. Army, are characterized by a hierarchical leadership structure, often referred to as the chain of command. This leadership chain of command is essential for the success of the military, especially during times of military deployments in support of combat operations. To help ensure military units are always deployment ready, adherence to this chain of command is also maintained while the military unit is in garrison in nondeployed settings. Leadership responsibilities include maintaining accountability of one's subordinates and having an awareness of their whereabouts. This hierarchical arrangement goes beyond the typical workplace role of a manager and extends to service members' personal lives and decision-making. Personal discipline and attention to details are highly enforced—even when the stakes may appear to be low. This practice helps ensure that these behaviors will hold up under incredibly stressful situations, such as military combat deployments.

In addition to the philosophical and organizational tenets that underlie Army culture, it is essential for clinicians to be familiar with these work ethics and work demands soldiers experience. Many service members work long duty hours, which can interfere with engaging consistently in treatment. Work schedules depend on several factors, including military occupational specialty (MOS), rank, and current mission demands (e.g., operation tempo or OPTEMPO). Military personnel often begin their days with physical training (PT) and formations at 0600 or earlier, and may work until 1900 or later. Furthermore, service members may get tasked with staff duties such as "charge of quarters" or "CQ," which is a 24-hour shift to serve as the primary point of contact for personnel residing in military barracks. In addition, permanent changes in station, temporary duty assignments, field exercises, and deployments can also disrupt treatment engagement and completion.

Setting the Stage for Successful PE With Military Personnel

Full participation in standard outpatient PE treatment requires that patients dedicate up to 12 hours per week to complete the 90-minute therapy session and the additional homework assignments (see Appendix A). Unique demands of a military work schedule may legitimately make treatment attendance and homework completion difficult. Personal and family time expectations can compound the challenge. Failure to complete regular imaginal and in vivo exposures between sessions lowers the dose of treatment received, which in turn can decrease treatment effectiveness. The following section presents strategies to address these challenges to maximize treatment adherence and odds for success.

Reducing Obstacles Through Careful Homework Scheduling

One strategy to overcome scheduling obstacles is to spend time during treatment sessions to explicitly and collaboratively plan for when the service member can complete homework assignments. Addressing time limitations and competing priorities in Session 1, while discussing the importance of homework assignments, can help set service member expectations about treatment and anticipate barriers. In addition to external demands, service members may also experience internal conflicts relating to work demands or feeling selfish because they are seeking treatment instead of being with their fellow soldiers. Keeping in mind military values and realistic limitations, therapists can emphasize how fully participating in treatment will facilitate their ability to serve their comrades and their families. The use of military-relevant

analogies may be used to build rapport and draw parallels between treatment and military training to bolster the rationale and importance of homework completion in PE. Using the example of field training, therapists can emphasize the importance of consistent practice and high frequency of repetition required in PE. Field training consists of practicing realistic situations that a unit may face while deployed. These exercises are planned out and are completed in a limited timeframe to enhance in-the-moment decision making during battle. Typically, field training occurs on consecutive days, with a goal of developing specific battle-ready skills by the end. Additionally, the lack of field training would leave a service member without the necessary skills. Thus, both the planning and the example of field training can be applied to in vivo exposure to facilitate the acquisition of new skills.

Another strategy to reduce obstacles with homework is to describe the daily completion of in vivo and imaginal exposure as a minimum "dose" for effective treatment. Like antibiotics, the effect of the treatment may be limited unless the entire prescription is completed. While an incomplete dose of antibiotics may even be harmful in that a targeted illness may return, an incomplete dose of PE may leave patients feeling incompetent or concluding prematurely that treatment was not effective. Thus, encouraging consistency is a key component in homework implementation. Therapists can encourage military personnel to bring their appointment planners to session and schedule specific dates and times for their exposure activities while in session. Additionally, service members can incorporate in vivo exposures into their daily routines. For example, they can go as scheduled to formation, where they will have other people standing behind them, or they can eat at a busy food court on post during their lunch break. A sample schedule is provided in Appendix A to demonstrate how in vivo and imaginal exposure could be explicitly mapped out with a patient.

Reducing Obstacles by Enlisting Command Support

Communicating with a service member's chain of command regarding the logistical and time requirements of treatment (including in- and between-session commitments) may help overcome barriers to completing a full dose of PE and to engaging most fully with all the procedures that are essential the treatment process. Maintaining confidentiality and privacy involves more nuances in the military than in the civilian health-care sector. However, discussing the intensive time commitment required by PE with military commanders and other leaders in the chain of command may facilitate service members' ability to attend sessions and/or complete assignments during duty time and prevent work conflicts during the course of treatment. Leaders are required to maintain accountability of their subordinates, but need not be privy to the details of a service member's trauma or treatment. Command support may also provide the service member additional social support during the treatment process. Any concerns that the service member has about confidentiality, perceived stigma, and potential career ramifications should be carefully considered and discussed before soliciting command support. Anecdotally, this procedure has resulted in greatly improved attendance rates in the randomized clinical trial the authors conducted at Fort Hood, Texas and many commanders were supportive of their personnel receiving treatment.

It is helpful to discuss with the service member the potential benefits and issues related to engaging command before beginning treatment. However, command support (with the individual's permission) can be obtained after the first few sessions if attendance and homework completion become concerns. Upcoming field and temporary duty assignments that may require an extended absence are important to consider when scheduling PE and may be helpful to discuss with command. An example of an initial presentation of PE to a commander and some of the questions and answers the authors have encountered are included below.

> CLINICIAN: I'm reaching out on behalf of your soldier, SGT Jason Smith, with his permission, to discuss the program in which he is engaging in my clinic, to answer any questions that I'm able, and to seek your support for his participation in this program. SGT Smith has given me permission to let you know he is in treatment for posttraumatic stress disorder or PTSD. First, let me check, can I answer any questions about PTSD? [Do so, as needed, speaking in generalities rather than referencing the specific experiences of the service member.] The treatment SGT Smith and I will be completing together is called Prolonged Exposure (or PE) and we'll be meeting weekly for about an hour and a half to address some of the memories that are haunting him. But what's also really important about this treatment is that he is required to complete assignments between sessions, which may take up to one and a half to two hours of his day each day. One of our goals is to make daily life run more smoothly (which PTSD has gotten in the way of), so we'll try to incorporate these assignments into daily life rather despite it. That said, he may need to do certain activities at certain times—even during core duty hours. All in all, this program is expected to last about 10 weeks, and then the hope is SGT Smith will resume daily life and duty as usual and maintain his fitness for duty. So, hearing all this so far, what are your thoughts on SGT Smith's plans to engage in this treatment and the potential for supporting him in fully committing to the weekly sessions with me *as well as* the required between-session exercises?

> COMMAND QUESTION 1: I'm used to my soldiers taking leave to attend appointments every now and then, but I'm not sure

about being out daily for one to two hours. Can't he just do the weekly sessions like normal?

CLINICIAN RESPONSE 1: The trauma healing process takes time, and it's a difficult learning process. If you spend only an hour and a half a week practicing something new, it takes a lot longer to learn it but, by working at it each day, the learning happens a lot faster. All in all, it will take less of SGT Smith's time to take this approach than just doing weekly sessions only. The chances of his improvement are also much greater if he devotes this amount of time to the program.

COMMAND QUESTION 2: Can I check in about his progress? I need to be aware of how he is doing.

CLINICIAN RESPONSE 2: I will talk with SGT Smith about how much he would like me to share. There are several things I will not discuss outside the therapy room like the specific details of the traumatic event(s), SGT Smith's personal beliefs, and the details of the emotional response to the trauma. I will always put SGT Smith's safety and the safety of others first. I also keep in mind the safety of any mission SGT Smith is part of, so I will provide all essential notifications if safety ever becomes a concern. I can also provide logistical updates such as treatment attendance and appointment schedule. I'll keep other information protected by HIPAA and not under the Military Command Exception confidential unless SGT Smith requests otherwise.

Reducing Obstacles by Incorporating Social Support

Previous studies have documented the bidirectional relation between PTSD and family dysfunction in post-9/11 veterans (e.g., Sayers, Farrow, Ross, & Oslin, 2009; for review, also see Taft, Watkins, Stafford, Street, & Monson, 2011). The behavioral, emotional, and cognitive avoidance that maintain PTSD can also perpetuate relationship distress. Conversely, strained familial relationships can reinforce trauma-related beliefs (e.g., *No one understands me*; *No one can be trusted*.) and promote interpersonal avoidance. By accommodating the service member's external and internal avoidance, even nondistressed family relationships can contribute to the maintenance of deployment-related PTSD. For example, family members may unintentionally collude with avoidance by shifting seats if a service member with PTSD insists on sitting with his back to the wall at crowded restaurant. However, educating family members about the importance of exposure can help them to support their service member to make efforts to approach rather than avoid. Importantly, family members and other forms of social support can be an asset in working through trauma and completing treatment. For example, Gros and colleagues (2013) recently found that social support provides a buffer from early discontinuation of exposure-based treatments in post-9/11 veterans, thereby increasing the likelihood of positive outcomes. Simple modifications can be made to the PE protocol to increase the treatment engagement of the family members and other social support persons, which in turn may improve relationship functioning while decreasing PTSD symptoms in military personnel.

Active-duty military are often reluctant to disclose their traumatic experiences to family or friends. Therefore, it can be helpful to include partners (or other key support persons) in the early stages of treatment, both to provide them with psychoeducation and to collect collateral data that the service member may not disclose or even recognize. For example, support persons who understand the cognitive and behavioral factors that maintain PTSD as well as the rationale for exposure-based treatments are better equipped to promote treatment engagement. They may also be less likely to inadvertently accommodate the service member's PTSD-maintaining avoidance behaviors. Additionally, including supportive partners in a discussion of the common reactions to trauma can provide families with a better understanding of the service member's postdeployment behavioral changes. This initial discussion may increase the probability that the couple will continue to discuss the impact of trauma, which further undermines cognitive avoidance that contributes to PTSD.

As appropriate, family members can be incorporated into the exposure-based interventions. For example, family members can provide valuable information about people, places, and situations that should be included in the in vivo hierarchy. Family members also can be instrumental in titrating the difficulty level of in vivo exposures. For some service members, their family represents a safety cue and makes stressful situations more bearable. It is important to educate family members that accommodating safety behaviors is counterproductive in the reduction of PTSD and to model how they can support successful exposure. For others, the presence of family members in crowded areas actually increases their subjective distress because they feel an increased need to be hypervigilant to protect them. For these patients, family members can be introduced in later exposures once the service member has mastered the in vivo exposure without them.

By bolstering social support during the challenging aspects of treatment, military personnel may be more likely to complete treatment interventions and have outcomes that support a better functioning family system that is available to provide further support to the individual. Often service members cite their family members as their main motivation for seeking treatment, so it follows that family members should be included in treatment to the extent that a service member desires. Further investigation is

necessary to identify the extent that these modifications enhance clinical outcomes for PE.

Reducing Obstacles By Modifications in Treatment Delivery

In addition to increasing social and command support for participation in standard outpatient PE, treatment accessibility and engagement can sometimes be improved by modifying PE treatment delivery to fit the demands of military service. As described below, initial studies that have examined the use of modified PE protocols have proved promising.

Telebehavioral Health

Delivery of PE via telehealth technologies can extend access to treatment and potentially increase continuity of care across temporary duty assignments or permanent changes of station. For example, since telehealth technology allows treatment to be delivered in the home, PE becomes accessible to military personnel who are unable (e.g., injured) or unwilling to present for care at a military treatment facility. Initial studies with post-9/11 veterans indicate that this mode of treatment is both feasible and noninferior to in-person delivery of PE (Strachan et al., 2012; Tuerk, Yoder, Ruggiero, Gros, & Acierno, 2010). Moreover, telehealth provides a promising avenue for the delivery of PE to military personnel in remote locations with limited access to qualified PE providers, including those deployed to a combat zone (Pelton, Wangelin, & Tuerk, 2015). In addition, Web-based PE (McLean et al., 2018) is currently being investigated to determine if therapist-monitored PE, in which clients independently complete sessions on the internet, is an effective modality.

Psychotherapy delivery via telehealth does introduce some unique issues and concerns to the therapeutic context including technological difficulties and the need for additional, often expensive equipment. Moreover, engaging patients via telehealth may add levels of complexity to standard therapy issues of confidentiality and risk management (Kruse et al., 2018). For example, service members who overengage or become agitated during imaginal exposure often require additional, interactive support from the provider to deescalate and ground themselves. Via telehealth, fewer strategies are available to the provider to guide the patient, ensure safety, and facilitate an effective level of engagement in the session/exposure. Thus, providers must have specific response plans and procedures in advance and these should be discussed openly with the service member at the outset of treatment. Similarly, clear and efficient SOPs for addressing imminent risk to self or other as well as patient confidentiality are requisite for ethical and effective practice via telehealth. Notwithstanding these issues and given its potential to reduce treatment obstacles, the feasibility, acceptability, and effectiveness of telehealth PE in active-duty military warrants further investigation.

Shorter Sessions

The majority of military behavioral health clinics rely on a 60-minute template for ongoing care appointments. However, the empirical support for PE has been established with 90-minute sessions, creating a significant implementation barrier that decreases the accessibility of PE for service members. Thus initial studies have begun to investigate the possibility of reducing the length of PE sessions. To date, two studies have examined the potential of providing 30 versus 60 minutes of imaginal exposure within the context of PE for PTSD. In a nonrandomized treatment study, van Minnen and Foa (2006) found that individuals who participated in 60-minute imaginal exposures demonstrated better within-session habituation to their trauma memories than those who completed 30-minute exposures. However, both groups demonstrated similar improvements in PTSD symptoms, anxiety, and depression at posttreatment and 1-month follow-up. Nacasch et al. (2015) replicated these findings using a randomized noninferiority clinical trial design. Importantly, both studies were conducted with civilians, who generally demonstrate more robust outcomes with PE for PTSD than their military counterparts. Given the lower response rate to standard PE, studies are needed to establish the equivalency of the 60-minute PE protocol before it is widely implemented in the military healthcare system.

Intensive Outpatient Programs

The standard delivery of PE includes weekly outpatient sessions over the course of 3 to 4 months. The weekly spacing of sessions along with the duration of treatment can inhibit service members' engagement and completion of PE. Temporary duty assignments, frequent permanent changes in station, deployments, and assignments to remote locations can make it difficult for military personnel to commit to a therapy that requires months to complete. Additionally, service members stationed in more remote locations may not have access to qualified PE providers. While telebehavioral health can help overcome some of these logistical barriers, some military personnel may prefer to obtain treatment in person and be better served by PE that is delivered in a condensed fashion, delivered in 2 to 3 weeks. This format increases the feasibility of traveling for care and decreases the likelihood that treatment will be disrupted by military assignments. A recent study by Foa et al. (2018) supports the efficacy of intensive PE with active-duty military service members. Massed PE, in which 10 PE sessions were conducted over 2 weeks, resulted in similar symptom reduction to Spaced PE, in which 10 PE sessions were

completed over 8 weeks. In the Foa et al. study, active-duty service members completed 90-minute sessions in clinic and then completed in vivo and imaginal assignments independently, and participants often juggled their military service with treatment activities. Foa et al. noted that active-duty military personnel demonstrated lower reductions in PTSD symptom severity compared to civilians, suggesting the need for further research and military culture considerations. An important benefit of a Prolonged Exposure Intensive Outpatient Program (PE IOP) format could be to provide additional time and support for service members beyond the 90-minute in-clinic session.

PE IOP maintains the compressed time frame of Massed-PE while also incorporating more structure support for out-of-session activities (e.g., listening to the imaginal recordings in the clinic; offering feedback session between out-of-session activities). These augmentations provide a framework in which service members can engage in treatment-related homework assignments with minimal interference from outside demands and with fewer opportunities to engage in unhelpful avoidance. Consequently, PE IOP may be particularly helpful for military members who have not fully benefited from standard outpatient PTSD treatment. Blount and colleagues (2014) published the first case study examining PE IOP with an active-duty service member. The service member developed PTSD and depression following a deployment to Afghanistan. She participated in PE 5 days a week for 2 consecutive weeks, engaging in imaginal and in vivo exposures throughout the day. She demonstrated clinically significant decreases in both PTSD and depression by the end of treatment and had maintained her gains at a 6-month follow-up. The results of the case study are promising and are consistent with recent findings that multiple behavioral therapy sessions per week may produce better outcomes than less frequent sessions (e.g., Cuijpers, Huibers, Ebert, Koole, & Andersson, 2013).

Over the past 5 years, many military treatment facilities have established IOPs that target deployment-related PTSD in active-duty military patients. However, further research is necessary before conclusions can be made about the efficacy of PE IOP.

Providing Culturally Sensitive PE in an Active-Duty Military Population

In order to optimize outcomes for active-duty military personnel receiving PE, it is important to provide PE sensitive to military culture in addition to overcoming the logistical barriers. For example, emotional processing theory (Foa & Kozak, 1986), the conceptual underpinning of PE, posits that erroneous beliefs about oneself as weak or incompetent develop as a result of trauma, and these beliefs are maintained through avoidance of emotions, thoughts, and situations. Certain aspects of military training and culture exert a powerful influence on service members as they confront and process traumatic experiences during the course of PE. Military culture is infused with values that serve to provide cohesion and solidarity and to ascribe meaning to both overall and day-to-day missions. Accordingly, these values may influence trauma recovery and trauma-focused treatment. For example, military personnel with a strong sense of duty may express a commitment to treatment in order to fulfill their military obligations and promises. However, these values can also influence trauma-related cognitions in unhelpful ways through maladaptive attributions about one's self, the world, and other people. Depending on the application, even apparently adaptive military values (i.e., personal responsibility; emotional fortitude) can hinder recovery from trauma. The following section focuses on commonly observed themes in the context of PE with military populations and presents clinical strategies on how to promote effective exposure and emotional engagement. Clinical examples and vignettes are interwoven with commonly observed themes with active-duty military. Appendix B includes a list of common beliefs in combat-related PTSD generated by noting common themes among active-duty patients that the authors have treated and that are helpful to target in emotional processing.

Hypervigilance and Safety Behaviors

Hypervigilance is a key aspect of PTSD across all types of trauma. However, there are several reasons why hypervigilance might be particularly common or severe among military patients. Alertness, awareness, vigilance, and readiness have all been fundamental virtues in military culture throughout history. Popular American military quotes such as, "The price of freedom is eternal vigilance" (Thomas Jefferson) and "Always Ready, Always Alert" (Army antiterrorism campaign) demonstrate the widespread acceptance of these values. Some of the behaviors service members adopt, such as changing their route to work every day to avoid being predictable, might seem extreme to a civilian but are often sanctioned by military training. The military concept of "situational awareness"—knowing your surroundings, assessing the tactical environment—is part of being a service member and not necessarily maladaptive in itself. In fact, developing high situational awareness while deployed to a warzone characterized by ambushes and hidden explosives can be highly adaptive. Thus, some discussion may be necessary with military patients to identify which aspects of their behavior are driven by PTSD and which are adaptive, military training precautions. Investigating the degree of functional impairment the behavior creates, or how difficult it is to abstain from the behavior, can help illuminate the

differences. For instance, it is not uncommon for some individuals with handgun permits to carry a weapon in public, and many service members do. However, if a patient is overwhelmed by fear at the thought of going out without a gun, it probably represents a *safety behavior* that needs to be addressed. Many active-duty patients remain more vigilant and focused on the idea of preparedness than a typical civilian, even after successful treatment. However, if the behavior does not create significant anxiety or otherwise interfere with their life, then it may not reach a level of dysfunction in which it would be classified as a symptom.

Safety behaviors are the maladaptive behaviors that a person performs in an anxiety-provoking situation to prevent unlikely feared outcomes from occurring. Examples include sitting with one's back to a wall, scanning the environment for threats, or mentally planning how to react in an attack. Based on their training, situational awareness, and experience of unique life threats, service members may exhibit safety behaviors with idiosyncratic or highly military-specific relevance (e.g., scanning rooftops for snipers). See Fina and colleagues (2014) for a full review of how safety behaviors undermine exposure and a list of military-relevant examples. Safety behaviors are functionally akin to other types of avoidance. The distinction nonetheless has some utility because avoidance typically refers to not entering an anxiety-provoking situation at all while safety behaviors are conducted during the anxiety-evoking situation. Importantly, safety behaviors can sabotage the effectiveness of exposure in a much more subtle manner than full-on avoidance. It is therefore critical to identify and eliminate these behaviors early in the process of addressing avoidance and engaging in exposure. A helpful strategy is to introduce safety behaviors as the in vivo hierarchy is constructed, explaining that engaging in safety behaviors can prevent learning and limit the effectiveness of in vivo exposure.

Active-duty service members are typically reporting to their duty station daily, and therefore maintain some level of activity outside the home that inevitably brings them into anxiety-provoking situations. Many also report having family obligations (e.g., taking their children out to an arcade) that push them out into busy or chaotic environments. Coupled with the cultural value of stoicism (discussed next section), this population may be especially likely to deny avoidance of public places while nonetheless accommodating their anxiety with considerable use of safety behaviors.

Therapist-assisted exposure can be a powerful tool to build patient self-efficacy, observe barriers to corrective learning, and provide real-time strategies for overcoming hypervigilance. In military personnel, vigilance has often become so habitual that, without assistance, patients may not realize the degree with which they engage in safety behaviors. Therapist-assisted in vivo exposure can be particularly useful for patients who report weak habituation and limited learning in homework review. In these cases, the therapist can help the patient correct how they are structuring in vivo exposure so that they can conduct more effective homework exercises. This typically involves ensuring that the patient positions him- or herself so that people can get behind them, and catching quick, reflexive scanning behaviors (e.g., looking over his or her shoulder each time someone walks by). Therapists can model appropriate alternative behaviors and countermeasures for safety behaviors, such as engaging with store clerks in a friendly manner, as opposed to avoiding them, examining store merchandise instead of scanning their surroundings, and walking down crowded aisles, rather than hugging the perimeter.

During a therapist-assisted in vivo exposure, the focus is on processing thoughts and feelings related to the experience and monitoring habituation and safety behaviors. There are numerous opportunities to highlight evidence that contradicts the trauma-related fears (e.g., "We've been sitting here with our guard down like sitting ducks for a whole hour, but no one has attacked us—why do you think that is?"). Military patients may notice the "complacency" (lack of situational awareness) of the civilians they see. This too can be used for corrective social learning by noting that the civilians have not had experiences that increased their level of vigilance—suggesting that the local threat level is low. However, for some patients, a hyper-focus on habituation and trauma-related cognitions can contribute to anxiety about performance or not progressing quickly enough. Therapists can balance attention to the goals of the exposure with casual conversation, which can provide a model of how patients may interact with others in a less anxious manner.

Several alternatives can be used in settings where therapist-assisted exposures are not an option. Patients may contact therapists via telephone before, during, and/or after in vivo exposure to discuss strategies for optimizing exposure. Such phone contact can provide both emotional support and logistical feedback to help patients course-correct with unhelpful safety behaviors or cognitions. In the authors' experience, offering brief phone feedback sessions (5 to 15 minutes) has helped with compliance as well as provided flexibility for patients who may not be able to come into the clinic multiple times a week or day. Other options include within-session exposures, such as the service member sitting with his or her back to the door. In addition, exposures on-site at the therapist's office or clinic can be beneficial, such as sitting in crowded waiting rooms or interacting with office staff.

Stoicism

Military service members are expected to maintain a sense of physical and mental composure while on duty, encapsulated in the professional concept of "military bearing." Military bearing is a broad term that can allude

to dress code requirements, the manner in which one's body is held, as well as the acceptable range of emotional expression. Personal strength and courage are highly valued in military culture (Wachen et al., 2016). Emotional fortitude can be an adaptive quality in the wake of a traumatic event and may be socially enforced through directives such as, "Suck it up and drive on." Leaders are especially encouraged to limit the impact of emotions for the benefit of their subordinates. Military personnel may see little value in allowing themselves to experience emotions, whether on their own or with their families. Emotional expression may be avoided out of fear of feeling weak or vulnerable; numbness often seems safer or easier. Moreover, service members may believe that they should maintain their composure at all times, which can discourage them from facing anxiety and other powerful emotions during in vivo and imaginal exposures. There may be particular concerns about displaying emotion in front of military personnel of different ranks, civilians, or the opposite sex.

Exposures that test unrealistic beliefs about weakness and competency are an important form of corrective learning during PE. Stoicism, therefore, may interfere with trauma recovery in several ways. Unwillingness to consider feelings of helplessness or powerlessness during trauma can maintain unrealistic beliefs about control of the event. Values of emotional fortitude can interfere with in vivo exposure as well. If a service member is totally averse to experiencing feelings of fear or anxiety in an in vivo exposure to a crowded store, he may be unwilling to do the exposure, subsequently reinforcing thoughts that emotions are not tolerable, and inhibiting his ability to receive contrary information that he can handle negative or intense emotions.

Acknowledging military, cultural, and gender norms around stoicism during the common reactions to trauma discussion may be helpful. While these norms can be restrictive for males, given societal stereotypes of men being weak if they show emotion, female service members may also feel pressure to appear strong in the face of stereotypes involving women as weak and emotional. This information can be revisited throughout the trauma processing, as military personnel consider the context of the trauma and their reactions.

The process of imaginal exposure provides a mechanism to address barriers around accepting emotional vulnerability. If avoidance of emotional vulnerability seems to be impeding PTSD recovery, service members can be explicitly encouraged in imaginal exposure to feel and describe vulnerability experienced during the trauma. During emotional processing after imaginal exposure, providers can ask about the feared outcomes related to emotional vulnerability: "Did you fall apart? Did you lose control? Are you less of a soldier because you expressed feelings?" This experiential exposure to emotional openness can test beliefs that experiencing and expressing helplessness, sadness, or anxiety is weak.

For some service members, it can be challenging to identify emotions at the time of the trauma because they were focused on the mission at hand and acted accordingly (e.g., "My training kicked in, I didn't have time to think or feel"). It can be helpful in trauma processing to consider any emotions they may have had after the trauma was over. For example, these reactions may be present in After Action Reports (AARs), when the military team debriefs what occurred and consider lessons learned and preparedness for future, similar events. Often this is when service members can learn the status of others who were injured or those killed, which can bring up the realization of life threat and emotional vulnerability. In order to facilitate feeling these emotions, military personnel can incorporate this emotional expression into their articulation of the trauma narrative. In addition, a key component of the AAR is to determine what caused the event and if any errors or deficiencies occurred. At times, service members may misinterpret the AAR as evidence that they are to blame for an outcome that was beyond their control, so it is important to be mindful of this during trauma processing.

It is also important to consider that there is a wide range of appropriate emotional engagement with imaginal exposure (Foa et al., 2007). Underengagement refers to a repeated pattern of emotional avoidance that interferes with the ability to connect with the trauma memory. If service members demonstrate such a pattern during treatment, therapists might intervene by prompting patients with specific questions about their emotions, sensations, and other sensory details. Some patients have described feeling as though a wall is blocking them from accessing their emotions. Instructing them to imagine the wall coming down slowly or breaking apart bit by bit may be useful.

Another approach involves highlighting the protective function and value of both positive and negative emotions, as well as the roles they play in helping people to learn and make sense of themselves, the world, and other people. High emotional control may be helpful during some parts of a service member's life but limiting in others (e.g., engaging with friends or family). Experiencing only positive emotions and not negative emotions may be unrealistic and ultimately unhelpful.

Using in vivo exposure to set up behavioral experiments around the experience of emotional expression is another way to appraise the accuracy and utility of the thought, "Emotions are weak or of no value." Examples of such behavioral experiments include having a service member share an emotionally intense story with a battle buddy or spouse, watch a sad movie with his or her family, share directly about the trauma with supportive others, or complete journal assignments to process feelings. For military personnel who report feeling numb around their

family members, assigning in vivo exposures with high behavioral activation can be beneficial. Behavioral activation, which aims to increase the amount of pleasure and mastery in a person's life, can reduce symptoms of depression and can increase energy and motivation to engage in PE. Activities may include playing games with their children or being in the room with their families instead of withdrawing. When setting up these exposure exercises, inform patients that they may be able to notice emotions at lower intensity than experienced before the trauma. Encourage patients to notice their emotions at whatever intensity. This can include instruction on mindfulness of present emotional states, physical sensations, and attention to positive exchanges, however brief. The task is for patients to repeat this exposure with the goal of rebuilding emotional engagement.

Reconciling Warrior Ethos With the Aftermath of Trauma

The Army's Warrior Ethos represents a set of principles rooted in Army values by which every soldier is trained to live. While these principles serve a motivating, unifying, and stabilizing function for many soldiers in many contexts, they can also contribute to maladaptive beliefs as well as cognitive or behavioral rigidity for those seeking to reconcile or accommodate traumatic experiences or other significant operational stressors. While emboldening, this ethos may also yield a sense of duty and control that is irreconcilable with uncontrollable traumatic events. Imperatives of selfless service and personal courage may (unintentionally) communicate that fear for one's life or well-being is unacceptable. And, when actions or inactions ordered as part of the mission are inconsistent with a soldier's own morals and values, a dissonance may arise that leads to ongoing suffering.

Inflated Sense of Responsibility and Control

Guilt is a common reaction to trauma of all kinds. As noted by Wachen et al. (2016), it can develop naturally when a traumatic event is interpreted through just-world beliefs. That is, the rigid assumption that "you get what you deserve" leads the individual to deduce that he or she has done something wrong to deserve the trauma. The assumption of guilt also sometimes serves a protective function in that it helps maintain the sense of control. The alternative conclusion that the world is not necessarily just and that sometimes even good people are subject to tragedy outside of their control can be very distressing. This protective guilt is consistent with culturally influenced cognitions that are common to many service members, such as "an NCO (noncommissioned officer) is responsible for everything his soldiers do." In addition to the guilt that is often experienced after trauma, service members are subject to powerful messages about responsibility from leadership, an incredibly high degree of accountability, and forces that could easily combine to create an inflated sense of power and control.

The idea of responsibility is a key element of military culture that can strongly influence cognitions related to PTSD. Military personnel at every level of the chain of command (both NCOs and officers) are considered responsible for the service members under their command. Areas of responsibility must be clearly defined so that individuals can focus on their own role while depending on others to fulfill their part of the mission. In this sense, each member of a unit is individually responsible for the unit as a whole. A common saying that captures this outlook is, "If everyone does their job, we all go home okay." Despite the positive intentions behind this sentiment, it is a good example of just-world thinking that can lead to maladaptive interpretations of a trauma.

Importantly, an overdeveloped sense of responsibility can lead service members to ignore the situational context in which the trauma occurred. This perspective naturally fails to take into account the extreme challenges associated with and the uncontrollability of deployment-related trauma. So, when things go wrong, as they often do on the military battlefield, those up the chain of command may interpret these events through a culturally sanctioned lens of unrealistic control and responsibility, resulting in persistent self-blame that might not seem realistic to a civilian.

Repeated exposure to potentially life-threatening combat situations may also contribute to an inflated sense of power and control by presenting evidence that one can always thwart a threat or survive whatever may come. Many patients voice a sense of "invincibility" that comes with taking heavy body armor, automatic weapons, and armored vehicles up against a group of individuals who may be lightly armed, on foot, malnourished, and dressed in lightweight attire. This is no doubt a good boost for morale. However, insurgents still find ways to inflict casualties despite this disparity, which can lead to a complete reversal of the unrealistic sense of invulnerability that was held.

Several different approaches can be helpful for processing an overdeveloped sense of responsibility or power/control. The first is to help patients critically evaluate the messages around responsibility and control that they have learned through their service. Military personnel should be encouraged to consider the purpose of that assigned responsibility. For example, this perspective may increase diligence; however, it also prevents service members from adopting a balanced outlook on uncontrollable situations once they occur. Having the service member consider whether he or she would apply the same level of responsibility and blame to another service member can help increase his or her cognitive flexibility and promote more realistic attributions. When

patients struggle to see outside of this cultural lens, it can actually be used to advantage by highlighting (if true) that they were not reprimanded or punished for their trauma. This fact highlights the difference between human limitations and criminal negligence.

The hindsight bias often leads to thoughts such as “I *should* have known” or “I *could* have prevented this trauma.” In these cases, it can be helpful to suggest to patients that the question of whether they could have prevented their trauma is not a fair one, as it usually ignores the issue of whether they *had good reason at the time* to act otherwise. An example of the hindsight bias is included below.

Sergeant (SGT) Turner is a 30-year-old male, active-duty Army wheeled vehicle mechanic (91B). While deployed to Afghanistan, his unit was sent on a mission to assist a damaged high-mobility medium-weight vehicle. He was operating as the truck commander in the lead vehicle of a convoy when they were ambushed by a group of insurgents.

SGT TURNER: I just keep thinking that I should have done something else.

CLINICIAN (C): What should you have done?

SGT TURNER: I should’ve been looking to the right to see it coming. I could’ve intervened. Instead I was looking left.

C: Is that a part of your mission protocol, or a rule of thumb we can take away for every situation, that you should spend every moment looking to the right?

SGT TURNER: (laughs) No. No, that wouldn’t work either. Then they’d see that and attack from the left. I guess it just sucks knowing that I could’ve prevented it, and I didn’t. I could’ve done more to prepare or something.

C: Isn’t it always the case that we could do more? If you want to get technical, I could’ve found a way to contact you guys the night before and warned you which direction to look.

SGT TURNER: Yeah, but you had no reason to think that this specific thing was going to happen that you could stop that way.

C: Did you?

SGT TURNER: No, I guess not.

When a patient continues to draw guilt from a situation despite any rational basis, it may be helpful to acknowledge how threatening it can be to let go of that sense of control that comes with feeling responsible. In the event that friends have been killed in action and the patient is punishing himself or herself, it can be worthwhile to explore what the patient thinks the deceased would want. Another example is included below.

Staff Sergeant (SSG) Lopez is a 41-year-old female, active-duty army telecommunications operations chief (21W). While overseeing an ongoing mission in Iraq, she received information on the radio that the convoy she was supporting hit a series of improvised explosive devices (IEDs). Four members of the convoy were killed and eight were severely injured. SSG Lopez lost her closest comrade, SSG Tim Black.

SSG LOPEZ: I just don’t want him to be forgotten.

C: So having PTSD is your way of remembering him?

SSG LOPEZ: In a way, yeah.

C: Is that the kind of impact you would want to have on your buddies after your death?

SSG LOPEZ: No way. I’d want them to remember me, but have a good life.

C: Is SSG Black different? Is he watching down on you to make sure you don’t enjoy your life ever again?

SSG LOPEZ: No, of course not.

C: What would he want?

SSG LOPEZ: Tim was a great guy. He’d want to make sure everyone was doing well.

C: Could there be a better way to recognize this loss then? A way to honor his memory without depriving yourself of a good life, or having a negative impact on your family?

Finally, it can be helpful to address the inflated sense of power and control. Fortunately, there are well-appreciated quotes from military figures that serve as a foil to the idea of invincibility. “The enemy gets a vote” (often attributed to General James “Maddog” Mattis but the sentiment is drawn from Sun Tzu’s *The Art of War*), and “No plan survives contact with the enemy” (Helmuth von Moltke the Elder). Many military patients are able to readily appreciate the wisdom behind these sentiments and acknowledge that no military makes it through a war unscathed.

Personal Courage in the Face of Potential Life Threat

Military personnel sometimes encounter traumatic events in which they experience a life-threatening situation in which no injury or death occurs. Examples of “close call” traumas include a near-miss rocket or mortar attack on the forward operating base (FOB), finding an IED prior to explosion, running over a dud IED, or a vehicle in a convoy almost

falling into a roadside canal. Deployment-related close-call traumas present challenges in PTSD recovery that require specific attention. PTSD triggered by close calls can be perplexing to patients and clinicians alike, particularly as service members have likely experienced multiple potentially traumatic events during deployments that do not result in PTSD symptomatology.

Most notably with close-call traumas that lead to PTSD, patients often ruminate on what could have happened as if the potential injury did happen. Patients present with maladaptive beliefs or "what ifs" about the negative consequences that could have happened and expect further danger that will cut their life short. They may even conflate "I could have died" with a depressive thought: "I *should* have died." Imaginal exposure can be utilized to help patients accept the close call as it happened, whereby they or others *did not* die. Saying the details of the specific event repeatedly with emotional engagement can help patients to appreciate the specific details and actual outcome of the trauma.

Patients may reason that, "If I can die at any moment now, there's no point of having relationships or planning for the future." Not surprisingly, this interpretation limits interest or desire to engage in meaningful relationships or activities. Next is a case example to illustrate approaching a close call trauma.

Specialist (SPC) Lee is a 24-year-old male, active-duty Army infantryman (11B). On the FOB, he was walking from the dining facility (DFAC) back to his computerized housing unit (CHU), when an incoming missile hurtled over the FOB walls and landed in the dirt, undetonated.

CLINICIAN: If you think you should have died, I wonder why you didn't.

SPC LEE: I don't know, but now it is all I can think of, like I cheated death and I'm not supposed to be here.

C: That sounds like a tough thing to think considering you have your family and other soldiers to care for.

SPC LEE: It is.

C: I wonder how this stance, that you cheated death, impacts your involvement with your family. On the one hand, you have expressed what they mean to you and at the same time you have shared that you don't want to spend time with them. Is any of that related to this thought about the trauma?

SPC LEE: I think so. I want to protect them from pain since anything bad could happen.

C: So do you wish you died when the missile hit?

SPC LEE: No, it's not that, it is that I realize I can die at any time. I was just walking to my CHU from the DFAC, and all of a sudden a freaking missile comes out of nowhere. So what's the point of getting close to people?

C: Well, let's consider that. One option would be to try to avoid any situations for the rest of your life where you could feel close to your family. It is possible that you could die next year. Another possibility is that you live another 10, 20, or 50 years. I wonder what that would be like for you to never engage with your family or do other things you enjoy again under the assumption that you will die soon, but end up living a long life.

SPC LEE: That would suck, too.

C: How would you want to be remembered at your own memorial?

SPC LEE: As a good father and a decent person.

C: How does your decision currently to limit your engagement with you family fit with that long-term picture.

SPC LEE: It doesn't.

It is helpful in processing to highlight how their behavior may be in contrast with their values and goals. The assignment of meaningful activities for in vivo exposure, such as assisting a friend with a project, can bolster attention to patient values and dismantle fixation on death.

When patients believe they are prepared for anything, close-call traumas can lead them to question their own or others' decision making. This can be accentuated by the military cultural understanding that taking personal responsibility is a hallmark of a good soldier. Just as with other traumatic experiences where the dangerous outcome occurs, service members can draw conclusions that they must have acted in error, such as, "I should have stopped this from happening" or "I should have reacted differently." Processing can be focused on helping patients consider how much personal responsibility they actually had at the time of the close call. Military personnel who have a freeze response during a close call can also experience guilt or shame about their reaction. To help patients process their reactions, therapists can ask questions to help them to unpack their unhelpful beliefs. For example, the therapist might ask, "Did you know that a mortar was going to land right in front of you? Why did you stop running? Why didn't you run to the bunker right away?" These lines of questioning and related discussion may help service members accept their emotional and physical vulnerability and the limitations of their power and control but still take the acceptable risks necessary for good quality of life.

Potentially Morally Injurious Events

Service members, while trained in the values of the Army, each possess their own unique set of morals and values. Potentially morally injurious events (PMIEs), actions or inactions that deeply violate one's morals, values, and expectations, are increasingly common in modern warfare (Litz et al., 2009). Examples of PMIEs include killing civilians or unarmed combatants, witnessing maltreatment of others by fellow service members, and perceived betrayals by leadership. These experiences interact with unique individual, cultural, and contextual factors, and the sequelae of PMIE exposure may require a broader lens on specific procedures and processes in PE.

PFC Linda Garza is a 22-year-old female, active-duty cavalry scout (19D). While serving her first tour in Afghanistan, her fire team was tasked with clearing a structure believed to be vacant but in which insurgents had previously been identified. After entering the structure and upon seeing movement, the NCO fired and told the other soldiers to "light 'em up." Four Afghani civilians, including two children, were killed. The intelligence regarding the insurgents was either incorrect altogether or outdated. Moreover, PFC Garza and the other members of the fire team had played soccer with the two children the day before this incident. After the event, she overheard the NCO and another soldier making callous comments about the incident. PFC Garza was deeply affected by this incident and the response to it.

CLINICIAN (C): When you think about the outcome of that mission, what emotions show up for you?

PFC GARZA: All of them at once. I'm pissed, I'm sad, I'm afraid. I regret it more than anything. Some days I regret joining the Army altogether.

C: Those are some painful emotions, and I hear some thoughts about regret in there. How are those painful thoughts and emotions affecting your daily life?

PFC GARZA: I just don't give a **** anymore. I used to. But at work now, I'm just so disgusted with everyone around me, I just don't want to deal with them. But really I'm no better; I'm just as guilty. So I hardly see the point in anything anymore.

C: So I hear anger and disgust toward some people in the Army…

PFC GARZA: [interrupts] More like the whole Army.

C: So anger and disgust at the Army and feelings of guilt and maybe even disgust toward yourself?

PFC GARZA: Pretty much.

C: And why do you think those feelings are there?

PFC GARZA: Because they shouldn't have died! We shouldn't have been there that night. And I shouldn't have listened… I guess mission first means shoot first ask questions later. But now those people, those kids, are dead. We were supposed to be there to help repair what our war with the terrorists destroyed. Now who's the terrorist? But no one seems to care.

C: There are some extremely powerful emotions and thoughts coming across here, and I think they say a lot about who you are, who you want to be, and what matters to you. You're angry that your NCO made a decision that seemed to violate protocol and you're disgusted by his comments after the event. It sounds like you're feeling guilty about taking part in that and having thoughts that you're "no better" and maybe even equating yourself with a terrorist. All in all, something terrible happened and you're struggling to reconcile that with your own morals and values.

In a conversation of this sort (especially following an imaginal exposure) the clinician and service member have access to a lot of relevant information and can go a number of different directions. As mentioned previously, exploration of hindsight bias may yield new contextual information that facilitates changes in beliefs. Exploration of intentionality and "right-sized" responsibility may also further shift distorted beliefs and ameliorate exaggerated emotional responses. However, there may be time when moral emotions (e.g., guilt, disgust, contempt) and moral judgments are appropriate and healthy responses. Thus, rather than habituating to these emotions, new learning may require acknowledging the "message" of the emotion (e.g., guilt as an indicator of personal violation and a desire not to commit such a violation in the future) while still being pained by it. Likewise, rather than restructuring the cognitions, new learning may require generation of novel, present- and future-oriented thoughts about how to live in line with the value that was previously violated while accepting the painful reality of that violation. In sum, addressing moral injury in PE with soldiers requires the therapist to hold a knowledge base of Army values as well as the individual values of the soldier, to be able to contextualize discrepancies if they arise, and to approach new learning from multiple angles.

Conclusion

The aim of this paper was to highlight the role of military culture and lifestyle in PTSD symptom expression and recovery and to provide clinical strategies to successfully conduct PE with active-duty military service members. Several strategies for accommodating and working around the demanding schedules of military personnel were presented, including reducing obstacles

through collaborative and detailed homework planning, soliciting command support when indicated, and incorporating important social support people into treatment. In addition, several emergent modifications in treatment delivery were described, including taking advantage of technological advances to offer behavioral health, shortening PE sessions from 90 minutes to 60 minutes for better fit into typical clinical slots, and providing specialized intensive outpatient programs that condense PE into a massed format.

Another main focus of this paper was to illustrate with case examples several clinical techniques for therapeutically processing common themes that emerge in military populations. Strategies to help disentangle pernicious hypervigilance from adaptive military training guidelines were highlighted. In addition, the internalization of military values and ideals such as emotional control, responsibility for one's comrades, and reconciling warrior ethos with vulnerability was explicated. Ways to emotionally process whether service members were overgeneralizing these principles unhelpfully were demonstrated, and approaches for helping them overcome such cognitive distortions were delineated.

The main impetus for this paper was the limited literature that focuses on delivering PE with active-duty military service members. The literature both on treating active-duty personnel in an emergent stage and on many innovative therapeutic approaches currently being investigated will aid in the identification of culturally congruent, evidence-based programs to reduce and eliminate PTSD among active duty military. Given the number of returning service members and the overwhelming need for services, it is imperative that mental health providers in all settings and disciplines be competent in the treatment of service members and veterans. This article can serve as an important stepping stone for those seeking to improve their competence in treating PTSD with military populations.

Appendix A. Example Weekly Schedule of Planned in Vivo and Imaginal Exposure Assignments

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
5:30	Wake	Wake	Wake	Wake	Wake		
6:00							
6:30	Formation: Stand in middle of group	Formation: Stand in middle of group	No formation	Formation: Stand in middle of group	Formation: Stand in middle of group		
7:00	Work	Work	Work	Work	Work	Wake	Wake
8:00							Gym
9:00							
10:00						Home Depot	Home Depot
11:00							
12:00							
13:00	Work	Work	Work	Work	Work	Lunch: Out with family	Neighborhood BBQ
14:00						Household Chores	
15:00							
16:00						Imaginal exposure	Imaginal exposure
17:00	Gym	Park with kids, no scanning	Gym	Park with kids, no scanning	Gym		
18:00	Dinner with family, leaving blinds open	Dinner with family, leaving blinds open	Home Depot	Home Depot	Dinner with family, leaving blinds open		
19:00							
20:00		Imaginal exposure		Imaginal exposure			
21:00							
22:00							
23:00	Sleep	Sleep	Sleep	Sleep	Sleep	Sleep	Sleep

Appendix B. Common Combat-Related PTSD Beliefs

I was complacent.

I should've been more vigilant (to spot an IED/ambush).

I should've known better (to use a different tactic).

I didn't do anything/I froze/I panicked (and that means I'm weak/a failure).

I should've done something to intervene (besides follow orders).

The world is a dangerous place – I just didn't know before I deployed.

I'd rather be safe than sorry.

Safety should be the only priority.

I can't trust anyone.

Our leadership didn't care about us.

I was responsible for them (those who got hurt/killed) – period.

I failed them (my unit or subordinates).

I'm to blame.

The insurgents aren't to blame; they were just doing their job.

I can't accept this.

If I accept this, it means I approve of it.

If I accept this (or recover), I'll dishonor/forget my friends who died.

I deserve to be punished and feel bad.

It should've been me who died.

Others had it so much worse. I have no right to be bothered by this.

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Address correspondence to Brittany N. Hall-Clark, PhD, Department of Psychiatry, The University of Texas Health Science Center at San Antonio, 7550 IH-10 West, Suite 1325, San Antonio, TX 78229.; e-mail: hallclark@uthscsa.edu.

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