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The Use of Eye Movement Desensitization and Reprocessing in the Management of Filipino Soldiers with Combat Related Posttraumatic Stress Disorder

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ABSTRACT

This study explores the effectiveness of eye movement desensitization and reprocessing (EMDR) as an intervention for trauma-related symptoms consistent with post-traumatic stress disorder (PTSD) among three soldiers of the Philippine Army. The application of EMDR in a military context was supported by the case studies of the participants, who exhibited heightened trauma symptoms before treatment. The study utilized the PCL-5 with LEC-5, CAP-5, and Cortisol Assay test to monitor changes in their symptoms. Data analysis involved comparing pre-treatment and post-treatment scores, psychotherapy notes, medical records, and interview notes. The clients underwent the eight phases of the EMDR Treatment protocol. Post-treatment, the clients reported alterations in the severity of their symptoms. The results showed a significant decrease across the four clusters of PTSD symptomatology: reexperiencing, avoidance, cognition and mood, and arousal and reactivity symptoms. Additionally, themes extracted from the data were categorized into three overarching headings: EMDR's transformative impact on an individual, prerequisites for EMDR to induce change, and EMDR as a catalyst for change. Both active and passive processes were identified in the participants' descriptions of the EMDR process and its impact on change. The discussion centered on pre- and post-treatment data and themes, offering a unique qualitative phenomenological perspective on EMDR. The study suggests implications for future clinical and counseling research while acknowledging its limitations and theoretical foundations. Overall, the study's conclusions provide evidence supporting the effectiveness of EMDR in treating combat-related PTSD within a military context.

Keywords: Combat-related PTSD, trauma, EMDR, case study, military psychology

INTRODUCTION

Military personnel face a heightened risk of exposure to traumatic events, potentially leading to posttraumatic stress disorder (PTSD) (Xenakis, 2014). PTSD is a trauma-related disorder with symptoms grouped into four clusters: intrusion, avoidance, negative alterations in cognition and mood, and arousal and reactivity (APA, 2013). Diagnostic criteria include intrusive, avoidance, negative alteration, and arousal symptoms, lasting more than one month and causing significant distress. Additional criteria specify the absence of substance use or another condition. Two specifiers are also identified: (1) with dissociative symptoms and (2) with delayed expression (APA, 2013).

After World Wars I and II and the Korean War, soldiers were noted to experience PTSD due to the mental and physical toll of warfare. A meta-analysis of 28 studies from various nations found a 10.2 percent to 13.2 percent probability of developing PTSD after military deployment to Afghanistan or Iraq (Kok, Herrel, Thomas & Hoge, 2012). The reported prevalence of combat-related PTSD among US veterans ranged from two to 17 percent, with a lifetime prevalence of six to 31 percent (Dohrenwend et al., 2006; Kulka et al., 1990). Persian Gulf War veterans reported PTSD rates between 1.9 percent and 13.2 percent, and in the conflict in the Middle East, prevalence ranged from four to 17.1 percent (Hoge et al., 2006; Thompson, Gottesman & Zalewski, 2006; Gray et al., 2002). The 2017 conflict in the southern Philippines led to an estimated 10 to 12 cases of diagnosed PTSD after a five-month battle (Army General Hospital records). During the Marawi Siege, V Luna Medical Center admitted 23 soldiers with PTSD, a small percentage compared to the approximately 12,000 troops involved, possibly due to only severe cases being diagnosed, recorded, and treated.

Many military personnel and veterans face combat-related PTSD, with symptoms like nightmares, flashbacks, hypervigilance, sleep disturbances, and negative mood. The 2017 Marawi battle posed challenges in providing timely mental health services. Camp Evangelista Station Hospital (CESH) in Mindanao is crucial for mental healthcare, but there is a lack of established programs for screening, diagnosis, and treatment of combat-related PTSD in the military. Testing evidence-based psychological treatments is crucial to address soldiers' needs and integrate them into the mental health program. The researcher explored the use of Eye Movement Desensitization and Reprocessing (EMDR) for managing combat-related PTSD.

RELATED LITERATURE

Presented in this section is a discussion of several studies on psychological intervention for PTSD and Eye Movement Desensitization and Reprocessing (EMDR) as treatment for combat-related PTSD.

Combat Deployment and Post-traumatic Stress Disorder. Combat-related PTSD, a condition marked by stress symptoms following exposure to trauma in warzones, has gained prominence, especially in Iraq and Afghanistan wars (Fajarito & De Guzman, 2017; Fragedakis & Toriello, 2014). Research on US Army Soldiers and Marines returning from Iraq and Afghanistan deployments (N=3,671) revealed high rates of trauma exposure, including artillery fire, gunfire, witnessing death, and ambush (Peterson et al., 2011; Hoge et al., 2004). Combat-related PTSD results from exposure to such traumatic events, with individual soldiers having unique stories. In the local area, combatants referred for assessment described experiences beyond normal human encounters, such as prolonged deployment, witnessing fellow soldiers' death, handling human remains, and facing the possibility of not surviving the war zone.

During the Marawi Siege in the southern Philippines, V Luna Medical Center recorded 23 soldiers with PTSD, making up less than 10% of all patients admitted during the conflict. Some soldiers reported symptoms like irritability, insomnia, hypervigilance, and flashbacks.

Some soldiers may develop severe PTSD symptoms after combat, while others in the same unit may not. The likelihood of PTSD increases with the intensity of combat and the personal nature of the trauma (Hoge, 2010). For example, in a platoon facing a casualty, most members may be personally affected, but not all will develop PTSD. Those most at risk are individuals with close personal connections to the injured, those responsible for their well-being or the death of a comrade, and those who feel helpless in preventing the tragedy. The risk is higher if there is a perception of betrayal, such as poor leadership decisions contributing to the incident or gross negligence leading to friendly-fire casualties.

PTSD, often seen as a mental disorder, is fundamentally a physical condition affecting the entire body. Its hallmark is intrusive experiences, vividly reliving events with physiological responses triggered by reminders, leading to a sense of lack of control. Coupled with the vivid yet disjointed nature of these memories, the intrusive symptoms are distressing and confusing. The distinctive feature of being unable to construct a coherent timeline or recall specific elements causes frustration and distress (McGuire et al., 2014).

The Biology of Psychological Trauma and PTSD. Research on the neural mechanisms underlying PTSD has predominantly focused on the hippocampus. Brain imaging reveals that individuals with PTSD exhibit a smaller hippocampus compared to healthy controls. A diminished hippocampus increases vulnerability to developing PTSD following trauma exposure (Bossini et al., 2008). Additionally, stress-induced increases in circulating glucocorticoids, including cortisol, may contribute to the reduction in hippocampal size (Kassai et al., 2008). Recent reviews (Everly & Lating, 2002; van der Kolk, 1996; Yehuda et al., 1998) have affirmed that the physiological response to trauma and PTSD differs from the response to major depression and the body's general physiological reaction to routine life stressors.

Hypothalamic-Pituitary-Adrenal (HPA) Axis. The central coordinator of the human neuroendocrine stress response involves hypothalamic components, including the anterior pituitary and adrenal glands. In response to stress, neurons in the hypothalamic paraventricular nucleus release corticotropin-releasing hormone (CRH), which triggers the production and release of adrenocorticotropin (ACTH) from the anterior pituitary.

ACTH, in turn, triggers the release of glucocorticoids from the adrenal cortex. These glucocorticoids play a crucial role in regulating metabolism, immune function, and brain activity, coordinating physiological and organismal responses to manage stressors. Simultaneously, various brain pathways influence HPA axis activity; the hippocampus and prefrontal cortex (PFC) inhibit it, while the amygdala and aminergic brainstem neurons stimulate CRH neurons in the PVN. Additionally, glucocorticoids provide negative feedback control of the HPA axis by regulating hippocampal and PVN neurons. Prolonged exposure to glucocorticoids adversely affects hippocampal neurons, leading to reduced dendritic branching, loss of dendritic spines, and impaired neurogenesis (Sherin & Nemeroff, 2011).

Studies suggest that PTSD may be linked to HPA axis dysfunction. For example, US Combat Veterans with PTSD exhibit significantly higher plasma cortisol levels than normal volunteers, with cerebrospinal fluid cortisol concentrations at a mean of 3.18 ng/ml (SD=0.33) compared to 2.33 ng/ml (SD=0.50) (Baker et al., 2005). Cortisol, an adrenal glucocorticoid hormone, is the end product of the HPA axis in humans. In response to stressors, the body releases cortisol to inhibit the stress response, restoring normal functionality. However, persistent exposure to high-pressure situations, triggering the stress response too often, can lead to HPA axis dysregulation, potentially causing

functional impairment in individuals with PTSD.

Furthermore, if the HPA axis fails to return to its normal state, individuals with PTSD may experience abnormal cortisol levels. Elevated cortisol levels are associated with an increased incidence of reporting false memories (Payne, Jackson, Hoscheidt, Ryan, Jacobs, & Nadel, 2007). Consequently, cortisol could serve as a potential biomarker for diagnosing and treating patients with PTSD.

PTSD Treatment Approaches. The Middle East war has elevated PTSD as a significant public health concern, with studies revealing a prevalence of PTSD and mental health issues among troops comparable to the Vietnam War. Around 29 percent of veterans from Operations Iraqi Freedom (OIF) and Enduring Freedom (OEF) enrolled in Veterans Administration (VA) healthcare (Reisman, 2016). The VA/Department of Defense (DoD) treatment guidelines for PTSD outline effective treatments for the disorder. The use of psychological interventions is regarded as the first-line approach to PTSD. Cognitive Behavioral Therapy (CBT) is one of the mainstay treatments for PTSD. Cognitive approaches help correct erroneous thoughts in the experience and use behavioral methods that decrease associated symptoms through gradual exposures to reminders of the traumatic event(s). CBT includes cognitive therapy, exposure therapy, and skills training (Fogger, Moore, & Pickett, 2016).

Eye Movement Desensitization and Reprocessing Therapy and its Efficacy. While Cognitive Behavioral Therapy (CBT) is known for effectively reducing PTSD symptoms, Eye Movement Desensitization and Reprocessing (EMDR) is gaining acceptance as a recommended treatment for both civilian and combat-related cases. Endorsed by the VA and the Department of Defense in 2014, EMDR follows the Adaptive Information Processing (AIP) model, suggesting that trauma is stored and trapped in the brain's neural network.

A traumatic experience from the past is referred to as a "node," which is a biologically stored memory at the center of memory networks. This represents the core of an unprocessed memory network, focusing on the incident. Any recall of the traumatic event triggers negative emotions and thoughts. The goal is to introduce adaptive emotions to the neural network through bilateral stimulation. This process forms new neural pathways, enabling access to the stored trauma. Consequently, this facilitates the reprocessing of the trauma, reduces associated anxiety, and establishes new associations with memories, promoting adaptive behaviors (Shapiro, Kaslow & Maxfield, 2007).

Several previous meta-analyses have found that EMDR has sustained and

lasting treatment effects for PTSD (Bisson, et al., 2007; Bradley, et al., 2005). EMDR is now considered to meet criteria for evidence-based practice in the United Kingdom by the National Institute for Clinical Excellence (2005), in America by the American Psychiatric Association (2004), in Australia by the Australian Centre for Posttraumatic Mental Health (2007), and in the Netherlands by the Dutch National Steering Committee for Guidelines for Mental Health Care (2003). Currently, many nations have established EMDR as treatment of choice for PTSD (Chen, et al., 2014). The EMDR treatment outcomes were studied under controlled conditions through efficacy studies, which routinely exclude comorbid conditions (Bisson, Robert, Andre, Copper & Lewis, 2013). The superiority of EMDR over other trauma-focused, cognitive-behavioral treatment methods was thus amply proven (Bradley et al. 2005). Further, it has been found that EMDR works better than pharmacotherapy alone and has lower nonadherence (Van Etten & Taylor, 1998). It was also validated that EMDR is efficacious in civilian populations (Ehring, et al., 2014), refugees (Acarturk, Konuk & Cetinkaya, 2015)), and soldiers (Zimmermann, et al., 2007).

In the meta-analysis studies conducted by Chen, Zhang, Hu, and Liang (2015) comparing CBT and EMDR for most effective therapies, subscale scores of PTSD symptoms indicated that EMDR was better for decreased intrusion and arousal severity compared to CBT. Apart from using EMDR among the PTSD group of population, research also showed that such therapy can be effective in reducing stress, anxiety, and depression among cancer patients undergoing radiation therapy. In a study conducted by Krupnik (2015), EMDR therapy was shown to reduce depression, anxiety, and stress among patients undergoing radiation therapy. In an Asian population where EMDR has been applied, it was shown that among Taiwanese adolescents who experienced disaster trauma, there was a significant reduction of general anxiety and depressive symptoms (Tang, Yang, Yen & Liu, 2015). EMDR offers several potential benefits for military populations over other treatment modalities. With the light of evidence of its efficacy and suitability to the current population tested in the study, EMDR has been shown to be as effective as exposure and cognitive-based models, though EMDR typically confers more rapid treatment gains, making it well suited for emergent response settings for patients prone to drop out early in treatment when symptom alleviation is not immediately apparent.

Although there have been no local studies conducted on the efficacy of EMDR on combat-related PTSD, it has been used by mental health professionals here in the Philippine setting to help clients with depression, disturbing memories, stress, and bipolar disorders (Enriquez, 2018). Since the primary treatment

modality of this study is EMDR therapy, the researcher upholds its fidelity. This research is mainly intended to help the Filipino soldiers who exhibit symptoms of combat-related PTSD. Optimistically, once the treatment modality produces successful outcomes for the participants, it will be integrated into the mental health programs of CESH Mental Health and Resilience Center.

FRAMEWORK

This present study is based on the Adaptive Information Processing (AIP) Model developed by Shapiro in 2001 through experiences in EMDR therapy sessions. The AIP model suggests that maladaptively stored trauma memories hinder the rational processing of information in the brain's prefrontal cortex. The model emphasizes the patient's resources, if the human brain can typically process stressful information for complete integration. However, when the innate processing system is impaired, memories may be stored in a raw, unprocessed, maladaptive form, leading to distressing incidents being stored separately and inability to connect with other memory networks holding adaptive information.

According to Shapiro, when a memory is encoded in an excitatory, state-specific form, various internal and external stimuli can trigger the original perceptions. This means that dysfunctional stored memories become the foundation for future maladaptive responses, as current situations automatically connect with the associated memory networks of unprocessed, dysfunctional stored memories (Hase, Balmaceda, Ostacoli, Liebermann & Hofmann, 2017). The AIP model emphasizes that these dysfunctional stored and not fully processed memories serve as the basis for psychopathology. Activating these memories, even years later, can result in a range of symptoms, including intrusions in the form of flashbacks and nightmares.

Pathogenic Memories and Post Traumatic Stress Problems. Traumatic experiences, known for their intense stress, can disrupt information processing, as stated in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (APA, 2013). While discussions often connect intrusive memories to Criterion A events in PTSD criteria, non-Criterion A events may trigger even more intrusions (Gold, Marx, Soler-Baillo, and Sloan, 2005). Studies by Kendler, Hettema, Butera, Gardner, and Prescott (2003) indicated that stressful life events can cause as many PTSD symptoms as traumatic events, leading to intrusions without full PTSD development (McFarlane, 2010). These findings suggest that intrusions are a common memory-based symptom not necessarily tied to a PTSD diagnosis

or Criterion A.

Intrusions, indicating memory-related issues beyond PTSD, may be associated with other mental disorders. Theoretically, pathogenic memories play a crucial role in the origin of various psychiatric symptoms related to the formation and consolidation of implicit dysfunctional memory (Centonze, Siracusane, Calabresi & Bernani, 2005). Following the Adaptive Information Processing (AIP) model, EMDR protocols target these dysfunctionally stored memories, activating the information processing system for a process known as "reprocessing." This transformation of memories, combined with subsequent integration into adaptive memory networks, leads to symptom resolution and facilitates learning (Solomon & Shapiro, 2008).

The EMDR Protocol. EMDR therapy involves attention to three-time periods: the past, present, and future. Focus is given to past disturbing memories and related events, the present situations that cause the distress, and developing skills and attitudes needed to positive future actions. Transformational processing involves the EMDR eight-phase treatment approach: Phase1. History taking sessions – assessing the client's readiness and developing a treatment plan, identifying possible targets for processing that include distressing memories and current triggers; Phase 2. Preparation sessions – ensuring that a client has several different ways of handling emotional distress, teaching stress reduction techniques, maintaining equilibrium during and between sessions, and developing and enhancing safe place; 17 Phases 3-7. Reprocessing – identifying the traumatic event – the vivid visual image related to the memory, determining the Subjective Unit of Distress, identifying the negative belief about self and related emotions and body sensations, installing positive cognition, determining the validity of cognition and body scan, installing future template, and closure debriefing (Processing of memories is accessed using bilateral stimulation that may include eye movement, taps or tones); and Phase 8. Re-evaluation – evaluating treatment effects, reassessing memory from last session, and evaluating integration within a large social system.

OBJECTIVES OF THE STUDY

The goal of this study was to describe the experiences of using Eye Movement Desensitization and Reprocessing as a treatment method among military personnel with combat-related PTSD. Specifically, this study determined the following questions: (1) the participants' profile based on their case reports; (2) the participants description of their traumatic experiences; (3) the process and outcome of EMDR as an intervention method; and (4) the changes in terms of thoughts, feelings and behavior of participants while undergoing the process of EMDR.

METHODOLOGY

Research Design. A Multiple Case Study Analysis is the most appropriate way to carry out the present study. Multiple Case Study design, according to Yin (2003), provides more extensive descriptions and explanations of the issue, which, in this case, is the use of the EMDR method as a therapeutic technique. This case study used multiple sources of data, such as the participants' case reports containing pre-treatment and post-treatment PTSD and cortisol levels and the narrative of the sessions conducted with each participant. Other sources of data included psychotherapy notes, medical records, Summary of Information (SOI) highlighting each participant's military background, collateral interview and follow-up notes with the unit's Personnel Officer and First Sergeants, and follow-up interview with the participants. This study developed an understanding of the implications of EMDR therapy when used in the management of Filipino soldiers with combat-related PTSD.

Research Locale. This study was conducted in an Infantry Division of the Philippine Army situated in a major city of Southern Philippines. It has its own Military Treatment Facility (MTF) that provides quality healthcare to all military personnel, their dependents, Civilian Auxiliary (CAA), and authorized civilians. It has an active Mental Health and Resilience Center that provides mental healthcare programs for soldiers such as Neuro-Psychiatric Screening, Psychological Assessment, and Psychosocial Service with Clinical Psychology Service, which has been recently established with adequately manned by registered psychologists, registered psychometricians, a medical officer, and a neuro-psychiatric screener manning the Mental Health and Resilience Center.

Participants. The study participants were recruited from hospital clients referred by line units between June 18, 2020, and March 24, 2021, and who had served in deployment and combat support settings. For screening for PTSD symptoms, the PTSD Checklist for DSM-5 (PCL-5) with Life Events Checklist for DSM-5 (LEC-5) and Criterion A were used. Individuals with a total score of 31-33 or higher were initially included, and five met these criteria: exposure to death or threat, intrusive symptoms, avoidance of trauma-related stimuli, negative mood alterations, arousal and reactivity changes, disturbance duration exceeding one month, clinically significant distress or impairment, and disturbance not attributed to substances or other medical conditions. However, two were not included in the final conduct of the study. One has complex trauma events with co-occurring depressive disorder. The other opted to be treated in a similar Philippine Army facility located near his family in Northern Philippines.

Instruments. PTSD Checklist for DSM-5 (PCL-5) with Life Events Checklist for DSM-5 (LEC-5) and Criterion A. This checklist was used to screen combat troops for PTSD. This 20-item self-report measure assesses the presence and severity of PTSD symptoms and can be completed in 5-10 minutes. The instrument evaluates symptoms in the past month and is useful for a provisional diagnosis of PTSD.

The Cortisol Assay test measures cortisol levels in the blood, which is a steroid hormone released by the adrenal gland. Prolonged high cortisol levels can lead to various health issues, including weight gain, high blood pressure, disrupted sleep, mood swings, reduced energy levels, and an increased risk of diabetes. People with posttraumatic stress symptoms may have more sensitive cortisol receptors in the brain, making them intensely responsive to external events (Kaminer & Eagle, 2010). The test, requested by a medical officer and conducted by a licensed medical technologist, involved extracting a blood sample, which was then sent to a CESH-accredited Medical Laboratory for the Cortisol Assay. The results were interpreted by a medical officer.

The Participants' Interview Guide, created by the researcher, collected information about the participants' characteristics. It was used during the history-taking and assessment phase of EMDR therapy, helping the researcher understand the participants' preparation before deployment, the deployment's nature and duration, and their thoughts and feelings during and after deployment.

The Clinician-Administered PTSD Scale for DSM-5 (CAPS-5) is a 30-item interview aligned with PTSD criteria in the Diagnostic and Statistical Manual of Mental Disorders, 5th edition. Administering the full interview usually takes 45-60 minutes, and it is a crucial part of the assessment phase. CAPS-5 is recognized as the gold standard for diagnosing PTSD due to its reliability and strong validation. Initial validation, aligned with DSM-5, indicates a convergent validity of r=.83 with the well-validated CAPS-IV.

The Psychotherapy Outcome Monitoring Tool, created by the researcher, evaluates the therapy's results following the eight phases of the EMDR method. It assesses helpful and unhelpful aspects of the intervention, along with the participants' challenges in comprehending and following the procedures. Validated by three experts, the tool was employed after completing the EMDR protocol.

Research Procedure. Preparation. The researcher obtained approval from the Ethics Committee of the 4th Infantry Division, Philippine Army for the study. The participants with combat-related PTSD diagnoses were selected from the Mental Health and Resilience Center. After informing the participants about the study's purpose, the researcher asked for their written informed consent. A medical officer ordered a Cortisol Assay test and a licensed medical technologist explained and conducted the blood sample extraction protocol. The blood sample was sent for the Cortisol Assay test, ensuring proper handling and disposal of blood serum. A medical officer interpreted the test results.

Clinical Intervention. Eligibility for EMDR therapy was determined through a thorough history and assessment, utilizing the CAPS-5. For participants with a history of suicide attempts and dissociative symptoms, caution and case consultation with the researcher's mentor were undertaken. The preparation phase included establishing stabilization and self-control strategies, with additional sessions conducted to ensure readiness. The researcher individually administered to the eligible participants the intervention that spanned from fourteen to seventeen sessions at a twice-weekly interval. Successive sessions addressed incomplete processing sessions.

Post-Intervention. PCL-5, CAPS-5, and Cortisol Assay were used during post intervention. The psychotherapy outcome tool was used and a follow up upon reintegration of the participants to their unit and family was done to substantiate the results of therapy.

Data Treatment and Analysis. The findings came from multiple sources of data. The data gathered from the participants to answer the research questions, the

pretreatment and posttreatment scores, the psychotherapy notes, the medical records, and the interview notes were integrated in the case study reports. The case reports were evaluated individually. Each research question was answered and the implications of the use of EMDR in the military setting were explored.

Ethical Considerations. Before being asked for their consent, the participants were fully informed about the research and its procedures, briefed on the risks and benefits associated with their involvement in the study, and told that their participation was optional and voluntary. They were also assured of the confidentiality of their identity and informed that their participation does not earn them any remuneration. The researcher explained the possible psychological benefits, such as development of insight, acquisition of specific skills that increase capacity to tolerate stress and manage stress reactions, and improvement of psychological well-being. The participants were not compelled to reveal information that they were unwilling to share. For considerations in handling human body tissue, the preparation and procedures of extracting blood serum from the participants for cortisol assay test were explained by a license medical technologist.

RESULTS AND DISCUSSION

Profile of the Participants based on Case Reports. Table 1 shows that the participants are enlisted personnel with the following ranks: private, corporal, and sergeant. Given their designations, they each hold combat and combat support roles.

Table 1

Sociodemographic and Service Profile

	Case 1 (SL)	**Case 2 (LS)**	**Case 3 (IO)**
Rank	*Sgt*	*Cpl*	*Pvt*
Designation	Squad Leader	Lead Scout	Intel Operative
Length of Military Service	14 years	7 years & 7 months	2 years & 5 months
Age	33	26	26
Education Background	Vocational Graduate (TESDA)	2nd Year College	High School Graduate
Marital Status	Married	Single	Common Law Spouse
Duty Status	Combat Deployed	Combat Deployed	Combat and Operational Support
Number of PTS(s)	Two Combat encounters (2013, 2014)	Two Combat encounters (2015, 2016)	One motor vehicle accident (Jan 2021)

The participants have been in service for less than 14 years, with the most junior having served less than five years. Length of military service is positively associated with higher probabilities of PTSD, particularly those serving one to five years having 72.80 percent risks of PTSD (Whitehead, 2020). Two participants aged 26 years old while one aged 33 years old. Lee (2019) cited that DSM-5 PTSD prevalence among U.S. veterans was estimated to be 29.3 percent in ages 18-29 and 12.3 percent among those aging 30-44.

SL is married, LS is single, and IO has a common law spouse. Family support is very important to a recovering trauma survivor with PTSD. The quality of family relationships is critical to one's physical and psychological health (Taylor et al., 2005). In a study about Filipino help-seeking for mental health problems, it was found that Filipinos preferred family and friends as sources of help (Martinez et al., 2020).

Table 2

Pretreatment Clinical Profile

Case	Test PCL-5 with LEC and Criterion A	CAPS-5	Pretreatment Results Cortisol (ECLIA)
Case 1. The Squad Leader	59 (Significant)	3.4 (Severe)	495.5 nmol/L (Within Normal Range)
Case 2. The Lead Scout	74 (Significant)	3.7 (Severe)	259.9 nmol/L (Within Normal Range)
Case 3. The Intelligence Operative	51 (Significant)	2.7 (Severe)	278.1 nmol/L (Within Normal Range)

As shown above, all three cases have significant and severe PTSD based on the results of PCL-5 with Lec and Criterion A and CAPS-5. Such level of PTSD indicates that they experience pronounced distress and considerable difficulty managing their PTSD symptoms. Cortisol Assay test, however, yielded normal ranges, although SL's result was approaching the upper limit of the normal range.

Participants' Description of Traumatic Experiences. IO experienced only one traumatic event with features like his current trauma symptoms. SL and LS, on the other hand, experienced two combat-related traumatic events. During deployments, Filipino soldiers are exposed to potentially 114 traumatic events. They may witness injury and death, get involved in vehicular accidents, or handle human remains. Research has shown a strong link between levels of combat stress and PTSD. According to Fajarito and De Guzman (2017), level of combat

exposure and proximity are important elements in understanding how soldiers experienced their PTSD. The study's results suggest elevated pretreatment trauma symptoms in all three cases based on diagnostic tools and clinical interviews administered before treatment.

Severe level (https://www.ptsd.va.gov/professional/assessment/adult-int/caps.asp) suggests prolonged exposure to traumatic events, and without treatment, such level impacts one's mental health. Cortisol levels of the three cases are within normal limits, indicating no current physiological stress reactions. However, it may suggest a lower risk of reporting false memories of their trauma experience (Payne et al., 2007).

Features of Trauma Narratives. All three cases experienced trauma related to military service, involving combat operations for SL and facing a threatening situation with a Scout Ranger for IO. SL's trauma was rooted in self-blame, regret, grief, and the sight of mangled bodies. For LS, the daily risk of violent death in the Marawi battle zone was unsettling. IO struggled with the trauma of being mistaken by a Scout Ranger, further complicated by the dismissal of his terror by a commanding officer. Military leaders not only influence systems and processes but also impact how subordinates perceive and respond to stressful events (Charrys, 2021). Tsai, Whelin, and Pietrzak (2014) stressed the importance of studying the impact of leadership behaviors on mental health. Personal support from military leaders in normalizing treatment-seeking among soldiers is crucial (Tsai et al., 2014). The fact that the three cases were referred from line units indicates an acknowledgment of the importance of connecting soldiers to mental healthcare.

Trauma Issues Addressed by the EMDR Process. The EMDR protocol was observed among the three cases, allowing for the spontaneous emergence of insights, emotions, physical sensations, and other memories and resolution of maladaptive information.

Shame and Guilt. After a traumatic event, individuals often grapple with feelings of shame and guilt. These emotions vary among them but are generally challenging to cope with. Two cases experienced trauma-related guilt, regretting that they could have done something different to prevent the painful incident. For example, one regretted not returning to a battle zone to save a fallen soldier, while the other felt mortified for being listed among the casualties when he was unharmed. Survivor guilt, a form of trauma-related guilt, is common when

someone survives while others do not. This can lead to self-blame and hesitation to seek treatment due to feelings of worthlessness or weakness.

Suicidality. The three participants cited having thoughts of suicide. Studies indicate a higher risk of suicide in individuals with PTSD, especially those with unpleasant trauma memories, rage, and poor impulse control (Haas, 1991). People with PTSD who cope by not expressing their feelings also face an increased risk. In the U.S. military, PTSD and suicide are significant concerns. A meta-analysis found that 23 percent of Operation Enduring Freedom (OEF)/Operation Iraqi Freedom (OIF) veterans had PTSD. Among over 100,000 returning veterans, 25 percent received a mental health diagnosis, with 52 percent diagnosed with PTSD (Seal et al., 2007). The participants in this study, like others, faced suicide risks associated with various psychosocial factors, such as relationship issues, legal challenges, and employment difficulties.

Heightened reactivity and prolonged sense of danger. Trauma survivors, as noted by Van der Kolk (2015), have overactivated brain parts that monitor for danger, causing even slight signs to trigger intense stress responses. Despite the trauma being in the past, the emotional brain generates ongoing sensations, making PTSD survivors feel scared and helpless. The heightened bodily reactivity seen in the three cases makes it challenging for soldiers to connect with comrades, as closeness triggers a sense of danger and betrayal. Demeaning remarks worsen these feelings. To calm down, a sense of safety is needed, but these three cases struggle to control their bodily responses, leading to avoidance, numbing, and suicidal thoughts. One case went AWOL to avoid triggering sensations, while the other used alcohol to numb the feelings, expressing a strong desire to escape the overwhelming feelings.

Mental Health Stigma. Military mental health stigma is likely cultural, stemming from a preference to handle issues independently (Kaplan, 2019). Service members expressed psychosocial concerns, facing stigma from superiors and colleagues, impacting help-seeking. A review from 2011 to 2014 found concerns about how unit leadership might treat individuals, and fears of being seen as weak were common (Sharp et al., 2015). Despite the anticipated stigma, interest in seeking help remained high, suggesting gaps between perception, behavior, and mental health support utilization. Research gaps persist in the UK armed forces, where internal stigma is a barrier to help-seeking (Murphy & Busuttil, 2015). Military leaders' attitudes also impact recovery; their recognition

of potential PTSD is crucial. Instances of leaders dismissing distressing events, like the CO's nonchalant response to IO's near-death experience, can contribute to a lack of acknowledgment and dissonance. Leaders not only affect early stress injury intervention but also play a vital role in the recovery and reintegration of soldiers with PTSD, as seen in LS's demotion. Studies and Walter Reed researchers emphasized the importance of leadership in predicting and managing stress. Understanding how military leaders handle soldiers with PTSD symptoms is crucial for effective support.

Process and Outcome of EMDR as an Intervention. MDR was employed for processing traumatic memories, focusing on Phase 4, the desensitization phase. This phase aims to fully process memories, integrate positive experiences, and achieve adaptive resolution at a 0 SUD level. Techniques such as the "Cognitive Interweave," "Empty Chair," and "Percentage of Responsibility" were utilized to unblock processing by eliciting more adaptive information.

Sense of Well-being, Safety, and Control. PTSD can undermine a person's sense of security, leaving them feeling helpless and vulnerable. EMDR therapy played a crucial role in calming the clients' nervous systems, restoring emotional balance and enhancing their overall sense of well-being, safety, and control. Post-treatment and follow-up sessions revealed a reduction in PTSD symptoms, with clients reporting improved sleep, absence of cold sweats, reduced fatigue, elimination of negative thoughts, and restored readiness for combat deployment. LS reported to feel less fatigued when his negative thoughts are gone. He also recovered his readiness for combat deployment. IO reported to feel and think safe.

Acceptance and Hope played a crucial role in SL and LS's recovery. They gave themselves a break from the burden of responsibility for their comrades' deaths by embracing the present and letting go of unhealthy thoughts. Accepting the reality of their comrades' death allowed them to move forward and look optimistically toward the future of their career and family. While the journey of overcoming military trauma can be lengthy, the collaboration of trained professionals offers hope for multiple pathways of support. This support aids in the service member's recovery, strengthens resilience, and helps them rediscover the qualities that initially drew them to military service (Thomas, 2016).

Family and Social Support. Social support involves providing assistance

or comfort to others, helping them cope with various stressors (VandenBos, 2007). For the three cases, family serves as a crucial source of comfort. The quality of family relationships significantly influences physical and psychological health (Taylor et al., 2005). Recognizing and receiving social support is vital for maintaining health, and Filipinos commonly turn to close family and friends for help (Martinez et al., 2020). This type of support encouraged the participants to also seek professional help. An Israeli study found that perceived social support and a sense of hope contribute to resilience in individuals exposed to traumatic events. The study revealed a negative correlation between a sense of hope and PTSD, while family support was positively correlated with PTSD (Kessler et al., 2018).

PTSD and AWOL. The three cases resorted to going AWOL to escape traumatic memories. In military settings, alcohol use and AWOL are common methods to avoid such memories. For instance, soldiers in the Afghanistan and Iraq wars sought treatment for PTSD outside the military healthcare system by going AWOL (Dahr Jamail, 2009). However, in the Philippines, the lack of trained professionals makes this form of treatment challenging. SL and LS went AWOL to evade triggers, hoping it would improve their well-being.

PTSD and problems with alcohol use. Studies indicate a link between PTSD and an increased risk of alcohol-related issues, and conversely, a drinking problem raises the risk of experiencing traumatic events that can lead to PTSD. The US National Center for PTSD (August 2022) reported that 60% to 80% of Vietnam veterans seeking PTSD treatment also have alcohol use problems. LS turned to alcohol to cope with traumatic memories from the Marawi Siege, even experiencing binge drinking during therapy when a painful memory surfaced. Therapists should be equipped to handle clients with substance use problems in such situations.

PTSD and Suicidality. PTSD can make one feel trapped in a nightmare, often leading to thoughts of suicide. A study on post-9/11 veterans and active service members revealed that PTSD contributed to a suicide rate four times higher than combat-related deaths (Gillete, 2021). The three participants admitted to having suicidal thoughts as a way to escape their pain and suffering.

PTSD and Psychosis. Both psychosis and PTSD share common symptoms like disturbed sleep, personal neglect, difficulty concentrating, and social withdrawal.

The paranoia seen in psychosis often mirrors the hyper-vigilance experienced by those with PTSD (Hardy et al., 2021). For instance, IO exhibited hyper-vigilance and social withdrawal. During reprocessing, being transported back to a traumatic memory might have heightened his stress, temporarily disconnecting him from the present situation. IO reported hearing whispers from the winds, indicative of a hallucination, expressing intense fear that he signaled to stop. While PTSD includes four symptom clusters, some mental health professionals consider psychotic symptoms as an additional aspect due to their co-occurrence with PTSD symptoms, such as hallucinations.

Post-treatment Reduction of Trauma Symptomatology. All the three cases showed a significant reduction in trauma symptoms after EMDR treatment. SL's pre-treatment score on the PCL-5 was 59, which decreased to 17 post-treatment. LS had the most substantial improvement, with a 68-point difference on the PCL-5, and the severity level reduced from severe to mild on the CAPS-5. IO's pre-treatment PCL-5 score was 51, decreasing to 30 post-treatment, and severity on the CAPS-5 went from severe to mild. While cortisol levels were normal before treatment, slight changes post-treatment suggested a potential decrease in stress reactions or lower physical stress levels during therapy.

Changes in Thoughts, Feelings and Behavior while Undergoing Treatment. The study employed a Multiple Case Study design in which several instrumental bounded cases were selected to develop a more in-depth understanding of participants' journey in the therapeutic process using EMDR as the primary framework for clinical intervention. Thematic syntheses were derived from the data gathered in the study.

In applying EMDR to combat-related PTSD, all the three cases showed interconnected changes and transformation. They came to terms with the past, shifting from a "victim mentality" to a more rational self-examination. Behavioral changes included moving from avoidance to confronting traumatic experiences using different strategies, linking trauma resolution to cognitive and behavioral changes. Changes in cognition were evident through clearer thinking and responses to triggers. Throughout the therapy, the clients gradually became desensitized, no longer feeling the need to hide cognitive and emotional triggers, reducing intensity compared to the past. These changes signify a deep transformation in how they grapple with core issues related to the past, present, and future.

Conditions for EMDR to Effect Change. For the three cases, EMDR appears to work best when considering themes of self-care, the client's personal attributes, and safety during therapy. Progress in therapy is influenced by the clients' motivation and personal beliefs, especially when realizing that trauma can affect them for the rest of their lives. External motivators, like family support, play a significant role in maintaining and transitioning through therapy, providing a reason to live. The clients' personal desire for change also contributed to successful EMDR outcomes. Psychoeducation and recognition of turning points in their experiences are crucial in this realization.

Like other therapies, guiding clients in proper self-care and lifestyle changes is integral. The participants in this study identified these skills as part of their integrated care. The perception of safety during therapy is another important factor in EMDR success. Providing therapy orientation, safety plans, and other supportive services are critical, given the therapy's nature of opening up about trauma. In this in-patient treatment approach, the participants feel reassured to share meaningfully, and it is not seen as isolation, aiding their recovery. Clinicians can also monitor and identify additional issues to integrate into the treatment plan.

The study's findings reveal significant positive changes in the participants due to EMDR. From a broader perspective, it indicates an enhancement in their quality of life and a decrease in trauma symptoms. The application of the EMDR protocol led to a noticeable reduction in the participants' expressed symptoms and the resolution of traumatic experiences.

This study indicates that EMDR Psychotherapy can positively impact combat-related PTSD, but it is crucial to note that the results are based on the treatment of three individuals. Therefore, generalizing to a larger population may not be accurate. The most effective aspect of the treatment appears to be a combination of psychoeducation and techniques anchoring feelings into physiology, addressing underlying issues highlighted by clients. In cases with profound psychosis, a multidisciplinary approach is necessary for a realistic perception of a client. Stabilizing psychotic symptoms is crucial before applying psychotherapy.

The notable changes in pre- and post-evaluation of the treatment of the participants indicate that there is a positive effect on the psychological and physiological aspects in the defined triggering situations. Notwithstanding, improvement from trauma symptoms was experienced over time, at least during Phases 2 and 3 of EMDR Psychotherapy.

The research explored the positive effects of EMDR Psychotherapy among military personnel when administered by a trained clinician with protocol

adherence. For active military personnel, an in-patient treatment format at CESH-Mental Health and Resilience Center is highly beneficial. The intensive weekly treatment approach allows immediate addressing of reactivity concerns and helps identify psychological triggers between sessions. This format also builds momentum in treatment, allowing more time for trust and rapport development in the clinical relationship. In cases with additional clinical diagnoses, such as psychosis, treatment from an affiliated psychiatrist is necessary to stabilize a client before resuming EMDR Psychotherapy.

This current case study provides evidence of the effectiveness of treating combat-related PTSD, but it is important to note that more participants are needed to understand the effects of EMDR Psychotherapy on a larger number of military personnel. The study involving three military personnel suggests that EMDR Psychotherapy can be made part of a pluralistic therapeutic approach. Combining it with other relevant treatments may be beneficial given the therapy's short duration and effectiveness. However, further investigation is needed to fully assess the use of EMDR in treating combat-related PTSD among military personnel.

IMPLICATIONS AND RECOMMENDATIONS

EMDR results in quick improvement of functioning, seen in cases like SL with a single traumatic event, and accelerates treatment for multiple traumas, like in the case of LS. Thus, soldiers experiencing traumatic events during deployments may find EMDR therapy beneficial. Integrating EMDR into the Philippine Army Comprehensive Mental Health Program aids in restoring soldiers and facilitates their return to mainstream society.

To enhance the capacity of PA Mental Health Teams, it is crucial to provide specialized services. Offering EMDR skills training to all PA psychiatrists, psychologists, and psychiatric nurses is necessary, ensuring soldiers in field units having access to this assistance. Regular supervision and treatment fidelity by an EMDR consultant are crucial, especially for providers learning this new skill. The three cases in this study exhibited suicidality and went AWOL to avoid traumatic memories. Despite being recalled by their commanders, a thorough psychological assessment before restoring soldiers from AWOL is essential. This assessment helps determine the presence of PTSD, suicidality, and other psychological issues, allowing appropriate referrals for further care.

IO showed signs of psychosis, but it is unclear if it existed before his military service or developed during his military service, thus emphasizing the need for

thorough psychological screening and proper training of soldiers assigned to critical tasks like an Intelligence Operative. Selection procedures and Standard Operating Procedures (SOPs) for psychological screening, especially at entry levels, should be strictly adhered to or reconsidered by the NP Screening team. There should be an intensified mental health promotion and awareness campaigns delivered at the battalion level. Providing access to programs and enhancing understanding about mental well-being can encourage more soldiers to seek help.

SL's case suggests that the absence of debriefing and psychosocial support after deployment leaves traumatic memories unaddressed. Thus, it is crucial to have training programs that empower personnel to support each other and identify early signs of trauma and post-traumatic stress disorder. Early interventions are more likely to lead to recovery from potential mental health disorders. The After Activity Review can serve as a platform not just for tactical or operational evaluation but also for psychological debriefing.

Establishing aftercare programs for soldiers with mental health problems is crucial. In LS's case, there was no reported aftercare program monitoring his progress after returning to his unit. Hence, a multidisciplinary approach to interventions is vital for managing and restoring soldiers' mental well-being, preventing relapse as they return to mainstream life. Support from soldiers' families is critical in the recovery of those diagnosed with post-traumatic stress disorder, ensuring proper care at home. Families should receive psychoeducation on the nature of the soldier's mental illness, encouraging medication compliance. In IO's case, readmission to the hospital was necessary to ensure treatment compliance. Including home visitation by a mental health professional is important for creating a conducive environment for progress and healing. Analyzing the cases reveals an issue of existential fear, experienced through the reality of death and near-death scenarios. Prioritizing intervention for this issue is essential. Training troops on how to handle the aftermath of such experiences can be beneficial.

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