Exploring the Relationship: Confidence in Unit and Posttraumatic Growth in Military Personnel

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ABSTRACT

Introduction: The military expects service members to fight in and return to combat despite the traumatic effect it can have on their mental health. In multi-domain large-scale combat operations, there will not be the luxury of quickly medically evacuating every behavioral health-affected service member. Service members and their leaders must be prepared for the lack of immediate treatment from behavioral health professionals to undo some of the negative effects of multi-domain large-scale combat operations.

Purpose: The purpose of this research is to identify if confidence in one's unit is associated with posttraumatic growth, positive psychological changes through finding meaning and growth in adversity.

Methodology: The research design is a secondary analysis of the Land Combat Study cross-sectional survey data from 2003-2007 ($N = 1289$) from three different Army infantry divisions following combat deployments.

Results: The primary research hypothesis, confidence in one's unit ($M = 33.10, SD = 6.43$) is positively correlated to posttraumatic growth ($M = 21.99, SD = 4.34$) for active-duty military personnel was supported ($p < 0.01$) with a moderately strong correlation ($tau\text{-}b = 0.35$).

Military Relevance: The study explores the impact that confidence in one's unit can have on posttraumatic growth following stressful deployments. This study is consistent with other evidence that leadership can play a significant role in mitigating the constant psychological risk of engaging in austere environments.

INTRODUCTION

Stress and trauma are often unavoidable in combat. Behavioral health conditions are one of the leading causes of medical evacuations out of combat environments.[1] The Army orders its members to fight in combat despite the traumatic effect it can have on their mental health. Combatant commanders count on behavioral health providers as force multipliers to conserve the mental health of their soldiers to complete required missions by returning them to the stressful and traumatic events of war that caused their original psychiatric problems. Service members often require the psychological resources to mitigate the constant psychological risk of engaging in austere environments. In multi-domain large-scale combat operations, there will not be the luxury of quickly medically evacuating every behavioral health-affected service member.

Wilk et al[2] did a qualitative study with three groups of military medics to understand the most common stressors and mitigation strategies in a deployed environment. As a result, participants indicated ineffective and inexperienced leaders and poor team dynamics as the most common stressors. The identified mitigation strategies were better leadership, improved morale, resilience training, increased strength in team resources, greater availability of behavioral health providers, and behavioral health skills training for non-providers and leaders.[2] Service members and their leaders must be prepared for the lack of immediate treatment from behavioral health professionals to undo some of the negative effects of multi-domain large-scale combat operations.

The Broaden and Build theory of positive emotions, coined by Barbara Fredrickson, an American psychologist, in 1998, captures the effects of positive emotions.[3] Peñalver et al[4] stated the theory "proposes that positive emotions increase social resources such as social support and connections among people." Thus, the presence of positive emotions broadens one's perspective and builds psychological resources, often providing an undoing effect of negative emotions or stress from external stimuli and accumulating additional psychological resources for long-term development.

Positive emotions, such as gratitude and resilience were found to play an important role in developing posttraumatic growth with Iranian veterans diagnosed with posttraumatic

stress disorder (PTSD)[5] and unit cohesion was found to buffer the effects of combat exposure on post-deployment mental health.[6] Regardless of how prepared a unit is, interpersonal conflict will arise due to different point of views looking at the same problem.[7] Training on mindset and conflict resolution during deployment was found to improve unit morale and build camaraderie, improving the confidence in one's unit.[8] Due to the expected stress and trauma of war, and the potential delay for medical evacuation, units will need to be able to enhance resilience to stay in the fight. This highlights the importance of cultivating positive emotions in the military and improving confidence in one's unit so that service members have improved opportunities to be more resilient, gain posttraumatic growth, and therefore be less injured psychologically upon redeployment. This study's hypothesis is higher confidence in one's unit will be positively correlated to higher levels of posttraumatic growth for active-duty military personnel.

LITERATURE REVIEW

Confidence in Unit

In the current study, confidence in one's unit was characterized by perceived social support, supportive leadership, unit cohesion, and perceived preparedness. Peñalver et al[4] found that positive emotions in supportive groups improved performance. The results found that group positive affect (enthusiasm, optimism, satisfaction, and comfort) was positively related to group social resources (teamwork, coordination, and cohesion), expanding the Broaden and Build theory to groups. Group positive affect did not consistently result in improved performance; group social resources fully mediated the relationship between group positive affect and performance.[4] It is important to note that confidence in one's unit can change after deployment due to mediocre performance and mission failures, which could influence the broadening effect if the positive emotions are no longer present. Lee[9] found that perceived social support reduced PTSD symptoms, which could maintain the presence of confidence in one's unit after a traumatic deployment. More specifically, Lee[9] found that trauma exposure resulted in PTSD via intrusive rumination, emotional regulation, and perceptions of entrapment as mediating symptoms. Elevated levels of perceived social support reduced the mediating PTSD symptoms of intrusive rumination and perceptions of entrapment. Generating positive emotions and maintaining social support before and after deployments may indicate a decrease in PTSD symptoms and an increase in posttraumatic growth.

Posttraumatic Growth

Posttraumatic growth was characterized by the appreciation of life, personal strength, new possibilities, and improved relationships.[10-11] After finding that transformational leadership resulted in fewer PTSD symptoms through the mediation of post-deployment coping self-efficacy, LaRocca and Groves[12] conducted a secondary analysis of their original data to explore the effects of transformational leadership on posttraumatic growth and self-efficacy with 130 combat veterans. They found that transformational leadership had a positive correlation with posttraumatic growth only in low-to-medium levels of combat intensity during a longer deployment, which allotted sufficient time to develop supportive leader-follower relationships. Transformational leadership was negatively associated with posttraumatic growth in higher levels of combat intensity during a shorter deployment.[12] The conclusion from LaRocca and Groves[12] is that transformational leadership can help followers with posttraumatic growth through reframing "major stressors as opportunities for personal growth" if there is enough time to mature the leader-follower relationship regarding combat deployments. If there is already confidence in one's unit before deployment, leaders, peers, and subject matter experts can arm service members with coping mechanisms before the presence of stressors during deployment to assist them in confirming their ability and recognizing the ability of others to cope with stressors.

Furthermore, Lien et al[13] found that the greater meaning of service resulted in higher levels of posttraumatic growth, especially if they could confirm their ability to cope and recognize coping in their peers. The study conceptualized the meaning of service by analyzing the confirmation in ability, cohesion of peers, and significance of effort of one's service. Posttraumatic growth highlights one's increased personal confidence, a supportive relation to others, and a greater appreciation of life based upon the perceived significance of their efforts. Current literature provides tools and understanding that posttraumatic growth is possible after traumatic events and that one's positive emotions and perceived support can theoretically create a social environment that makes posttraumatic growth more likely to occur.

Protective and Risk Factors in Operational Deployments

Lamb and Withnall[14] conducted a qualitative study with a medical response team of fifteen team members from the United Kingdom deployed in Afghanistan as a focus group to develop a working model of resilience related to deployments. The results indicated psychosocial patterns of organizational and personal protective and risk factors on a spectrum relating to resilience before, during, and after deployments. More specifically, important protective factors were self-reflection of role, positive character, and perception to influence the outcome of events before and after deployment. Risk factors were associated with the ability to attain a high enough level of operational situational awareness, to develop as a team in a realistic operational environment (with graphic imagery) to hone military and

clinical skills.[15] Because of the small sampling size and focus from only one medical response team, it is limited to generalizability since the focus group is only representative of a medical response team, and not additional occupational specialties in the military. An important takeaway is that the participants involved in the study found the ability to speak freely in a formal interview without judgment or influence on their careers to be a sense of relief. These protective and risk factors and judgement-free interviews are important to consider because they can influence the confidence in one's unit and posttraumatic growth, leading to more questions for research and evaluations of military tactics, techniques, and procedures for behavioral health.

METHODOLOGY

This study was a secondary data analysis of U.S. Army Walter Reed Army Institute of Research's (WRAIR) desensitized 2003-2007 Land Combat Study cross-sectional survey data (N = 1289) collected from three U.S. combat infantry brigades using anonymous surveys that were administered three to four months after returning home from deployment.[15] Chosen questions were based on the conceptualization of each variable and found comparable to existing validated scales. Questions for confidence in one's unit were comparable to questions from the Section J: Unit Cohesion of the deployment risk and resilience inventory-2.[16] Questions for posttraumatic growth were comparable to questions from the posttraumatic growth inventory (PTGI).[10-11] Eleven questions were used to measure confidence in unit and six questions were used to measure posttraumatic growth. All questions used were self-reported and scored on a five-point Likert scale. Due to the severely negative skewness (-10.92) of posttraumatic growth, statistical analysis of the data was analyzed using a correlation test with IBM SPSS Statistics 29.0.2.0 for Kendall's Tau-b.

Results

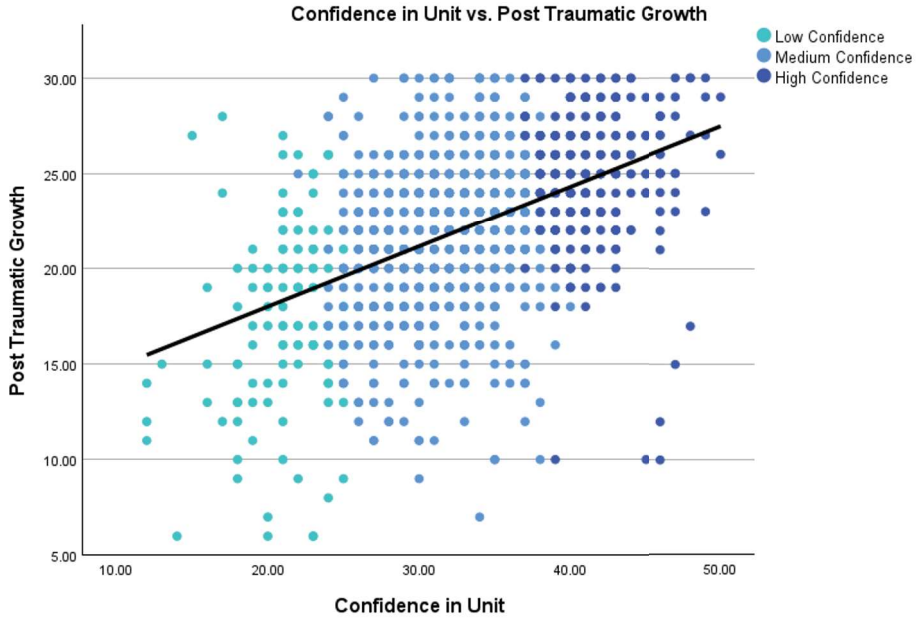
The research hypothesis was supported, confidence in one's unit (M = 33.10, SD = 6.43) was found to have a positive correlation to posttraumatic growth (M = 21.99, SD = 4.34) for active-duty military personnel with statistical significance ($p < 0.01$) and a moderately strong effect size (tau-b = 0.35) (Figure 1).

DISCUSSION

Consistent with previous research using a military population, leadership and unit cohesion can reframe major stressors as opportunities for personal growth to mitigate the constant psychological risk of engaging in austere environments.[6,12] These results support previous literature recommendations to include self – and team-coping strategies in leadership training to deal with the negative effects of stress and trauma.[13] This study contributes to the broaden and build theory of positive emotions concerning stress experienced during military deployments with survey results from active-duty military personnel.

Unit commanders may only see behavioral health providers as clinicians to assist their service members in getting back in the fight when psychiatric catastrophe arises. In addition to this role, behavioral health providers are one of the many resources that commanders can access to build confidence in one's unit. Behavioral health providers have specialized knowledge and experience (in group dynamics,

Figure 1. Bivariate correlation between confidence in unit and posttraumatic growth.



psychological processes, resilience factors, communication) making them particularly effective as unit educators and trainers that contribute to individual resilience and posttraumatic growth of service members. Behavioral health providers should train units in garrison and help prepare them for stressful deployments by providing consultation on unit needs to leaders and educate units through resilience training to teach evidence-based and efficient coping skills to frontline service members and leaders. They can train other medical specialty personnel to assist with behavioral health triages down range when there is a lack of access to a behavioral health officer or specialist. There are not enough behavioral health providers to help everyone; unit commanders, leaders and behavioral health providers must work together to improve the behavioral health skills of non-providers across the formation to deal with acute stressors and urgent psychiatric triages down range. Leaders must promote policies and procedures that promote confidence in one's unit.

As noted, this is a secondary data analysis of a cross-sectional self-report survey and therefore includes the limitations characteristic to this methodology. The study cannot demonstrate causation between studied variables and self-report may not accurately reflect actual behavior. Further, caution is advised generalizing findings to females based on the limitation inherent to the small representation of females (n=19) compared to males (n=1270) in the study. Posttraumatic growth was characterized by four of the five factors represented in the PTGI: appreciation of life, personal strength, new possibilities, and improved relationships. [10-11] Positive affect towards one's unit and the unit's use of internal and external unit resources represented the confidence in one's unit.

Future research should look at how receiving psychological protective factors in garrison affects mental health outcomes in multi-disciplinary large-scale combat operations. Future research should consider a longitudinal study using survey outcomes from before, during, and after deployment. Future research should consider a systemic review or metanalysis using regression to better understand predictors of one's confidence in unit.

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