

## Predictors of psychiatric disorders in combat veterans

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### RESEARCH HIGHLIGHTS:

- Previous studies relying solely on self-reported surveys indicate that deployment can increase psychiatric disorders. In this study, researchers explore the potential for developing psychiatric disorders using demographic and psycho-social predictors.
- In this sample of Marines, having mild traumatic brain injury (TBI) symptoms, or being female, was correlated with being more likely to develop a psychiatric disorder; being satisfied with the leadership in the military was correlated with being less likely to develop a psychiatric disorder.
- Several factors predict future psychiatric or adjustment disorders, including gender, organizational commitment, education, age, marital status and satisfaction with leadership. Future research is needed on how fixed factors, such as gender, impact psychiatric and adjustment disorders.

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### ABSTRACT:

**“Background:** Most previous research that has examined mental health among Operation Enduring Freedom and Operation Iraqi Freedom (OEF/OIF) combatants has relied on self-report measures to assess mental health outcomes; few studies have examined predictors of actual mental health diagnoses. The objective of this longitudinal investigation was to identify predictors of psychiatric disorders among Marines who deployed to combat in Iraq and Afghanistan.

**Methods:** The study sample consisted of 1,113 Marines who had deployed to Iraq or Afghanistan. Demographic and psychosocial predictor variables from a survey that all Marines in the sample had completed were studied in relation to subsequent psychiatric diagnoses. Univariate and multivariate logistic regression were used to determine the influence of the predictors on the occurrence of psychiatric disorders.

**Results:** In a sample of Marines with no previous psychiatric disorder diagnoses, 18% were diagnosed with a new-onset psychiatric disorder. Adjusting for other variables, the strongest predictors of overall psychiatric disorders were female gender, mild traumatic brain injury symptoms, and satisfaction with leadership. Service members who expressed greater satisfaction with leadership were about half as likely to develop a mental disorder as those who were not satisfied. Unique predictors of specific types of mental disorders were also identified.

**Conclusions:** Overall, the study’s most relevant result was that two potentially modifiable factors, low satisfaction with leadership and low organizational commitment, predicted mental disorder diagnoses in a military sample. Additional research should aim to clarify the nature and impact of these factors on combatant mental health.”

## Implications

### FOR PRACTICE

Military service members should work to increase their awareness of the risk(s) of developing a psychiatric disorder and work to minimize symptoms by discussing their concerns with a counselor or their medical provider. Support networks for military service members may also be beneficial as far as increasing job satisfaction and providing a place for service members to share concerns with each other. This study suggests that being female increases the likelihood of developing a psychiatric disorder after deployment. Therefore, clinicians should work to provide female service members with both preventative and treatment oriented information on psychiatric disorders. Clinicians should discuss techniques to prevent the onset of psychiatric disorders with deploying service members who exhibit predictive factors and, when necessary, clinicians and service members should collaborate on plans to minimize psychiatric disorders. Family members and friends of service members returning from deployment should familiarize themselves with signs of psychiatric disorders and work to help service members readjust to civilian life. Family members might also consider scheduling an appointment with a medical provider to learn additional ways to assist returning service members.

### FOR POLICY

The Marine Corps and other military service branches should continue to develop programs that strengthen leadership and foster greater organizational commitment among service members, as well as encouraging service members to seek medical attention for any psychiatric issues. The Marine Corps and other military service branches might consider implementing programs that provide specialized care to female service members with psychiatric symptoms stemming from their military service. Policy makers may wish to focus on improving counseling options available to returning service members by revisiting the distribution of funding to counseling programs. Additional funding for counseling and educational programs for family members of returning service members may also be beneficial, especially in helping them to identify the signs of psychiatric disorders and better assist in seeking help. Policy makers and the Department of Veterans Affairs (VA) officials might consider working together to create and implement policies that educate service members on the importance of seeking medical help for psychiatric disorders so that they can be adequately addressed.

### FOR FUTURE RESEARCH

Women who deploy to combat zones may be particularly susceptible to psychiatric disorders. Research is needed to determine the factors responsible for these elevated levels of mental disorders among military women. Further, researchers should conduct longitudinal studies on mental illnesses, traumatic brain injuries and pre-existing psychiatric conditions to investigate causality of mild TBI symptoms and mental disorders. Because previous studies have inconsistent findings on the influence of marital status on the onset of post-traumatic stress disorder, researchers should further investigate and confirm the effect of marriage on combat service members. This study was limited by the small number of female service members included in the sample. Future studies should include samples representative of the female population in the Marine Corps, as well as considering other variables such as religious affiliation, socioeconomic status, and experience with military sexual trauma in relation to developing psychiatric disorders after deployment. Future studies should also increase the use of objective measures rather than relying solely on self-reporting, and limit the collection of identifiable information from respondents. Because the number of psychiatric diagnoses in this sample was small, some psychiatric symptoms might not have been detected or participants may not have reported symptoms or sought assistance. Females might also seek assistance for mental disorders more frequently than men though men might have the same quantity of disorders. Therefore, researchers should use scales and other objective measures to detect the presence of symptoms in response samples, and also be cognizant of the possibility of underreporting due to gender differences.

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