

Putting Research to Work for Military Families



Focus:
Army

Psychiatric Disorders Moderate the Relationship Between Insomnia and Cognitive Problems in Military Soldiers

Brownlow, J.A., Klingaman, E.A., Boland, E.M., Brewster, G.S., & Gehrman, P.R. (2017). Psychiatric disorders moderate the relationship between insomnia and cognitive problems in military soldiers. *Journal of Affective Disorders*, 221, 25-30. doi:10.1016/j.jad.2017.06.023

SUMMARY: A common complaint of combat-exposed Service members is insomnia. Frequently, insomnia occurs along with other psychiatric disorders (e.g., depression). Since insomnia can affect vigilance, moral reasoning, and decision making, this study examined the relationship between insomnia, other psychiatric disorders, and their impact on cognition (e.g., memory and concentration) in Service members. Results suggest that the presence of other psychiatric disorders influence the relationship between cognitive ability and insomnia.

KEY FINDINGS:

- A large percentage of Service members who were experiencing a major depressive episode were also experiencing insomnia (85%).
- Insomnia often occurred in conjunction with generalized anxiety disorder (82.6%) and posttraumatic stress disorder (69.7%).
- Certain psychiatric disorders were found to influence the relationship between insomnia and cognitive problems; namely, a major depressive episode, posttraumatic stress disorder, and generalized anxiety disorder.
- The presence of more than one psychiatric disorder further increased the likelihood of a Service member to experience insomnia.

IMPLICATIONS FOR PROGRAMS:

Programs could:

- Educate Service members and their partners on ways to improve sleep habits
- Provide support groups for Service members who are experiencing insomnia and another psychiatric disorder to reduce the risk of cognitive problems
- Disseminate information to Service members and their families regarding the effects of insomnia on cognitive functioning and where they can find help for insomnia

IMPLICATIONS FOR POLICIES:

Policies could:

- Encourage the training of professionals to better identify Service members who may be experiencing cognitive problems due to insomnia
- Recommend integrating education on ways to improve sleep quality into existing delivery systems (e.g., parent education, reintegration programming) for military families
- Encourage the development and continuation of programs that promote better mental health and sleep quality for Service members and their families

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METHODS

- U.S. Army Service members were recruited quarterly between 2011 and 2013. Units with less than 30 Service members or who only included civilians were excluded from recruitment.
- Surveys included measures assessing insomnia, psychiatric disorders, and cognitive problems.
- Researchers analyzed associations between insomnia, psychiatric disorders, and cognitive problems.

PARTICIPANTS

- Participants were Service members in the U.S. Army who completed the All Army Study of the Army Study to Assess Risk and Resilience in Service members (n=695,784).
- The sample included both men (86.5%) and women (13.5%).
- The sample was 66.3% White, 16.3% Black, 3.6% Asian American, 1.3% Native American, 4.1% Multiracial, and 8.5% other.

LIMITATIONS

- There is an increased chance that mental health data included inaccurate diagnoses or estimates since all data was self-reported and not based on professional diagnoses or neurocognitive tests.
- The long-term effects of insomnia on the cognitive functioning of Service members cannot be determined since a follow-up survey was not conducted.
- Data were cross sectional; therefore, the directions of effects cannot be determined.

AVENUES FOR FUTURE RESEARCH

Future research could:

- Use full diagnostic measures for mental health diagnoses in order to improve accuracy of classification
- Conduct a longitudinal study that includes follow-up data to further assess the direction of effects, such as how insomnia and psychiatric disorders influence cognition over time
- Expand the study to include other branches of the military in order to increase the relevance to all service branches

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