



Military REACH's review of
LONGITUDINAL PATTERNS OF PTSD SYMPTOM CLASSES AMONG US NATIONAL GUARD SERVICE MEMBERS DURING REINTEGRATION

Bohnert, K. M., Sripada, R. K., Ganoczy, D., Walters, H., & Valenstein, M. (2018). Longitudinal patterns of PTSD symptom classes among US National Guard service members during reintegration. *Social Psychiatry and Psychiatric Epidemiology*, 53(9), 911-920. <https://doi.org/10.1007/s00127-018-1542-x>

BRIEF SUMMARY: Posttraumatic Stress Disorder (PTSD) symptomology was examined among United States National Guard (NG) service members ($N = 886$) who recently returned from an overseas deployment. The researchers identified groups of service members based on the severity of their PTSD symptomology, a term known as PTSD classes. Membership within these PTSD classes were assessed over time, at 6 months and 12 months post-deployment. Changes in PTSD classes from time one to time two were examined as well as how multiple demographic characteristics, such as rank, were associated with PTSD class.

KEY FINDINGS

- Four PTSD classes emerged among NG service members at 2 post deployment time points.

Class	PTSD Class Description	6 months	12 months
1	No symptomology	54%	55%
2	Overall low symptomology with elevated hyperarousal	22%	17%
3	Overall moderate symptomology with elevated hyperarousal	15%	15%
4	Overall severe symptomology	10%	13%

- Multiple deployments, combat exposure, and co-occurring mental health issues were associated with more severe PTSD classes; noncommissioned officers were more likely to be in Class 4 (severe class).
- ~70% of NG members stayed in the same class between 6 and 12 months. NG members in Class 1 (no symptomology) were more likely to stay in their initial class than those in more severe classes.
- 33% of NG members changed PTSD classes between 6 and 12 months post-deployment. Elevated depression and anxiety predicted a greater risk of changing to a more severe symptomology class.

IMPLICATIONS FOR FAMILIES

- Education on PTSD can aid family members in understanding how PTSD severity influences service members' functioning as well as their ability to function within the family.
- In the first 12 months post-deployment, many NG members with PTSD symptoms experience a reduction in those symptoms; yet, a sizeable portion maintain elevated levels of PTSD symptoms. Therefore, family members might expect an extended transitional period post-deployment, especially if their service member has been deployed multiple times or has been exposed to combat.

IMPLICATIONS FOR HELPING PROFESSIONALS

- Depression and anxiety commonly co-occur and extend the duration of PTSD symptoms. Thus, screening for other mental health concerns is needed to identify appropriate treatments.
- The most common PTSD symptom reported was hyperarousal, and those with hyperarousal tend to be less likely to seek treatment. Continued education for service members and families is needed to assist them in recognizing specific PTSD symptoms and encourage help seeking behaviors.

IMPLICATIONS FOR POLICY MAKERS

- Ongoing support for intervention programs in the military and private sectors is needed. For example, the Welcome Back Veterans Initiative continues to take action by raising PTSD awareness and encouraging help seeking among practitioners, services members, and their families.

SAMPLE CHARACTERISTICS

- National Guard service members ($N = 886$) returning from overseas deployment
- The majority of the sample were male (92.4%) and white (84.3%)
- No branch specified
- Data were collected twice at 6- and 12 months post-deployment between 2011-2013

METHODOLOGY

- Data were comprised of NG members from 32 units from one Midwestern state who returned from overseas deployment. Data were collected at 6- and 12-months post-deployment.
- Of the 2,871 NG members eligible to participate, 1,465 completed the survey at time one, and 968 completed the survey at time two. 886 NG members completed all measures at both time points.
- Participants were recruited during drill weekends and by mail.
- Surveys were filled out through self-report pencil and paper surveys by the participants.
- Latent Class Analysis (LCA) was fit to identify classes (e.g., groups of similar people) based on their responses to measurable indicators of PTSD symptomology.
- Latent Transition Analysis (LTA) was used as an extension of LCA to examine whether individuals within each PTSD class stayed within their class or changed classes over time.

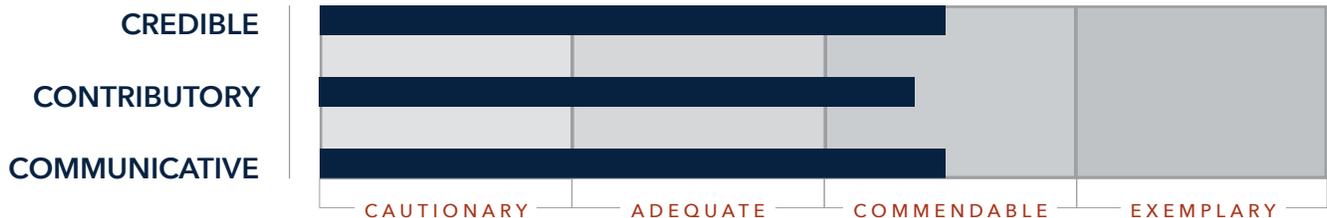
ARTICLE STRENGTHS

- This research is one of the first studies to use latent class and transition analysis to investigate PTSD symptomology among veterans over time (one other study used the same method investigating a Marine sample), therefore, demonstrating innovation and contributory work.
- The longitudinal design over the course of 6 to 12 months, allowed for stronger conclusions about the stability and change of PTSD symptomology over time.
- Findings were clearly and accurately written in both the results and discussion sections, appropriately presenting current findings in light of existing knowledge.

LIMITATIONS AND FUTURE DIRECTIONS

- Caution is warranted when interpreting findings due to the timing of data collection as it might not be generalizable to those engaged in more recent conflicts outside of Iraq and Afghanistan.
- Some of the results on PTSD symptomology were compared to prior research on Canadian veterans. Although other countries have served in OEF/OIF, their experiences, training, and treatments may be different than United States military personnel.
- Although the current study was well-connected to the literature, the study was atheoretical.

ASSESSMENT OF THE STUDY



DIMENSIONS OF ASSESSMENT

- **CREDIBLE:** Research that is rigorous, transparent, consistent, and generalizable. This dimension reflects an evaluation of the study's scientific methodology.
 - **CONTRIBUTORY:** Research that is original, applicable, and has the potential to enhance the well-being of military families. This dimension examines the impact of the study.
 - **COMMUNICATIVE:** Research that is coherent, understandable, and readable. This dimension assesses how effectively the authors convey the content of the study.
- * These dimensions are adapted from the work of Mårtensson et al. (2016). For more information on the REACH evaluation framework and rubric visit: militaryREACH.org

PARTNERSHIP

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