

Syracuse University

## SURFACE at Syracuse University

---

Institute for Veterans and Military Families

Institutes, Centers and Organizations

---

2023

### Research Review: "Risk Factors Explaining Military Deaths From Suicide, 2008-2017: A Latent Class Analysis"

Institute for Veterans and Military Families at Syracuse University

Follow this and additional works at: <https://surface.syr.edu/ivmf>



Part of the [Military and Veterans Studies Commons](#)

---

#### Recommended Citation

Institute for Veterans and Military Families at Syracuse University, "Research Review: "Risk Factors Explaining Military Deaths From Suicide, 2008-2017: A Latent Class Analysis"" (2023). *Institute for Veterans and Military Families*. 465.

<https://surface.syr.edu/ivmf/465>

This Brief is brought to you for free and open access by the Institutes, Centers and Organizations at SURFACE at Syracuse University. It has been accepted for inclusion in Institute for Veterans and Military Families by an authorized administrator of SURFACE at Syracuse University. For more information, please contact [surface@syr.edu](mailto:surface@syr.edu).

RESEARCH REVIEW | ISSUE 270

# Risk Factors Explaining Military Deaths From Suicide, 2008-2017: A Latent Class Analysis

**AUTHORS:**

Scott D. Landes, Janet M. Wilmoth, Andrew S. London, and Ann T. Landes

**SOURCE:** Armed Forces & Society**YEAR:** 2023**Publication Type:** Peer-reviewed journal article**LINK:** <https://doi.org/10.1177/0095327X211046976>**KEYWORDS:** Suicide; Military; Relationships; Job problems; Mental health**ABSTRACT:**

“Military suicide prevention efforts would benefit from population-based research documenting patterns in risk factors among service members who die from suicide. We use latent class analysis to analyze patterns in identified risk factors among the population of 2660 active-duty military service members that the Department of Defense Suicide Event Report (DoDSER) system indicates died by suicide between 2008 and 2017. The largest of five empirically derived latent classes was primarily characterized by the dissolution of an intimate relationship in the past year. Relationship dissolution was common in the other four latent classes, but those classes were also characterized by job, administrative, or legal problems, or mental health factors. Distinct demographic and military-status differences were apparent across the latent classes. Results point to the need to increase awareness among mental health service providers and others that suicide among military service members often involves a constellation of potentially interrelated risk factors.”

**RESEARCH HIGHLIGHTS:**

- This study analyzed data from the Department of Defense Suicide Event Report (DoDSER) system, examining 33 potential risk factors across five domains for 2,660 active-duty military members who died by suicide between 2008 and 2017. Using latent class analysis, the study identified patterns among suicide decedents and explored associations between demographic and military characteristics and risk factor profiles.
- Researchers found that among 2,660 military suicide decedents from 2008 to 2017, 13.9% had no identified risk factors, while relationship dissolution was the most common risk factor, present in 51.1% of cases. Latent class analysis revealed five distinct patterns of co-occurring risk factors, with the largest group primarily characterized by recent relationship dissolution. Other classes showed varied combinations of mental health issues, job/legal problems, and combat experience, with notable differences based on demographic and military status characteristics.
- The study highlights the need for the Department of Defense to focus on the co-occurrence of risk factors, particularly relationship dissolution, which was the most common risk factor and often accompanied by job, legal, or mental health issues, underscoring the importance of comprehensive suicide prevention strategies that involve both individual service members and their relationships.

## Implications

### FOR PRACTICE

Results from this study support that mental health service providers should continue to identify relationship risk factors and be especially attentive to instances of co-occurring risk factors (as shown in table 2 of the study) such as “(1) job, administrative, or legal problems with or without accompanying substance abuse history; (2) adjustment disorders and/or depression; (3) PTSD and/or combat history with/without an accompanying anxiety disorder; and (4) PTSD and/or combat history with accompanying systemic risk factors across multiple domains.” Additionally, relationship dissolution was the most prevalent risk factor among service member suicides from 2008 to 2017. Thus, military service members should work proactively with their partners to develop coping strategies and communication, decision-making, and conflict resolution skills to constructively resolve relationship issues as needed.

### FOR POLICY

For policy, the findings underscore the need for a multi-faceted approach to military suicide prevention that goes beyond focusing solely on individual risk factors. Policies should emphasize the integration of relationship-based interventions, particularly targeting the dissolution of intimate relationships, as well as providing support for job-related challenges and legal issues. Expanding mental health services and making them more accessible to all service members, regardless of their current mental health status, is crucial. Additionally, there should be an increased emphasis on involving spouses and partners in suicide prevention efforts and providing proactive relationship-building and coping skills training early in military careers.

### FOR FUTURE RESEARCH

The study suggests exploring the interactions between various risk factors and how they contribute to suicide risk. Thus, further research should also investigate the effectiveness of couple-level interventions and other relationship-based approaches in reducing military suicides. Additionally, there is a need for studies that examine the impact of systemic risk factors, such as job-related stress and legal problems, on suicide risk, and how interventions can be tailored to address these issues more effectively. Research should continue to explore ways to enhance post-suicide data collection processes to identify overlooked risk factors, ultimately leading to more targeted and effective prevention strategies.

### AUTHOR INFORMATION

Scott D. Landes; Ph.D.; Syracuse University; [sdlandes@syr.edu](mailto:sdlandes@syr.edu)

Janet M. Wilmoth; Ph.D.; Syracuse University

Andrew S. London; Ph.D.; Syracuse University

Ann T. Landes; Ph.D.; Syracuse VA Medical Center