

# The Association of Suicidal Ideation and Various Sources of Social Support Compared between Military Service Members and Civilians



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# Introduction

- Suicide has become one of the top ten leading causes of death for individuals aged 10 to 64, with roughly 13.2 million adults experiencing suicidal ideation in 2022 (CDC, 2024).
- Due to experiencing immensely stressful situations, military service members have a suicide rate that is almost double that of civilians, with suicide being the 13th leading cause of death for veterans (VA, 2022; Dempsey et al., 2021; Griffith, 2015; Therrien et al., 2016).
- Recent studies have discussed that social support is the most effective protective factor against suicide (Blais et al., 2021; Therrien et al., 2016).
- It is unclear whether specific sources of social support are associated with lower suicidal ideation in general or if a particular source has a higher relationship for military service members versus civilians.

# **Research Questions**

- How does the relationship between perceived emotional support and suicide compare between military service members and civilians?
- How does the effectiveness of different sources of social support—spouse/partner, family, and friends—compare between military service members and civilians?

# Methods

#### Sample

- Data was drawn from the fifth wave of The National Longitudinal Study of Adolescent to Adult Health (AddHealth) that is nationally representative of U.S. adults in their late 30s and early 40s.
- The sample includes 4,064 participants, with 3,772 civilians and 292 military service members.

#### Measures

- Military service was measured with the question "Have you ever served in the military?".
- Suicidal ideation was measured with the question "During the past 12 months, have you ever seriously thought about committing suicide?".
- Perceived emotional support was measured with the question for each source of social support "For each of the following individuals or groups of people indicate whether or not you can open up to them if you need to talk about your worries. [Your spouse or partner. / Other family members / Your friends.]" Possible responses included no, yes, and not applicable.

# Results

#### Univariate

- 7 percent of participants were military service members and 93 percent were civilians
- 7 percent of participants experienced suicidal ideation and 93 percent did not
- 76 percent of participants reported having spouse support, 80 percent reported having family support, and 84 percent reported having friend support

#### Bivariate

- Chi-Square analysis revealed that military service and spouse support was not statistically significant but family and friends were (for family: X2 = 9.2405, df = 2, p-value = 0.00985; for friends: X2 = 6.4169, df = 2, p-value = 0.04).
- Military service members have an expected odds of experiencing family support that is 26 percent lower than civilians.
- Military service members have an expected odds of experiencing friend support that is 30.7 percent lower than civilians.
- Having one of the three sources of social support—spouse, family, and friend—were statistically significantly associated with lower levels of suicidal ideation than not having the support

# Multivariate

- Logistical regressions revealed that those with spouse support have an expected odds of experiencing suicidal ideation that is 71 percent lower than those who do not have spouse support.
- Those with family support have an expected odds of experiencing suicidal ideation that is 63.1 percent lower than those who do not have family support.
- Those with friend support have an expected odds of experiencing suicidal ideation that is 56.6 percent lower than those who do not have friend support.
- Military service was not a moderator for spouse or friends

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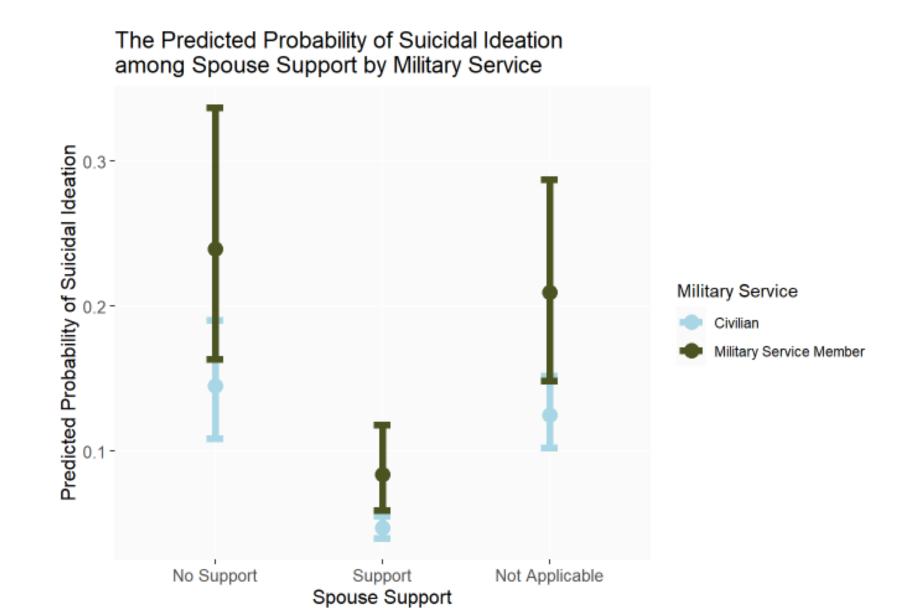


Figure 1: The Predicted Probability of Suicidal Ideation among Spouse Support by Military Service

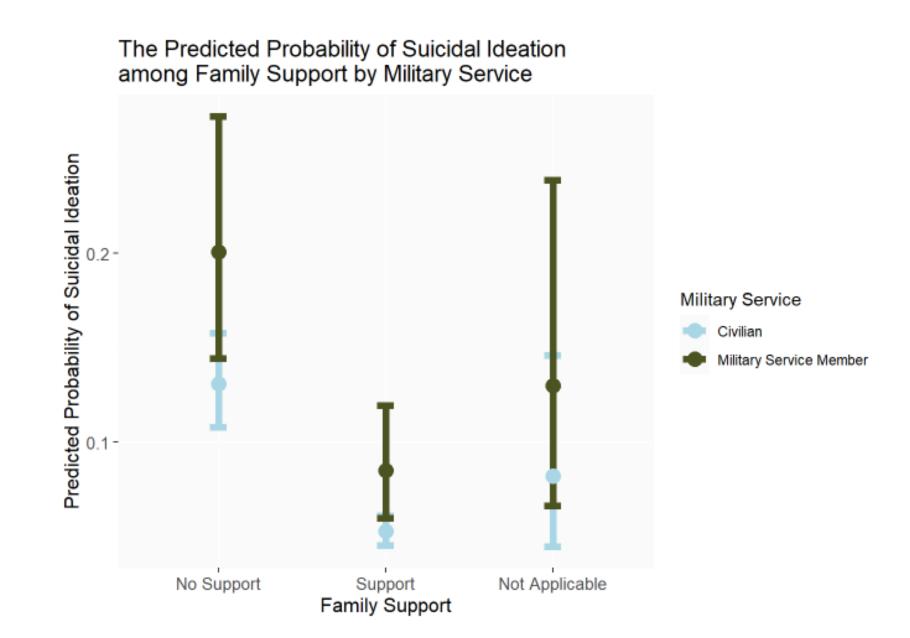


Figure 2: The Predicted Probability of Suicidal Ideation among Family Support by Military Service

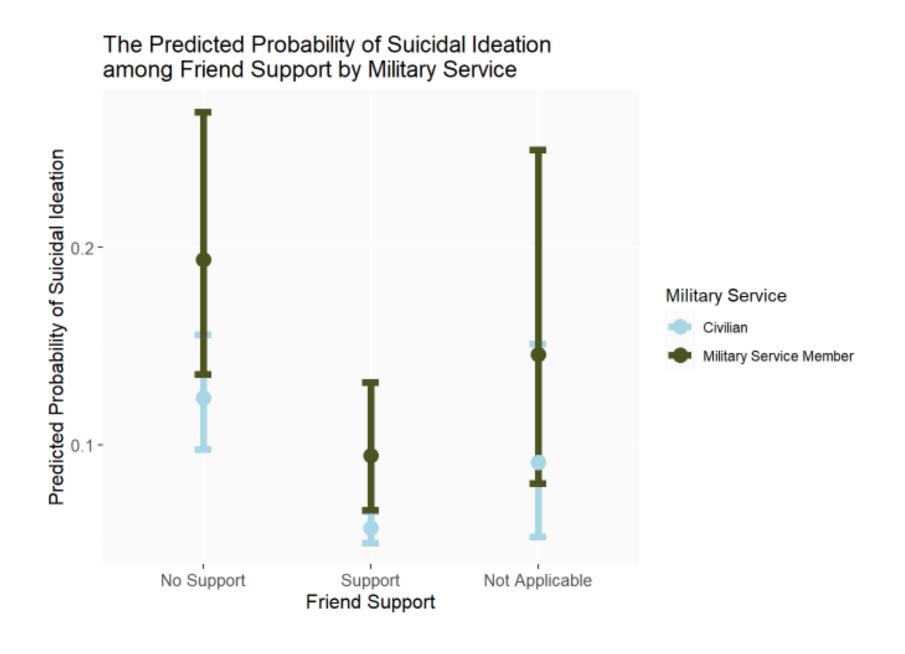


Figure 3: The Predicted Probability of Suicidal Ideation among Friend Support by Military Servie

# Discussion

- Each source of social support—spouse, family, and friend—is associated with 50 to 70 percent lower odds of experiencing suicidal ideation.
- The relationship between the different sources of social support and suicidal ideation does not vary based on whether an individual is a military service member or civilian.
- However, military service members are less likely to have support from family or friends.
- Discovering ways to encourage and develop family and friend relationships among military service members will be crucial to alleviate suicidal ideation and help prevent suicidal deaths among military service members.
- Further research is necessary to understand how these associations compare among gender and race/ethnicity to discover the specific source of social support that is better geared to a specific individual.

#### References

Barr, N., Petry, L., Fulginiti, A., Arora, A., Cederbaum, J., Castro, C., & Rice, E. (2023). Who Supports the Troops? Social Support Domains and Sources in Active Duty Army Networks. Armed forces and society. https://doi.org/10.1177/0095327X231182907

Blais, R. K., Tirone, V., Orlowska, D., Lofgreen, A., Klassen, B., Held, P., Stevens, N., & Zalta, A. K. (2021). Self-reported PTSD symptoms and social support in U.S. military service members and veterans: a meta-analysis. European journal of psychotraumatology, 12(1), 1851078-1851078. https://doi.org/10.1080/20008198.2020.1851078

Centers for Disease Control and Prevention. (2024, April 25). Facts about suicide. Centers for Disease Control and Prevention. https://www.cdc.gov/suicide/facts/index.html Dempsey, C. L., Benedek, D. M., Nock, M. K., Zuromski, K. L., Brent, D. A., Ao, J., Aliaga, P. A., Heeringa, S. G., Kessler, R. C., Stein, M. B., & Ursano, R. J. (2021). Social closeness and support are associated with lower risk of suicide among U.S. Army soldiers. Suicide & life-threatening behavior, 51(5), 940-954.

https://doi.org/10.1111/sltb.12778

Griffith, J. (2015). Cross (Unit)-Level Effects of Cohesion on Relationships of Suicide
Thoughts to Combat Exposure, Postdeployment Stressors, and Postdeployment Social
Support. Behavioral medicine (Washington, D.C.), 41(3), 98-106.
https://doi.org/10.1080/08964289.2014.987719

Sripada, R. K., Bohnert, A. S. B., Teo, A. R., Levine, D. S., Pfeiffer, P. N., Bowersox, N. W., Mizruchi, M. S., Chermack, S. T., Ganoczy, D., Walters, H., & Valenstein, M. (2015). Social networks, mental health problems, and mental health service utilization in OEF/OIF National Guard veterans. SOCIAL PSYCHIATRY AND PSYCHIATRIC EPIDEMIOLOGY, 50(9), 1367-1378. https://doi.org/10.1007/s00127-015-1078-2

Therrien, M. E., Richer, I., Lee, J. E. C., Watkins, K., & Zamorski, M. A. (2016).
Family/household characteristics and positive mental health of Canadian military members: mediation through social support. Journal of military, veteran and family health, 2(2), 8-20. https://doi.org/10.3138/jmvfh.4017

U.S. Department of Veterans Affairs. (2022, September). 2022 National Veteran Suicide Prevention Annual Report. U.S. Department of Veterans Affairs. https://www.mentalhealth.va.gov/docs/data-sheets/2022/2022-National-Veteran-Suicide-Prevention-Annual-Report-FINAL-508.pdf