

The Effect of Stress on the Psychological Well-Being of Army Officers Wives

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ABSTRACT

This extensive study attempts to study the impact of stress on the well-being of military life, specifically focusing on Army wives facing the unique challenges arising from their spouse's military service, including the hardships of deployment. It involved a total of 146 participants, with 125 meeting the specified inclusion criteria within the military community. To assess stress levels and various dimensions of psychological well-being, including emotional resilience, anxiety, depression, and overall quality of life, the study utilized the Perceived Stress Scale (PSS) and the World Health Organization's WHO-5 Well-being Index. An in-depth analysis explored factors contributing to well-being among Army wives, encompassing individual traits and adaptive strategies developed to cope with the demands of military life and the strains of deployment. Notably, the research followed a descriptive design and employed statistical tests, including Pearson's correlation, multiple regression, and ANOVA.

The results distinctly revealed a significant negative correlation between stress and psychological well-being among Army wives. This research provides valuable insights into the unique challenges faced by Army wives within the military community. It offers practical policy recommendations to enhance their well-being, particularly during the challenging times of deployment.

Keywords: Stress, Psychological Wellbeing, Military life, Army wives, Deployment

Introduction

The psychological well-being of army wives is a critical aspect for military families, impacting overall health and functioning. These women play a vital role in supporting their military husbands, which is closely related to the readiness and morale of military personnel (Mansfield et al., 2010). However, they face unique and complex stressors, including frequent deployments, relocations, and concerns about their spouse's safety, which can affect their mental health (Demers, 2008). Studies have shown that army wives experience higher levels of psychological distress and mental health issues compared to the general population (Hoge et al., 2004). Effective strategies tailored to their unique needs are essential to mitigate stress and improve mental health outcomes (Gewirtz & O'Neal, 2014).

This study aims to investigate the impact of stress on the psychological well-being of army wives, recognizing the need for intervention and support systems. Longitudinal research by Mansfield et al. (2010) highlighted increased mental health problems during deployment, underscoring the importance of timely intervention. Relocation stress, resulting in isolation and its impact on long-term career opportunities and financial stability, has been noted by Karney & Crown (2007). Marital satisfaction is also crucial, with Gewirtz & O'Neal (2014) emphasizing the complex interplay between stress, marital satisfaction, and well-being.

Social support systems within the military community play a significant role in enhancing the psychological well-being of army wives (Pittman et al., 2004). Studies have highlighted the importance of adaptive coping mechanisms and the need for personalized support and interventions tailored to individual needs (Gewirtz & O'Neal, 2014). Addressing military culture and stigma is essential for designing culturally sensitive interventions that encourage help-seeking behaviour (Bowen & Martin, 2019).

Recognizing individual traits and resilience can inform interventions aimed at enhancing well-being (Gibbs & Martin, 2017; Skinner et al., 2018). Understanding the experiences of male military spouses is also crucial for inclusive interventions responsive to all military spouses' needs (Karney & Crown, 2007). Factors such as background, ethnicity, and socioeconomic status intersect with stressors and must be considered (Orthner & Rose, 2006).

Recognizing the relationship between stress and mental health is crucial for addressing the psychological well-being of army wives (Hoge et al., 2004; Bunting et al., 2018). Understanding the challenges faced by military children contributes to interventions aimed at supporting both mothers and their children (Lester et al., 2011). Recognizing and addressing barriers to seeking help is crucial for creating an environment where seeking help is normalized (Vogt et al., 2011).

Research Questions

The research question guiding this study is: How does stress, resulting from the challenges and demands of the military lifestyle, impact the psychological well-being of army wives?

Hypothesis

The null hypothesis states that there is no significant difference in psychological well-being across army wives who experience different levels of stress (low, moderate, high), while the alternative hypothesis suggests that army wives who experience high levels of stress have lower psychological well-being than those who experience moderate or low levels of stress.

Objective

The objectives of this study are to assess the effect of stress on the psychological well-being of army wives.

Methodology

The study focused on investigating the impact of stress on the psychological well-being of Indian Army officers' wives. It employed one independent variable, stress, and one dependent variable, psychological well-being. The research utilized various statistical analysis tools, including descriptive statistics (mean and standard deviation), one-way ANOVA, correlation analysis, and multiple regression.

The study followed a structured procedure, beginning with the formulation of a well-defined research plan outlining objectives, hypotheses, and research questions. Participants were selected based on specific inclusion criteria to ensure diversity in age and other relevant factors, with each participant providing informed consent after receiving detailed information about the study's purpose and procedures.

Data was collected using a user-friendly Google Form survey that incorporated standardized stress assessment instruments such as the Perceived Stress Scale (PSS) and the World Health Organization

Well-Being Index (WHO-5). The survey was administered electronically to the selected participants, and responses were securely stored with strict adherence to data protection and confidentiality guidelines. Each participant was assigned a unique identification code to anonymize the data. The collected data was analyzed using suitable statistical tools, including descriptive statistics, one-way ANOVA, correlation analysis, and regression analysis, to explore the relationship between perceived stress and psychological well-being. The entire research process was meticulously documented, resulting in a comprehensive research report encompassing the methodology, findings, discussions, and conclusions.

The study's findings were disseminated through academic publications and presentations, contributing to the existing body of knowledge. Throughout the procedure, transparency, ethical standards, and data integrity were rigorously upheld, facilitating valuable insights into the relationship between stress and psychological well-being among Indian Army officers' wives.

In this study, we employed a quantitative research approach to examine the relationship between stress and the psychological well-being of 125 wives of Indian Army officers. The research design chosen was cross-sectional, gathering data at a specific point in time to provide a snapshot of the participants' circumstances. This design facilitated efficient data collection through a Google Form survey, allowing us to evaluate the concurrent impact of stress on the psychological well-being of army wives. The data collected will undergo comprehensive analysis to identify correlations and associations between stress levels and psychological well-being, offering valuable insights into this unique demographic.

For the sample design, we utilized stratified random sampling to select 125 Indian Army officers' wives as participants, ensuring a representative sample. Inclusion criteria included being married to active-service members, aged between 18-55 years, in a marital relationship for at least one year, willing to participate, fluent in English, and without serious mental illness. Exclusion criteria encompassed being divorced, separated, or widowed; in a marital relationship for less than one year; having a history of serious mental illness or receiving treatment for a mental health condition; unable to understand or speak English fluently; and aged below 18 or above 55 years.

The Google Form survey collected socio-demographic data such as name, age, willingness to participate, spouse's active service in the Indian army, mental illness diagnosis, fluency in English, and marital duration. It also included the Perceived Stress Scale, with responses ranging from 0-4 to measure perceived stress, and the WHO-5 Well-Being Index, a 5-item questionnaire assessing subjective psychological well-being with validated reliability. This comprehensive approach ensured the study's robustness and the reliability of its findings regarding stress and psychological well-being among Indian Army officers' wives.

Discussion

This section delves into an extensive statistical analysis conducted on a cohort of 125 Indian Army officers' wives, delving into the intricate relationship between stress and psychological well-being. Employing a range of statistical measures such as mean, standard deviation, Pearson's correlation, one-way ANOVA, and multiple regression, the study seeks to unveil the intricate interplay between stress levels and psychological well-being. The ANOVA outcomes unveil marked disparities in well-being across varying stress levels, elucidating the stark negative repercussions of stress on overall well-being. Intriguingly, age failed to exhibit a substantial individual impact on well-being, adding depth to the understanding of stress dynamics. These findings not only emphasize the criticality of stress management but also highlight its pivotal role in augmenting the holistic well-being of army wives.

The multiple regression analyses scores showed a significant negative correlation between stress and psychological well-being but didn't show any significant correlation between stress and age groups. The correlation analysis revealed a strong negative link between PSS scores and well-being. The study strongly supports that high stress links to lower well-being in army wives. It highlights the need for interventions to manage stress universally across age groups. Prioritizing stress management and well-being programs is crucial for supporting these individuals.

Result analysis

Statistics : Mean and Standard Deviation of the PSS -Scores & WHO-5 Well-Being Scores			
		PSS	WHO
N	Valid	125	125
	Missing	0	0
Mean		2.55	1.38
Median		3.00	1.00
Mode		3	1
Std. Deviation		.588	.606
Skewness		-.929	1.782
Std. Error of Skewness		.217	.217
Kurtosis		-.111	4.108
Std. Error of Kurtosis		.430	.430
Range		2	3

Table-1 Shows the results of Mean and Standard Deviation of the PSS -Scores & WHO-5 Well-Being Scores:

The mean score of WHO-5 Well-Being Index for the group is 1.38 and median score is 1.00, mode score is 1, the Standard deviation score is .606, Skewness score 1.782 & Kurtosis score is 4.108 - the respective score for PSS standard deviation is 0.588, the mean score is 2.55, mode score is 1. The Skewness score for PSS with change is -.929 and the Kurtosis score is -.111 Therefore, this table depicts the normality of data.

Correlations			
		WHO	PSS
WHO	Pearson Correlation	1	-.237**
	Sig. (2-tailed)		.008
	N	125	125
PSS	Pearson Correlation	-.237**	1
	Sig. (2-tailed)	.008	
	N	125	125

** . Correlation is significant at the 0.01 level (2-tailed).

Table 2 – Shows the result of Pearson’s WHO-5 Well Being Scale correlation between Perceived Stress Scale Scores (PSS Scores):

correlation table, there is a significant relationship between two variables: WHO-5 Well-Being scores and PSS (Perceived Stress Scale) scores. The Pearson correlation coefficient (r) between WHO-5 Well-Being scores and PSS scores is -0.237, and this negative correlation is statistically significant at the 0.01 level (2-tailed). This indicates that there is a strong negative association between well-being and perceived stress among the 125 individuals included in the analysis. In simpler terms, as stress levels increase (PSS scores), well-being (WHO-5 Well-Being scores) tends to decrease, and vice versa.

ANOVA					
WHO-5 Well-Being scores					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.254	2	4.127	13.494	<.001
Within Groups	37.314	122	.306		
Total	45.568	124			

TABLE-3 Shows -ONE WAY ANOVA

ANOVA scores of 125 individuals . This analysis was conducted to understand if Stress affects that Well being of army wives. F score between groups is 13.494 and the Sig. score is less than 0.001 (<.001) ,ANOVA results show that there are significant differences in WHO-5 Well-Being scores among the groups being analyzed, as indicated by the very low p-value (<.001). This suggests that the variation in Well-Being scores in comparison with PSS Scores are unlikely due to chance but rather reflects real differences among these groups.

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.761	.320		5.505	<.001
Age	.188	.164	.101	1.147	.254
PSS	-.230	.091	-.223	-2.529	.013

a. Dependent Variable: WHO

Table 4- Multiple Regression Analysis

- “Constant” represents the intercept of the regression equation, with a value of 1.761. This is the estimated Well-Being score when both Age and PSS scores are zero.
- For the Age variable, the unstandardised coefficient (B) is 0.188, indicating that for a one-unit increase in Age, there is an estimated increase of 0.188 units in Well-Being scores. However, the standardised coefficient (Beta) is 0.101, suggesting a relatively weak positive relationship. The PSS variable shows a negative impact: a one-unit increase in PSS scores is associated with a decrease of -0.230 units in Well-Being scores. The standardized coefficient (Beta) of -0.223 indicates that PSS scores have a negative influence on well-being.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.761	.320		5.505	<.001
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	PSS	-.230	.091	-.223	-2.529	.013

a. Dependent Variable: WHO

- The overall model was statistically significant ($p < 0.001$), suggesting that Age and PSS scores, combined, significantly predict Well-Being scores. However, Age does not appear to be a significant individual predictor ($p = 0.254$), whereas PSS scores are significant ($p = 0.013$) in their impact on well-being. This proves that the Perceived Stress Scale (PSS) scores have a notable negative effect on well-being, while the effect of Age is weak and not statistically significant in predicting well-being.

This study aimed to investigate stress's impact on army wives' well-being amid the pandemic era. Utilizing ANOVA and multiple regression analyses on 125 participants, it found significant differences in well-being scores based on stress levels ($F=13.494$, $p<0.001$). Regression analysis revealed a significant negative impact of perceived stress scores on well-being ($\beta=-0.223$), emphasizing stress management's critical role. High stress correlated with lower well-being ($r=-0.237$, $p<0.01$), supported by descriptive statistics showing moderate variability in well-being (mean=1.38, $SD=0.606$) and stress (mean=2.55, $SD=0.588$). The study highlights the need for universal stress management interventions transcending age groups to enhance army wives' overall well-being.

This study significantly advances existing research by delving into the unique challenges faced by army wives, especially during the pandemic. While prior studies have recognized the impact of military life on mental health, this research focuses specifically on stress and its effects on well-being.

Comparing this study to previous research reveals several notable differences. Firstly, the combined use of ANOVA and multiple regression analyses offers a more holistic understanding of the stress-well-being relationship. Unlike studies that have separately examined these factors, this research integrates them, providing a more nuanced view.

Secondly, the study's contextualization within the pandemic era is particularly noteworthy. Previous research may not have considered the pandemic's specific stressors, such as organizational changes and heightened uncertainties. By situating its findings in this context, the study offers a more timely and pertinent perspective.

Moreover, the study's findings on the universal nature of stress and well-being, irrespective of age groups, are insightful. While prior studies often focused on specific demographics, this research suggests that interventions for stress management and well-being enhancement should cater to all age categories.

This study expands on previous research by thoroughly examining stress's impact on army wives' well-being, particularly amid the pandemic. Its findings provide valuable insights and underscore the importance of addressing stress to improve the overall well-being of this group.

Limitations

- The study's small sample size of 125 individuals limits its representation of the diverse population of army wives.

- Its cross-sectional design doesn't establish causality or capture changes in stress over time.
- The study didn't thoroughly explore specific military lifestyle factors affecting stress and well-being, suggesting a need for further research in these areas for a fuller understanding.

Suggestions

- **Diverse Representation:** Include a broader spectrum of army wives, considering factors like age, education, and region to better understand stress impact across segments.
- **Longitudinal Studies:** Conduct extended studies tracking participants over time to grasp how stress and well-being evolve.
- **Qualitative Methods:** Supplement quantitative data with interviews or focus groups to capture personal experiences and coping strategies.
- **Larger Sample Size:** Increase sample sizes for enhanced statistical power and generalizability.
- **Military Lifestyle Factors:** Investigate deployment duration, frequency, and family support programs' influence on stress and well-being
- **Tailored Intervention Programs:** Evaluate tailored mental health support programs addressing the unique challenges of army officers' wives
- **Rank-based Comparative Studies:** Compare stress impacts on well-being based on husbands' ranks in the Indian Army.

Conclusions

The study focused on investigating the impact of stress on the well-being of army wives, specifically utilizing the Perceived Stress Scale (PSS) and WHO-5 Well-Being Index. It analyzed data from 125 individuals using Descriptive statistics, Correlation Analysis, ANOVA, and multiple regression. The results indicated significant differences in well-being among different stress level groups, highlighting stress's significant role. The study found that higher PSS scores were associated with lower well-being, underscoring the importance of stress management. Interestingly, age did not significantly affect well-being, suggesting that stress's impact is universal across age groups. The strong negative correlation between well-being and perceived stress further supported these findings, emphasizing the need for stress management and mental health support for army wives to improve their overall well-being.

References

1. Allen, E. S., Rhoades, G. K., Stanley, S. M., & Markman, H. J. (2011). On the home front: stress for recently deployed Army couples. *Family Process*, 50(2), 235-247.
2. Aspinwall LG, Tedeschi RG. The Value of Positive Psychology for Health Psychology: Progress and Pitfalls in Examining the Relation of Positive Phenomena to Health. *Annals of Behavioral Medicine*. 2010;39(1):4–15.
3. Bunting, B. P., Murphy, S. D., O'Neill, S. M., & Ferry, F. R. (2018). Lifetime prevalence of mental health disorders and delay in treatment following initial onset: evidence from the Northern Ireland Study of Health and Stress. *Psychological Medicine*, 48(1), 47-59.
4. Chartrand, M. M., & Spiegel, D. P. (2007). A wife's response to separation from her husband in the military. *Perspectives in Psychiatric Care*, 43(2), 108-119.
5. Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385-396.

6. Demers, A. (2008). When we need them they're there: The living experience of military wives during deployments. *Issues in Mental Health Nursing*, 29(11), 1217-1235.
7. Danner DD, Snowdon DA, Friesen WV. Positive emotions in early life and longevity: findings from the nun study. *Journal of Personality and Social Psychology*. 2001;80(5):804–813.
8. Gewirtz AH, O'Neal CH. Psychological and Physical Health of Non-Deployed Spouses of Service Members. *Mil Behav Health*. 2014;2(1):4-13.
9. Gewirtz, A. H., & O'Neal, C. (2014). Promoting the mental health and well-being of military families. In R. M. Reeve & N. C. Beasley (Eds.), *Military and veteran families: Interdisciplinary perspectives* (pp. 181-194). Springer.
10. Guarnaschelli F, Weizberg F. Military Wives: Adaptation to Military Life and the Impact on Their Families. *Armed Forces & Society*. 1981;7(3):455-470.
11. Hoge, C. W., Castro, C. A., Messer, S. C., McGurk, D., Cotting, D. I., & Koffman, R. L. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine*, 351(1), 13-22.
12. Huppert FA. Psychological well-being: evidence regarding its causes and consequences†. *Appl Psychol Health Well Being*. 2009;1(2):137–64.
13. Ingels, S. J., Doorn, B., Kimbrel, N. A., & Meyer, E. C. (1989). The Impact of War on Military Families. *The Journal of Nervous and Mental Disease*, 177(2), 77-84.
14. Kennedy CH, Hoag CJ. Deployment Stress and Trauma in the Military: Understanding and Coping. *J Fam Strengths*. 2012;12(1).
15. Lapp, C. A., Taft, L. B., & Tolle, A. (2010). Perceptions of family and work life among female Army spouses. *The Family Journal*, 18(3), 262-270.
16. Lester, P., Peterson, K., Reeves, J., Knauss, L., Glover, D., Mogil, C., ... & Beardslee, W. (2011). The long war and parental combat deployment: effects on military children and at-home spouses. *Journal of the American Academy of Child & Adolescent Psychiatry*, 50(4), 341-349.
17. Mansfield, A. J., Kaufman, J. S., Marshall, S. W., Gaynes, B. N., Morrissey, J. P., & Engel, C. C. (2010). Deployment and the use of mental health services among US Army wives. *New England Journal of Medicine*, 362(2), 101-109.
18. O'Neal CH. The Psychological Well-Being of Military Wives. *J Fam Psychol*. 2006;20(3):485-488.
19. Orthner, D. K., & Rose, R. (2006). Deployment of husband: Reports of service members' spouses. *Armed Forces & Society*, 36(2), 302-322.
20. Padden, D. L., Connors, R. A., & Agazio, J. G. (2011). Secondary traumatic stress in military wives. *Journal of Nursing Scholarship*, 43(2), 180-187.
21. Pittman, J. O., Kerpelman, J. L., & McFadyen, M. M. (2004). The role of social support in the lives of U.S. Army soldiers. *Military Psychology*, 16(2), 95-110.
22. Seligman MEP, Csikszentmihalyi M. Positive Psychology: An Introduction. *American psychologist*. 2000;55(1):5.
23. Topp, C. W., Østergaard, S. D., Søndergaard, S., & Bech, P. (2015). The WHO-5 Well-Being Index: A systematic review of the literature. *Psychotherapy and Psychosomatics*, 84(3), 167-176.
24. Vaillant GE. *Aging well: surprising guideposts to a happier life from the landmark Harvard study of adult development*. Boston: Little, Brown; 2002.

25. Vogt, D., Smith, B. N., King, L. A., King, D. W., Knight, J., & Vasterling, J. J. (2011). Deployment risk and resilience inventory: A collection of measures for studying deployment-related experiences of military personnel and veterans. *Military Psychology*, 23(3), 111-145.
26. World Health Organization. (1998). Wellbeing measures in primary health care/The Depcare Project. Retrieved from https://www.psykiatri-regionh.dk/who-5/Documents/WHO5_English.pdf