

Depression, Anxiety and Stress Among Retired Officers of Indian Armed Forces

Jaidev Janardhan Natesh^{1*}, Dr. Molly Joy²

ABSTRACT

This paper aims to understand the emotional states of Depression, Anxiety, Stress among retired officers of the Indian Armed Forces. The sample had 86 participants who Served in the Indian Army, Indian Navy, and Indian Airforce for a minimum of 20 years. At the time of the data collection are Retired. The age range was between 43 and 70. The DASS-21 scale was used to assess the emotional states of Depression, Anxiety and stress.

Keywords: *Depression, Anxiety, Stress, Armed Forces, India*

The objective of this study was to investigate the emotional states of Depression, Anxiety, and Stress on Retired Officers of the Indian Armed Forces and to understand the relationship between Anxiety and Stress on Depression. The DASS-21 (Depression, Anxiety, and Stress Scale) was chosen because it appears to be a consistent and easy to conduct scale, ideal for this research. This tool was administered to Retired officers of the Indian Armed forces. The total number of participants was 86 who Have Served in the Indian Army, Indian Navy, and Indian Airforce for a minimum of 20 years. At the time of the data collection are Retired. The age range was between 43 and 70. The place of current residence is all over India, a few places of current residence include Bangalore, Mumbai, Delhi, Pune, Noida, Kolkata, Dehradun, Thrissur, Hyderabad, Indore, Chennai, Kochi, Jalandhar, Chandigarh, Patna, Coimbatore and even beyond India like that of the United States of America. The educational qualifications had a wide range of Undergraduate, PG Dip (Heavy Automobile-Tracked, Post-Graduate- M.Sc., MBA, M. Tech, M.Sc. Defence & Strategic Studies, Advance Hydrography, M Phil and Doctorate. Descriptive research design, Correlational research design was used in this study. Descriptive Statistics, and Pearson Correlation Coefficient were used for the analysis of the data.

Need and significance of the study

Depression is a disorder of major public health standing, in terms of its prevalence and the suffering, dysfunction, morbidity, and economic burden. It is estimated that by the year 2020 if current trends for demographic and epidemiological transition continue, the burden of

¹4th Semester, M.Sc. Counselling Psychology, Kristu Jayanti College, Bengaluru, Karnataka, India

²Head Department of Psychology, Kristu Jayanti College, Bengaluru, Karnataka, India

*Corresponding Author

Received: May 09, 2022; Revision Received: September 28, 2022; Accepted: September 30, 2022

depression will increase to 5.7% of the total burden of disease and it would be the second leading cause of disability-adjusted life years (DALYs). This paper aims to understand the levels of depression in a sample universe that is lacking literature and research. In this paper, we also explore the levels of anxiety and stress and their relationship with depression. This study fulfils the need of adding literature to the otherwise deficient area of the defence community of India sample universe.

MATERIALS AND METHODS

Objectives of the study

- To understand the levels of depression in the given sample.
- To understand the levels of Anxiety in the given sample.
- To understand the levels of Stress in the given sample.

Hypothesis

H₀₁- There will be no statistically significant levels of Depression, Anxiety, and Stress among Retired Officers of the Indian Armed forces.

Operational Definitions

The depression scale assessed dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia, and inertia. The anxiety scale assessed autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The stress scale is sensitive to levels of chronic nonspecific arousal. It assessed difficulty relaxing, nervous arousal, and being easily upset/agitated, irritable / over-reactive, and impatient.

Population and Study Sample

Retired Officers of the Indian Armed Forces. Including The officers of the Indian Army, Indian Airforce, and Indian Navy.

Tools

DASS 21 (The Depression, Anxiety and Stress Scale – 21) Henry JD, Crawford JR. (2005) The Depression, Anxiety and Stress Scale - 21 Items (DASS-21) is a set of three self-report scales designed to measure the emotional states of depression, anxiety, and stress. Each of the three DASS-21 scales contains 7 items, divided into subscales with similar content. The depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia, and inertia. The anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The stress scale is sensitive to levels of chronic nonspecific arousal. It assesses difficulty relaxing, nervous arousal, and being easily upset/agitated, irritable / over-reactive, and impatient.

Characteristics of high scores on DASS

Depression scale

- Self-disparaging
- Dispirited, gloomy, blue
- Convinced that life has no meaning or value
- Pessimistic about the future
- Unable to experience enjoyment or satisfaction
- Unable to become interested or involved

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- Slow, lacking in initiative

Anxiety scale

- Apprehensive, panicky
- Trembly, shaky
- Aware of dryness of the mouth, breathing difficulties, pounding of the heart, sweatiness of the palms

Stress Scale

- Over-aroused, tense
- Unable to relax
- Touchy, easily upset
- Irritable
- Easily startled
- Nervy, jumpy, fidgety

Geographical area

The place of current residence is all over India, a few places of current residence include Bangalore, Mumbai, Delhi, Pune, Noida, Kolkata, Dehradun, Thrissur, Hyderabad, Indore, Chennai, Kochi, Jalandhar, Chandigarh, Patna, Coimbatore. And even beyond India is the United States of America

Procedure

A Google form was created to collect demographic details, Consent form, and to collect data for the present study. The two scales used for the study, the **DASS 21** (The Depression, Anxiety and Stress Scale – 21) Henry JD, Crawford JR. (2005) was sent along with the Google form which was created for data collection. The Google form was distributed to retired officers of the Indian Armed Forces on social media platforms like WhatsApp and Instagram. The responses were collected from the participants and the data was analysed using SPSS (IBM Statistical Software). The results were interpreted, results and conclusions were drawn.

RESULTS AND DISCUSSION

Results

There were 86 participants(N=86). Multiple regression statistical analysis was used to analyse the relationship between a single dependent variable (Depression) and two independent variables (Anxiety and Stress). Pearson correlation coefficient was used to analyse the dependent and independent variables and to understand the size of the effect that variables are having on the dependent variable and the coefficient among the variables. Descriptive Statistics was used to analyse the mean and standard deviation of the variables.

Table 1 Mean and Standard Deviation of the variables Resilience, Stress, Anxiety and Depression

	Mean	Std. Deviation	N
Stress	15.7674	8.84597	86
Anxiety	8.6744	7.64882	86
Depression	8.9070	8.02148	86

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According to the table above, there is no significant difference in levels of Depression in Retired Officers of the Indian Armed forces. The findings of the study indicate the mean of the depression scale has the value of 8.90 which has a Normal Rating. (Normal-0-9). 8.02 was the level of significance. According to the findings of the study, the mean of the Anxiety Scale has the value of 8.67 which indicate a Mild Rating. (Mild-8-9). 7.64 was the level of significance. According to the findings of the study, the mean of the Stress Scale has a value of 15.76 which indicate a Mild Rating. (Mild- 15-18). 8.84 was the level of significance.

Table 2 Pearson Correlation Coefficient Values for Depression, Anxiety and Stress

	1	2	3
Pearson Correlation			
Stress	-		
Anxiety	.536**	-	
Depression	.622**	.531**	-

Note. N=86*p<.05. **p<.01.

The relationship between Stress and Anxiety as compared with Depression have the respective values .622 and .531 which have the interpretation of a High Degree of Positive Correlations and a High Degree of Positive Correlations respectively. This indicates that the variables Anxiety and Stress have a high degree of positive correlation with Depression. (High degree ± 0.50 to ± 1).

For the relationship between Anxiety and Depression, the value is .531 which have the interpretation of a High Degree of Positive Correlations. (High degree ± 0.50 to ± 1).

For the relationship between Stress and Depression, the value is 622 which have the interpretation of a High Degree of Positive Correlations. (High degree ± 0.50 to ± 1).

For the relationship between Anxiety and Stress, the value was .536 which has the interpretation of a High Degree of Positive Correlations. (High degree ± 0.50 to ± 1).

DISCUSSION

The total number of participants was 86 who Have Served in the Indian Army, Indian Navy and Indian Airforce for a minimum of 20 years. At the time of the data collection are Retired. The age range was between 43 and 70. The strength of this research is three-fold starting with the diverse Age Range viz. 43 to 70. Second, the place of current residence is all over India, few places of current residence include Bangalore, Mumbai, Delhi, Pune, Noida, Kolkata, Dehradun, Thrissur, Hyderabad, Indore, Chennai, Kochi, Jalandhar, Chandigarh, Patna, Coimbatore. And even beyond India like that of the United States of America. Third, the educational qualifications had a wide range of Undergraduate, PG Dip (Heavy Automobile-Tracked, Post-Graduate- M.Sc., MBA, M. Tech, M.Sc. Defence & Strategic Studies, Advance Hydrography, M Phil and Doctorate.

The present study had the objective of understanding the relationship between the variable of Anxiety, Stress and the variables of Depression. Descriptive statistics were used to understand the central tendency and measures of variability. For the scale of depression, the value was 8.90 which indicate a Normal Rating. (Normal-0-9). The anxiety Scale has a value of 8.67 which indicate a Mild Rating. (Mild-8-9). The Stress Scale has a value of 15.76 which indicate a Mild Rating. (Mild- 15-18). The associations of the result are that the person can make adjustments. The person has a sense of personal worth, feels worthwhile

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and important. The individual solves his/her problems largely by his/her efforts and makes his/her own decisions. They have a sense of personal security and feels secure in a group, show understanding of other people's problems and motivate themselves and others. The person has a sense of responsibility and can give and accept love. The individual who lives in a world of reality rather than fantasy shows emotional maturity in his behaviour and develops a capacity to tolerate frustration and disappointments in his daily activities and finally, the person has a variety of interests and generally lives a well-balanced life of work, rest and recreation.

The relationship between Stress and Anxiety as compared with Depression has a High Degree of Positive Correlation which denotes that as Stress or Anxiety Increase the levels of Depression increase and the other way around.

For the relationship between Anxiety and Stress, the interpretation was a High Degree of Positive Correlation. This denotes that as Anxiety increases the levels of Stress increase and vice versa.

There has been substantial dispute regarding the relationship between depression and anxiety. Several possible models that were explored provided different conceptions of how this relationship may best be understood, Symptoms of depression and anxiety represent different external manifestations of a more basic underlying cause. One condition may predispose to the other and so comorbid syndromes within the spectrum of anxiety and depression are present, Association may be due to overlap, particularly since the instruments used to measure depression and anxiety share so many items. Research has established a strong and causal association between stressful life events (Stress) and major depressive episodes (Depression).

In a Particular study, they investigated the presence of anxiety and depression in retired officers of the Armed Forces in Greece. According to the responses of 502 veterans, it seems that the majority does not show severe symptoms of anxiety or depression. However, a percentage of 23.2% displayed mild-to-moderate symptoms of depression. Those who were discharged because of stressful working conditions, people who have a high BMI, consume alcohol regularly, smoke, and were not satisfied by changes in their everyday life after retirement had significantly more symptoms of depression and anxiety. Those who retired because of family problems had significantly more symptoms of depression. *Military Medicine*, Volume 182, Issue 3-4, March-April 2017, Pages e1639–e1644, doi. 10.7205/FILMED-D-16-00299.

The results of the Greece armed forces study with 502 participants had similar results to the current study where we saw Normal Rates of Depression in the sample.

CONCLUSIONS

The relationship between Stress and Anxiety as compared with Depression had a High Degree of Positive Correlation.

It was found that Anxiety and Stress significantly predicted Depression in the given sample, Retired Officers of the Indian Armed Forces.

There is a definite need for the advancement of research and scientific literature in the sample of Indian armed forces. This particular research gives an understanding of major

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mental health concerns such as depression albeit in a small sample size. Future researchers could implement larger sample sizes and include comparative groups such as civilian population, choice of service, various subordinate- superior workplace relationships etc and its implications on individual mental health. Researchers could include various psychological phenomena and understand their cause-effect relationship on the Indian armed forces sample.

Limitation of study

limitations of this study were that it is a convenient sample. Second, the study focused on male veterans. The study was conducted primarily with an online questionnaire, which excludes retirees who are not computer savvy. Military personnel, in general, are not generally accustomed to participating in psychosocial research, mainly because of the taboo associated with topics of mental health and depression. Finally, the results cannot focus on direct-term effects of retirement, service conditions, choice of arms, number of years since retirement and military training on Depression, Anxiety and Stress. The mild rating for the Anxiety and Stress scales could be assumed due to the average age of the sample being high.

REFERENCES

- Age and Depression - jstor.* (n.d.). Retrieved November 30, 2021, from <https://www.jstor.org/stable/2137349>.
- The American Journal of Public Health (AJPH) from the American Public Health Association (APHA) publications.* American Journal of Public Health. (n.d.). Retrieved November 30, 2021, from <https://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2011.300425>.
- American Psychological Association. (n.d.). *Apa PsycNet.* American Psychological Association. Retrieved November 30, 2021, from <https://psycnet.apa.org/buy/1998-04232-001>.
- American Psychological Association. (n.d.). *Apa PsycNet.* American Psychological Association. Retrieved November 30, 2021, from <https://psycnet.apa.org/record/1973-25123-001>.
- American Psychological Association. (n.d.). *Apa PsycNet.* American Psychological Association. Retrieved November 30, 2021, from <https://psycnet.apa.org/record/2003-09670-014>.
- American Psychological Association. (n.d.). *Apa PsycNet.* American Psychological Association. Retrieved November 30, 2021, from <https://psycnet.apa.org/record/2008-11035-003>.
- Antony, M. M., Federici, A., & Stein, M. B. (2008, September 4). *Overview and introduction to anxiety disorders.* Oxford Handbooks Online. Retrieved November 30, 2021,
- Bartone, P. T., & Homish, G. G. (2020, January 23). *Influence of hardiness, avoidance coping, and combat exposure on depression in returning war veterans: A moderated-mediation study.* Journal of Affective Disorders. Retrieved November 30, 2021, from <https://www.sciencedirect.com/science/article/abs/pii/S0165032719327260>.
- Butler, G., & Mathews, A. (2004, August 30). *Cognitive processes in anxiety.* Advances in Behaviour Research and Therapy. Retrieved November 30, 2021, from <https://www.sciencedirect.com/science/article/abs/pii/0146640283900152>.
- Butler, G., & Mathews, A. (2004, August 30). *Cognitive processes in anxiety.* Advances in Behaviour Research and Therapy. Retrieved November 30, 2021, from <https://www.sciencedirect.com/science/article/abs/pii/0146640283900152>.

Depression, Anxiety and Stress Among Retired Officers of Indian Armed Forces

- Byers, A. L., & Yaffe, K. (2014, June 10). *Depression and dementias among military veterans*. *Alzheimer's & Dementia*. Retrieved November 30, 2021, from <https://www.sciencedirect.com/science/article/pii/S1552526014001356>.
- Byrne, S. P., Fogle, B. M., Asch, R., Esterlis, I., Harpaz-Rotem, I., Tsai, J., & Pietrzak, R. H. (2021, May 3). *The hidden burden of social anxiety disorder in U.S. military veterans: Results from the National Health and Resilience in veterans study*. *Journal of Affective Disorders*. Retrieved November 30, 2021, from <https://www.sciencedirect.com/science/article/abs/pii/S0165032721004201>.
- Chandavarkar, U., Azzam, A., & Mathews, C. A. (2006, July 14). *Anxiety symptoms and perceived performance in medical students*. Wiley Online Library. Retrieved November 30, 2021, from <https://onlinelibrary.wiley.com/doi/abs/10.1002/da.20185>.
- Ciorniciuc, V. (n.d.). *Dass 21 - Depression Anxiety Stress Scale Test*. <https://www.thecalculator.co>. Retrieved November 30, 2021, from <https://www.thecalculator.co/health/DASS-21-Depression-Anxiety-Stress-Scale-Test-938.html>.
- ClinMed International Library. (n.d.). *Indexing partners*. International Journal of Depression and Anxiety | Clinmed International Library. Retrieved November 30, 2021, from <https://clinmedjournals.org/international-journal-of-depression-and-anxiety.php>.
- Correa, K. A., Carrillo, V., Funkhouser, C. J., Shenberger, E. R., & Shankman, S. A. (2021, November 25). *Ethnic differences in behavioural and physiological indicators of sensitivity to threat*. *Journal of Anxiety Disorders*. Retrieved November 30, 2021, from <https://www.sciencedirect.com/science/article/abs/pii/S0887618521001559>.
- Fajkowska, M., Domaradzka, E., & Wytykowska, A. (2018, January 23). *Types of anxiety and depression: Theoretical assumptions and development of the anxiety and depression questionnaire*. *Frontiers in psychology*. Retrieved November 30, 2021, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5787098/>.
- Fletcher, D., & Sarkar, M. (2012, April 18). *A grounded theory of psychological resilience in olympic champions*. *Psychology of Sport and Exercise*. Retrieved November 30, 2021, from <https://www.sciencedirect.com/science/article/abs/pii/S1469029212000544>.
- Frances, A., Manning, D., Marin, D., Kocsis, J., McKinney, K., Hall, W., & Kline, M. (n.d.). *Relationship of anxiety and depression*. *Psychopharmacology*. Retrieved November 30, 2021, from <https://link.springer.com/article/10.1007/BF02246243>.
- Gadermann, A. M., Engel, C. C., Naifeh, J. A., Nock, M. K., Petukhova, M., Santiago, P. N., Wu, B., Zaslavsky, A. M., & Kessler, R. C. (2012, August 1). *Prevalence of DSM-IV major depression among U.S. military personnel: Meta-analysis and Simulation*. OUP Academic. Retrieved November 30, 2021, from https://academic.oup.com/milmed/article/177/suppl_8/47/4345399?login=true.
- Kypraiou, A., Sarafis, P., Tsounis, A., Bitsi, G., Andreanides, E., Constantinidis, T., Kotrotsiou, E., & Malliarou, M. (2017, March 1). *Depression and anxiety in Greek male veterans after retirement*. OUP Academic. Retrieved November 30, 2021, from <https://academic.oup.com/milmed/article/182/3-4/e1639/4099770?login=true>.
- Liu, S., Lithopoulos, A., Zhang, C.-Q., Garcia-Barrera, M. A., & Rhodes, R. E. (2020, August 21). *Personality and perceived stress during COVID-19 pandemic: Testing the mediating role of perceived threat and efficacy*. *Personality and Individual Differences*. Retrieved November 30, 2021, from <https://www.sciencedirect.com/science/article/pii/S0191886920305420>.

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- McLeod, S. (1970, January 1). *Psychological theories of depression*. Depression Theories | Simply Psychology. Retrieved November 30, 2021, from <https://www.simplypsychology.org/depression.html>.
- Nelson, C., Cyr, K. S., Corbett, B., Hurley, E., Gifford, S., Elhai, J. D., & Richardson, J. D. (2011, July 12). *Predictors of posttraumatic stress disorder, depression, and suicidal ideation among Canadian Forces personnel in a National Canadian Military Health Survey*. Journal of Psychiatric Research. Retrieved November 30, 2021, from <https://www.sciencedirect.com/science/article/abs/pii/S0022395611001300>.
- Nestler, E. J., Barrot, M., DiLeone, R. J., Eisch, A. J., Gold, S. J., & Monteggia, L. M. (2002, April 4). *Neurobiology of depression*. Neuron. Retrieved November 30, 2021, from <https://www.sciencedirect.com/science/article/pii/S0896627302006530>.
- Nichter, B., Haller, M., Norman, S., & Pietrzak, R. H. (2019, November 15). *Risk and protective factors associated with comorbid PTSD and depression in U.S. military veterans: Results from the National Health and Resilience in veterans study*. Journal of Psychiatric Research. Retrieved November 30, 2021, from <https://www.sciencedirect.com/science/article/abs/pii/S0022395619308003>.
- Perceived stress-home-springer*. (n.d.). Retrieved November 30, 2021, from https://link.springer.com/referenceworkentry/10.1007%2F978-1-4419-1005-9_479.
- Pflanz, S. E., & Ogle, A. D. (2006, September 1). *Job stress, depression, work performance, and perceptions of supervisors in military personnel*. OUP Academic. Retrieved November 30, 2021, from <https://academic.oup.com/milmed/article/171/9/861/4577823?login=true>.
- Primary hyperparathyroidism in pregnancy-liebertpub.com*. (n.d.). Retrieved November 30, 2021, from <https://www.liebertpub.com/doi/abs/10.1089/jwh.2009.1777>.
- Psychological theories of stress*. Psychological Theories of Stress - James-Lange, Cannon-Bard. (n.d.). Retrieved November 30, 2021, from <https://explorable.com/psychological-theories-of-stress>.
- Psychology, C. H. D. of. (n.d.). *Stress and depression*. Annual Reviews. Retrieved November 30, 2021, from <https://www.annualreviews.org/doi/abs/10.1146/annurev.clinpsy.1.102803.14393>
- Schafer, K. M., Clancy, K. J., & Joine, T. (2021, November 25). *An investigation into the bidirectional relationship between post-traumatic stress disorder and suicidal ideation: A nine-year study*. Journal of Anxiety Disorders. Retrieved November 30, 2021, from <https://www.sciencedirect.com/science/article/abs/pii/S0887618521001572>.
- Sheriff, R. S., Hooff, M. V., Malhi, G. S., Grace, B., & McFarlane, A. (2020, May 13). *Childhood determinants of past-year anxiety and depression in recently transitioned military personnel*. Journal of Affective Disorders. Retrieved November 30, 2021, from <https://www.sciencedirect.com/science/article/abs/pii/S0165032719326643>.
- The theory of resilience and relational load - researchgate*. (n.d.). Retrieved November 30, 2021, from https://www.researchgate.net/profile/Tamara-Afifi/publication/309470221_The_theory_of_resilience_and_relational_load/links/5a00f946a6fdcc82a31705a2/The-theory-of-resilience-and-relational-load.pdf.
- Tiller, J. W. G. (2013, October 29). *Depression and anxiety*. The Medical Journal of Australia. Retrieved November 30, 2021, from https://www.mja.com.au/journal/2013/199/6/depression-and-anxiety?fbclid=IwAR1kDPMjhnRi24XcknQYgsyBix71Y_PVLF83XxCBOXFFX6vyXFfahm1RxmQ.

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- Tolentino, J. C., & Schmidt, S. L. (1AD, January 1). *DSM-5 criteria and depression severity: Implications for clinical practice*. *Frontiers*. Retrieved November 30, 2021, from <https://www.frontiersin.org/articles/10.3389/fpsy.2018.00450/full>.
- Zeidner, M. (2014, April 16). *Anxiety in education: Moshe Zeidner: Taylor & Francis Group*. Taylor & Francis. Retrieved November 30, 2021, from <https://www.taylorfrancis.com/chapters/edit/10.4324/9780203148211-20/anxiety-education-moshe-zeidner>.

Acknowledgement

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Jaidev, J. N. & Molly, J. (2022). Depression, Anxiety and Stress Among Retired Officers of Indian Armed Forces. *International Journal of Indian Psychology*, 10(3), 1975-1983. DIP:18.01.202.20221003, DOI:10.25215/1003.202