

Assessment of post-traumatic stress disorder and psychological well-being of Military Personnel in Kaduna State, Nigeria

Hembafan D. Ngutsav¹ . Ronke G. Awopetu² . David M. Shekwolo¹ . Ruth H. Olumeka¹

¹Department of Psychology, Nigerian Defence Academy, Kaduna

²Department of General Studies, Air Force Institute of Technology, Kaduna

Received: 31 January 2024 / Accepted: 7 March 2024

© The Author(s) 2024

Abstract

This study assessed post-traumatic stress disorder and psychological well-being of military personnel in Kaduna, Nigeria. A total of 268 (239 = male ; 29 = females) participants from active-duty military personnel serving across the Nigerian Air Force Base, First Mechanised Division, and Nigerian Defence Academy all in Kaduna were employed in carrying out this study. Results of Pearson Moment Correlation Coefficient (Pearson's r) showed that the relationship between post-traumatic stress disorder and the psychological well-being of military personnel was not significant. The result of a T-test indicated that there was no significant difference in the psychological well-being of military personnel who have been exposed to combat and those who have not. Although these results were not significant, it is worthy of note that military personnel whether exposed to combat or not find their job very stressful and hazardous, which makes them to be at high risk of developing post-traumatic stress disorder. Therefore, military personnel should be exposed to psychological training to manage the risk of PTSD. In addition, the military authority should employ the services of trained psychologists to help the personnel to effectively deal with or manage the challenges of PTSD.

Key Words: Post-traumatic stress disorder, Psychological well-being, Military personnel, Kaduna

Hembafan D. Ngutsav (*Corresponding author*)

doreenngutsav123@gmail.com

Department of Psychology,
Nigerian Defence Academy, Kaduna, Nigeria
Phone No.: +2348025049880

Introduction

The encouragement one gets from significant others in recognition of an achievement in periods of adversity or in various life difficulties such as bereavement, accident, illness and imprisonment can play a significant role in enhancing the individual's well-being. Psychological well-being refers to inter and intra-individual levels of positive functioning that can include one's relationship with others and self-referent behaviours that include one's sense of mastery and personal growth (WHO, 2017). Psychological well-being is about living well and lives going well, it is a healthy blend of feeling good and functioning effectively. People with high psychological well-being report feeling good, capable, supported, fulfilled and satisfied with life. Huppert's (2009) review on military personnel claim that the influencers of psychological well-being include improved physical health, mediated by brain activation patterns, neuro-chemical effects and genetically formed factors.

Health can be seen as a state of complete physical, mental and social well-being, and not just the mere absence of disease or infirmity. It is not simply an objective life course transition, but also a subjective, developmental and socio-psychological transformation that may be related to physical and psychological well-being. The experience of post-traumatic stress disorder may decrease a sense of well-being, as workers move out of demanding or stressful jobs, especially among the military (Undiyaundeye & Agbama, 2022).

Post-traumatic stress disorder is a multi-organisational challenge that affects patients' family relations, employers, colleagues, friends, communities and neighborhoods who are often involved in cases of post-traumatic stress disorder at the major level (Dami et al., 2018). Large entities like the military, the health care system, and government organisations sometimes show concern and get involved in the problems of post-traumatic stress disorder. Stakeholders who have varying preferences and incentives focusing on an organization or specific stage of patients' lives can result in a shift of the burden to another organization rather than getting the root cause addressed. Post-traumatic stress disorder can be said to result from the experience of a traumatic event like war, e.g., Boko Haram insurgency, kidnapping, armed robbery, or a non-war traumatic event such as an attack by terrorists, family violence, sexual abuse, or severe injury or accident (Baggetta & Alexander, 2016). Although the majority of post-traumatic stress disorder may be high among combat exposed personnel, it can also co-morbid with other psychological issues or mental health issues that can occur following extreme stress, trauma, including depression, schizophrenia, mania, anger, violence, guilt, shame, substance abuse and suicide (Dami et al., 2018). Individuals with post-traumatic stress disorder (PTSD) continue to experience the psychological effects of trauma, like re-experiencing symptoms, avoidance of similar stimuli, negative cognition and increased physical arousal, long after being removed to a safe environment or even after retirement (Dami et al., 2018). The factors contributing to the psychological well-being of military personnel emerge from varying sources. For example, a happy marriage is contributes to a satisfying career or a meaningful relationship with other person(s) and a propensity to unrealistic optimism and over-exaggerated self-evaluations can be useful (Emeka, 2017). Military personnel may also suffer a wide range of consequences of revealing their challenges about how strenuous their training and entire career is and the hazards they are exposed to as they discharge their duties on a daily basis. They may suffer consequences such as a higher chance of losing jobs or being discriminated against in the workplace, social exclusion, low income, difficulties in renting residence, exclusivity from social communities, and legal challenges (Baggetta & Alexander 2016).

In addition, optimism also helps individuals cope with stressors to their well-being; negative contributing factors can also include, degrading and unrewarding work environment, unfulfilling obligations and unsatisfying relationships. Social interaction has a strong effect on well-being, as negative social outcomes are more strongly related to well-being than are positive social outcomes. Childhood traumatic experiences diminish psychological well-being throughout adult life, and can damage psychological resilience in children, adolescents, and adults (Undiyaundeye & Agbama,

2022). A traumatic event can be said to be a life-threatening event such as military combat, natural disasters, terrorist incidents, serious accidents, physical or sexual assault in adult or childhood. PTSD is an anxiety disorder that can occur following the experience or witnessing of a traumatic event (Emeka, 2017). Most survivors of trauma return to normal when given a little time (Kelly, 2005). However, some people may have stress reactions that do not go away on their own, or may even get worse over time and they may develop PTSD.

Today, the term PTSD can be used to describe the psychological challenges resulting from traumatic events. If one is involved in or witnessed a traumatic event it is quite common to experience upsetting, distressing or confusing feelings afterwards. The feeling of distress may not emerge immediately as some persons may just feel emotionally numb at first. After a while, some persons may develop emotional and physical reactions, such as getting easily agitated or not being able to sleep. This is understandable, and some people may discover that these symptoms may reduce or fade out in a relatively short period. But if these challenges last for about a month or even longer, or are very extreme, the individual is likely to be diagnosed of PTSD (Emeka, 2017). Exposure to traumatic events such as war, conflict, natural and human-made disasters, assault and life-threatening illnesses are common with over two thirds of the general population likely to be exposed to a traumatic incident in their lifetime (Undiyaundeye & Agbama, 2022)

Exposure of military troops to the rigors of their training, career hazards, and persistent warfare with debriefing in between times is likely to increase their chances of getting PTSD. While some are likely to not have the mental and psychological build up required for one to stand the rigors of the military, others may be in a peritrauma, post trauma, and trauma state and so a little stressor is likely to trigger maladaptive behaviour in them (Dami et al., 2018). Over the years, concerns have been raised about the involvement of the military all over the globe in war and peace keeping operations. This war has led to the destruction of lives and property as innocent civilians become victims. Most times, the perpetrators become victims too, and the liberators (military and other agencies) become more and more vulnerable. What we have here in Africa have been series of armed conflicts across the African countries and in the process, a lot of persons have lost their lives (Emeka, 2017). Trauma does not exist in vacuum, there is always a cause (Jakupcak et al., 2009).

Nigeria's military forces have been engaged in trying to restore sanity at the continental level through the African Union medium and then regionally through the ECOWAS Monitoring Group (ECOMOG) as we have seen over the years. Internally, Nigeria's military forces have been involved in trying to maintain internal peace and stability. Our military have been out stretched by their continuous involvement in peacekeeping missions. They have been on operational fields from the troubled North Eastern part of Nigeria troubled by Boko Haram, the South East ravaged by IPOB secessionist group to the South-South with the Niger-Delta Avengers. In addition, the issues in North-Central troubled by Nomads and farmers clash; these issues and a lot others have led to the deployment of Nigerian military to various combat grounds in order to curb these fore bearing menace. In the event of these deployments, personnel are more often taken to different operation zones such as the operations Boyona, Lafia Dole, Safe Haven, Crocodile Tears, Zenda and many more; these are likely to set the ground for trauma (Dami et al., 2018).

Exposure to traumatic events can consequently have a series of adverse psychological effects. In the last three decades, there has been an increase in the discussions around trauma and its effects, with particular focus on PTSD (Undiyaundeye & Agbama, 2022). Previous reviews have documented PTSD to be a commonly studied psychopathology in the aftermath of trauma (Emeka, 2017). PTSD is characterised by several interconnected symptoms including re-experiencing symptoms (e.g., intrusive thoughts, recurrent dreams, flashbacks, distress and physiologic reactivity upon exposure to trauma cues). Others include avoidance and emotional numbness (e.g., avoidance of trauma reminders, social detachment from others, restricted emotional experiences, sense of foreshortened future), and symptoms of hyper-arousal (e.g., sleep difficulties, irritability and anger, concentration challenges, hyper-vigilance, exaggerated startle) (Undiyaundeye & Agbama, 2022).

PTSD is often studied among military personnel in relation to combat trauma. The effect of combat on PTSD among military personnel is a major concern among the public, military authorities, and policy makers in the areas of policy re-draft. Indeed, it can be a debilitating consequence of severe or life-threatening trauma. Moreover, PTSD can cause substantial distress and interfere with personal and social functioning, subsequently leading to social withdrawal, anger, and aggression. Furthermore, PTSD in military populations has a pervasive impact on military readiness and the accomplishment of military goals (Dami et al., 2018).

The work environment of military personnel does not only expose them to the risk of being killed or wounded by their adversaries, but also the risk of witnessing or suffering from the aftermath effects of violence. While some may function well under challenging circumstances and remain asymptomatic, a significant number fall victim to PTSD. The combat environment of the Nigerian military personnel is normally very diverse. It can be peace-keeping operation in countries like Mali, South Sudan or internal security operation in different parts of the country. The nature and type of stressors vary from one operation to another (Campbell et al., 2007). Military personnel are sometimes away from home for long periods and they experience high levels of stress including long working hours, boredom and traumatic incidents with unfriendly forces. The factors mentioned above contribute greatly to the vulnerability of the Nigerian military personnel (Emeka, 2017).

The present study

In the last three decades there has been an increase in the discussion of trauma and its effects, with particular focus on post-traumatic stress disorder (Dami et al., 2018). The military as an organization is a closed system and as such collecting data from the formations is usually difficult. This is partly attributed to Nigeria as a less developed country, with poor record of death cases and their causes. There are a lot of military personnel in Kaduna and other parts of the country who are directly or indirectly facing the heat of the insecurity in the country which has a lot of negative impact on their mental and physical health which leaves a lot of military personnel with mental disorders like post-traumatic stress disorder (Dami et al., 2018). This has caused a disruption in their social relationships, damaged self-image, suicide, feeling of helplessness, and increased difficulty in adjusting to the civil life at retirement. Only a few studies (e.g., Jakupcak et al., 2009) have examined the relationship between PTSD and psychological well-being among veterans who screened positive for PTSD were more than four times as likely to have experienced low psychological well-being compared to non-PTSD veterans. Despite the enormity and pervasive cases of PTSD among the military, there have not been adequate studies to explore this important agency in Nigeria. As far as we know studies on the relationship between PTSD and psychological well-being of military personnel who have been exposed to combat have not been compared with those who have not. The current study therefore, attempts to investigate the relationship between PTSD and the psychological well-being of military personnel as well as compare the psychological well-being of those exposed to combat and those who have not been exposed to combat. In view of the above argument, the following hypotheses were tested:

Hypothesis 1: There will be a significant negative relationship between PTSD and the psychological well-being of military personnel.

Hypothesis 2: There will be a significant difference between the psychological well-being of military personnel who have been exposed to combat and those who have not.

Method

Participants and Procedure

Participants for this study were 268 active-duty military personnel drawn from Kaduna across the Nigerian Air Force Base, First Mechanized Division Kaduna and Nigerian Defence

Academy using the convenient sampling technique. The participants comprised of 239 (89.2%) males and 29 (10.8%) females ranging from ages 18 to 30 (57.8%) and 31 to 50 (42.2%). 63.1% indicated Christianity as their religion, 0.7% indicated others as their religion, while 36.2% indicated that they were Muslims. 51.1% of the sample population stated that they were married as at the time of the research, 47.4% were single, 1.1% were separated and 0.4% were divorced. 25.4% had never been exposed to combat, 74.6% had been exposed to military combat operations. 18.7% of the participants were of the non-commissioned cadre, while 81.3% were commissioned. The sampling technique employed in this research was the convenient sampling. This enabled selection and collection of data from the participants in the field and it involved the collection of relevant information from a representative sample of the given participants to obtain information about them in the setting through the administration of the research instruments, which includes surveys on PTSD and psychological well-being.

Instruments

Questionnaire was used as the instrument for data collection. The first part (i.e. Section A) sought information on the demographic characteristics of the participants. The second part (Section B) consisted of two instruments, and they are: Post-traumatic Stress Disorder Checklist-Military Version (PCL-M) and the Psychological Well-being Scale. Each of these instruments is discussed in detail below.

Post-traumatic Stress Disorder Checklist-Military Version (PCL-M)

The PCL-M is a 17-item self-report screening instrument based on DSM-V diagnostic criteria for PTSD. This brief inventory is designed to assess PTSD symptomology among military personnel. Items correspond with PTSD criterion: 5 items measure re-experiencing symptoms, 7 items measure numbing and avoidance symptoms, and 5 items measure hyper-arousal symptoms. Participants rated the extent to which they have been bothered by symptoms over the past month on each of the 17 items on a 5-point Likert scale ranging from 1 "Not at all" to 5 "Extremely". Here, symptoms of PTSD were measured by the Posttraumatic Stress Disorder Checklist-Military Version (PCL-M; Weathers et al., 1993). The total symptom severity score ranges from 17-85 and is calculated by summing the scores from each of the 17 items. Total severity scores will be compared to a normative threshold. The PCL-M has been shown to have excellent concurrent validity. ($r = .93$; Blanchard et al., 1996; Wilkins et al., 2011) and test-retest reliability ($r = .96$; Weathers et al., 1993; Wilkins et al., 2011). The PCL-M has a range of proposed cutoff scores that vary according to sample and setting. A cutoff score of 34 is identified as the optimal score for maximising efficiency for a PTSD diagnosis (Bliese et al., 2008; Walker et al., 2002). In the present study, the analysis shows a Cronbach's alpha reliability coefficient of .93.

Psychological Well-being Scale (PWBS)

Psychological well-being was assessed with the Brief Psychological Wellbeing Scale (PWBS) developed by Ryff (1995). The scale consists of 8 items (short version) with 7 response options ranging from; 7-Strongly Agree; 6-Agree; 5-Slightly Agree; 4-Neither Agree nor Disagree; 3-Slightly Disagree; 2-Disagree; 1-Strongly Disagree. All items were phrased in a positive direction. Scores can range from 8 (which is Strong Disagreement with all items) to 56 (which is Strong Agreement with all items). High scores signify that respondents view themselves in very positive terms in diverse areas of functioning. Davidson (1991), the factors related to the social support of emotional and information type were grouped, and the scale comprises of four factors, with an internal consistency index evaluated by the Cronbach's alpha ranging between .76 and .95, while Dauda et al. (2016) showed the existence related to the content of these, the internal consistency

gotten ranged from .92 to .83. In the present study, the analysis shows a Cronbach's alpha reliability coefficient of .93.

Design/Statistics

The research adopted the cross-sectional survey research design in carrying out this research. There was no attempt to manipulate the variables since a survey design presumes that the data are collected after the events of interest have occurred. The researchers decided to adopt this design for this study because it is an inherent trait among the participants used for this study. The Pearson Moment Correlation Coefficient (Pearson's *r*) and Independent T-test were employed to test the research hypotheses. These were done via the Statistical package for Social Sciences (SPSS Version 26).

Results

The results of the analyses are presented and interpreted below. The first analysis involved the significance of the relationship between post-traumatic stress disorder and psychological well-being of military personnel in Kaduna State. This hypothesis was tested using Pearson's product moment correlation and the result is presented in table 1.

Table 1

Pearson's correlation showing relationship between post-traumatic stress disorder and psychological well-being

Variable	N	df	R	p
Post-traumatic stress disorder and psychological well-being	268	266	-0.06	0.16

Table 1 shows that post-traumatic stress disorder has no statistically significant relationship with psychological well-being ($r=-0.06$; $p=0.164$). This result implies that the higher military personnel post-traumatic stress disorder will be the lower their psychological well-being. Therefore the hypothesis which stated that there would be a significant relationship between post-traumatic stress disorder and the psychological well-being of military personnel in Kaduna State was not confirmed.

Table 2

Independent t-test showing results of the difference in the psychological well-being of military personnel who have been exposed to combat and those who have not.

Combat Exposure	N	Mean	SD	df	t	Sig
Not exposed	68	39.7794	13.48946	265	.850	.922
Exposed	200	39.4250	12.76358			

The result in Table 2 indicated no significant difference in the psychological well-being of military personnel who have been to combat and those who have not ($t = .850$, $p>.05$). As can be seen in Table 2, there is no statistically significant different in the mean scores of those who were not exposed to combat ($M =39.77$, $SD=13.48$) when compared to those who were exposed to combat ($M=39.42$, $SD=12.76$). Based on this finding, hypothesis 2 was rejected.

Discussion

The research focused on the assessment of post-traumatic stress disorder and psychological well-being of military personnel in Kaduna State, Nigeria. Two hypotheses were tested in the study. Hypothesis 1, which stated that there will be a significant relationship between post-traumatic stress disorder and psychological well-being of military personnel in Kaduna State was rejected ($p > .05$). Although PTSD was negatively related to psychological well-being, the value was not statistically significant. The reason for this finding could be that the Nigerian military are consistently faced with debilitating challenges that can make them to constantly have issues with their psychological well-being. For instance, they receive relatively low wages compared to other less live threatening careers, unlike what are obtainable in more developed climes where the military profession are valued and their welfare matters the to the government and military authorities. As a result, the present finding opposes previous findings including Guerra and Calhoun, (2011), Jakupcak et al. (2009), Kessler et al. (1999), Lemaire and Graham (2011) which found PTSD to be associated with low psychological well-being among the military. Their conclusion that an evidence-based synthesis that PTSD should be considered a risk factor for low psychological well-being, among military and veteran populations is relevant to the present study. The current finding also disagrees with (Calabrese, 2011), which found that military personnel with PTSD and 2 or more comorbid disorders were 7 times more likely to report depression as compared to those with only PTSD. However, the current finding tend to agree with (Corson et al., 2013), which found that PTSD was not associated with suicidal ideation..

Futhermore, the results of the present study revealed no significant difference between the psychological well-being of personnel exposed to combat and personnel who have not been exposed to combat. This implies rejection of Hypothesis 2, which stated that there will be a significant difference between the psychological well-being of military personnel who have been to combat and those who have not. This finding is contrary to earlier studies (e.g., Seal et al. (2009), which indicated that extended periods of exposure to combat experiences such as these are often linked to an increased risk of mental health issues such as post-traumatic stress disorder, suicidal ideation and behaviors, and depression. The research found that the military personnel exposed to combat scored the same as those who have not on the psychological well-being scale. However, based on the findings in this study, it is obvious that it is not combat exposure alone that poses as a causal factor for PTSD among military personnel in Nigeria, other risk factors may include low wages, perceived corruption among the military, and the general harsh economy that affects both the military exposed to combat and those not exposed to combat equally.

Implications of the study

Findings of the study imply that although the negatively relationship between PTSD and the psychological well-being was not significant, there is a need for military authorities to pay more attention to the welfare of military personnel. This might go a long way in helping them to cope with PTSD and have high psychological well-being. More so, the military authorities should ensure that its personnel are sensitized on the high risk of PTSD and be trained by psychologists to recognize their basic signs and symptoms so as to report in time for proper treatment. The findings of the study further imply that the Nigerian military policies are generally not psychological well-being friendly. This means that if military policy makers should enunciate policies such as a compulsory psychological assessment to ascertain the mental buildup and psychological well-being of candidates looking to join the military before the recruitment exercise in order to recruit only those that can withstand the rigors of the military training, this can reduce the burden of PTSD on them and improve the psychological well-being of the military. There should also be training programme capable of equipping the military with the skills to cope with PTSD. Routine checks

should also be carried out on all military personnel whether exposed to combat or not because combat is not the only stressors that pose as a risk factor for PTSD among military personnel.

Limitations of the study and suggestions for future research

This study was conducted in only three military units situated in Kaduna State. Future research should be conducted in many military units across different states to enhance the extent to which the study is generalised. The research adopted a cross-section data with its notable limitation of not taking care of causality. Beyond this, there could be bi-directional relationships among the study variables, which cross-sectional data cannot reveal. Future efforts should be geared towards addressing the cause and effect relationship of these variables by adopting longitudinal design, which would also take care of a possible bi-directionality of our variables. In the same vein, single source of data was a limitation of the current study however, generating data from personnel about psychological well-being without the input of supervisors, family and colleagues may be misleading. Future studies should complement such data by sourcing further information from other sources such as colleagues and supervisors. This will avoid the problem of common source variance.

Conclusion

The security situation in the country is currently very challenging, the Nigerian military are constantly kept on their toes. This research has sought to assess post-traumatic stress disorder on the psychological well-being of military personnel in Kaduna State, Nigeria. The results of the study has demonstrated the need to look into the psychological well-being of military personnel in Kaduna State so as to enable them work more effectively and also be happy at their duties and with their personal lives.

References

Baggetta, P., & Alexander, P. A. (2016). Conceptualization and operationalization of executive function. *Mind, Brain, and Education, 10*(1), 10–33.

Bliese, P.D., Wright, K.M., Adler, B.A., Cabrera A., Castro, C.A., & Hoge, C.W. (2008). Validating the primary care posttraumatic stress disorder screen and the posttraumatic stress disorder checklist with soldiers returning from combat. *Journal of consulting and Clinical Psychology, 76*(2), 272-281.

Burrell, I.M., Adams, G.A., Durand, D.B., & Castro, C.A (2006). ``The impact of military lifestyle demands on wellbeing, Army and family outcome. *Armed Forces and Society, 33*(2), 43-58.

Campbell, D. G., Felker, B. L., Liu, C. F., Yano, E. M., Kirchner, J. E., Chan, D., Rubenstein, L. V., & Chaney, E. F. (2007). Prevalence of depression-PTSD comorbidity: Implications for clinical practice guidelines and primary care-based interventions. *Journal of General Internal Medicine, 22*(6), 711-718. doi: 10.1007/s11606-006-0101-4. PMID: 17503104

Cristobal, E., Flavián, C., & Guinaliu, M. (2007) Perceived E-Service Quality (PeSQ) Measurement Validation and Effects on Consumer Satisfaction and Web Site Loyalty. *Managing Service Quality: An International Journal, 17*, 317-340.

- Corson, K., Denneson, L. M., Bair, M. J., Helmer, D. A., Goulet, J. L., & Dobscha, S. K. (2013). Prevalence and correlates of suicidal ideation among Operation Enduring Freedom and Operation Iraqi Freedom veterans. *Journal of Affective Disorders, 149*(1), 291-298.
- Dami, B.E., James, A., Zubairu, D., Karick, H., & Dakwak, S. (2018). Combat exposure and PTSD among military combatants in North East Nigeria. *Journal of Psychology and Clinical Psychiatry, 9*(4), 28-42.
- Emeka, P.C. (2017). The impact of malaria on the people of Anambra State Nigeria and their response to the disease. *Journal of Infectious Diseases & Therapy, 5*(5), 324, 324. doi:10.4172/2332-0877.1000324
- Foa, E.B., Steketee, G., & Rothbaum, B.O. (1989). Behavioural cognitive conceptualization of Posttraumatic stress disorder. *Behaviour Therapy, 20*, 155-176.
- Griep, Y., Hyde, M., Vantilborgh, T., Bidee, J., De Witte, H., & Pepermans, R. (2015). Voluntary work and the relationship with unemployment, health, and well-being: A two-year follow-up study contrasting a materialistic and psychosocial pathway perspective. *Journal of Occupational Health Psychology, 20*(2), 190–204.
- Guerra, V.S., & Calhoun, P.S (2011). Examining the relation between posttraumatic stress disorder and suicidal ideation in an OEF/OIF veteran sample. *Journal of Anxiety Disorders, 25*(1), 12-18.
- Huppert, F.A. (2009). Psychological wellbeing: Evidence regarding its causes and consequences. *Applied Psychology, 1*(2), 137-164.
- Jakupcak, M., Hoerster, D.K., Varra, A., Vannoy, S., Felker, B., & Hunt, S. (2011). Hopelessness and suicidal ideation in Iraq and Afghanistan war veterans reporting sub- threshold and threshold posttraumatic stress disorder. Kessler, R. C., & Frank, R. G. (1997). The impact of psychiatric disorders on work loss days. *Psychological Medicine, 27*, 861–873.
- Kelly, J. G. (2005). The national institute of mental health and the founding of the field of community psychology. In W. E. Pickren, Jr. & S. F. Schneider (Eds.), *Psychology and the National Institute of Mental Health: A historical analysis of science, practice, and policy* (pp. 233–259). American Psychological Association.
- Lemaire, C.M., & Graham, D.P (2011). Factors associated with suicidal ideation in OEF/OIF veterans. *Journal of National Library of Medicine; National Center for Biotechnology Information. 130*(1-2), 231-238.
- Ryff, C., & Keyes, C. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*, 719–727.
- Seal, K. H., Metzler, T. J., Gima, K. S., Bertenthal, D., Maguen, S., & Marmar, C. R. (2009). Trends and risk factors for mental health diagnoses among Iraq and Afghanistan veterans using Department of Veterans Affairs health care, 2002-2008. *American Journal of Public Health, 99*(9), 1651-1658.

Taylor, S.E., & Brown, C. (2011). Social support: A review". In, M.S. Friedman. (Ed.) *The handbook of health psychology*(pp.189 – 214). Oxford University Press.

Undiyaundeye, F., & Agbama, I.A. (2022). Post-traumatic stress disorder among military personnel in Nigeria: A social approach. *Scholars Journal of Arts, Humanities and Social Sciences*,10(9), 402-406.

Walker, E.A., Newman, E., Dobie, D.J., Ciechanowski, P., &Katon, W. (2002). Validation of the PTSD checklist in an HMO sample of women. *General Hospital Psychiatry*,24(6), 375-380.

Weathers, F., Litz, B., Herman, D.S., Huska, J.A., & Keane, T.M. (1993). *PTSD checklist (PC) reliability, validity and diagnostic utility*. Annual convention of the International Society for Traumatic Stress Studies, San Antonio.

World Health Organization (2017). 67th World Health Assembly. *Psychological wellbeing*.