SELF ESTEEM AND SOCIAL SUPPORT AS CORRELATES OF COMBAT STRESS AMONG 213 FORWARD OPERATING BASE, NIGERIAN AIR FORCE PERSONNEL IN KATSINA STATE, NIGERIA

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Abstract
The research aimed to explore the factors associated with self-esteem and social support in relation to combat stress among Nigerian Air Force Personnel stationed at the 213 Forward Operating Base in Katsina State, Nigeria. The study focused on the experiences of personnel during combat operations and how their personal characteristics and support networks affected their behavior. A total of 187 (84.2%) male and 35 (15.8%) female participants who had been deployed for duration ranging from 1 month to over 2 years took part in the study. They completed four sets of research instruments, including the Unit Support Scale, Family/Friends Support Scale, Rosenberg Self-Esteem Scale, and Combat Exposure Scale. Three hypotheses were formulated and tested. Pearson Product-Moment Correlations and Multiple Regression Analysis, were used to test the hypotheses. The results indicated the following: the first hypothesis showed a statistically significant positive relationship ($r(220) = 0.148$, $p < 0.05$) between self-esteem and combat stress; the second hypothesis revealed a statistically significant negative correlation between family and friend's support and unit support ($r = -310$, $p < 0.01$); and the third hypothesis demonstrated a significant impact of family and friend's support ($\beta = -.472$, $t = -7.491$, $p < .01$), but no significant impact of self-esteem ($\beta = .033$, $t = .555$, $p > .01$) or unit support ($\beta = -.067$, $t = -1.098$, $p > .01$) on personnel's combat stress. Additionally, the results showed a significant combined effect of self-esteem and social support ($R = .506$, $F = 24.974$, $p < 0.01$) on combat stress among the personnel. The study concludes thatself-esteem and social support systems have a significant relationship with combat stress thus, suggested that self-esteem and social support play a significant role in influencing combat stress among personnel. Based on the findings, it was recommended, among other things, to provide combatants with training on self-esteem and the importance of social support before and after combat operations. It was also suggested to organize stimulating events to help combatants cope with trauma.

Keywords:Self-esteem, Family/Friend Support, Unit Support, Combat stress.

Introduction

Globally, military personnel returning from combat operations are faced with several psychosocial challenges capable of affecting their functioning and productivity. In recent times, empirical reports have shown an unusual rise in psychological consequences of war among military veterans who return from combat operations (Abel et'al, 2018). Furthermore, concerns have been raised about the involvement of the military all over the globe in war and peacekeeping operations after the war has been fought (Richard & Reinhart, 2015). This war has led to the destruction of lives and properties as innocent civilians become victims, 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 a series of armed conflict across the African countries and in the process, a lot of people have lost their lives. Combat stress does not exist in a vacuum.

Combat stress is a universal phenomenon, experienced all over the world over and across time. Poets and novelists as far back as Homer and Shakespeare were among the first to record the profound impact of combat stress and its subsequent stressors on human cognition, behaviour and emotion. Exposure to combat stress events, such as war, conflict, and natural and human-made disasters is common, with over two-thirds of the general population likely to be exposed to a traumatic incident in their lifetime (Ugwu et al., 2020; Richard & Reinhart, 2015).

Our 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, our military forces have been involved in trying to work for internal peace. Our military has been outstretched in peacekeeping missions. They have been on operation fields from the troubled North Eastern part of Nigeria ravaged by boko haram to the North West by banditry, to the South East troubled by IPOB (Indigenous People of Biafra) secession group, to the South-South with the Niger Delta Avengers, the North Central troubled by Nomads and farmers clash and so; these issues and many more have led to the deployment of our military to various combat grounds just in a way to curbing these fore bearing menaces. In the event of these deployments, they are more often taken to different operations such as the operations Boyona, Lafia Dole, Safe Haven, Crocodile Tears, and many more; these are likely to set the ground for combat stress. Brewin (2013) also studied predictors of combat stress and showed that pre-combat stress risk factors have relatively weak predictive effects, while combat stress intensity and post-combat stress risk factors have somewhat stronger predictive effects.

Military duty often involves service members placing their life at great risk to accomplish the mission. Often, these missions are conducted in areas far from the home of service. In recent years, there has been a high pace of military deployments to Maiduguri (Sambisa forest) and other areas in the fight against boko haram and other insurgency and banditry issues thus many service members serving more than one tour of duty in a combat zone. Generally, the

service member is placed on orders for the tour of duty and must complete the tour assigned regardless of personal concerns or circumstances. There are very few scenarios in which a member of any branch of service will be dismissed once ordered to a tour of duty. Further, the length of each deployment a service member experiences may vary in time from a shorter four to six-month tour to a single tour as long as 18 months served in a combat zone. The length of the tour will dictate how long the service member will be away from home, friends, and family while also in part determining the likelihood of having combat-related experiences. In addition to the rapid rate of deployment that many service members experience, there is a lack of social support.

As with many groups, the military is a close community of people who can understand the unique stressors that service members and their families endure (Demers, 2011). Stress can also decrease military personnel's sensitivity at work. The errors caused by workers who are working under impaired conditions such as air traffic controllers or pilots are vital ones. A single error can be fatal. Perhaps the most important cost of occupational stress comes from those jobs. These numbers and the reality indicate that managers (commanders) must take precautions for reducing and eliminating stress or stress-maker conditions. Because it is an inevitable result of work, relationships and personal life, personnel are always subjected to combat stress on and off in their job, which may decrease their performances. However, well-managed combat stress can increase performance as well as the health of the personnel. Military leaders must understand the main elements of stress; the causes of stress; how it occurs; how to reduce or prevent it by using leadership tactics. They also must observe the symptoms as they display among personnel.This will help to improve personnel performance, military leaders must also learn how to create healthy work environment for subordinates.

The primary function of the Nigerian Air Force is to provide close support for the ground-based and sea borne forces for the attainment of peace and stability in the country. Services in the Nigerian Air Force are to carry out missions and training under a variety of stressful circumstances. Military personnel are expected to perform their duties fully, therefore the training and preparation of military personnel become so crucial. One of the main tasks of the commanders is to evaluate the stress conditions and stress levels of the soldiers. Therefore, a basic knowledge of stress and coping techniques is of great importance for all military personnel as a means of managing stress in military operations and their life. Command group has to apply for stress management programs in their organizations. For example, the NATO (North Atlantic Treaty Organization) Research Study Group applies “psychological support for military personnel” to enhance the performance as well as the general well-being of soldiers (Mangels&Dorff, 1995).

Many surveys were carried out to identify the relationships between stress and military personnel and performance. Katz (1997), mentioned some findings about stress and aviators in his Aero-medical research. In his report, naval personnel reported significantly

decreased job satisfaction concerning negative stressful life events; another study in his report cited 71 per cent of military pilots admitted to being worried by personal and family problems; and family stress on the pilot's affected flying efficiency.

In a study carried out by Carlistle (2001) on preflight stress experienced by pilots before flying, the author observed that even the best pilots are subjected to a significant level of stress that could diminish their ability to fly safely. He suggests not flying, if pilots perceive much more stress. Richard and Reinhart (2015), also focused on preflight stresses. According to them, flight stresses may be solved at the end of the day. However, pilots experience stress from the aircraft to the cockpit, this could be a real problem. Therefore, stress can be more dangerous in pilots' life. Human factors cause 60-70% of air accidents during combat (Uçuşet'al, 1995), including sleeplessness, fatigue, alcohol and smoking, panic, using drugs, ignorance, and stress. The role of stress in air accidents is approximately 20% (Gataet'al, 2001). If commanders deal with stress and human factors, they can reduce the number of accidents, and thereby increase the safety of Nigerian Air Force Personnel.

Statement of the Problem

Military combat encompasses a lot of physical and psychological injuries that deserve significant attention and management in combat operations thus, understanding military personnel's self-esteem and social support system will help in addressing combat's stress challenges among Nigeria Air Force personnel. It will interest you to know that recent studies on social support as correlates of combat stress have yielded contradictory findings which underscore the need to study more on the impact of self-esteem and social support on stress among combatants (Perez, 2012).

This implies that the Nigerian Air Force is saddled with not only dealing with the psychological problems associated with personnel such as depression; they have to cope with environmental challenges imposed on them due to some form of demand to discharge their responsibilities Air Force personnel which is neglected by the Nigerian government. In addition, Nigerian Air Force is said to be short-fall in operational management which has increases the level of combat stress experience by the personnel, lack of strategic sea based, and lack of motivation for personnel,has categorically challenge the readiness of our Nigerian Air Force personnel psychological stability (Ugwu et al., 2020; Adamu, 2010).

Furthermore, for a long, attention of researchers, psychotherapist, clinicians and social workers have focused more on the social and emotional stress of Air Force personnel thereby paying less attention to self-esteem and social support as correlates of combat stress among Air Force personnel. This has created a big service and information gap in the psychological stress of the Air Force personnel. However, very few researchers have studied self-esteem and social support in the Nigerian population. Hence, with all these in the minds of the Air Force personnel, how could they have viewed the world around them? These are many of the questions this present study intends to address as itemized below:

Research Questions

The following are the major questions that the study will address:

i. What is the relationship between self-esteem and combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base, Katsina?
ii. What is the relationship between social support and combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base, Katsina?
iii. What is the joint influence of self-esteem and social support on combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base, Katsina?

Objectives of the Study

This study is aimed at achieving the following objectives:

i. To examine the relationship between self-esteem and combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base, Katsina.
ii. To examine the relationship between social support and combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base, Katsina.
iii. To examine how self-esteem and social support predict combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base, Katsina.

Hypotheses

This study is guided by the following hypotheses:

i. There will be a significant relationship between self-esteem and combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base, Katsina.
ii. Social Support will have a significant relationship with combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base, Katsina.
iii. Self-esteem and social support will jointly predict combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base, Katsina.

Literature Review

Many factors influence how people appraise a situation or event. Some of them are backgrounds, values, customs, experiences, religions, attitudes, and ideologies. The important thing is the personality. Personality is a dominant element to interpret internal and external demands as a stress or not. Allen (1983) states that personality makes people "more prone" or "more resistant" to stress. There are some personal characteristics mentioned below that affect the stress perception state: *Self-esteem* is an individual's general feeling of worth. Individuals with high self-esteem have positive feelings about themselves. Individuals with low self-esteem view themselves negatively. People with high self-esteem perform better and are more satisfied with their jobs than those with low self-esteem. Having low self-esteem, people have been confronted with more stress than others. "An individual`s generalized belief about internal control (self-control) versus external control (control by the situation or by others)" is called *locus of control* (Nelson & Quick, 1990). Internals have been found to have higher job satisfaction, higher motivation, more effort leading to performance, and less anxiety than externals.

Externals are more prone to get stress in organizations.

Self-esteem is a positive or negative attitude toward oneself (Rosenberg, 1965) and the personal judgment of worthiness (Coopersmith, 1967). Global self-esteem is an overall feeling of self-worth (Rosenberg et'al, 1995). Specific self-esteem is a feeling of competence in a specific area of life such as academics, work, or social relations. Higher global self-esteem is vital for a variety of adolescent developmental outcomes, such as the transition to university (Hickman, et'al, 2000), whereas lower self-esteem has been related to poorer social adjustment in several studies. Mooney et'al. (1991) discovered that among first-year female students, better global self-esteem was associated with overall, academic, and social adjustment. Similarly, after adjusting for demography, IQ, and the educational achievement of the mother and father, Hickman and colleagues discovered that global self-esteem predicted overall, academic, and social adjustment.

Social identity theory as developed by Tajfel and Turner (1986) argues that there are two distinct aspects of the self-concept: personal identity and social identity (also known as collective identity) (Crocker &Luhtanen, 1992). Hence, Self-esteem can be socially and personally based. The assessment of our feeling of self as an object, whether favorable or negative, is known as personal self-esteem. (Rosenberg, 1989). In addition to personal self-esteem, Crocker and Luhtanen (1992) propose that there is a second type of self-esteem, collective self-esteem. Collective self-esteem refers to our evaluations of social identities. Furthermore, they contend that we work to uphold both our individual and group self-esteem and that these ideas may interact in a way that influences both individual and group well-being.

Few studies have been conducted on military personnel's self-esteem. The few studies that exist either have small sample sizes (Platt, 1970), are dated (Julian et al., 1966), or have excluded people who are serving in the armed forces (Bachman & O'Malley, 1977). But stigma around mental health contributes to low self-esteem in some soldiers (Greene-Shortridge, 2017). Notably, traditional research in the military context emphasizes the role of group cohesion on individuals' and groups' performance. Cohesion is often thought of as a group's “esprit de corps” or sense of oneness (Shils & Janowitz, 2018). Units with a greater sense of cohesion are thought to perform better than those with lower cohesion and have greater well-being (Costa & Kahn, 2010; Griffith, 2007). Social scientists, as well as military leaders, tend to cite unit cohesion as the key element in combat motivation and fighting resilience (Ben-Shalom et'al., 2005). However, they seems to be conflicting studies on how cohesiveness affects people's readiness and self-esteem. In their research of Civil War veterans from the Union Army, Costa and Kahn (2010) contend that men from more cohesive companies were much less likely to suffer from the effects of wartime stress. Nevertheless, a different study on military cohesiveness revealed that the fighting capability of military units might not be affected by a lack of social cohesiveness and a reliance on brittle frameworks and short-term elements (Ben-Shalom et'al., 2005).

Patriotism has also been cited as a possible motivation for fighting (Wong, 2003). While not designed to be a measure of collective self-esteem, it reflects perceptions towards one's country. Patriotism is also studied under the rubric of national identity (Evans & Kelly, 2002; Smith & Kim, 2006). The logic of the argument is that men and women will be more willing to sacrifice their personal lives for the love of their country, and their sense of national (group) pride. Research on this hypothesis has also been mixed. Conventional studies conducted following World War II discovered that the two main motivations for fighting in war are the desire to put an end to the conflict and group connections such as protecting one's battalion (Marshall, 1947; Shils & Janowitz, 1948). However, Leonard Wong and his associates (2003) found that many soldiers fighting in Iraq also attributed some of their motivation to their sense of honour and duty towards the U.S. Although, self-esteem has not been the focus of military study per such, it is evident that military scholars think that group dynamics have an impact on individuals. We anticipate that among those connected to the military, sentiments toward the military as a whole and collective self-esteem will be favorably correlated with personal self-esteem given our understanding of the relationship between individual and collective self-esteem. Furthermore, there was a positive correlation between well-being and self-esteem on both an individual and together level; higher levels of self-esteem was linked to better well-being.

Again, Ugwu et al. (2020) opined that the experiences of armed personnel in combat can impact their relationships with family members, friends, and civilians upon their return. They conducted astudy to explore the influence of combat exposure on operational management within the Nigerian Navy, Nigerian Air Force, and Nigerian Army. The study involved 150 participants, consisting of 134 males and 16 females, selected through purposive sampling based on population characteristics and study objectives. The research employed a cross-sectional survey design, and a One-Way ANOVA was conducted to assess the significance of differences. The findings revealed that participants with high combat exposure had a lower total mean of 45.54 (SD=11.71) in operational management compared to those with lower combat exposure, who obtained a higher total mean of 48.00 (SD=12.2). Interestingly, the study suggested that personnel from the Nigerian Navy might be less susceptible to combat stress.

Hellmuthet'al. (2012) examined aggression among 359 US Iraq and Afghanistan, combat veterans who had presented to a Department of Veterans Affairs healthcare clinic for physical or mental health problems, 31.8% reported at least one act of physically aggressive behaviourin the past four months, 18.9% reported more extreme physical violence (i.e., physical fight), while 27.7% reported less severe physical aggression (i.e., threatening without a weapon). They did not particularly examine the connection to deployment or exposure to war. Twenty-three percent of the 1,543 US Marines engaged in the US Armed Forces who had been deployed to Iraq or Afghanistan rated "high" on antisocial behavior in a non-anonymous, questionnaire-based, cross-sectional study.

Experiential exposure to combat was positively correlated with antisocial behavior, even after controlling for a variety of military and demographic variables.

Wright et'al. (2012) examined the relationship between internalizing symptoms, externalizing behaviors (such as drinking excessively, acting aggressively, and taking risks), and combat exposures in a survey of 1,397 (42%) soldiers from a US military unit between 4 and 9 months after deployment (only 589 were followed up at 9 months). They included an item on picking fights, assaulting people, and threatening violence in their validated 4-item aggression scale. Interestingly, 67% of the sample reported aggressive behavior in the previous month, but this included threats of verbal and physical aggression as well as property aggression, so it is not comparable with estimates of physical aggression alone. The sample also reported high levels of combat exposure during their most recent deployment. Even after adjusting for internalizing and social environment characteristics, combat exposure was linked to externalizing behaviors at 4 and 9 months in the cross-sectional and longitudinal studies. Sadly, they did not discuss any distinct connection or trajectory from military exposure to personal externalizing behaviors like aggression.

Social Support and Combat Stress

A social support system can be applied within the organization. Club activities and family meetings are a few kinds of support systems. Managers are responsible for controlling the physical environment. They may reduce noise, institute better control of temperature, and provide physical facilities to improve employee health and reduce stress. Creating a productive climate and culture is also important for producing or eliminating stress. Centralized or formalized organizations may exert much more stress than participative organizations. Therefore, employees are eager to have the ability to take part in the decision-making process. Upward communication has to be provided by top management.

Sohyunet'al. (2014) imply that there is a correlation between lower PTSD symptoms after military deployment and help from the military unit and social support in the community after the deployment. By investigating the relationships between pre-deployment unit support and PTSD symptoms prior to Iraq deployment as well as unit support, PTSD symptoms, and post-deployment social support following deployment among 835 U.S. Army and 173 National Guard members, this study expanded on previous research. Multiple regression analyses showed that while higher unit support during deployment was significantly associated with lower post-deployment PTSD severity among active-duty soldiers only, pre-deployment unit support was not significantly associated with post-deployment PTSD severity in either group of soldiers. Lower levels of post-deployment PTSD symptom severity were linked to higher levels of social support following deployment in both groups. According to these results, unit support may not have as much of an impact as post-deployment social support in preventing post-deployment PTSD symptoms in either group of soldiers. PTSD symptoms, social

assistance following deployment, and military unit support among National Guard and active duty soldiers stationed in Iraq.

Chapman et'al. (2014) studied 14 male veterans of OEF/OIF with mild traumatic brain injury (MTBI) and PTSD co-morbidity. In this study, social support was measured using the Unit Support Scale (USS). The loss was assessed using the questions: "While deployed did you lose a buddy or valued leader" and "While deployed did a spouse or girl/boyfriend leave you?" (p.155) Social supports decreased as losses increased. Also addressed was the level of stress that the loss of a combat peer can produce, comparable to the death of a spouse. The losses were then correlated with increased susceptibility to PTSD symptoms, especially an increase in avoidance/numbing and arousal symptoms. This study is significant because it addressed stress (loss), social support, and specific PTSD symptoms. It is also directional in that, a retrospective measure of social support was taken to measure support before the trauma and then compared to a measure of support levels after the development of PTSD symptoms. The sample size in this study is very small but should drive more interest in the ways we define or describe stress and loss of social support.

Despite the large body of work indicating that both higher levels of unit support and post-deployment social support are associated with less severe PTSD symptoms, most studies have used cross-sectional designs and therefore are more restricted in terms of causal inferences. To date, only one study (Polusny et al., 2011) has prospectively examined the effects of unit support (pre-deployment) and general post-deployment social support on post-deployment PTSD symptom severity. These investigators assessed a sample of 522 U.S. National Guard soldiers approximately one month before, and two months following deployment to Iraq. Results indicated that post-deployment social support was inversely related to new-onset PTSD symptoms after accounting for pre-deployment PTSD symptoms, pre-deployment unit support, and combat experiences, whereas pre-deployment unit support was not significantly associated with post-deployment PTSD. These findings provide compelling support for the potential benefits of post-deployment social support as a buffer for PTSD symptom development following war-zone deployment. However, they did not address the potential effects of unit support specifically during deployment. Given that unit support may change as a function of warzone deployment, it is important to understand the impact of unit support both as service members initially deploy (i.e., pre-deployment unit support) and during deployment.

Furthermore, prior research suggests that the temporal proximity of risk and resilience factors to the measurement of outcomes may affect the potency of these factors (Schnurret'al., 2004); therefore, unit support during deployment may be a stronger predictor of post-deployment PTSD symptoms compared with pre-deployment unit support. Yet, no studies to date have longitudinally assessed both pre-deployment unit support and unit support during deployment.

Social support scales include four kinds of

social support in the workplace, emotional support (psychological, emotional, and accepted support), instrumental support (instrumental and material support), advice (advice, guidance, and informational support), and companionship (companion and society). According to Schwarzer and Leppin (1991), people can cope with stressful lives by using external resources like social support and internal resources like self-worth and mastery. Research has demonstrated that social support plays a pivotal role in mitigating the adverse physiological and psychological consequences of stress. According to Crandall (1979) and Larson et al. (1986), for example, friendship and companionship can be viewed as the primary component of social support; as a result, engaging in enjoyable activities with friends or companions can improve psychological well-being. To the extent that the specific kind of social support meets the needs of the stressor, it improves assessments and coping. Studies on work stress that evaluated a variety of vocations discovered that social support could lessen people's stress by lessening the detrimental impacts of stressors in the workplace. People in a variety of professions, including professors, bank workers, and social workers, benefit from social support by being shielded from the negative consequences of stress; this suggests that the strength of stressor-strain connections diminishes with increasing social support. The impact of social support at work on the experience of work stress has not often been the subject of the scant research on professional military personnel.

The buffering models of Ensel and Lin (1991) provided the foundation for the theoretical model of stress buffering that Coleman and Iso-Ahola (1993) developed. According to the theoretical concept, social support mitigates the detrimental effects of external stressors on people's mental health by acting as a buffer or moderator against the effect of perceived stress. Additional evidence was provided by Iso-Ahola and Park (1996) to support their studies on the impact of stress on health and sickness and the moderating role of social support in the stress-health relationship. Further research has confirmed this. According to the buffering model of social support, receiving social support from others may increase people's perceptions of their capacity to use healthy coping mechanisms to deal with stress, hence enhancing their health and general well-being.

Kowalski (2000) more focused on social resiliency especially in seeking input from others. He believes that a trusted person may see new ways to deal with the situations because he believes that no one can deal with all life's stresses alone. Unions and social support must be established to decrease stress levels. The unions do many things that relieve job stress. In developed countries the rate of unionization is great. Companies that deal with unions employed more than 50 per cent of the US workforce (Cooper & Michael, 1985). Discussing difficult experiences with another person gives a chance to feel better. The process of confessing appears to counter the detrimental effects of stress. This process is also called “networking” (Luthans, 1987). Optimism also improves social resiliency. Optimism and pessimism are two different thinking styles. Optimist people avoid distress by understanding bad events and

thinking positively. Being relaxed and making jokes also affect a person's well-being. Many people find that watching a favourite movie or listening to music can relieve stress.

Carrell, et'al. (2000) explain that humour and laughter may reduce susceptibility to physical illness and disease. It is thought that if people have a good sense of humour and laugh regularly, they may be releasing hormones that will help to maintain their health.

Social Support and Adjustment Social support is one of the most important protective factors for undergraduates (Taoet, 2000). Social support includes social resources that individuals perceive to be available or that are offered to them by helping relationships. Perceived social support is one of the most commonly used measures of social support. Perceived social support is a person's perception of the availability of support from others (i.e., friends and family) and captures the complex nature of social support including both the history of the relationship with the individual who provided the supportive behaviour and the environmental context (Hobfoll& Vaux, 1993).

Barrera et'al. (1981) have proposed four different types of support that friends and family may offer including guidance and feedback (e.g., advice and instruction), non-directive support(e.g., trust and intimacy), positive social interactions (e.g., spending time with friends and family), and tangible assistance (e.g., shelter and money). The relationship between perceived global social support (i.e., one composite score for the different sources of social support) and one facet of adjustment has been the focus of the majority of studies in this area. For example, in a year longitudinal study Halamandaris and Power (1999) found that perceived global social support predicted psychosocial adjustment (i.e., absence of loneliness and overall satisfaction with the social and academic components of university life). Tao and colleagues (2000) demonstrated that perceived global social support was related to academic, personal-emotional, and social adjustment during the 3rd and 15th weeks of the first semester. Perceived social support was more closely related to social adjustment than to personal-emotional or academic adjustment.

Therefore, the literature reviewed shows differential roles and relationships among self-esteem, social support and combat stress. The studies indicate that self-esteem and social support play a significant role in occupational stress not only in the military but general. This also indicates that the self-esteem and social support of military personnel determine how they perceived occupational stress. The literature also displaced significant findings on the variables of study concerning combat stress while some studies' findings demand the search for more clarity in terms of self-esteem among military personnel. Therefore this study aims at providing more empirical knowledge in the area of self-esteem and social support systems as parameters for managing combat stress in Nigeria. Also, the theories adopted in this study will explain the variables of the study and then provide clarity for the outcome of the study in terms of its findings.

Methods

Design

This study employed an ex-post facto research design. The method is expected to show relationships among the variables in the study. It implies that none of the variables in the study was manipulated and that the researchers do not create an artificial setting for the study. The predictors (independent) variables are self-esteem and social support while the dependent variable is combat stress both variables were measured using research questionnaires.

Population, Sample and Sampling Techniques

The population of the 213 Forward Operating Base personnel of the Nigeria Air Force in Katsina State consists of 266 personnel who were deployed for crew training as well as combat exercises base for Nigeria Air Force (NAF) to join in the ongoing fight against insurgents in Northwest Nigeria. The Nigeria Air Force, 213 Forward Operating Base Katsina is located at Latitude 12.997887N and Longitude 7.676125E adjacent to Umaru Musa Yar'adua Airport along Daura Road Katsina State, Northwest Nigeria. Participants were conveniently sampled based on their availability and willingness to participate in the study. Convenience sampling technique was used based on the fact that all the personnel experience combat exercise and some might not be willing to participate, thus, giving the researcher the liberty to sample those that are available and willing to participate in the study. Meanwhile, about 83.5% of the personnel participated and filled and returned the questionnaires while 16.5% of the personnel do not participate in the study.

The demographic characteristics showed that age ranged between 21-45 years old and mean age of 28.41 and a standard deviation of 4.754. Gender: Males (N= 187; 84.2%) and Females (N=35; 15.8%). Religious affiliation: Christianity (N= 118; 53.2%) Muslim (N= 104; 46.9%). Marital status: Single (N= 168; 75.7%), Married (N= 51; 23%) and Divorced/Separated (N= 3; 1.4%). Education: Primary (N= 1; 0.5%), Secondary (N= 60; 27%) and Tertiary (N= 161; 72.5%). Number of Deployments: 1-3 deployments (N= 72; 32.4%), 4-6 deployments (N= 94; 42.3%) and more than 6 deployments (N= 56; 25.2%) and Duration of Deployment: 1-3 months (N= 70; 31.5%), 4-6 months (N= 81; 36.5%), 7-11 months (N= 44; 19.8%), 1 year (N= 12; 5.4%) and 2 years (N= 15; 6.8%). The study used the following ranks of personnel: Lance Corporal (N= 36; 16.2%), Flying Officer (N= 15; 6.8%), Air Craftsman (N= 68; 30.6%), Warrant Officer (N= 4; 1.8%), Sergeant (N= 24; 10.8%), Squadron Leader (N= 4; 1.8%), Flight Lieutenant (N= 4; 1.8%), Corporal (N= 50; 22.5%), Flight Sergeant (N= 12; 5.4%) and Master Warrant Officer (N= 5; 2.3%).

Data Collection (Instruments)

Combat Exposure Scale

Combat stress was measured using a 7-item self-report combat exposure scale developed by Keane et'al. (1987) this is a widely used measure that assesses wartime stressors experienced by combatants. The scale was designed to measure all forms of combat situations such as wars, peacekeeping operations and terrorism. Items are rated on a 5-point frequency (1= no or never to 5= more

than twelve times a week). High scores indicate high combat exposure. The scale has been widely used among military veterans and found to be a sound psychometric measure with Cronbach alpha of .85 and a week test-retest of .97 for the three groups was reported. In Nigeria's military population, the scale has been widely used and established as a good measure of combat stress at .86 (Abel et'al., 2018).

Social Support for Family/Friends

Family and friends' social support was assessed using an 8-item self-report instrument developed by Vogt et'al. (2012), this instrument measures the amount of instrumental and emotional assistance that military personnel receive from family and friends during deployment and is scored using the 5-point Likert scale. High scores (40) indicate higher perceived social support from family and friends during deployment while scores below the mean infer low support. The scale has demonstrated robust psychometric properties in studies involving the military population the scale has a reliability point of .92.

Unit Social Support Scale

A unit of social support was assessed using a 12-items self-report instrument developed by Vogt, Smith, King, and King (2012), this instrument measures the amount of instrumental and emotional assistance that military personnel receive from unit leaders and colleagues during deployment and is scored using the 5-point Likert scale. High scores (60) indicate high unit social support while scores below the mean infer low support. The scale has demonstrated robust psychometric properties in studies involving military populations the scale has a reliability point of .96. In a study conducted in Nigeria the scale obtained an internal consistency of .94 (Abel et'al., 2019).

Rosenberg Self-Esteem Scale (RSS)

Self-esteem was measured with the Rosenberg Self-Esteem Scale which was developed by Morris Rosenberg in 1965. The scale consists of a 10-item Likert Scale rated on a 4-point scale ranging from strongly disagrees to strongly agree. The scale has been used globally in the assessment of self-esteem. Example of questions in the scale includes: “At times I think I am no good at all” “I feel I do not have much to be proud of” and “I certainly feel useless at times”. The scores of the RSS were obtained by reversing items 1, 3, 4, 7 and 10 and then summing all the scores of the 10 items. The scale has been widely used in several studies. The higher the score obtained in the RSS, the greater the level of self-esteem. The RSS has acceptable internal consistency, with a Cronbach alpha coefficient of between .85 - .88. Test-retest reliability for the 2-week interval was calculated at 0.85, and the 7-month interval was calculated at 0.63 (Silber &Tippett, 1965, Shorkey& Whiteman, 1978). Alhassanet'al. (2020) reported a reliability coefficient of 0.78 for use within Nigeria's cultural settings.

Data Analysis

The study adopted descriptive statistics such as frequency, percentages, mean and standard deviation to describe the demographic characteristics of the participants and to explain the spread of the variables across the sample population. Also, the study adopted inferential statistics to test

the stated hypotheses where hypotheses 1 and 2 were tested using Pearson Product-moment Correlation to test the relationship between the variables and the third hypothesis was tested using multiple regression analysis to test the joint prediction of the independent variables on the dependent variable. Reliability analysis of the scales was done to obtain a Cronbach's Alpha of the instruments.

Procedure

A research permit was granted by the commander for the conduct of the study within the command. Three research assistants were trained on the procedure of administering the research instruments and what was expected of them in supporting the participants to completely respond to the items. The researcher visited the research centre to familiarize with the environment and gain the consent of the participants. The questionnaire contained a letter of introduction stating the topic of the study, soliciting participants' cooperation and obtaining their consent to participate in the study. The study employed a convenience sampling technique to obtain 158 responses from the personnel establishing effective rapport to get the consent of the participants before administering the test. The data collected from the survey were coded and analysed with SPSS (version 26.0).

Ethical Consideration

The researcher obtained informed consent from the authorities and participants before administering the instruments. Participation was voluntary without coercion. The study ensured participants of confidentiality and anonymity by not having their names and/or identifiable information on the questionnaire. Participants were protected from any psychological and physical harm regarding their participation in the study.

Results

Test of Hypotheses

This section of the report presents the analysis and the interpretation of the results in line with the tested hypotheses as follows:

Hypothesis One

There will be a significant relationship between self-esteem and combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base Katsina. This hypothesis was tested using Pearson Product-Moment Correlation in Table 1.

Table 1: The Relationship between Self-Esteem and Combat Stress among Nigeria Air Force Personnel of 213 Forward Operating Base Katsina

Variables	M	SD	df	r	Sig.
Self-Esteem	23.14	7.989	220	.148	.027
Combat stress	17.73	3.709			

r(220) = 0.148, *P*< 0.05

Table 1 shows the summary results of the Pearson correlation on the relationship between self-esteem and combat stress. The results revealed the mean and standard deviation scores for self-esteem (M= 23.14; SD= 7.989) and combat stress (M= 17.73; SD= 3.709). Furthermore, the results revealed a statistically significant positive relationship r(220)= 0.148, $P < 0.05$ between self-esteem and combat stress. In other words, this hypothesis was confirmed significant in this study. Thus, implies that an increase in self-esteem might lead to a significant increase in combat stress among Nigeria Air Force personnel of 213 Forward Operating Base Katsina.

Hypothesis Two

Social Support will have a significant relationship with combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base Katsina. This hypothesis was tested using Pearson Product-Moment Correlation in Table 2.

Table 2: Social Support Correlates with Combat Stress among Nigerian Air Force Personnel of 213 Forward Operating Base Katsina

Variables	CS	F&FS	US
Combat Stress (CS)	1		
Family and Friend's Support (F&FS)	-.501**	1	
Unit (work) Support (US)	-.216**	.310**	1

****Sig. Level @ 0.01**

Table 2 presents the summary results of the correlates of social support on combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base Katsina. The results revealed that family and friend support significantly correlated with combat stress negatively (r= -0.501, P< 0.01). Also indicated that unit (work) support significantly correlated with combat stress negatively (r= -0.216, P < 0.01) Furthermore, the result revealed a statistically significant negative inter-correlation between family and friend's support and unit support (r= -310, $P < 0.01$). In other words, this hypothesis was confirmed significant in this study. Therefore, this implies that a decrease in social support might lead to a significant increase in combat stress among Nigeria Air Force personnel of 213 Forward Operating Base Katsina.

Hypothesis Three

Self-esteem and social support(s) will jointly predict combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base Katsina. This hypothesis was tested using Multiple Regression Analysis in Table 3.

Table 3: Summary Results of the Multiple Regression Analysis on Combat Stress among Nigerian Air Force Personnel of 213 Forward Operating Base Katsina

VARIABLES	β	t	R	R^2	F
Self-esteem	.033	.558			
Family and friend's support	-.472	-7.491**	.506	.246	24.974**
Unit (work) support	-.067	-1.098			

Sig. Level: ***P* = .01 (df= 3, 218)

Table 3 shows the summary results of the Multiple Regression Analysis, where the results revealed that self-esteem, family and friend support and unit (work) support significantly and jointly predicted personnel's combat stress (*R*= .506; *F*= 24.974, $p < .01$) thus, accounted for about 24.6% variance for combat stress among Nigerian Air Force personnel in Katsina. Also, the results indicate a significant impact of family and friend support (β= -.472 t= -7.491, $p < .01$) but an insignificant impact of self-esteem (β= .033 t= .555, $p > .01$) and unit support (β= -.067 t= -1.098, $p > .01$) on personnel's combat stress. This implies that self-esteem, family and friend support and unit support has a significant joint impact on combat stress among personnel. Meanwhile, the result found social support as the major predictor factor of combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base Katsina.

Discussion

The first hypothesis which stated that there will be a significant relationship between self-esteem and combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base Katsina State, Nigeria was confirmed as statistically significant with a positive relationship between self-esteem and combat stress. This finding is consistent with the finding of Mooney et'al. (1991) who opined that higher global self-esteem was related to overall as well as combat and social adjustment among female armies. Similarly, Hickman et'al. (2000) found global self-esteem predicted overall, combat, and social adjustment, after controlling for demographics, intelligence, and paternal and maternal educational attainment. Costa and Kahn (2010) in their study of the Union Army veterans of the Civil War argue that men from more cohesive companies were significantly less likely to experience the impact of wartime stress. However, another study on cohesion in the military showed that the fighting power of military units may not be diminished by the lack of social cohesion and reliance on temporary frameworks and short-term components (Ben-Shalom et'al., 2005). Patriotism has also been cited as a possible motivation for fighting (Wong, 2003). While not designed to be a measure of collective self-esteem, it reflects perceptions towards one's country. Patriotism is also studied under the rubric of national identity (Evans & Kelly, 2002; Smith & Kim, 2006). The logic of the argument is that men and women will be more willing to sacrifice their personal lives for the love of their country, and their sense of national (group) pride. Wright et'al. (2012) opined that Combat exposure was positively associated with antisocial behaviour after adjustment for a range of demographic and military confounders.

The second hypothesis states that Social Support will have a significant relationship with combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base Katsina. The result was confirmed significant in this study. This is consistent with the study of Sohyunet'al. (2014)opined that military unit support and community post-deployment social support are associated with combat stress following military deployment. This study extended prior research by examining the associations among pre-deployment unit support and combat stress before Iraq deployment as well as unit support, Combat Stress, and post-deployment social support after deployment among 835 U.S. Army and 173 National Guard Soldiers. The results in this study supported the above study on the basis that family/friend support is quite instrumental in combatting stress but disagreed with the findings on unit support. Similarly, Chapman et'al. (2014), opined that unit support was not significantly associated with post-deployment combat stress. However, they did not address the potential effects of unit support specifically during deployment. Given that unit support may change as a function of warzone deployment, it is important to understand the impact of unit support both as service members initially deploy (i.e., pre-deployment unit support) and during deployment (Schnurret'al., 2004) therefore, unit support during deployment may be a stronger predictor of post-deployment combat stress compared with pre-deployment unit support. For instance, Crandall (1979) and Larson, Mannell, and Zuzanek (1986) claimed that companionship and friendship could be seen as the central element of social support; thus, doing enjoyable things, together with companions or friends, could elevate psychological well-being. Social support enhances appraisals and coping to the extent that the particular type of social support matches the demands of the stressor (Ugwu et al., 2020).

The third hypothesis states that Self-esteem and social support(s) will jointly predict combat stress among Nigerian Air Force Personnel of 213 Forward Operating Base Katsina. The result was confirmed significant and accounted for about 24.6% variance for combat stress among Nigerian Air Force personnel in Katsina. Also, the results indicate a significant impact of family and friend support but an insignificant impact of self-esteem and unit support on personnel's combat stress. This is consistent with the study of Sohyunet'al. (2014) opined that military unit support, self-esteem and community post-deployment social support are associated with combat stress following military deployment. Among both groups, higher levels of post-deployment social support were associated with lower levels of post-deployment combat stress severity. These findings suggest that post-deployment social support is a particularly strong buffer against post-deployment combat stress among both groups of soldiers whereas the effects of unit support may be limited (Chapman et'al., 2014; Ugwu et al (2020)). These findings provide compelling support for the potential benefits of post-deployment social support as a buffer for combat stress development following war-zone deployment which is similar to was is obtainable in Katsina Based. The insignificant impact of self-esteem and unit support might be held to the fact that the

majority of the personnel lack morals as a result of low motivation or stimulating course for the job at hand. And the significant impact from families /friends was based on the support from host communities and relatives that pray for them with the hope to meet them safe and sound someday.

Conclusion

In conclusion, the research found self-esteem and social support systems have a significant relationship with combat stress. When viewed independently, the personnel's personality which is defined based on self-esteem can be instrumental in helping personnel handle combat stress on the other hand, a social support system can also be instrumental within the work unit and outside the work unit to handle combat stress among personnel. Also, the results indicate how effective both constructs can significantly influencing personnel behaviour after combat operations. The implication of these findings suggested the engagement of the services of psychologists and counsellors to engage personnel from combat operations to help in managing their stress and to be well-integrated with their friends and family.

Recommendations

i. There is a need for professionals to engage with personnel before and after combat operations to psycho-educate them on the influence of self-esteem. This can be informed of seminars or symposiums.

ii. There is a need for personnel to be educated and trained on the importance of exploring social support systems within the work unit and outside the work unit. This can be achieved through effective linkages within the country.

iii. Government can collaborate with families and host communities of the personnel on combat operations for establishing a stimulating event that will give them a sense of belonging with their loved ones.

iv. Government can create a rehabilitation system that will help combatants to refresh from the traumatic event. This will involve psychologists and counsellors within or outside the command.

References

Abel, J, Anongo, F.S, Dami, B.E, &Dagona. Z.K. (2019). Combat Exposure and SelfEfficacy Predicting Psychological Distress among Military Personnel Exposed to Boko-Haram in surgency: The Moderating Role of Unit Support. *Journal of Addiction and Psychology,2*(2), 1-7.

Abel J, Dagona, Z.K, Omoruri O.J &Dauda A.S. (2018). The wounds of terrorism among combat military personnel in Nigeria. *Psychology Clinic Psychiatry, 9*(4), 425-429.

Adamu, S.B. (2010). Combined PTSD and depressive symptoms interact with post deployment social support to predict suicidal ideation in operation enduring freedom and operation Iraqi freedom veterans. *Psychiatry Research,* 216, 357-362. doi: 0.1016/j.psychres.2014.02.01.

Allen, C. D. (1983). Qualitative research in sport management: Case study as a methodological approach. *Qualitative Report, 19*(17), 1-13.

http://www.nova.edu/ssss/QR/QR19/morse1

Barrera, B., Sandler, P. & Ramsay, F. (1981). Continuing controversy over the psychological risks of Vietnam for U.S. veterans. *Journal of Traumatic Stress*, *20*(4), 449?465.

Bachman, C., &O'malley, H. (1977). *Human Nature and Social Order*. Charles Scribner's Sons.

Ben-Shalom, T., Lehrer, C., & Ben-An, U. (2005). Social support and oxytocin interact to suppress cortisol and subjective responses to psychosocial stress. *Biological Psychiatry, 54*(12), 1389-1398.

Brewin, C. A. (2013). The impact of deployment length and experience on the well-being of male and female soldiers. *Journal of Occupational Health Psychology, 10*(2), 121-137. doi: 10.1037/1076-8998.10.2.121

Carlisle, N. A. (2001). The development of psychological well-being among first year college students. *Journal of College Student Development, 51*(2), 180-200. doi: 10.1353/csd.0.118

Carrel, J. B., Elbert, J. T., & Hartfield, A. H. (2000). The PHQ-8 as a measure of current depression in the general population. *Journal of affective disorders, 114*(1), 163-173.

Chapman, J.C., Andersen, A.M., Roselli, L.A., Meyers, N.M., &Pincus, J.H. (2014). Screening for mild traumatic brain injury in the presence of psychiatric co-morbidities. *Archives Phyiscal Medicine Rehabilitation 91,* 1082-1086

Costa, L. C., &Kaln, J. T. (2010). Loneliness matters: a theoretical and empirical review of consequences and mechanisms. *Annals of Behavioral Medicine*, *40*(2), 218-227.

Cooper, H. & Michael (1985). *How does analysis cure?*. Chicago.

Coleman, J., &Iso-Ahola, S. (1993). Going to war and going to college: Did World War II and the GI bill increase educational attainment for returning veterans? *Journal of Labor Economics, 20*(4), 784-815.

Crandall, T. E. (1979). From social integration to health: Durkheim in the new millennium. *Social Science & Medicine, 51*(6), 843-857.

Crocker, N. R., &Luhtanen, R. D. (1992). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology, 77,* 135-149.

Cronkite, K. A., & Moos, J. D. (1995). Social connectedness, social appraisal, and perceived stress in college women and men. *Journal of Counseling& Development, 80*(3), 355-361.

Demers, J. P. (2011). Trauma, PTSD, and resilience: A review of the literature. *Trauma Violence Abuse*, *6*(3), 195-216. doi: 10.1177/1524838005277438

Ensel, B. H., &Lins, D. B. (1991). Characteristics of socially isolated patients with coronary artery disease who are at elevated risk for mortality. *Psychosomatic Medicine, 63*(2), 267-272.

Evans, H. & Kelly, R. (2002). Intimate relationships among returning soldiers: The moderating roles of negative emotionality, PTSD symptoms and alcohol problems. *Journal of*

Traumatic Stress, *23*(5), 264?572.

Gata, K., Hava, M., UzayHekinligi, O. &Merkezi, R. T. (2001). Development ofanew resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression, Stress and Anxiety*, *18,* 76-82.

Greene-Shortridge, B. B., Brilt, T. W., & Castro, S. M. (2007). Partner interactions are associated with reduced blood pressure in the natural environment: Ambulatory monitoring evidence from a healthy, multiethnic adult sample. *Psychosomatic Medicine, 63*(3), 423-433.

Halamandaris, C. & Power, W. (1999). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *The New England Journal of Medicine*, *351*(1), 13? 22.

Hellmuth, J.C, Stappenbeck, C.A &Hoerster, K.D. (2012). Modeling PTSD symptom clusters, alcohol misuse, anger and depression as they relate to aggression and suicidality in returning U.S. veterans. *Journal of Trauma Stress, Vol. 36*(5), 330-337

Hickman, A., Bartholomae, D., &Mckenry, D. M. (2000). The impact of collective self-esteem on intergroup evaluation: Self-protection and self-enhancement. *Current Research in Social Psychology,* 7, 1-11.

Hobfoll, R. M., & Vaux, S. B. (1993). Measuring belongingness: The social connectedness and the social assurance scales. *Journal of Counseling Psychology, 42*(2), 232.

Julian, K. M., Bishop, S. S., & Fiedler, K. C. (1966). Effects of partner support on resting oxytocin, cortisol, norepinephrine, and blood pressure before and after warm partner contact. *Psychosomatic Medicine, 67*(4), 531-538.

Katz, T. (1997). Development of a clinician-administered PTSD scale. *Journal of Traumatic Stress, 8,* 75-90.

Keane, T.M., Fairbank, J.A., Caddell, J.M., Zimering, R.T., Taylor, K.L., & Mora, C. (1989). Clinical evaluation of a measure to assess combat exposure. *Psychological Assessment, 1*, 53-55. doi: 10.1037/1040-3590.1.1.53 PTSDpubs ID: 01555

Kowalski, S. S. (2000). Hostility, social support, and carotid artery atherosclerosis in the national heart, lung, and blood institute family heart study. *The American Journal of Cardiology, 86*(10), 1086-1089.

Larson, N., Manmell, A., &Zuzamek, R. C. (1986). Invisible support and adjustment to stress. *Journal of Personality and Social Psychology, 79*(6), 953.

Luthans, A. (1987). Social network and coronary artery calcification in asymptomatic individuals. *Psychosomatic Medicine, 67*(3), 343-352.

Tao, S. & Colleague, L. (2000). Aggressive behavior in combat veterans with post-traumatic stress disorder. *Military medicine*, *166*(8), 671?676.

Tajfel, M. & Turner, M. (1986). How organizational stressor affect collective organizational citizenship behaviors in the French police: The moderating role of trust climate. *International Journal of Public Sector*

Management, 30, 48-66. https://doi.org/10.1108/IJPSM-02-2016-004.

Taoet, S. (2000). Social connectedness, dysfunctional interpersonal behaviors, and psychological distress: Testing a mediator model. *Journal of Counseling Psychology*, *48*(3), 310.

Mangels, J. H., &Dorff, G. E. (1995). Male student veterans: Hardiness, psychological well-being, and masculine norms. *Psychology of Men and Masculinity, 15* (1), 95- 99 . doi: 10.1037/a0031450

Mooney, U., Sherman, Z., &Lopresto E. (1991). Cohesion during military operations: A field study on combat units in the Al-Aqsa Intifada" *Armed Forces & Society, 32,* 63-79.

Nelson, A., & Quick, M. (1990). Occupational stress and its consequences. *Leadership in Health Service, 27*, 224-239. https://doi.org/10.1108/LHS-07-2013-0032

Perez, B. D. (2012). Occupational engagement scale-student: Development and initial validation. *Journal of Career Assessment, 23*(1), 107-116. doi: 10.1177/1069072714523090

Richard, A., and Reinhart, T. W. (2015). Effect of transition home from combat on risk-taking and health-related behaviors. *Journal of Traumatic Stress, 24*(4), 381-389.

Rosenberg, K., Schooler, O., Schoenbach, O., & Rosenberg, J. U. (1995). Enhancing organizational commitment and employee performance through employee engagement: An empirical check. *South Asian Journal of Business Studies, 6*, 98-114. https://doi.org/10.1108/SAJBS-04-2016-0036

Rosenberg, P.J. (1989). Identity processes and social stress. *American Sociological Review,* 56: 836-849.

Rosenberg, K. (1965). Using peer ethnography to address health disparities among young urban Black and Latino men who have sex with men. *American Journal of Public Health, 103*, 849-852. https://doi.org/10.2015/AJPH.2012.300988

Smith, V. & Kin, F. (2006). Key elements in couples therapy with veterans with combat-related posttraumatic stress disorder. *Professional Psychology: Research and Practice, 36*(6):626?633.

Shils, G. G., &Janowitz, J. T. (2018). Loneliness in everyday life: Cardiovascular activity, psychosocial context, and health behaviors. *Journal of Personality and Social Psychology, 85*(1), 105-111.

Smith, H., & Kim, C. (2006). Impact of social support, cynical hostility and anger expression on progression of coronary atherosclerosis. *Journal of the American College of Cardiology, 36*(6), 1781-1788.

Sohyun, C.H., Frank, C., Lewina, O.L., & Meredith E.C. (2014). Military unit support, post-deployment social support, and PTSD Symptoms among active duty and National Guard soldiers deployed to Iraq. *Journal of Anxiety Disorders 28*(5), 446-453

Ucus, I., Emmiyetinde, M. &Hedef, K. (1995). Civilian employment among recently returning Afghanistan and Iraq National Guard Veterans. *Military Medicine, 176*(6), 639-646.

Ugwu, O.J., Nwagbo, I. L., Ezeh V. &Ufuma D. (2020). Effect of combat exposure on operational management among Nigerian military. *Nigerian Journal of Social Psychology 3*(1), 7-21

Vogt, D., Smith, B.N., King, D. & King, L. (2012). Manuel for the Deployment Risk and Resilience Inventory-2 (DRRI-2): *A collection of measures for studying deployment-related experiences of military veterans*. National Center for PTSD.

Wong, D. (2003). Social relationships and health. *Science, 241*(4865), 540-545.

Wright, K.M., Foran, H.M., Wood, M.D., Eckford, R. D., &McGurk, D. (2012). Alcohol problem, aggression and other externalizing behaviour after return from deployment: Understanding the role of combat experience, internalizing symptom and social environment. *Journal of Clinical Psychology, 68*(7), 782-800