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Combat Exposure on Operational Management

Effect of Combat Exposure on Operational Management among Nigerian Military

Ugwu Obinna Joseph^{1*}
Nwagbo Ifeoma Loveleen²
Ezeh Veronica³
Ufuma Douglas⁴

^{1,3,4}Department of Psychology,
Enugu State University of Science and Technology.
²Intelligence Department, Nigerian AirForce, Enugu.
*Correspondence: pavlovjo28@yahoo.com

Abstract

After exposure to combat, the armed personnel's experience in the combat may affect their relationship with their family members, friends and as well as civilian when they return from combat. Hence, this study investigated the impact of combat exposure on operational management among Nigerian Navy, Nigerian Air force and Nigerian Army, 150 participants comprising 134 males and 16 females were sampled using purposive sampling technique, this technique was used based on the characteristics of the population and the objective of the study, the design of this study was a cross sectional survey design, a One-Way ANOVA was used to test the significance this difference, however, the result of this study shows that participants with high combat exposure obtained a lower total mean of 45.54 (SD=11.71), on operational management when compared with the participants with lower combat exposure who obtained a higher total mean of 48.00 (SD = 12.2) on operational management, however, indicated that the Nigeria navy personnel are less prone to combat stress.

Keywords: *Combat, Stress, Combat exposure, trauma, Operational management, Post-traumatic*

Introduction

Operational management has been less effective as officers who return from combat exposure are not psychologically managed or counseled, to this end the officers are left with no choice than to move ahead with life having a post traumatic combat stress, therefore finding it difficult to fit into the society as a normal human/citizen.

Stress has been categorized as an antecedent or stimulus, as a consequence or response. Stress is not harmful however each individual's cognitive appraisal, his perceptions and interpretations give meaning to events and determines whether events are viewed as threatening or positive. Personality traits also influence the stress equation because what may be over tasking to one person may be a challenge to another. Stress generally is conceptualized as part of human life, which can be essential to survival. However, the "fight-or-flight" mechanism can tell us when and how to respond to danger. If this mechanism is triggered too easily, or when there are too many stressors

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at one time, it can undermine a person's mental and physical health and become harmful after exposure.

In recent years, terrorism has become one of the most dangerous threats to world order. (Majekodunmi 2015) One common problem identified in several researches concerning terrorism is that terrorism is globally becoming a household word. (Alao, Aterem, & Alao 2012) Nigeria as an example is currently faced with internal security challenges posed by Boko Haram. (Udounwa 2013). The hemorrhagic acts of Boko Haram and Niger Delta militants in Nigeria warrants an exhaustive discourse on terrorism and counter terrorism in Nigeria. (Omale 2013) Due to security challenges facing the nation, military personnel are deployed to trouble areas across the country in order to ensure peace and harmony. Currently in Nigeria, the military are majorly engaged in operation lafia dole in North East Nigeria saddled with responsibility of winning boko haram insurgency. The 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, Nigerian military forces have been involved in trying to work for internal peace. Deployment to the theatre of the war according to Shively & Perl (2017) increased risk of exposure to trauma. (Kendler, Gardner & Perscott 2002) For any outcome or negative consequences of experiencing combat trumatic conditions, an individual will be more at risk to the extent that the individual encounter stressful and demanding events that tasks resources and energy that are already limited by the conditions and other vulnerabilities. Tanielian & Jaycox (2008). For example, this model suggests that for a service member returning from combat with a particular condition is most likely to experience negative consequences of that condition to the extent that the service member has other vulnerabilities and encounter stressful events and circumstances. (Tanielian et al 2008)Service members and veterans with combat blast exposure frequently express symptoms consistent with Post Traumatic Stress Disorder and other diagnosis primarily within the medical discipline of psychiatry (Sharon & Daniel, 2017). Findings of a study among personnel deployed to Darfur, Sudan for United Nations PSOs in 2010 by Ameh et al. (2014) revealed that, Four hundred and five personnel were positive for PTSD; male, young, non-commissioned military personnel were most likely to experience Post-traumatic stress Disorder. Gomez (2017) found that soldiers between 33-60 years of age had more cases of PTSD than younger soldiers between 18-32 years. Post-traumatic stress disorder (PTSD), major depression, and traumatic brain injury (TBI) were the focus of a study of the mental health and cognitive needs of returning service members and veterans. Unlike physical wounds, these conditions affect mood, thoughts, and behaviour and often remain invisible to other service members, family, and society. In addition, according to Purtle (2016) PTSD has been constructed as a problem unique to combat exposures and military populations. The prevalence of PTSD was 33% and significantly associated with combat exposure. (Connell, Omole, Subramaney, et al. 2013). Okulate & Jones (2006) found that, PTSD was significantly associated with long duration of stay in the mission area, current alcohol use, lifetime use of an alcohol/gunpowder mixture, and lifetime cannabis use because they are stressful.

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The American Psychological Association (2015 in Nordqvist 2017), posits three different types of stress that require different levels of management. These subdivisions of stress are: acute stress, chronic stress and episodic stress. Acute stress is short-term and is the most common way that stress occurs. Acute stress is often caused by thinking about the pressures of events that have recently occurred, or upcoming demands in the near future. For example, if you have recently been involved in an argument that has caused upset or have an upcoming deadline, you may feel stress about these triggers. However, the stress will be reduced or removed once these are resolved. The second type of stress is episodic acute stress. People, who frequently experience acute stress, or whose lives present frequent triggers of stress, have episodic acute stress. A person with too many commitments and poor organization can find themselves displaying episodic stress symptoms. These include a tendency to be irritable and tense, and this irritability can affect relationships. Individuals that worry too much on a constant basis can also find themselves facing this type of stress. This type of stress can also lead to high blood pressure and heart disease. The third type of stress is chronic stress. This is the most harmful type of stress and grinds away over long period. Ongoing poverty, a dysfunctional family, or an unhappy marriage can cause chronic stress. It occurs when a person never sees an escape from the cause of stress and stops seeking solutions. Sometimes, it can be caused by a traumatic experience early in life.

Apart from these sources of stress, this research looked at the stress of the military, more especially, when they are exposed to combat. Hence, combat is conceptualized as a battle, fight or struggle for victory, in which weapons are heavily used. In Nigeria, the military are vulnerable to combat, because of the activities of Boko-Haram, militancy and that of the maiming activities of the Fulani herdsmen, in some parts of the country, more especially the Northern part of the country. All these maiming activities can be ameliorated by the military because they are charged with the primary responsibility to maintain internal security and external defense. However, in the cause of engaging in combat with these terrorist activities, some may begin to present some negative psychological reactions during and after the combat. These psychological reactions are termed the combat stress caused by combat exposure.

Combat stress is a term used within the military to describe acute behavioural disorganization seen by military personnel as a direct result of trauma and exposure of war. It is also known as “combat fatigue” or “battle neurosis”. It has some overlap with the diagnosis of acute stress reaction used in civilian psychiatry. It is historically linked to shell shock and can sometimes procure Post-traumatic stress disorder.

Research had shown that the act of terrorism had exposed military combatants to a lot of psychological impairments, to this end the problem identified in this study is to assess the silent wounds experienced among military personnel deployed in Operation Lafiya Dole saddled with the responsibility of tackling terrorism championed by Boko Haram. Therefore, this study is aimed at assessing the impact of combat exposure stress on operational management. Findings in this

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study will add to the existing body of knowledge and to guide in clinical information among the Nigerian military concerning the pains encountered by military combatants during and or after war

Statements of Problem

Combat exposure stress is a major problem faced with the military personnel at the end of any war operation. This is such that many of the personnel who went to war, usually come back with behaviours that indicate emotional and cognitive disorders, such as depression and as well as posttraumatic stress disorder (PTSD). This is a major concern of the military, therefore, it becomes necessary that a study comparing the influence of combat stress variables on post operation management behaviour be conducted, to investigate the extent to which combat exposure stress influences maladaptive behaviour in the aftermath of war.

To this end, the study is set to investigate the following question:

1. Will combat exposure stress significantly influence post operational management among the military personnel?

Purpose of Study

To determine whether combat exposure stress will have influence on post operation management among Nigerian military.

Theoretical Background

Combat exposure stress is not an illness and may be experienced by active duty personnel during both peace and war, due to stressful conditions during training, deployment, humanitarian missions, government support missions and other assignments (Armstrong, Richard, & Atglen, Penn, 1994).

Physical phenomena and the structure of corresponding theories are used as a guide to examine the nature of combat and combat theory. (Lei Chen, Yingxin Kou, Zhanwu Li, An Xu and Cheng Wu, 2018).

The Job Demand-Control (JCD) theory (Karasek, 1979) and its expanded version the Job Demand-Control-Support theory (Johnson & Hall 1998, Karasek, & Theorell, 1990) have dominated the field of occupational stress research for more than two decades. The JCD model postulates that job strain results from the interaction between two dimensions of the work environment: psychological job demands and job control. Psychological demands traditionally referred to workload, operated mainly in terms of time pressure and role conflict (Karasek, 1979). However, more recently, cognitive and emotional demands and interpersonal conflict dimensions define the contemporary construct of psychological demand (Karasek, Brisson, Kawakami, Houtman, Bongers, & Amick., 1998). Job control refers to the person's ability to control their work activities, and is defined by two key components: (a) decision authority (worker's ability to

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make decisions about their job); and (b) skill discretion (the breadth of skills used by the worker on the job). The JCD theory suggests that individuals experiencing high demands paired with low control are more likely to experience psychological strain, work-related stress, and, in the long term, poor physical and mental health may occur.

The theory was later extended to include a social dimension: social support (Johnson, et al, 1998, Karasek, et al, 1990). The JCDS theory postulates that social support can moderate the negative impact of job strain on worker's physical and mental health. This model suggests that the most at-risk group of poor physical and mental health are those workers who are exposed to job strain (high demands and low control) paired with low workplace support (Van der Doef, & Maes, 1999)

Much of contemporary stress theory finds its origins in the early work of the social science research group at the University of Michigan and in particular the work of Kahn, French, Caplan and van Harrison. Together they developed the Person-Environment (P-E) Fit theory (Caplan 1987, French, & Caplan, 1972, Harrison, Cooper, & Payne 1978). P-E Fit theory argues that stress can arise due to a lack of fit between the individual's skills, resources and abilities, on the one hand, and the demands of the work environment, on the other hand.

The P-E Fit theory makes explicit the interaction between the individual and the environment in shaping their response to work situations and events, but also highlights the importance of the individual's perception of the environment; and the interaction between them. Logically, this lack of fit can take three forms (Edwards, Caplan, & van Harrison, 1998): (1) the demands of the work environment exceed the employee's ability; (2) the employee's needs consistently fail to be met by the work environment; and (3) a combination of the two situations exists (i.e., where an employee's needs are not being met while at the same time their abilities are over-stretched).

Combat stress reaction (CSR) is a term used within the military to describe acute behavioral disorganization seen by medical personnel as a direct result of the trauma of war. Also known as "combat fatigue" or "battle neurosis", it has some overlap with the diagnosis of acute stress reaction used in civilian psychiatry. It is historically linked to shell shock and can sometimes preclude post-traumatic stress disorder (Copp, 2005).

Combat stress reaction is an acute reaction that includes a range of behaviors resulting from the stress of battle that decrease the combatant's fighting efficiency. However, the most common symptoms are fatigue, slower reaction times, indecision, disconnection from one's surroundings, and the inability to prioritize. Combat stress reaction is generally short-term and should not be confused with acute stress disorder, post-traumatic stress disorder, or other long-term disorders attributable to combat stress, although any of these may commence as a combat stress reaction. The US Army uses the term/acronym COSR (Combat Stress Reaction) in official medical reports. This term can be applied to any stress reaction in the military unit environment. Many reactions look like symptoms of mental illness (such as panic, extreme anxiety, depression, and

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hallucinations), but they are only transient reactions to the traumatic stress of combat and the cumulative stresses of military operations. (Copp, 2007).

Operations may be of a combat or non-combat nature and are referred to by a code name for the purpose of national security. Military operations are often known for their more generally accepted common usage names than their actual operational objectives. Military operations can be classified by the scale and scope of force employment, and their impact on the wider conflict. The scope of military operations can be:

- Theater: this describes an operation over a large, often continental, area of operation and represents a strategic national commitment to the conflict, such as Operation lafia-dulyia (insurgency in Nigeria), with general goals that encompass areas of consideration outside the military, such as the economic and political impact. (Glantz, 2016)
- Campaign: this describes either a subset of the theatre of operation, or a more limited geographic and operational strategic commitment, such as the Battle of Britain, and need not represent total national commitment to a conflict, or have broader goals outside the military impact.
- Battle: this describes a subset of a campaign that will have specific military goals and geographic objectives, as well as clearly defined use of forces, such as the Battle of Gallipoli, which operationally was a combined arms operation originally known as the "Dardanelles landings" as part of the Dardanelles Campaign, where about 480,000 Allied troops took part.
- Engagement: this describes a tactical combat event or contest for a specific area or objective by actions of distinct units. For example, the Battle of Kursk, also known from its German designation as Operation Citadel, included many separate engagements, several of which were combined into the Battle of Prokhorovka. The Battle of Kursk, in addition to describing the initial German offensive operation, also included two Soviet counter-offensive operations: Operation Kutuzov and Operation Polkovodets Rumyantsev.
- Strike: this describes a single attack, upon a specified target. This often forms part of a broader engagement. Strikes have an explicit goal, such as rendering facilities such as airports inoperable, assassinating enemy leaders, or limiting the delivery of supplies to enemy troops(Glantz, 1991).

Kerry & Eyvindson (2008) studies conducted both in the CF and other military research organizations on the effects of personnel tempo (including optempo or the pace of military operations, time away, and workload) on important individual, family, and organizational outcomes, and variables that may buffer or exacerbate these outcomes. The research suggests that frequent and longer deployments, as well as those of a more hostile nature, tend to be associated with more adverse outcomes. The types of stressors experienced by military members vary throughout the deployment cycle, and some reports have indicated that experiences vary depending on factors such as type of unit and reserve versus regular force status. Despite the evidence for the

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negative impacts of high Personnel tempo (perstempo), it appears that if time away is not excessive, deployments can have a positive effect on retention, in that they allow personnel to put their skills and training to use. In addition, researchers have identified a number of factors that may buffer individuals against the negative impacts of stressors associated with military service, such as adaptive coping styles. Although length and frequency of deployments can play a critical role in determining whether adverse outcomes will become evident, other factors, such as perceived support from superiors, may also be important. With high intensity deployments like the current one in Afghanistan, issues of perstempo will become increasingly important. The effects of perstempo on military personnel, their families, and the military organization will become increasingly evident.

Stretch, Marlowe, Wright, Bliese, Knudson, & Hoover (1996) study, the post-traumatic stress disorder systems among the gulf war veterans in active duty and reserve veterans from Pennsylvania and Hawaii who either deployed (n = 1,524) or did not deploy (n = 2,727) to the Persian Gulf. However, the overall deployed personnel exhibited significantly higher rates of psychological distress than non-deployed individuals. The prevalence rate for PTSD symptoms was slightly higher for reserve veterans than for active duty veterans. Stretch et al (1998) suggested that lack of psychological preparation might have been a factor that accounted for the elevated symptoms among reservists.

Gimbel & Booth (1994) did a survey study of 2,101 Vietnam veterans currently married or married in the past. The study assessed the impact of combat on marriages using three models: 1) factors that lead men into combat also decrease marital quality and stability (e.g., individuals who volunteer for battle may be more likely to have psychological problems or a history of antisocial behaviour); 2) combat causes psychological problems that can increase marital distress; and 3) combat intensifies premilitary stress and antisocial behaviours, which then negatively affect marriage. Support for all three models was found. The effect of combat on marital adversity was reduced when premilitary problems were included in the model, indicating that such factors play a role in marital quality. The effect of combat on marital adversity was mediated by post-traumatic stress symptoms and adult antisocial behaviour. When both mediators were in the model together, antisocial behaviour emerged as the strongest.

Britt, T. W. & Dawson, C. R. (2005) in a longitudinal study of 493 soldiers in garrison stationed in Europe; Predicting work-family conflict from workload, job attitude, group attributes and health of officers. The study examined both concurrent and longitudinal predictors of work-family conflict (WFC). Workload (higher work hours per day, less sleep, and more days training), physical symptoms, and morale were the strongest concurrent predictors of WFC.

For the entire sample, when WFC at time 1 was controlled, physical symptoms and horizontal cohesion at time 1 predicted WFC at time 2, in that higher cohesion and greater levels of symptoms were associated with higher WFC. The authors suggest that high cohesion may function to bring soldiers closer to work aspects of their life, which can lead to greater WFC. Among married

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personnel or those who had a child at home only, job satisfaction and job recognition were longitudinal predictors of lower WFC.

Ratings of leadership moderated several of the longitudinal relationships between the predictors and WFC. Specifically, the relationship between horizontal cohesion and WFC, physical symptoms and WFC, and job significance and WFC, were moderated by positive ratings of officer leadership. That is, there was a buffering role for officer leadership, such that positive leadership reduced the impacts of these variables on WFC.

Job significance was a moderator in the longitudinal relationship between cohesion and WFC, in that high cohesion was associated with higher WFC only when soldiers perceived a low level of job significance.

Newby, J. H, Ursano, R. J. McCarroll, J. E. Liu, X. Fullerton, C. S. & Norwood, A. E. (2005) 1,188 spouses of deployed and non-deployed soldiers participated in the study. The aim of the study was to determine whether a 6-month deployment predicted domestic violence against the wives of soldiers during the post-deployment period. It was found that deployment did not significantly predict domestic violence during the first 10 months following the deployment. Younger wives, as well as those who had experienced domestic violence prior to the deployment, were more likely to report abuse. It was concluded that interventions should focus on younger couples and those with a history of domestic violence.

Hypothesis

There will be significant influence of combat exposure on post operation management among military personnel

Method

The study adopted a cross sectional survey design, while purposive sampling technique was use in selecting the participants

Participants

One hundred and fifty participants (134 males and 116 females) were selected for the study and the scores obtained show that participants with high combat exposure obtained a lower total mean of 45.54 (SD=11.71) On operational management when compared with the participants with lower combat stress who obtained a higher total mean of 48.00 (SD = 12.2) on operational management

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Instruments

Combat Exposure Scale was used to measure combat exposure stress among Nigerian Military, while State Trait Anxiety Inventory was used to measure operational management.

Combat exposure was measured using 7-item self-report combat exposure scale Keane, Caddell, & Taylor. This is a widely used measure that assesses combat exposure specifically among military population. 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 .80 reported Keane, Caddell, & Taylor. In Nigerian military population, the scale has been widely used and established as a good measure of combat exposure (Abel, Dagona, Omoruri, & Dauda, 2018).

The State-Trait Anxiety Inventory (STAI) is a commonly used measure of trait and state anxiety (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). It can be used in clinical settings to diagnose anxiety and to distinguish it from depressive syndromes. Form Y, its most popular version, has 20 items for assessing trait anxiety and 20 for state anxiety. State anxiety items include: "I am tense; I am worried" and "I feel calm; I feel secure." Trait anxiety items include: "I worry too much over something that really doesn't matter" and "I am content; I am a steady person." All items are rated on a 4-point scale (e.g., from "Almost Never" to "Almost Always"). Higher scores indicate greater anxiety. Internal consistency coefficients for the scale have ranged from .86 to .95; test-retest reliability coefficients have ranged from .65 to .75 over a 2-month interval (Spielberger et al., 1983). Test-retest coefficients for this measure in the present study ranged from .69 to .89.

Procedure

A letter of authorization from Enugu State University of Science and Technology (ESUT) was issued to the appropriate authorities in the Army, Air force and Navy, which introduced the researchers as Post graduate students on a research mission. The instrument was issued to officers who just returned from operations at the North East of Nigeria at the different military bases (Army, Air force and Navy) in Enugu and collected after responded to.

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Results

Table 1: Mean and Standard Deviation of Combat Exposures on Operational Management

<i>Combat Exposure</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>N</i>
High	45.5441	11.71609	68
Low	48.0000	12.28971	82
Total	46.8867	12.05554	150

**Table 2:
ANOVA summary of Combat Exposure on Operational Management**

<i>Source</i>	<i>Sum of Squares</i>	<i>DF</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig</i>
Combat Exposure	224.206	1	224.206	1.548	.215
Error	21430.868	148	144.803		
Total	351409.000	150			
Corrected Total	21655.073	149			

a. R Squared = .010 (Adjusted R Squared = .004)

Discussion

The result of the study revealed that the hypothesis which stated that, there will be impact of combat stress on operational management was not accepted. This means that there is no relationship between the combat stresses of military personnel and their operational management. This indicates that the stressors involved in military regimentation have no predictive influence on post operation management behaviour of these personnel.

The inability to make an impact on personnel operational management could be as a result of the combat exposure of personnel stress on the military as a result of high discipline in the military which demands the personnel to obey the last other at any given time. These could make it impossible for operational management as a factor to be associated to any particular variable as a predictor. The maladaptive stress reaction theory, Everly and Jeffery (2002) seem to explain this finding. According to the theory, combat stress reaction is produced by both physical and mental tasks, which means that no single class of variable may show a stronger relationship to the predicting or criterion variable.

Also it indicates that the effect of combat exposure stress is more identified on the army and less identified on navy personnel.

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Implication of the study

This study has shown that among military personnel experiences of high or low combat stress did not predict or create an impact on personnel operational management. In other words, if a military personnel experienced high or low combat stress, this may not account for the his or her lower or high in operational management.

This study has paved way for the understanding of the Nigerian military personnel in terms of their operational management. In this manner, the non significant influence in the study has contributed to the understanding of job attitude among Nigerian military personnel. This work also has implication for understanding organizational life of the personnel in the light of the impact of combat stress variable.

Limitations of the study

One major limitation of this study is sample size. The study was conducted using 135 military personnel from Air force, Navy and Army. This sample size may limit the extent of generalization that will be made based on the result.

The researchers find it a little bit difficult to penetrate the military environment and to convince the participants that this research is only for academic purpose. Thus, this further reduced the sample size.

Suggestion for further studies

1. Future researchers should expand the sample size of the study
2. The powers that be or the leaders of Nigerian Psychological Association (NPA) should make effort to sensitize the Nigerian military to be more receptive, when it has to do with research from, more especially from their civilian counterparts as it can help in improvement of security challenges in Nigeria.

Summary/ Conclusion

The outcome of this study showed that combat stress statistically did not significantly influence operational management among Nigerian military personnel.

Based on the result of this study, combat stress did not predict operational management. This means that when military personnel experienced high or low combat stress, there was no decrease in their operational management.

To this end, the researchers conclude that combat stress as a single variable is not variable necessary in order to enhance personnel operational management. Other factors need to be considered alongside with it.

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