Impact of Life Event Stress among Military Personnel Fighting Boko-Haram Insurgency in North Eastern Nigeria: Any Relationship with Psychological Skills?

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| Received: February 18, 2023 | Accepted: April 26, 2023 | Online Published: May 18, 2023 |
|-----------------------------|--------------------------|--------------------------------|
| doi:10.5539/gjhs.v15n5p12 | URL: https://doi.org/ | 10.5539/gjhs.v15n5p12 |

Abstract

Psychological Skills Techniques (PST) can minimize the impact of traumatic life event stress but the underlying mechanism of this occurrence has not been fully explored. This study aimed to elucidate the relationship between psychological skills techniques (Social supports, avoidance of destructive-thought, positive self-talk, emotional strength, relaxation skill) and the impact of traumatic life events experienced by Nigerian soldiers deployed to combat Boko-Haram insurgency in North Eastern Nigeria. We used Impact of Event Scale-Revised (IES-R) and Psychological Skills questionnaire ($\beta = 89$) to collect data from 146 purposively drawn soldiers from operation "Lafiya Doye". Our findings show that of the 146 respondents 72.0% experienced recurrent recollections of dreams; 65.0% had physiological reactivity trauma cues, 82.0% had avoidance of trauma related actions, while 62.0% of participants experienced diminished interest in important activities. In addition, the major source of stress for the soldiers was physical violence (78%). In the regression model, it was observed that an increase in the psychological skills will statistically decrease the impact of life event stress experienced by the respondents. Further, result from ANOVA shows that the composite effect of the predictor variables on the criterion variable was statistically significant (F (5,140) = 248.369, p < 0.05). In terms of magnitude, social support $(\beta = 0.099, t = 2.460, p < 0.05)$ was most potent in predicting the impact of life event stress among the solders. We concluded that Psychological Skills Training (PST) can be effectively utilized to reduce the impact of exposure to traumatic life event stress on soldiers deployed to fight Boko-Haram insurgency in North Eastern Nigeria.

Keywords: Psychological skills, Post traumatic stress disorder, Operation Lafia Doye, Boko Haram

1. Introduction

One of the post-conflict issues faced by military personnel in Nigeria is post-traumatic stress disorder (PTSD). Yet, it is rarely given prominent attention both in research and intervention. It is well documented that PTSD affects military personnel due to exposure to traumatic events. Post-traumatic stress disorder is a mental health condition that is triggered by a terrifying event-either experienced or witnessing it. Symptoms may include flashbacks, nightmares, severe anxiety, as well as uncontrollable thoughts about events (Stanley, Hom, Marx, & Reger, 2020). These symptoms are classified into clusters and it include intrusion symptoms, avoidance, negative alterations in cognition/moods and alterations in arousal/reactivity (American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, 2013). There is strong evidence that the cumulative impact of PTSD has been associated with mental health problems which are prevalent among uniformed personnel (Cederbaum, 2017; Dami, James, & Zubairu, 2018; Miao, Chen, Wei, Tao, & Lu, 2018). The general Strain theory opined that individuals who are stressed are more likely to experience negative affective states such as anger, fear, and frustration. These affective states, in turn, create internal pressure, which can lead to negative outcomes, including deaths (Agnew, 1992; Ofole, 2017). The *Social Stress theory* also points out that stressful life events play an essential role in producing emotional and behavioural outcomes for individuals, which could raise the risk of mental disorder (Aneshense, 1992). Together these effects can harm an individual's physical health and career

potential (Cuijpers et al. 2020).

An urgent mental health concern is the growing prevalence of PTSD among Nigerian soldiers deployed to restore internal peace in the North Eastern part of Nigeria in an operation popularly known as Operation Lafiya Dole" ("Peace by Force"). Despite being at higher risk of PTSD, there is a paucity of data on the factors that protect against PTSD in this cohort (Cederbaum et al., 2017). Previous research in this field identified factors that predict PTSD in the Nigerian military. For example, Cuijpers et al. (2020) examined the predictive influence of peritraumatic using 715 military personnel exposed to the Boko-Haram insurgency in North Eastern Nigeria. The results revealed a significant positive relationship between combat exposure, substance use coping, and PTSD. Similarly, Abel et al. (2018) investigated the influence of combat exposure on PTSD among military combatants in North Eastern Nigeria using 249 purposely drawn men and officers of the Nigerian Army on operation. They found that combat exposure was significant for avoidance symptoms and re-experiencing symptoms. In addition, Cuijpers et al. (2020) investigated the role of combat exposure, and self-efficacy on both anxiety and depression components of distress and the moderating role of unit social support in the relationships between these variables using 605 military returnees. Results revealed a significant negative relationship between combat exposure and self-efficacy on anxiety. Evidently, these studies, apart from Cuijpers et al. (2020) merely examined only the risk factors of PTSD and not the protective factors. There is, therefore, a paucity of research on the protective factors for PTSD in military settings that will guide military operations policies. Consequently, identifying the protective factors that will minimize the impact of life event stress among military personnel in Nigeria is of great academic, clinical, and social importance.

The quest by behavioural scientists to identify variables that will relate to adaptive coping and hardiness has led to the identification of sports-related psychological skills. According to Abel et al. (2018) psychological skills is the intentional use of a well-structured sequence of specified thoughts in order to regulate behaviour in any context. Psychological skills are widely used in sports to regulate athletes' behaviour to meet sports demands by addressing attention, motivation, volition, arousal regulation, perceptual, cognitive functions, and motor control (Meggs & Mark, 2019). There is evidence that warfighters face significant physical and psychological challenges which require mental and physical agility (Vrijkotte, Bart, Romain, & Nathalie, 2016). Exposure to combat stress, just like sports, is associated with declines in several domains vital to military operational success, such as reaction time, sustained attention, and impulse control (Vrijkotte et al., 2016). In extreme conditions, combat stress is associated with impaired cognitive function, subtle neurologic compromise, neuroendocrine dysregulation, low levels of unit cohesion and readiness to accomplish military goals (Clare et al., 2022) Achievement Goal Theories (Elliot, 1999; Nicholls, 1984) and extensive research in this field have shown that sports-related psychological factors have beneficial effects on individual's physical, psychological, and social well-being. It is also reported that these psychological skills have positive effects on preventing and treating non-communicable diseases, lowering the risk of suicidal ideation, and increasing life expectancy (Adeoya, Adeleye, & Egawa, 2021; Tashman, Simpson, & Cremades, 2018; Ofole & Ojo, 2016). Given the negative consequences of PTSD, it is essential to equip military personnel with skills to handle the physical and psychological rigors associated with combat. With these requisite skills soldiers will have the ability to manage everyday military stressors. Therefore, this study aimed to evaluate if psychological skills (social support, avoidance of destructive thoughts, positive self-talk, emotional strength, relaxation skill) have a relationship with the impact of life events experienced by military personnel fighting Boko-Haram Insurgency in North Eastern Nigeria.

2. Methods

A sample size of one hundred and forty-six soldiers (male = 139; female = 7) with mean age of 30.27 years (SD = 29.87) drawn from the population of soldiers deployed to combat Boko Haram insurgency in North Eastern Nigeria participated in this study. A purposive sampling technique was adopted to draw the sample. The primary inclusion criteria were: (1) the participants must be a member of the Nigerian Army, and (2) they must have been deployed to combat Boko-Haram insurgency in North Eastern Nigeria in the past two years

To measure the effect of exposure to Boko-Haram insurgency on the soldiers, the Impact of Event Scale-Revised (IES-R) scale designed and validated by (Weiss & Marmar, 1997) was adopted. It is a 22-item self-report scale rated on 4-point Likert format of 0 (not at all) to 4 (extremely) used to examine the extent of distressing event they have experienced within the past week. The Scale has three subscales, namely: intrusion (8 items), avoidance (8 items), and hyperarousal (6 items). The subscales have been reported to have a high degree of intercorrelation (r = .87) (Nwoga, Audu, & Obembe, 2016). Similarly, a high level of internal consistency (Intrusion:.87-.94, Avoidance: 84 - .87, Hyperarousal: = .79-.91) has been reported by previous studies (Cuijpers et al., 2020; Abel et al., 2018; Filion, Munroe-Chandler, & Loughead, 2021; Meggs & Mark, 2019; Vrijkotte et al., 2016; Clare et al.,

2017; Elliot, 1999; Nicholls, 1984; Adeoya, Adeleye, & Egawa, 2021; Tashman, Simpson, & Cremades, 2018; Weiss & Marmar, 1997; Creamer et al., 2013). The authors reported a test-retest reliability coefficient of .89 to .94 after a 6-month interval (Weiss & Marmar, 1997). Similarly, previous research in Nigeria shows that the instrument is culturally appropriate and has acceptable internal consistency (Nwoga, Audu, & Obembe, 2016).

Researchers developed questionnaire was used to assess the participants' psychological skills. The questionnaire was entitled "psychological skills technique for soldiers." It is a 30-item self-administered questionnaire developed after a literature review of the constructs of psychological skills. The questionnaire has five subscales namely; perceived social supports (SS), avoidance of disruptive thoughts (ADT), positive talk (PT), Emotional Strength and focus (ESF), and Relaxation Skills (RS). Each of the subscales has six items. The response format was anchored on a modified Likert format of strongly (4) agree to disagree (0) strongly. It is positively worded. Typical item from the subscales includes: "I have the ability to remain calm and be serious"; "The support I received when I am down giving me positive emotions" The instrument was positively worded; the higher the scores, the higher the likelihood of possessing psychological skills while a low score is an indication of low psychological skills. Test and measurement experts of the University of Ibadan, Nigeria established the instrument's psychometric properties. Analysis of Moment Structures (AMOS) was used to test the instrument's suitability. The results revealed that factorability was good. Item 33 had the highest (0.726) value, while the least was item 38 (0.413). Similarly, the sub-scale showed commonalities, which ranged from 0.435 to 0.649. This indicated the amount of variance that each of the items accounted for. In addition, the subscale had a critical ratio that ranged from 5.676 to 7.799. This means that all six items were high and contributed to factor analysis. The instrument was pilot tested with soldiers, not in the current study. Test and re-test within a month interval reveal a correlation coefficient of .087 which shows that the instrument has a high-reliability index (see supplementary material).

Permission for the study was granted by the Commandant 81 Division of Nigerian Army (NA). The Commandant thereafter, informed the soldiers of the purpose of the study, which he said was "to collect data that will inform policy concerning soldiers' operations." Those who volunteered for the study signed the consent form provided by the researchers. No financial inducement was given to any respondent. Two research Assistants who could speak three major Nigerian languages (Hausa, Igbo, and Yoruba) were recruited and trained for this study. They supported the researchers in data collection. The researchers adhered strictly to the ethical principles required of a sensitive study of this nature. In all, the collection of data was from January 2020-February 2020).

2.1 Data Analysis

Statistical package for Social Sciences (SPSS-version-20) was used to analyze the data. The mean, age range, and standard deviation were obtained using descriptive statistics. Pearson Product Moment Correlation (PPMC) was used to determine the relationship between psychological skills (predictor variable) and the impact of life stress (criterion variable). In addition, Multiple Regression Analysis was used to examine whether when combined the five psychological skills (social supports, avoidance of disruptive thoughts, positive talk, emotional strength and focus and relaxation. skills) will significantly predict the impact of life event stress among soldiers fighting Boko Haram insurgency in North Eastern Nigeria.

3. Results

3.1 Demographic Characteristics of the Respondents

As indicated in Table 1, 139 (95.0%) of the respondents were males, while 7 (5.0%) are females. This implied that most soldiers are male. As shown in table 3, 45 (31.0%) respondents were in the age range of 18–25 years, 59 (40.0%) were between 26–33 years, 25 (17.0%) were in the age range of 34–41 years, while 17 (12.0%) were between 42–49 years. It implied that the ages range from 18–49 years (M = 30.27; SD = 29.87); while most of the soldiers were between the ages of 26–33 years. Table 2 revealed that 133 (91.0%) respondents obtained SSCE, 1 (1.0%) had NABTEB and HND respectively, 8 (5.0%) had ND, while 3 (2.0%) possessed First Degree. This means that, most of the respondents had SSCE. Table 4 revealed that, 61 (42.0%) respondents were private soldiers, 30 (20.0%) were in the rank of corporal, 4 (3.0%) were staff sergeants, while 36 (25.0%) were lance corporal. In addition, 11 (7.0%) were sergeants, 3 (2.0%) SAPPERS, while 1 (1.0%) was in the rank of GNR. This means that most of the respondents were private soldiers.

| C/N | | N=(146) | $\mathbf{D}_{\text{emponto and }}(0/)$ | |
|------|-----------------------------------|-----------|--|--|
| 5/1N | variable | Frequency | Percentage (%) | |
| 1 | Gender | | | |
| | Female | 07 | 5.0 | |
| | Male | 139 | 95 | |
| 2 | Age Range (Year) | | | |
| | 18-25 | 45 | 31.0 | |
| | 26-33 | 59 | 40.0 | |
| | 34-41 | 25 | 17.0 | |
| | 42-49 | 17 | 12.0 | |
| 3 | Highest Educational qualification | | | |
| | School Certificate SSCE) | 133 | 91.0 | |
| | NABTEB | 1 | 1.0 | |
| | National Diploma (ND) | 8 | 5.0 | |
| | Higher National Diploma (HND | 1 | 1.0 | |
| | First Degree | 3 | 2.0 | |
| 4 | Participants by rank | | | |
| | Private | 61 | 42.0 | |
| | Corporal | 30 | 20.0 | |
| | Staff Sargent | 4 | 3.0 | |
| | Lance Corporal | 36 | 25.0 | |
| | Sargent | 11 | 7.0 | |
| | Sapper (Warrant Officer) | 3 | 2.0 | |
| | GNR (Master Warrant Officer) | 1 | 1.0 | |
| 5 | Years of service | | | |
| | 1-5 | 74 | 50.7 | |
| | 6-10 | 36 | 24.7 | |
| | 11-15 | 30 | 20.5 | |
| | 16-20 | 6 | 4.1 | |
| 6 | Participation in sports | | | |
| | Football | 118 | 80.8 | |
| | Table Tennis | 27 | 18.5 | |
| | Athletics | 1 | 0.7 | |

Table 1. showing the Demographic Profile of Respondents

RQ1: As indicated in Figure 1, 105 (72.0%) soldiers experienced recurrent recollections of dreams of combat traumatic events, while 41 (28.0%) did not have such experience. In addition, 95 (65.0%) soldiers had physiological reactivity trauma cues, while 51 (25.0%) did not. Moreover, 120 (82.0%) had avoidance of trauma related action or behaviour, while 26 (18.0%) did not. Furthermore, 19 (62.0%) soldiers experienced diminished interest in important activities, while 55 (38.0%) did not. In the same vein, 59 (40.0%) soldiers experienced a restricted range of effect, while (87.0%) did not have such experience. Besides, 105 (72.0%) had sleep disturbance, while 41 (28.0%) did not experience any disturbance. Also, 99 (68.0%) experienced hyper vigilance, while 47 (32.0%) did not. The result indicated that, most of the soldiers had experience of trauma related action or behaviour, physiological reactivity trauma cues, avoidance of trauma related action or behaviour, here the soldiers had experience of trauma related action or behaviour, here the soldiers had experienced recurrent recollections of dreams of combat traumatic events, physiological reactivity trauma cues, avoidance of trauma related action or behaviour,



diminished interest in important activities, sleep disturbance and hyper vigilance as professional in combat.

Figure 1. summary of result of post conflict experience of soldiers fighting Boko haram insurgency



Figure 2. Summary of Result of Experiences of Soldiers in Combat

Figure 2 revealed that 114 representing 78.0% of the respondents, were exposed to physical violence/assault, while 32 (22.0%) were not. In addition, 3 (2.0%) of the respondents had been exposed to sexual violence/assault, while 143 (98.0%) were not. Moreover, 85 (58.0%) were exposed to life-threatening illnesses due to combat, while 61 (42.0%) did have such exposure. Similarly, 41 (28.0%) soldiers have been exposed to equipment accidents due to combat, while 105 (72.0%) were not. Also, 18 (12.0%) soldiers were exposed to vehicular accidents due to combat, while 128 (88.0%) were not. This result implies that the significant source of combatants' stress among Nigerian soldiers exposed to Boko-Haram insurgency in North Eastern Nigeria was physical violence or assault (78%). This is followed by life-threatening illness due to combat (58%). In addition, stress from equipment accidents was slightly below average score as a stressor (41%). It is also evident from the result presented in Figure 2 that exposure to vehicular accidents and sexual violence are the least stressors, respectively (12.0% and 2.0%).

| Table 2. | Correlation | Matrix, | Mean, | Standard | Deviation | and | Alpha | Coefficient | of | the | Psychological | Skill |
|----------|--------------|-----------|----------|----------|-----------|-----|-------|-------------|----|-----|---------------|-------|
| Techniqu | es and Impac | t of Life | Stress I | Event | | | - | | | | | |

| Variables | Mean | Std. | ILSE | PSS | ADT | PST | ESF | RS |
|-----------|-------|-------|--------|--------|--------|--------|--------|----|
| | | Dev. | | | | | | |
| ILSE | 20.03 | 18.88 | 1 | | | | | |
| PSS | 11.08 | 3.57 | .406** | 1 | | | | |
| ADT | 11.98 | 4.00 | .561** | .603** | 1 | | | |
| PST | 13.36 | 4.75 | .412** | .599** | .730** | 1 | | |
| ESF | 12.10 | 4.20 | .549** | .634** | .694** | .623** | 1 | |
| RS | 10.72 | 3.13 | .316** | .659** | .623** | .583** | .650** | 1 |

Note. Impact of life Stress Event = ILSE; Perceived Social Support = PSS; Avoidance of Distractive Thought =ADT: Positive Self-Talk = PT; Emotional Strength and Focus = ESF; Relation Skills = ES.

** P<.01=Significant.

* p<.05 =Significant.

The inter-correlation matrix of the relationship between psychological skill techniques and the impact of life stress events computed with PPMC as displayed in Table 2 revealed that perceived social support (r = 0.406, p > 0.05), avoidance of distractive thought (r = 0.561, p > 0.05), positive self-talk (r = 0.412, p > 0.05), emotional strength and focus (r = 0.549, p > 0.05) and relaxation skills (r = 0.316, p > 0.05) had negative correlation with impact of life stress event among Nigerian soldiers fighting Boko Haram insurgency in North Eastern Nigeria. Table 2 further shows that the correlation coefficient's magnitude of social support, avoidance of distractive thought, positive self-talk, emotional strength, and focus were moderate, while that of relaxation skills was weak. The possible implication of this finding is that the more the Nigerian soldiers exposed to Boko-Haram insurgency in North Eastern Nigeria have psychological skills, the less the likelihood of experiencing post-traumatic stress disorder (PTSD).

| Table 3. ANOVA Summary of | The Regression A | Analysis showing th | ie composite Co | ntribution of Ps | ychological |
|----------------------------------|------------------|---------------------|-----------------|------------------|-------------|
| Skill Techniques to impact of li | fe stress event | | | | |

| Model | Sum of Squares | df | Mean Square | F | Sig. (p value) | Remark |
|---------------------------|----------------|-----|-------------|---------|-------------------|-------------|
| Regression | 46441.256 | 5 | 0299 251 | | | |
| Residual | 5235.573 | 140 | 27 207 | 248.369 | .000 | Significant |
| Total | 51676.829 | 145 | 57.597 | | | |
| R=.948 | | | | | | |
| R ² =.899 | | | | | | |
| Adj. R ² =.895 | | | | | | |
| Std. Error=6.11530 |) | | | | | |
| | | | | | | |

The result of the regression analysis is presented in Table 3. It shows that the psychological skill techniques (perceived social support, avoidance of distractive thought, positive self-talk, emotional strength, and focus and relaxation skills) served as the predictor variables while the impact of life event stress was the criterion variable. The outcome revealed the composite effect of the predictor variable on the impact of life stress events was statistically significant (F $_{(5,140)}$ =248.369, *p*<0.05). Further, the result yielded a coefficient of multiple regression of R was 0.948 and multiple R-square of 0.899. The result also revealed that adjusted R²=0.895; indicating that about 89.5% of the variance in the impact of life events was accounted for by the independent variables (psychological skills).

Table 4. Parameter Estimate of The Relative Contribution of Psychological Skill Techniques on Impact of Life Event Stress

| Variables (sub-scales) | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Remark |
|----------------------------------|--------------------------------|------------|------------------------------|--------|-------|----------|
| | В | Std. Error | Beta | - | | |
| (Constant) | | | | | | |
| Perceived social support | 5.028 | 1.927 | .099 | 2.610 | .010 | Sig |
| Avoidance of distractive thought | .525 | .213 | .878 | 2 460 | .015* | Sig |
| Positive self-talk | 2.300 | .082 | .069 | 28.204 | .000* | Not Sig. |
| Emotional strength and focus | .270 | .150 | .248 | 1.798 | .074 | Sig |
| Relaxation skills | 1.113 | .184 | .053 | 6.064 | .000* | Not Sig. |
| | .321 | .243 | | 1.319 | .189 | |

*Significant at p<.05.

The results in Table 4 showed the psychological skills, the unstandardized regression weight (β), the standardized error of estimate (SE β), the standardized coefficient, the t-ratio, and the level at which the t-ratio were significant. It revealed that social support ($\beta = 0.099$, t = 2.460, p < 0.05), avoidance of distractive thought ($\beta = 0.878$, t = 28.204, p < 0.05), emotional strength and focus ($\beta = 0.248$, t = 6.064, p < 0.05) have statistically significant on the impact of life event stress event experienced Nigerian soldiers; while positive self-talk ($\beta = 0.069$, t = 1.798, p > 0.05) and relaxation skills ($\beta = 0.053$, t = 1.319, p > 0.05) did not. This means that social support, avoidance of distractive thought, emotional strength and focus independently contributed significantly to the impact of life stress event among the respondents.

4. Discussion

This study examined the possible relationship between psychological skills and the impact of life event stress experienced by Nigerian soldiers fighting the Boko-Haram insurgency in North Eastern Nigeria. The first finding from this study is that Nigerian soldiers combating Boko-Haram insurgency in North Eastern Nigeria experienced several symptoms of PTSD though at varying levels. This finding corroborates previous studies (Clare et al., 2022; Elliot, 1999: Nicholls, 1984; Adeoya et al., 2021; Tashman et al., 2018; Dami, 2018) that reported a high rate of PTSD in military service personnel. This outcome was expected due to the fact that the soldiers were fighting under challenging terrains and under harsh conditions. Further, the outcome shows that the significant source of combatants' stress among Nigerian soldiers exposed to Boko-Haram insurgency in North Eastern Nigeria was physical violence or assault (78%), followed by life-threatening illness due to combat (58%), and stress from equipment accident (41%). This finding is in support of previous studies (Dami et al., 2018; Schram, Pope, & Orr, 2019) who reported that war, by its nature, is tremendously a hazardous endeavor that entails risks to life and limb from weapons and battle. This justifies why occupational health and safety in the military context are of great concern to personnel and commanders. Dami et al. (2018) opined that "dangerous incidents", "exposures", and "near misses" (as distinct from injuries, illnesses, and fatalities) were evidence of serious health and safety risks faced by military personnel, that even if they did not cause immediate harm, it might give rise to harm in the future, if not adequately addressed, and in some cases the incidents may cause latent harm.

The result further revealed that there was a significant linear relationship between the perceived psychosocial factor and the impact of life event stress by Nigerian soldiers exposed to Boko-Haram insurgency in North Eastern

Nigeria. This outcome is plausible because psychosocial factors are said to be the tools of the mind which can enhance an individual's overall well-being (Filion, Munroe-Chandler, & Loughead, 2021). This corroborates previous studies which show that psychosocial factors increase the mental toughness and psychosocial well-being of athletes (Golby & Wood, 2016). Social support was also shown to have a positive association with stress resilience. This finding is consistent with previous studies (Cederbaum, 2017; Shreas, Narayanan, & Cheang, 2016; Lau, Chan, & Lam, 2008; Serene, Zhing, & Sivaguru, 2021). The probable explanation of this result was given by the buffering hypothesis framework which theorized that high social support would protect soldiers from the bad health effects of stressful events (i.e., stress buffering) by influencing how the soldiers think about and cope with stressful life events (Lakey & Orehek, 2011). On the other contrary, soldiers with lower levels of social support will experience a higher level of stress and decreased psychosocial functioning.

Avoidance of distracting thoughts was found to have a positive relationship with stress resilience. This outcome corroborates previous studies (Matel-Anderson, Bekhet, & Garnier-Villarreal, 2019; Waugh, Shing, & Furr, 2020) who reported that distraction was related to positive outcomes such as higher psychological well-being, positive emotions, and fewer depressive symptoms, especially when controlling for avoidance. This finding is plausible because avoidance of distractive thoughts is said to enable individuals to be focused, enabling them to pay attention selectively to parts of incoming stimuli. (Like a "spotlight" The implication is that soldiers who avoid distractions will concentrate on the activities to which they were engaged in with greater commitment.

In addition, self-talk was found to have a positive relationship with the impact of life stress. This finding corroborates the previous study of Waugh et al. ^{31,} who gave a preliminary report that motivational and instructional self-talk can improve an individual ability to withstand stress. This outcome is expected because self-talk relates to how individuals cope with stress. Self-talk has also been seen as an articulation of an internal position which may also facilitate self-regulation via mental simulations and reflective processing, which can lead to enhanced resilience (Van Raalte, Vincent, & Brewer, 2016).

Emotional thought was also found to have a positive association with the impact of life event stress experienced by the soldiers. This finding gave credence to what other scholars have reported (Nogaj, 2020; Trigueros et al., 2020) The result is in line with documented evidence that emotional strength is negatively linked to stress and negative emotions (Trigueros et al., 2020). Emotional stability assists individuals during stressful times by replenishing resources and providing relief from stressful experiences. Positive emotions may be particularly beneficial during times of stress by dampening negative emotional reactivity and quickening recovery from stressful events. This is line with the theoretical proposition of the dynamic affect model Trigueros, et al. (2020) which posits that positive emotions serve adaptive functions in times of stress. The theorist argues that positive emotions allow individuals to build up resources (e.g., skills, knowledge, social ties) during times of low stress that are beneficial during times of high stress. Additionally, the broaden-and-build theory posits that positive emotions also facilitate quicker recovery once negative responses have occurred (Fredrickson et al., 2000). The ability to control one's emotional energy, especially in stressful situations, is well documented as a useful coping mechanism (Lazarus, 1991) and this seems a feasible mechanism by which the "E" factor is related to resilience. Therefore, soldiers who possess this type of energy management skills can regulate their psychosocial and physiological response before, during and after exposure to adversity. This notion is compatible with Lazarus (1991) who identified five clusters of protective factors which was termed "internal resilience factors" The factors were: (a) spiritual or motivational characteristics, (b) cognitive competencies, (c) behavioural/social competencies(d) emotional stability and management, and (e) physical well-being competencies.

The result also shows that relaxation skills have a significant positive relationship with stress resilience. This result corroborates the previous study of Kumpfer (1999) who found that relaxation assisted respondents in their study to relax, to attain a state of increased calmness and reduce levels of anxiety, pain, anger, stress etc. The possible reason for this outcome could be due to the well documented evidence of relaxation in reducing stress, lowering blood pressure, decreasing muscle tension and slowing heart and breathing rates in diverse population (Unger, Busse, & Yim, 2017). The previous study also shows that guided relaxation, progressive muscle relaxation, yoga and combined relaxation reduced anxiety symptoms in diverse populations (Unger et al., 2017).

The psychological skills examined in the study significantly contribute to predicting the impact of life stress among Nigerian soldiers exposed to Boko-Haram insurgency in North Eastern Nigeria. The result showed that avoidance of distractive thought made the most potent contribution, followed by emotional strength and focus, positive self-talk and social support. On the other hand, relaxation skill was the least potent in predicting impact of life stress among the respondents. This is in tandem with the study of Unger et al. (2017) who reported that avoidance of distractive thought will enable individuals to be focused and pay attention selectively to parts or all

incoming stimuli. This outcome is plausible because thinking allows humans to make sense of, interpret, represent or model the world they experience and to make predictions about that world (Sörqvist et al., 2015).

The five psychological skills significantly contribute to predicting the impact of life stress among Nigerian soldiers exposed to Boko-Haram insurgency in North Eastern Nigeria. This finding was in line with Sörqvist et al. (2015) who revealed that multifaceted factors was responsible for impact of life event stress among their study participants. The findings of this study gave credence to ecological theory, which states that stress does not stem from a single source but is the culmination of multiple forces working against health that will benefit from multiple intervention. Salazar, Mary and Beaton (2000) identified four levels of occupational stressors: (1) the microsystem or the immediate environment of the workers; (2) the organisational system that encompasses all aspects of an organisation (e.g., physical structure, cultural context, policies, the work); (3) the periorganisational system including societal influences on the worker or the organisation such as the economic situation of the surrounding community; and (4) the extra organisational system that encompasses cultures, traditions, customs, and government policies that affect the organisation. They concluded that for any intervention to be meaningful, it must target the four sectors. This finding implies a need to build resilience in soldiers fighting Boko-Haram insurgency by strengthening their psychological skills and providing them social supports.

The major limitation of this study is the small sample size drawn from only North Eastern Nigeria. The outcome should be generalized with caution because their combatant exposure may be different from other zones in Nigeria. Similar studies can be conducted with samples from all the geographical zones where military personnel are deployed to fight insurgency. In addition, this study used only self-report questionnaires as a source of data. The main disadvantage of self-report questionnaires is the possibility of having some invalid responses due to "social desirability factor". Future studies could explore mixed methods, which entail collecting qualitative and quantitative data.

5. Conclusion

Overall, results obtained from this study suggest that psychological skills (social supports, avoidance of distractive thought, positive self-talk, emotional focus, and relaxation skills) are related to impact of life stress among soldiers fighting Boko-Haram insurgency in North Eastern Nigeria. The study has practical implications for improving psychological skills of at the disposal of soldiers, either prior to, during, or after deployment. This may likely assist in reducing PSTD. Our findings support the notion that psychosocial factors can serve as protective factors against PSTD. This outcome has theoretical and practical implications for the military in Nigeria.

Ethical Clearance

Ethical approval for this study was obtained from the University of Ibadan Ethical Committee. In addition, the theater commander of Operation Lafiya Dole also granted approval. To ensure that the participants were not forced into the study against their volition, they were informed about the purpose of the research, thereafter, they signed the consent form provided by the researchers. The participants were assured of confidentiality. They were informed that the outcome of the study would be used solely for academic purposes and not for commercial use. To respect the respondents' privacy, their responses were not linked to their data, the questionnaire was coded and no name, phone number or identification number was included.

Acknowledgements

We appreciate the Commandant of 81 Division of the Nigerian Army (NA) for granting us the opportunity to have access to the "Officers and men" working to restore peace at Maiduguri, State, Nigeria. We are also highly grateful to the soldiers deployed to Maiduguri, Borno State who despite the turbulent "war" condition they were exposed to had time to fill the questionnaire.

Data Availability Statement

The data source for this study can be accessed from this link https://docs.google.com/document/d/1sVc8vZ3UA3-2Ws5uEr6APA6z2JnznVPYG38JOIy9qIM/edit?usp=drives dk

Funding

This Study was funded by Tertiary Education Trust Fund (TETFUND) 2019 Institutional Based Research (IBR) through the University of Ibadan, Ibadan, Nigeria.

Competing Interests Statement

The authors declare that there are no competing or potential conflicts of interest associated with this publication.

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