



## COPING STYLES AS PREDICTORS OF POSTTRAUMATIC STRESS DISORDER AMONG NIGERIAN SOLDIERS

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### ABSTRACT

The study investigated coping styles as predictors of posttraumatic stress disorder among Nigerian soldiers. The study was carried out among Nigerian military personnel deployed in the North-eastern part of Nigeria fighting insurgency. Purposive sampling technique was employed to select 242 participants with combat experience. Demographic information revealed that 231 (95.5%) are males, 11(4.5%) are females. Analysis of participants' rank revealed that 215(88.8%) were private and 27 (11.2%) were commissioned, officers. The participants were administered two sets of instruments based on survey design; a 17-item Posttraumatic Stress Disorder Checklist-Military (PCL-M) (Weathers, Huska, & Keane, 1991); and 30-item Personal Functioning Inventory (Kohn, Brien-wood, Pickering & Decicco, 2003; Umeh, 2004); Descriptive statistics were used to present the socio-demographic factors of participants while hierarchical multiple regression analysis was used to test the hypothesis in relation to coping styles as predictors of Posttraumatic Stress Disorder among Nigerian soldiers. The results showed that the coping style was a significant predictor of PTSD among the soldiers ( $\beta = -.384, P < .05$ ). The findings were discussed in relation to literature reviewed and it was suggested that the Nigerian military authorities should effectively engage the services of mental health professionals such as the Psychologist to help in ensuring the mental state of soldiers fighting an insurgency. The researcher concluded that individuals with negative coping strategies such as emotional-focused coping styles are more likely to experience PTSD.

*Key words: Coping Styles, Posttraumatic stress disorder, Nigerian Soldiers*

### INTRODUCTION

There has been a growing interest and concerns among military authorities and researchers in understanding association between military deployment and its association with subsequent psychological adjustment (Anonzo, Abel, Dami & Ogbole, 2019). The counter terrorist/ counter insurgency operation in the North East Nigeria over the past decade have led to frequent deployment of military personnel to the region to restore calm. Like other military operations, it is believed that troops experience adverse deployment conditions in relation to enemy encounter which predisposes them to the development of Post-Traumatic Stress Disorder (PTSD). Though trained and professional both during peace and war times in preparation towards such eventualities, the military is not immune to trauma as they are constantly faced with life-threatening situations through serious injuries, enemy brutality or death (Keane, Niles, Otis & Quinn, 2012), in addition to absence from family and loved ones with whom they draw social support and other relevant activities to help them cope with their deployment environment (Terri and Jaycox, 2008).

Studies have found an association between traumatic events and different coping styles in the development of PTSD. As defined by Folkman and Moskowitz, (2006), coping is the cognitive and behavioural effort to master, reduce, or tolerate stressful demands which are critical mediators of stressful person-environment relations and their immediate and long-range outcomes, based on specific efforts, both behavioural and psychological. Thus, coping measures following a traumatic experience may pose certain vulnerability towards the development of posttraumatic stress or reducing its intensity. Lazarus & Folkman (2004) distinguished between the two general coping strategies: problem-solving and emotion-focused coping. While problem-focused coping includes confrontative coping, seeking social support, and planned problem-solving, Shadiya (2015) explained emotion-focused coping to include distancing, escape/avoidance, self-blame and denial. In essence, Problem-focused coping involves the use of specific activities in managing stressful demands, whereas emotion-focused coping is geared towards feeling better. Drawing from this, it has been identified that problem-focused coping styles are related to fewer psychological problems while emotion-focused coping strategies are related negatively to psychological adjustment, (Ben-Zur, 2016; Lazarus & Folkman, 2004; Mgbenkemdi, 2014).

Terzungwe, Awopetu, Igbende, & Tyavkase (2016) in a study assessing PTSD among Retired Military Personnel in Makurdi Metropolis employed an *expose facto* cross-sectional survey method where two hundred and ninety-two (292) retired military personnel with ages ranging from 38-88 years (Mean= 59.21, SD = 9.82) participated in the study. Results from Multiple Regression showed that, education, emotional detachment and social stigma independently and jointly contributed to post traumatic stress among retired military personnel ( $R= .304$ ,  $F(5,274)=3.498$ ,  $p<.001$ ). Pearson's Product Moment Correlation equally showed a significant positive relationship between coping abilities and post-traumatic stress disorder among retired military personnel  $r(290) = .96$   $p <.001$ .

Bramsen and Dirkzwager (2007) investigated the relationship between social support, coping strategies, additional stressful life events, and symptoms of Post-traumatic Stress Disorder among Dutch former peace keeping soldiers. The results showed that more negative social contacts and fewer positive social contacts were associated with PTSD symptom severity. A bilateral relationship was found between stressful life events and PTSD symptom severity with results indicating that social support and coping strategies may be valuable aspects of prevention and intervention programs for retired military personnel suffering from stress disorder.

Grills, Littleton and Axson (2010) in a study evaluating the relationship between maladaptive trauma coping and distress following the mass shooting at Virginia Tech university used 368 participants who were exposed to the mass shooting. Their result shows that the respondents who used



maladaptive coping strategies (e.g., avoidance, withdrawal, wishful thinking, and rumination) reported greater psychological distress over time. Across different studies, it has been found that coping styles which are active have a positive effect on both physical and psychological health (Olfm, Langeland, & Gersons, 2005). A study by Tarrier, Liveridge, & Gregg, (2006) using a university student population with no previous exposure to trauma but rather used a "what if" scenario looked at coping preference for PTSD. Participants who scored high on PTSD had much higher rates of avoidance and the use of other maladaptive coping techniques than those in the general population. While in a study conducted on 23 Sudanese refugees whose coping strategies included reliance on religious beliefs, cognitive strategies such as reframing the situation, relying on their inner resources and focusing on future wishes and aspirations, social support also emerged as a salient coping strategy (Khawaja, White, Schweite & Greenslade, 2008).

Similarly, a qualitative research performed on the resilience and coping strategies of 8 Afghan women dealing with violence and immigration identified coping strategies utilized by the Afghani women were that of problem focused/active coping such as taking on new roles, making quick decisions in direct connection to experienced threats, helping others using emotional social support from family (Welsh and Brodsky, 2010). Mgbenkendi, OmejeandEze, (2017). In a study on the influence of coping strategies on depression among parents living with mentally Retarded children (Down Syndrome) identified avoidant coping to be correlated with distress. Aldwin (2007), states that having a supportive family is crucial to adaptive coping. In these examples, contact with family proves to be an effective coping strategy that relieved the participants who apply it. Positive associations between coping strategies and PTSD symptoms have been described in other PTSD populations with avoidant coping having the strongest positive association with PTSD symptoms (Schnider, Elhai & Grey, 2007). Some authors have presumed the presence of PTSD symptoms causes the use of avoidant coping (Schnider et al, 2007; Golubski 2014). However, other authors have reported avoidant coping as a predictor of later PTSD symptoms in populations of Gulf War victims, domestic violence victims, and traumatic injury victims (Benotsch, Bradley & Vasterling, 2000; Sharkansky, King & King, 2000; Glass, 2011).

In line with the above assertions, a proper understanding on trauma and predictors of PTSD will help in the prevention and management of the development of this disorder among Nigerian military personnel. This will also provide for further research in the area of trauma and management among men of the Nigerian armed forces. Therefore, this study will investigate coping styles as predictors of Posttraumatic Stress Disorder among soldiers fighting insurgency in North-East Nigeria. In addition, this study, aims to identify relevant resilient factors in the nature coping styles that could enable soldiers to overcome the distress during the course of their deployment that can possibly lead to the development of PTSD. As such, the study will seek to

answer the research question; Will coping styles significantly predict Posttraumatic Stress Disorder among Nigeria Soldiers?

Purpose of the study is to investigate coping styles as predictors of Posttraumatic Stress Disorder among soldiers fighting insurgency in North-East Nigeria. The specific objective however is to determine whether coping styles would significantly predict Posttraumatic Stress Disorder among Nigerian Soldiers. It was hypothesized as follows:

- Coping Styles would significantly predict Posttraumatic Stress Disorder among Nigerian Soldiers.

## METHOD

### Participants

A total of 242 military personnel comprising 231(95.5%) male and 11(4.5%) female officers were used for the study. The participants were sampled from active duty military service personnel serving in Northeast Nigeria. Other demographic information revealed 215(88.8%) were Non Commissioned Officers (NCOs) while 27(11.2%) were commissioned, officers. The participants are within the ages of 20-58 years, with a mean age of 39.3 and a standard deviation of 2.1. Participants religion revealed 161(66.5%) were Christians while 81(33.5%) were Muslims.

### Instrument

Two sets of instruments were used for the study. They are the Posttraumatic Stress Disorder Checklist (Military version), and the Personal Functioning Inventory (PFI).

### Posttraumatic Stress Disorder Checklist (Military Version)

Posttraumatic Stress Disorder Checklist-Military (PCL-M) (Weathers, Huska, & Keane, 1991) is a self-report rating scale that measures PTSD symptoms severity in military veterans. This score was derived by adding the responses to all scale items. The total score ranged from 17 to 85, where elevated scores suggested greater severity. Ratings are chosen according to how much the veteran had been disturbed by a particular traumatic military-related incident. The scale had proven useful with both male and female veteran populations (Weathers, et al 1991). This scale has been shown to be both valid and reliable ( $\alpha = .96$ ) in previous research (Pietrzak, Johnson, Goldstein, Malley, & Rivers, 2010). A total score of 50 was considered to be PTSD positive in military populations (Weathers et al., 1991). Blanchard, Jones-Alexander, Buckley, and Forneris, (1996) found that overall diagnostic efficiency was improved to 0.900 when the cutoff score was lowered to 44, yielding a sensitivity of 0.944 and specificity of 0.864 and correctly identifying 17 of 18 participants with PTSD.

### Personal Functioning Inventory (PFI)



The personal Functioning Inventory was originally developed by Khon, Brienwood, Pichening, and Decicca (2003). It is a 30-item inventory designed to assess the style of coping characterized into 4 distinct coping styles which are; problem-focused coping, emotional-focused coping, avoidant-focused coping, and adaptive coping (Omoluabi, 2004). The instrument can be administered in a group and to individuals after adequate rapport is established. Scoring is carried out directly or in reverse and added together to get the client's total score on the test. PFI has good reliability and validity. Khon et al, (2003) in Omoluabi, (2004) reported a reliability coefficient as it yielded a Cronbach's alpha of .92 and .90 in a 2 weeks test-re-test and a construct validity coefficient of .71 with Summed Rating Scale for Adaptiveness (SRSA), and a predictive validity coefficient of .52 with the Situational Response Inventory (SRI). Umeh, (2004) in Omoluabi, (2004) also obtained a construct validity coefficient of .10 & .18 with extroversion and openness scales respectively on the BFI.

### Procedure

The researcher officially sought the authorization of the Headquarters Theater Command Operation LAFIYA DOLE to carry out the study. Upon approval, Participants were given full information on the nature and purpose of the research. Thereafter, voluntary participation was solicited with the assurance of confidentiality and assurances that data was to be used strictly for research purpose and in planning psychological care and support. Volunteers filled a consent form indicating their willingness to be part of the study. It took an average of 10 minutes to fill one questionnaire after which they were retrieved and subjected to analyses. Data was obtained with the help of 6 military personnel as research assistance.

### Design/Statistics

The study design was a survey design. Descriptive statistics were used to present the socio-demographic factors of participants while hierarchical multiple regression analysis was used to test the hypotheses in relation to coping styles as predictors of PTSD.

## RESULTS

Table 1: Summary table of Socio-demographic Characteristics of Participants on coping styles as predictors of posttraumatic stress disorder among Nigeria soldiers

VARIABLE (S)	FREQUENCY	PERCENT %
<b>GENDER</b>		
Male	231	95.5
Female	11	4.5
Total	242	100.0
<b>RANK</b>		

*Coping Styles as Predictors of Posttraumatic Stress Disorder among Nigerian Soldiers*

	NCOs	215	88.8
	Officers	27	11.2
	Total	242	100.0
<b>AGE</b>			
	20-30 yrs	127	52.5
	31-40 yrs	81	33.5
	42-50 yrs	24	9.9
	51 yrs >	10	4.1
	Total	127	52.5
<b>RELIGION</b>			
	Christianity	161	66.5
	Islam	81	33.5
	Total	242	100.0

Results on table 1 presented a summary of socio demographic characteristics of participants in the study. It was revealed that out of the total samples of 242 military personnel in the study, 231(95.5%) were males while 11(4.5%) were females. Other demographic information revealed that 215(88.8%) were NCOs while 27(11.2%) were commissioned officers. The participants are within the ages of 20-58 years, with a mean age of 39.3 and a standard deviation of 2.1. Participants religion revealed that 161(66.5%) were Christians and 81(33.5%) were Muslims.

**Table 2: Summary table of Hierarchical Regression Coefficients on coping styles as predictors of posttraumatic stress disorder among Nigeria soldiers Hierarchical Regression Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error			
1	(Constant)	93.634	5.345		17.518	.000
	Rank	7.378	2.309	.200	3.196	.002
	Age	1.282	.889	.091	1.443	.150
	Gender	-5.201	3.499	-.093	-1.486	.139
	Religion	-3.042	1.542	-.124	-1.972	.050
	(Constant)	90.615	5.875		15.424	.000
	Rank	6.037	2.136	.164	2.827	.005
	Age	1.788	.820	.126	2.180	.030
	Gender	-1.780	3.228	-.032	-.551	.582
	Religion	-2.467	1.420	-.100	-1.738	.084
	<b>Coping</b>	<b>-2.82</b>	<b>.045</b>	<b>-.384</b>	<b>-6.332</b>	<b>.000</b>

a. Dependent Variable: PTSD

Results on table 2 above presented findings on the study hypothesis which stated that coping styles would significantly predict Posttraumatic Stress Disorder among Nigeria Soldiers. From the table, it was revealed that coping style was a significant predictor of PTSD among the soldiers: Coping style ( $\beta = -.384$ ,  $P < .05$ ).

## DISCUSSION



The study investigated the influence of coping styles on PTSD among soldiers in North-East Nigeria. From the results of obtained, it was found that coping styles significantly predicts PTSD among Nigerian soldiers deployed. This aligned with Mgbenkemdi, (2014). However, the findings were also supported by other studies. For example, Terzungwe, et al., (2016) showed that emotional detachment as a coping style contributed to posttraumatic stress among retired among military personnel while Glass, et al., (2011) also identified that the respondents who used maladaptive coping strategies (e.g., avoidance, withdrawal, wishful thinking, and rumination) reported greater psychological distress over time. This was also in line with studies that found positive associations between coping strategies and PTSD symptoms have been described in other PTSD populations with avoidant coping having the strongest positive association with PTSD symptoms (Mgbenkemdi, Omeje&Eze, 2017; Schnider, et al, 2017; Golubski 2014; Olfaz, et al 2017), though authors presumed the presence of PTSD symptoms causes the use of avoidant coping (Schnider et al, 2017). However, other authors reported avoidant coping as a predictor of later PTSD symptoms in populations of Gulf War victims, domestic violence victims, and traumatic injury victims (Benotsch, Bradley & Vasterling, 2000; Sharkansky, King & King, 2000). In all, Bramsen, and Dirkzwager (2007) identified more negative social contacts and fewer positive social contacts were associated with PTSD symptom severity.

The results obtained showed varying implications among Nigerian Soldiers fighting insurgency in North-East Nigeria. Coping styles were shown to predict PTSD negatively. This therefore means that when one applies adaptive coping strategies, the likelihood for PTSD symptoms to reduce becomes imminent while on the other hand, maladaptive coping styles could lead to an increase in PTSD symptoms among military personnel. In view of this, coping styles employed by an individual could significantly predict the manifestation of PTSD symptoms. The study also has implications for researchers, clinicians as well as various security agencies especially the military. For the military and other relevant security agencies for instance, findings from this study will help in policy formulation and implementation towards a mentally balanced force for greater output in the fight against insurgency.

### LIMITATIONS OF THE STUDY

Some participants were reluctant to participate in the study while the few that accepted to participate spent much time towards responding to the copies of the research instrument. Some of the participants left some questions unanswered while some other instruments were not returned. all these may have been due to the battle field conditions.

### SUGGESTIONS FOR FURTHER STUDY

Stemming from the findings of this study, the following suggestions were made:

1. There is a need for these military personnel to be provided with trauma debriefing and counseling before, during, and after deployment.
2. Continuous mental health assessment and evaluation for troops on deployment. Submissions should be conducted periodically, and findings forwarded to appropriate superior authority for necessary action.
3. This study used the military population and as such, it is encouraged that the findings are in relation to population from which the sample was obtained, i.e. the Nigeria Army personnel serving in North-East Nigeria. It is on this note that the researcher suggested that the mental health of Nigerian soldiers should be taken care of, hence, the need for mental health practitioners to be highly engaged in the affairs of the military.

## CONCLUSION

The role of coping styles as predictors of PTSD among soldiers fighting insurgency in North-East Nigeria has been brought to fore by the findings of this study. The researcher concluded that individuals with maladaptive coping strategies such as emotion-focused and avoidant coping styles are also more likely to experience PTSD. Therefore, Nigerian military authorities, colleagues and friends of the personnel should ensure to provide adequate support to personnel deployed towards rendering effective and professional services and upholding their deployment mandate.

## REFERENCES

- Aldwin, C.M., (2007). *Stress, coping, and development: An integrative perspective* (2<sup>nd</sup> ed.). New York: Guilford Press.
- Anongo, F.S., Abel, J. Dami, B. E., and Ogbole, A.J.,(2019). Post-deployment social support predicting successful adjustment among Nigerian military returnees from Boko Haram insurgency. *Open Access Journal of Addiction and Psychology*. DOI: 10.33552/OAJAP.2019.02.000533.
- Benetsch, E.G., Brailey, K., & Vasterling, J. (2000). War zone stress, personal and environmental resources and posttraumatic stress disorder among Gulf war veterans: A longitudinal perspective. *Journal of Abnormal Psychology, 109*(2), 205 – 213.
- Ben-Zur. H., (2016). Coping, distress and life events in a community sample. *International Journal of Stress Management, 12*, 188 – 196.
- Blanchard, E. B., Jones-Alexander, J., Buckley, T. C., & Forneris, C. A. (1996). Psychometric properties of the PTSD Checklist (PCL). *Behaviour Research and Therapy, 34*(8), 669-73. Boston, MA: National Center for PTSD.





- Bramsen, I., & Dirkzwager, A. J. (2007). Predeployment personality traits and exposure to trauma as predictors of posttraumatic stress symptoms: A prospective study of former peacekeepers. *American Journal of Psychiatry*, 164(7), 1115-1119. doi:10.1176/appi.ajp.164.7.1115.
- Folkman, S., & Moskowitz, J.T. (2006). *Positive Effects of the other side of Coping*. American Psychological Association.
- Glass, K., Flory, K., & Hankin, B.L. (2011). Are coping strategies, social support and hope associated with psychological distress among hurricane Katrina survivors? *Journal of Social Clinical Psychology*, 28, 779 - 795.
- Golubsk, M.M. (2014). *How coping, PTSD and treatment preferences interact?* A Thesis submitted for Degree of Doctor of Philosophy from Cleveland State University. USA.
- Grills, A., Littleton, H., & Axson, D. (2010). Social support, world assumptions, and exposure as predictors of anxiety and quality of life following a mass trauma. *Journal of Anxiety Disorders*, 25(4), 498-506.
- Khawaja, N.K., White, K.M., Schweite, R., & Greenslade, J. (2008). Difficulties and coping strategies of Sudanese refugees: A qualitative approach. *Transcultural Psychiatry*, 45(3), 489-512. doi: 10.1177/1363461508094678.
- Keane, T.M., Niles, B.L., Otis, J.D., & Quinn, S.J. (2012). *Addressing posttraumatic stress disorder in veterans: challenges of supporting mental health following military discharge*. Deployment Psychology. American Psychological Association: Washington DC.
- Khon, P.M.O., Brienwood, C., Pickering, D.I., & Decicca, T.L. (2003). In Omolunbi, P.F., (2004). *PFI Manual*. Department of Psychology, University of Lagos.
- Lazarus, R.S., & Folkman, S. (2004). *Stress, Appraisal and Coping*. Springer, New York.
- Mgbenkemdi E. H (2014). Influence of Marital Stress and Coping Strategies on depression among single parents in South-Eastern Nigeria. *Journal of Social Sciences and Public Policy*. 6(1).
- Mgbenkemdi, E.H., Omeje, O., & Eze S.G.N., (2017). Influence of Coping Strategies on Depression among Parents Living with Mentally Retarded Children (Down Syndrome). *International Journal of Humanities and Social Science Invention*.
- Nuttman-Schwartz, O., & Dekel, R. (2009). Ways of coping and sense of belonging in the face of a continuous threat. *Journal of Traumatic Stress*, 22(6).
- Olfaz, F., Hatipoğlu, S., & Ayadın, H. (2017). Effectiveness of psychoeducation intervention on PTSD and coping styles of earthquake survivors. *Journal of Clinical Nursing*, 17, 677- 687.
- Olfm, M., Langelan, W., & Gersons, B.P.R. (2005). The psychology of PTSD: Coping with trauma. *Psychoneuroendocrinology*, 30(10).
- Omolunbi, P.F., (2004). *PFI Manual*. Department of Psychology, University of Lagos.

- Pietrzak, R.H., Johnson, P., Goldstein, M., Malley, J., & Rivers, A. (2010). Psychosocial buffers of traumatic stress, depressive symptoms and psychosocial difficulties in veterans of operation enduring freedom and operation Iraqi freedom: the role of resilience, unit support and post deployment support. *Journal of Affective Disorders*, 120, 188 - 192.
- Schneider, K. R., Elhai, J.D., & Gray, M. J. (2017). Coping style use predicts posttraumatic stress and complicated grief symptom severity among college students reporting a traumatic loss. *Journal of Counseling Psychology*, 54(3), 344-350. doi:10.1037/0022-0167.54.3.344.
- Shadiya, M.S.B., (2015) Stress and Coping Mechanisms: A Historical Overview. *Mediterranean Journal of Social Sciences*. 6(2). MCSER Publishing. Rome-Italy.
- Sharkansky, E.G., King, D.W., & King L.A. (2010). Coping with Gulf war combat stress: mediating and moderating effects. *Journal of Abnormal Psychology*, 109(2), 188 - 197.
- Terri, T., & Jaycox, L.H. (2008). *Invincible wounds of war: Psychological and cognitive injuries, their consequences and services to assist recovery*. RAND Cooperation. Santa Monica.
- Terzungwe, A.S., Awopetu, R.G., Isbende, D.A., & Tyavkase, R.D. (2016). An assessment of post-traumatic stress disorder among retired military personnel in Makurdi metropolis, Nigeria. *International Journal of Humanities and Social Science*, 3(6), 1-6.
- Umeh, C.S. (2004). In Omluabi, P.F. (2004). *PFI Manual*. Department of Psychology, University of Lagos.
- Weathers, F., Huska, J., & Keane, T. (1991). *The PTSD checklist military version (PCL-M)*.
- Welsh, E., & Brodsky, A.E. (2010). After every darkness is light: resilient afghan women coping with violence and immigration. *Asian American Journal of Psychology*, 1(3), 163-174. doi:10.1037/a0020922.