MERIT RESEARCH JOURNALS
www.meritresearchjournals.org

Merit Research Journal of Medicine and Medical Sciences (ISSN: 2354-323X) Vol. 4(2) pp. 111-120, February, 2016
Available online http://www.meritresearchjournals.org/mms/index.htm

Original Research Article

Association of psychiatric morbidity and coping strategies among service personnel of an army formation in Nigeria, West Africa

Adole Oloche, ***Armiya'u Aishatu Yusha'u**, **Audu Moses David and Obembe Ayodele**

Department of Psychiatry, Jos University Teaching Hospital, Jos, Plateau State

***Corresponding Author's** Email: aarmiyau@gmail.com

Abstract

The concept of coping is considered by the authors to be important to understanding the psychological outcomes of the stresses of military experiences in a developing multi-ethnic, multi-religious society with its problems of internal conflicts, growing infrastructure and developing economy. Coping mechanisms/strategies play a role in psychological maladjustments in relation to occupational tasks particularly in the military. To determine correlations, if any, between coping strategies and psychiatric morbidity and also to compare psychiatric outcomes among troops who use emotion focused coping and those who use problem focused coping. A cross sectional descriptive study carried out among 193 servicemen. Samples were drawn by stratified multistage sampling in which respondents were stratified according to gender, military units and rank. Data was collected using a socio-demographic questionnaire, the full COPE scale, the General Health Questionnaire (GHQ) 12 and interviewed with the Composite International Diagnostic Interview (CIDI). Nine out of the 15 coping strategy domains had statistically significant correlations with morbidity. Logistic regression result showed that three coping strategies were independently associated with psychiatric morbidity. We recommend a curriculum on coping skills training for the Army. The study found a significant relationship between coping styles and morbidity with emotion focused coping showing a greater positive correlation with morbidity.

Keywords: Association, Coping strategies, Nigerian Army, Psychiatric morbidity, Service personnel

INTRODUCTION

Military service is associated with higher stress levels (physical conditions, sleep deprivation), while habitual coping strategies, such as arbitrary social environments, are neither adequate nor useful (Mueller et al., 2009). The high stress levels of military service and associated maladaptive behaviour was reported in relation with physical safety (Mueller et al., 2009). The specific correlations with coping styles of the conscripts were, however, not reported. Spence et al. (2002) found that poor coping strategies were related to depression so also Lai in his Master's thesis on study of stress, depression symptoms and coping behaviours in recruited soldiers at the National Defense Medical Center, Taipei, Taiwan. He observed an association between coping mechanisms and depressive symptoms with the raw soldiers (Spence et al., 2002; Lai, 2004). He reported that very depressed people adopted a coping strategy of escape; the more they relied on emotional coping strategies, the more

severe their depression (Lai, 2004). If the participants in his study thought the problem could be solved, they tended to adopt an active, problem-resolving strategy aimed at countering the source of the stress through direct action and if they thought the problem would be hard to solve, they tended to adopt a passive strategy such as escaping, staying way, or temporarily stepping back (Lai, 2004).

Dhir et al studied neuroses among armed forces personnel and their families in a large cantonment of the Indian army. They found that the overall prevalence of neuroses was 31.34% with 95% confidence interval between 27.41% and 35.55% (Dhir et al., 2008). They observed that neither gender nor marital status had any effect on prevalence of neuroses and noted that neuroses were more common in the lower ranks and among troops who belong to the combat arms compared to services and strongly recommended preventive psychological services in the armed forces (Dhir et al., 2008). The study focused on neuroses in a combined population of 300 servicemen and 300 wives (Dhir et al., 2008). No correlations were reported with length of stay on a rank (such as career stagnation) or with coping strategies and the study did not identify modifiable issues such as coping styles that could be manipulated to influence psychiatric morbidity, but rather appears to have focused mainly on largely un-modifiable factors such as age etc.

Published works in Coping studies in African populations (especially military) are relatively uncommon, but alcohol/substance misuse which is also a known maladaptive coping mechanism was studied by Cheng et al in the Angolan military; it was stressed that most studies examining risk factors for maladaptive coping with substance/alcohol misuse among soldiers have relied on US military personnel and may have limited applicability to military populations of developing nations (Cheng et al., 2011). Nonetheless, results of their work provide guidance for initial research with African military populations and a guide towards possible maladaptive coping. Such works found that military culture's emphasis on risk-taking has been associated with problematic alcohol and some cases other psychoactive substance consumption (MacQueen et al., 1996; Hunter et al., 2000; Ames and Cunradi, 2004/2005; Ames et al., 2006). Similarly, these studies also cited by Cheng noted that combat-related stress, being away from home and ease of acquiring alcohol near military bases appear to contribute to problematic drinking, a maladaptive coping mechanism (Ames and Cunradi, 2004/2005; Ames et al., 2006; Bremner et al., 1996; Mehlum, 1999; Koenen et al., 2003; Galen and Rogers, 2004; Karlovic et al., 2004; Moore et al., 2007; Hooper et al., 2008). The effects of use of alcohol, emotional support and turning to religion as coping mechanisms could also be inferred from Cheng's work which demonstrated that the proportion of drinkers who were married or attended church was significantly smaller relative to non-drinkers (Cheng et al., 2011). Attending religious services more than once a week appeared to protect against problematic drinking while not being married or never attending religious services almost doubled the likelihood of having consumed alcohol during the past year (Cheng et al., 2011).

Though military studies of coping are absent and those of psychiatric morbidity few in Nigeria; Okulate in 2005 demonstrated differences in the pattern of psychiatric referrals and psychiatric diagnoses among Nigerian military personnel in peace and at war times (Okulate, 2005). The findings may only be viewed as hinting at a difference in the mental reaction to stress of varying nature. However, the study did not specifically correlate these disorders with troops coping styles.

METHODOLOGY

The study was a cross sectional descriptive study comprising of 193 servicemen 177 males and 16 females. Sample was drawn by stratified multistage sampling in which participants were stratified according to gender, military units within the cantonment and rank. Data was collected in 2 stages. The socio-demographic questionnaire, the full COPE scale and the general health questionnaire (GHQ) 12 were administered to the respondents at the first stage. Second stage was interview with the WHO Composite International Diagnostic Instrument (CIDI) for respondents with a general health questionnaire (GHQ) 12 score of 2 and above. Data was analyzed using the Statistical Package for Social Sciences (SPSS) version 17.0. Frequency counts and chi square were used for categorical variables. Continuous variables were analyzed by mean, and a probability of 5% was regarded as statistically significant.

RESULT

Table 1 shows the age distribution of respondents. Age ranged between 22 and 57 years with a mean age of 37.8 ±8.7 years. More than half (56.3%) of the females and about 1 in 5 (20.9%) of males were below the age of 30 years. A little more than a tenth (11.3%) of males but none of the females were 50 years and above. One hundred and fifty six (80.8%) of the subjects were married. None of the females was divorced or widowed. (Table2a). About half (12.4%+38.3% = 50.7%) of all respondents were junior soldiers comprising junior non-commissioned officers (JNCO) and private soldiers while senior non-commissioned officers (SNCO) and commissioned officers made up 42.5% and 6.7%

Table 1. Gender distribution

Age	Gender Category				Total	
	Female		Male			
	N	%	N	%	N	%
20 – 29	9	56.3%	37	20.9%	46	23.8%
30 – 39	4	25.0%	60	33.9%	64	33.2%
40 – 49	3	18.8%	60	33.9%	63	32.6%
50+	0	0.0%	20	11.3%	20	10.4%
Total	16	100.0%	177	100.0%	193	100.0%

Table 2a. Marital Status Distribution

Marital Status	Gender				Total	
	Female		Male			
	N	%	N	%	N	%
Single	7	43.7%	25	14.1%	32	16.6%
Married	9	56.3%	147	83.1%	156	80.8%
Divorced/Separated	0	0.0%	3	1.7%	3	1.6%
Widowed	0	0.0%	2	1.1%	2	1.0%
Total	16	100.0%	177	100.0%	193	100.0%

Table 2b. Rank Distribution

Rank Category	Gender				Total	
	Female		Male			
	N	%	N	%	N	%
Privates	5	31.3%	19	10.7%	24	12.4%
JNCO	4	25.0%	70	39.5%	74	38.3%
SNCO	5	31.3%	77	43.5%	82	42.5%
Officers	2	12.5%	11	6.2%	13	6.7%
Total	16	100%	177	100%	193	100.0%

Table 3. Distribution of GHQ Cut Off

GHQ Score	Frequency	Percent
Less than 2	105	54.4%
Greater than or equal to 2	88	45.6%
Total	193	100.0%

Table 4. Lifetime and 12 Month Prevalence of Morbidity

Morbidity	Frequency	Percent
Nil	145	75.1%
Life Time	48	24.9%
12 Months	45	23.3%

respectively (Table 2b).

Table 3 show the distribution of GHQ12 scores among respondents. Eighty eight (88) respondents (45.6%) scored 2 and above while 105 (54.4%) scored below the cut off point for the CIDI interview. The mean GHQ 12 score was 1.92 with a mode score of 1 (n=56).

Table 4 shows the prevalence of any psychiatric morbidity with a CIDI diagnosis of lifetime psychiatric morbidity. It shows that 24.87% had at least one lifetime psychiatric morbidity and 75.13% had none.

Figure 1 shows that depression (25.3%) and specific phobias (24.0%) are the most common diagnoses, each

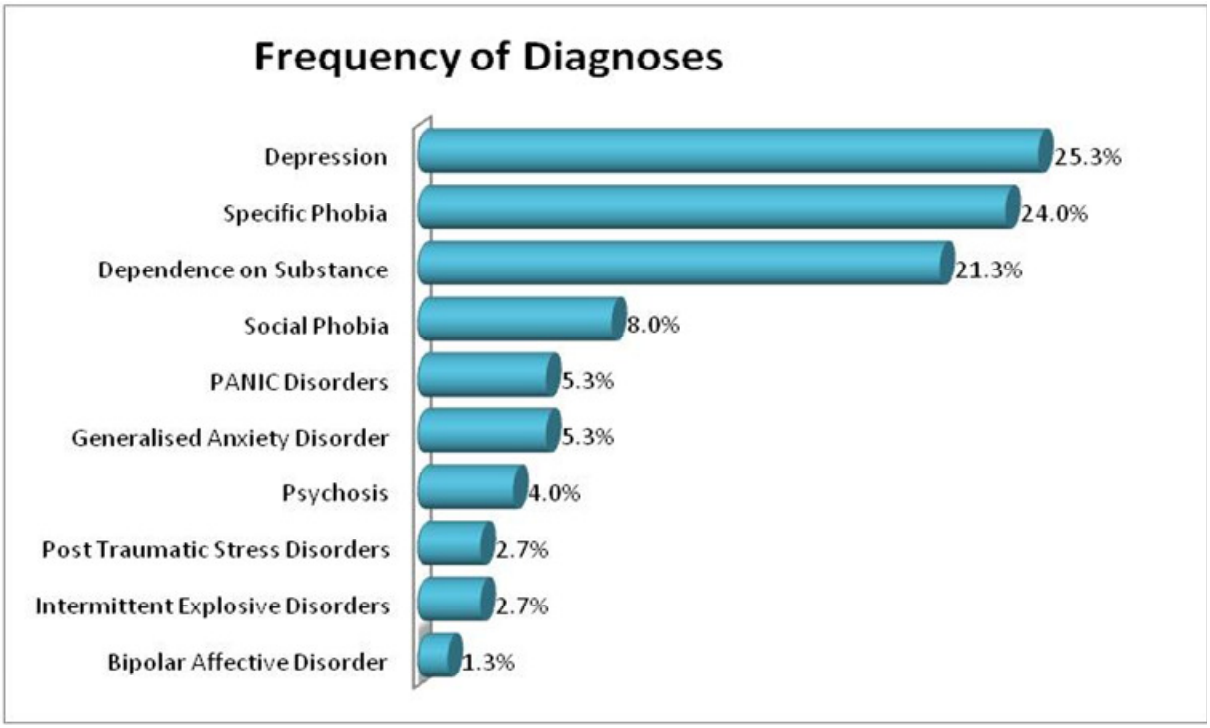

Figure 1. Bar chart showing frequency of CIDI diagnosis among respondents.

Table 5. Distribution of Psychiatric Diagnoses

		Gender			Prevalence
Number of Diagnoses		**Female**	**Male**	**Total**	
Social Phobia	Count	1	5	6	
	%	16.7%	83.3%	8.0%	3.11%
Specific Phobia	Count	5	13	18	
	%	27.8%	72.2%	24.0%	9.32%
Depression	Count	1	18	19	
	%	5.3%	94.7%	25.3%	9.84%
Dependence	Count	0	16	16	
	%	0.0%	100.0%	21.3%	8.29%
Generalized Anxiety Disorder	Count	0	4	4	
	%	0.0%	100.0%	5.3%	2.07%
IED	Count	0	2	2	
	%	0.0%	100.0%	2.7%	1.04%
Psychosis	Count	1	2	3	
	%	33.3%	66.7%	4.0%	1.55%
Post Traumatic Stress Disorders	Count	1	1	2	
	%	50.0%	50.0%	2.7%	1.04%
Bipolar Affective Disorder	Count	0	1	1	
	%	0.0%	100.0%	1.3%	0.52%
Panic Disorders	Count	1	3	4	
	%	25.0%	75.0%	5.3%	2.07%
Total	Count	10	65	75	38.85%
		13.3%	86.7%	100%	

constituting about a quarter respectively of all the diagnoses. Their lifetime prevalence was 9.8% and 9.3% respectively.

Table 5 shows there were 75 positive psychiatric

Table 6a. Coping Strategies and Significant Correlations with Diagnostic Categories

		Normal	Social Phobia	Specific Phobia	Depression	Dependence	GAD	IED	Psychosis	PTSD	BAD	Panic Disorder
Active coping	Pearson Correlation	.092	-.027	**-.142***	-.049	-.044	-.031	.049	.053	.032	-.028	-.068
	Sig. (2-tailed)	.202	.705	**.049**	.502	.545	.672	.496	.462	.663	.702	.344
	N	193	193	193	193	193	193	193	193	193	193	193
Seeking instrumental social support	Pearson Correlation	-.016	.084	.040	-.059	.002	**-.166***	-.041	-.078	.043	.113	.001
	Sig. (2-tailed)	.826	.243	.579	.416	.976	**.021**	.570	.281	.556	.118	.988
	N	193	193	193	193	193	193	193	193	193	193	193
Turning to Religion	Pearson Correlation	.105	-.006	-.011	**-.141***	-.040	-.062	-.044	.029	.077	-.031	-.091
	Sig. (2-tailed)	.147	.932	.878	**.050**	.581	.390	.546	.693	.288	.670	.209
	N	193	193	193	193	193	193	193	193	193	193	193
Focus on and venting of Emotions	Pearson Correlation	**-.293****	.077	**.321****	.101	**.196****	.114	.135	.046	.007	-.008	.036
	Sig. (2-tailed)	**.000**	.290	**.000**	.162	**.006**	.114	.061	.523	.920	.915	.616
	N	193	193	193	193	193	193	193	193	193	193	193
Mental Disengagement	Pearson Correlation	**-.152***	.076	**.144***	.068	.053	-.013	.070	.094	.030	-.049	**.184***
	Sig. (2-tailed)	**.035**	.291	**.046**	.350	.466	.854	.333	.192	.675	.502	**.010**
	N	193	193	193	193	193	193	193	193	193	193	193
Behavioural Disengagement	Pearson Correlation	**-.208****	**.158***	.063	**.144***	.024	.050	**.151***	.036	**.168***	.013	**.168***
	Sig. (2-tailed)	**.004**	**.028**	.381	**.046**	.745	.492	**.036**	.618	**.020**	.858	**.020**
	N	193	193	193	193	193	193	193	193	193	193	193
Alcohol/Drug Use	Pearson Correlation	**-.176***	.118	.127	.079	**.166***	.133	-.006	.033	-.006	-.047	**.162***
	Sig. (2-tailed)	**.014**	.103	.078	.276	**.021**	.064	.933	.645	.933	.520	**.025**
	N	193	193	193	193	193	193	193	193	193	193	193

Table 6b

		Normal	Social Phobia	Specific Phobia	Depression	Dependence	GAD	IED	Psychosis	PTSD	BAD	Panic Disorder
Problem Focused Coping	Pearson Correlation	**.161***	-.052	.070	-.096	**-.180***	-.095	**-.163***	-.080	.079	.091	-.039
	Sig. (2-tailed)	**.025**	.472	.332	.186	**.012**	.191	**.024**	.267	.273	.208	.591
	N	193	193	193	193	193	193	193	193	193	193	193
Emotion Focused Coping	Pearson Correlation	.090	-.101	.039	-.005	-.130	.023	**-.191****	-.129	.013	-.048	-.021
	Sig. (2-tailed)	.215	.164	.587	.940	.072	.754	**.008**	.074	.862	.503	.776
	N	193	193	193	193	193	193	193	193	193	193	193

diagnoses. The higher total number of N is due to co-morbidities. Males constitute over 4 in 5 (86.7%) and females just over 1 in 10 (13.3%) of all cases.

Table 6a and 6b show results of a correlation matrix depicting only those coping strategies that showed significant correlations with psychiatric diagnosis using the Pearson Correlation with two tailed significance. The tables show that only 9 coping strategies were found to have significant relationships with diagnosed morbidity. The correlations matrix shows that “Focus on and Venting of Emotions” (p=0.000), “Mental Disengagement” (p=0.035), “Behavioural Disengagement” (p=0.004), “Alcohol and Drug Use” (p=0.014) were significantly negatively correlated with an assessment of “Normal”, while “Problem Focused Coping” had a positive correlation. (P=0.025); PTSD was positively correlated with “Behavioural Disengagement” (p=0.020). Social Phobia was positively correlated with “Behavioural Disengagement” (P=0.028); Specific Phobia was negatively correlated with “Active Coping” (p=0.049), but positively correlated with “Focus on and Venting of Emotions” (p=0.000) and “Mental Disengagement” (p=0.046).

Depression was negatively correlated with “Turning to Religion” (0.050) but positively correlated with “Behavioural Disengagement”. Dependence was positively correlated with “Focus on and Venting of Emotions” (p=0.006), “Alcohol and Drug use” (p=0.021) and negatively correlated with “Problem Focused Coping” (p=0.012). Generalized Anxiety Disorder showed a negative correlation with “Seeking Instrumental Social Support” (p=0.021); Intermittent Explosive Disorder showed a positive correlation with “Behavioural Disengagement” (p=0.036) and a negative correlation with both “Problem Focused Coping “(p=0.024) and “Emotion Focused Coping” (p=0.008). Panic disorder was positively correlated with “Mental Disengagement” (0.010), “Behavioural disengagement” (0.20) and “Alcohol/Drug Use” (0.025). There were no statistically significant correlations of any particular coping strategy with psychosis or BAD demonstrated.

Table 7 shows three coping strategies were significant predictors of morbidity in the regression model. Coping strategies of “Suppression of Competing Activities” (P=0.036) and “Focus on and Venting of Emotions” (P= 0.012) were significant positive predictors of morbidity. Thus the greater the use of these the higher the odds of developing psychiatric morbidity while the greater the use of “Acceptance” as a coping strategy, the lower the odds (P=0.016).

There was no statistically significant association between the uses of Problem

Table 7. Logistic Regression of Coping with Morbidity

Coping Strategy	B	Wald	Sig.	Exp(B)	95% C.I.for EXP(B) Lower	Upper
Active Coping	-.129	2.214	.137	.879	.742	1.042
Planning	-.177	2.918	.088	.838	.684	1.026
Seeking Instrumental Social Support	-.067	.544	.461	.935	.782	1.118
Seeking Emotional Social Support	.125	1.652	.199	1.133	.936	1.371
Suppression of Competing Activities	.208	4.401	**.036**	1.231	1.014	1.496
Turning to Religion	-.105	1.043	.307	.900	.735	1.102
Positive Reinterpretation and Growth	.180	3.351	.067	1.198	.987	1.452
Restraint Coping	-.088	.727	.394	.915	.747	1.122
Acceptance	-.217	5.844	**.016**	.805	.675	.960
Focus on and Venting of Emotion	.207	6.352	**.012**	1.230	1.047	1.445
Denial	.066	.673	.412	1.068	.913	1.249
Mental Disengagement	-.020	.047	.828	.980	.817	1.176
Behavioural Disengagement	.112	2.517	.113	1.118	.974	1.284
Alcohol and Drug Use	.009	.011	.917	1.009	.856	1.188
Humour	.041	.283	.595	1.042	.895	1.213
Problem Focused Coping	-.033	.124	.725	.968	.807	1.161
Emotion Focused Coping	-.131	1.105	.293	.877	.687	1.120

Table 8. Comparison of Problem Focused VS Emotion Focused Coping with Morbidity

Coping Strategy	Morbidity	N	Mean Rank	Sum of Ranks	Sig
	Normal	145	101.26	14682.00	
Problem Focused Coping	Morbid	48	84.15	4039.00	
	Total	193			.066
	Normal	145	99.32	14401.50	
Emotion Focused Coping	Morbid	48	89.99	4319.50	
	Total	193			.315

Focused Coping versus Emotion Focused Coping with morbidity among respondents (Table 8).

DISCUSSION

The study aimed at determining correlations, if any, between coping strategies and psychiatric morbidity and also to compare psychiatric outcomes among troops who use emotion focused coping and those who use problem focused coping. The strength of the study lies in the fact that standardized assessment methods were used in face to face interviews. The weakness of the study is that only a single military formation was used though the biggest in the state.

There were far more males (91.7%) than females (8.3%) in the study with a proportion of 11.1:1. This markedly differs from the general population where females constitute 49% (Okulate, 2005) and also with the female population in the American army of 13.6% females (Department of Defence Veteran Affairs, 1998). The female population in this study was roughly evenly distributed between the combat and non-combat professional arms. Proportionately, females constituted a lower fraction of the combat arm (6.6%) than the non-combat (11.3%). More than half (56.3%) of the females and 1 in 5 (20.9%) of males were below the age of 30 years. This is in line with the fact that a vast majority of the fighting force are recruited from among the male population. Also presently, the Army recruitment targets mainly men and recruits based on a female proportion of only 7-7.5% (Department of Defence Veteran Affairs, 1998).

The age range of respondents was between 22 years and 57 years with a mean of 37.8 ±8.7years. This is not surprising as the target population was that of a Divisional level military facility where longer serving personnel are expectedly found. According to the Nigerian Army Order of Battle (ORBAT), a Division is the most senior level field formation and is expected to have proportionately greater number of senior and more experienced personnel who would have risen in service from the company to battalion level through the brigades (The Presidential Guidelines for the Nigerian Army, 2001). The age distribution is comparable to the population based study of 8441 personnel of the Canadian Army studied by Sareen et al (2007) who had a lower limit of 16 years and an upper limit of 54 years

(Sareen et al., 2007).

Majority of all the subjects (80.8%) were married. However, within the married category, a vast majority (94.2%) were males showing a higher percentage proportion of married males than married females in the service. There is a similar pattern in the US army with more men than women being married but markedly different in terms of the relative proportions where 55% and 44% of males and females respectively were married (Department of Defence Veteran Affairs, 1998). The marriage institution places an added burden of spousal and family responsibilities upon personnel (Dimicelli et al., 2010). For example, frequent relocations and transfers, often at short notice is a hallmark of military service with need for school changes and other problems of family dislocation; long absences while on mission deployment and consequent domestic/spousal challenges of separation; family and children health needs as well as an increased financial burden and so on all combine to multiply the stresses of married servicemen/women.

This study identified 9 out of the 15 coping strategy domains that had statistically significant correlations with morbidity. “Behavioural disengagement, focus on and venting of emotions and alcohol/drug use” were positively associated with the highest number of morbidities. “Problem Focused Coping” had a positive correlation with a diagnosis of normal (P=0.025) (Table 6a); this means that those who were diagnosed as normal after the CIDI interview were also found to use more of that coping strategy. This trend is supported by previous studies of combat stress disordered soldiers (Solomon and Mikulineer, 1988). “Focus on and Venting of Emotions” (p=0.000), “Mental Disengagement” (p=0.035), “Behavioural Disengagement” (p=0.004), “Alcohol and Drug Use” (p=0.014) (Table 6a) were negatively correlated with an assessment of “Normal”. This suggests that these coping strategies are maladaptive.

Respondents with Social Phobia used more of “Behavioural Disengagement” (P=0.028); Specific Phobia cases used less of “Active Coping” (p=0.049), and more of “Focus on and Venting of Emotions” (p=0.000) and “Mental Disengagement” (p=0.046) (Table 6a). Additionally, those with depression were found to use less of “Turning to Religion” (0.050) as a coping style but they used more of “Behavioural Disengagement”. This suggests that turning to religion might have some protective effect against depression or that behavioural disengagement predisposes to depression. Respondents who admitted to the use of alcohol were found to make significantly greater use of “Focus on and Venting of Emotions” (p=0.006), “Alcohol and Drug use” (p=0.021) for coping with stress and significantly less of “Problem Focused Coping” (p=0.012) (Table 6a). Individuals with Generalized Anxiety Disorder showed a negative correlation with “Seeking Instrumental Social Support” (p=0.021) implying that they used significantly less of that coping style; those with Intermittent Explosive Disorder showed a significantly greater use of “Behavioural Disengagement” (p=0.036) and used less of “Problem Focused Coping “(p=0.024) and “Emotion Focused Coping” (p=0.008). Respondents who were positively identified with PTSD were also found to make significantly greater use of “Behavioural Disengagement” (p=0.020) while Panic disorder was also positively correlated with “Behavioural disengagement” (0.020), “Mental Disengagement” (0.010), and “Alcohol/Drug Use” (0.025) (Table 6a). There was however no statistically significant correlations of any particular coping strategy with psychosis or BAD demonstrated. It then means that BAD or psychosis might have underlying biological features.

Several studies have shown similar and various other associations between coping and psychiatric morbidity; Georgian servicemen were found to use more problem focused coping than their civilian counterparts and this was associated with their lower manifestation of depression, somatization and hypochondriasis (Khechuashvili, 2009). Johnsen et al (1998) found sustained higher GHQ scores in avoidance copers (Johnsen et al., 1998). Nagase Y et al in Japan found that in relation to depression, the significantly highest odds ratios were for avoidant coping and the lowest for problem focused coping in both genders (Haghighatqou and Peterson, 1995). Other authors such as Rodriguez et al (2010), found emotion focused coping was related to higher PTSD symptom severity in moderate combat exposure; Gilbar et al (2010) reported greater symptoms of psychological distress in relation with emotion focused coping while Lai in 2004 observed an positive association between emotion focused and escape coping mechanisms and depressive symptoms in raw soldiers (Spence et al., 2002; Lai, 2004; Dhir et al., 2008; Rodriguez and Renshaw, 2010). These findings are thus in line with the above mentioned findings in this study regarding the relationship between coping and morbidity indicating a predictable pattern of psychological response to stress across the mentioned populations.

A logistic regression with morbidity as the dependent variable and coping strategies and subsequently socio-demographics as independent variable was carried out. Three coping strategies were found to be independently associated with psychiatric morbidity. These are, suppression of competing activities (P = 0.036, OR = 1.231), Acceptance (P = 0.016, OR = .805) and Focus on and venting of emotion (P = 0.012, OR = 1.230). This means that individuals were less likely to develop psychiatric morbidity the greater the use of acceptance while they were 1.2 times more likely to have a psychiatric morbidity the greater the use of each of suppression of competing activities and focus on and venting of emotions as coping strategies. Not much was

found in the literature regarding the use of suppression of competing activities and acceptance, although the authors of the COPE scale regard acceptance as an adaptive coping style especially in later stages of terminal illness or in cases of persistent, inevitable stress. The persistent stress of regimented life, frequent displacement, and combat exposure as expected in military tasks require acceptance and subordination to authority for adaptive functioning and a successful career trajectory. This may explain the inverse association of acceptance with morbidity in the logistic regression.

In the case of suppression of competing activities, the positive association with morbidity could be attributable to the highly stressful and demanding multiplicity of tasks faced by soldiers in the face of limited time as well as the culture of task performance 'with immediate effect' as is common in the Army. In such circumstances, ability to multi-task is essential for adaptive functioning. Thus service personnel whose coping style is characterized by suppression of competing activities could be prone to symptoms of psychological stress. This possibly accounts for the positive association with morbidity in the regression.

While there was no statistically significant difference in the use of problem focused coping and emotion focused coping among respondents, the problem focused coping has been significantly associated with an assessment of normal. Emotion focused coping has also been variously associated with psychological distress, and other psychiatric morbidity especially depression, PTSD, and various neurosis (Lai, 2004; Solomon and Mikulineer, 1988; Rodriguez and Renshaw, 2010; Gilbar et al., 2010).

The above results support the poor reputation of emotional focus coping (EFC) as a coping mechanism and the need to train personnel on emotional control and relaxation techniques.

CONCLUSION

The study found that nine coping strategies were maladaptive with emotion focused coping showing a greater positive correlation with morbidity.

RECOMMENDATION

A curriculum on coping skills training should be developed by the army. Training and cadre programs, particularly at earlier/junior rank stages should focus on a deliberate development of adaptive coping skills focused on active coping, acceptance, instrumental social support, planning and turning to religion.

Cadre/training programs should be strengthened and re-structured/designed to actively discourage the use of focus on and venting of emotions, mental/behavioural disengagement as well as alcohol/drug use for coping with stress.

Limitation

Specific details of locations, job descriptions and certain socio-demographic parameters such as religion could not be elaborated due to peculiarities of the army.

The version of the COPE Scale used in this study has not been validated in a military population in Nigeria. Additionally, although the dispositional implication of the instrument helps to reduce the complexity of coping assessment, it does so at a high price; it assumes that uniqueness of situation-specific coping responses only represents a negligible aspect of coping strategy (Schwarzer and Schwarzer, 1996).

Specific diagnosis of personality disorders and schizophrenia could not be established using the CIDI.

REFERENCES

Ames GM, Cunradi C (2004/2005). Alcohol use and preventing alcohol-related problems among young adults in the military. Alcohol Research &Health,; 28(4): 252–57.

Ames GM, Cunradi CB, Moore RS, Stern P (2006). Military culture and drinking behavior among U.S. Navy careerists. Journal of Studies Alcohol and Drugs, 68(3):336–344.

Bremner JD, Southwick SM, Darnell A, Charney DS (1996). Chronic PTSD in Vietnam combat veterans: Course of illness and substance abuse. American Journal of Psychiatry, 153(3): 369–75.

Cheng KG, Ortiz DJ, Weiss RE, Shi L, Ovalle-Bahamon RE, Ernesto F, Grillo MP and Bing EG (2011). Patterns of alcohol consumption and factors influencing problematic drinking among Angolan soldiers. Journal of Substance Use [Online] Jan 10; [cited 2011Jan 11]. Available from: http//www.informahealthcare.com.

Department of Defence Veteran Affairs (1998). Marital status of active component enlisted members.

Dhir C, Banerjee A, Chaudhary S, Singh Z (2008). Neuroses among Armed Forces Personnel. MJAFI, 64: 136-39.

Dimicelli E, Steinhardt MA, Smith SE (2010). Stressful experiences, coping strategies, and predictors of health-related outcomes among wives of deployed military servicemen. Armed Forces and Society, 36(2), 351-73

Galen LW, Rogers WM (2004). Religiosity, alcohol expectancies, drinking motives and their interaction in the prediction of drinking among college students. Journal of Studies on Alcohol, 65(4): 469–76.

Gilbar O, Ben-Zur H, Lubin G (2010). Coping, mastery, stress appraisals, mental preparation, and unit cohesion predicting distress and performance: a longitudinal study of soldiers undertaking evacuation tasks, Anxiety Stress and Coping, 23(5): 547-62.

Gureje O, Uwakwe R, Oladeji B, Makanjuola VO, Esan O (2010). Depression in adult Nigerians: results from the Nigerian Survey of Mental Health and Well-being Journal of Affective Disorders, 120(1-3):158-64.

Haghighatqou H, Peterson C (1995). Coping and depressive symptoms among Iranian students, Journal of Social Psychology, 135(2):175-80.

Hooper R, Rona RJ, Jones M, Fear NT, Hull L, Wessely S (2008). Cigarette and alcohol use in the UK Armed Forces, and their association with combat exposures: A prospective study. AddictiveBehaviors, 33(8): 1067–71.

Hunter CL, Talcott GW, Klesges RC, Lando H, Haddock CK (2000). Demographic, lifestyle, and psychosocial predictors of frequency of intoxication and other indicators as estimates of alcohol-related problems in Air Force basic military recruits.Military Medicine, 165: 539–45.

Johnsen BH, Laberg JC, Eid J (1998). Coping strategies and mental health problems in a military unit. Military Medicine, 163(9):599-602.

Karlovic D, Marusic S, Martinac M (2004). Increase of serum triiodothyronineconcentration in soldiers with combat-related chronic post-traumatic stress disorder with or without alcohol dependence. Wiener KlinischeWochenschrift, 116(11–12): 385–90.

Khechuashvili L (2009). Coping strategies and personality profile of the Georgian militaries. TiblisiState University [Online] Pub Nov 3 [cited 2011May 4]. Available from: http//www.press.tsu.ge.

Koenen KC, Lyons MJ, Goldberg J, Simpson J, Williams WM, Toomey R, Eisen SA, True W, Tsuang MT (2003). Co-twin control study of relationships among combat exposure, combat-related PTSD, and other mental disorders. Journal of Traumatic Stress, 16(5): 433–38.

Lai TJ (2004). A study of stress, depression symptoms and coping behaviors in recruited soldiers, (unpublished thesis), National Defense Medical Center, Taipei, Taiwan

MacQueen KM, Nopkesorn T, Sweat MD, Sawaengdee Y, Mastro TD, Weniger BG (1996). Alcohol consumption, brothel attendance, and condom use: normative expectations among Thai military conscripts. Medical Anthropology Quarterly,; 10: 402–23.

Mehlum L (1999). Alcohol and stress in Norwegian United Nations peacekeepers. Military Medicine, 164(10): 720–24.

Moore RS, Ames GM, Cunradi CB (2007). Physical and social availability of alcohol for young enlisted naval personnel in and around home port. Substance Abuse Treatment Prevention and Policy, 2: 17.

Mueller M, Kipke I, Frey F, Rossler W, Lupi G, Vetter S (2009). Antecedents and covariates of alcohol consumption among Swiss male conscripts. International Journal of Environmental Research and Public Health,; 6: 958–970.

Okulate GT (2005). Psychiatric referrals during peace and wartimes: a Nigerian experience.Military Medicine, 170(7):563-5.

Rodriguez CS, Renshaw KD (2010). Associations of coping processes with posttraumatic stress disorder symptoms in national guard/reserve service members deployed during the OEF-OIF era. Journal of Anxiety Disorders, 24(7):694-9.

Sareen J, Cox BJ, Afifi TO, Stein MB, Belik SL, Meadows G, and Asmundson GJ (2007). Combat and peace keeping operations in relation to prevalence of mental disorders and perceived need for mental health care. Archive of General Psychiatry, 64(7): 843-52.

Schwarzer R, Schwarzer C (1996). A critical survey of coping instruments. Handbook on coping. [Online] [cited 2011 Jan 6]. Available from: http://userpage.fuberlin.de/~gesund/publicaut/copchap6.htm.

Solomon Z, Mikulineer M (1988). Attributional style and combat related posttraumatic-stress disorder. Journal of Abnormal Psychology, 97:308-13.

Spence SH, Sheffield J, Donovan C (2002). Problem-solving orientation and attributional style: moderators of the impact of negative life events on the development of depressive symptoms in adolescence? J. Clinical Child Psychology, 31: 219–229.

The Presidential Guidelines for the Nigerian Army (2001)