



## STUDY OF OCCUPATIONAL STRESS AND ITS RELATIONSHIP WITH OCCUPATIONAL FUNCTIONING AND QUALITY OF LIFE AMONG INDIAN MILITARY PERSONNEL

### Psychiatry

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### ABSTRACT

While it has been noted that some amount of stress is necessary for optimal productivity, negative stress or too much stress in working situations is of concern in the work place in terms of worker safety and health (Pulat, 1997). This may lead to Occupational stress. Occupational stress arising out of routine military work environment is found to have significant negative impact on their level of occupational functioning and quality of life (QOL). The present study was aimed to find domains of occupational stress in Indian army and their relation with QOL and occupational functioning. It included 200 Rank 3 military personnel . Three main domains of occupational functioning affected were Role overload, Role Conflict and Intrinsic impoverishment. These were significantly correlated with different domains of QOL and Occupational functioning

### KEYWORDS

Occupational Stress, Occupational Functioning , Quality of Life.

#### 1. INTRODUCTION

“Stress is usually defined as the product of circumstance that threatens the homeostasis of the organism and requires adjustment to reestablish homeostasis or develop a new cognitive and emotional organization to accommodate the challenging experience or irretrievable loss. Hans Selye (1976) developed a theory of stress, which he considered a syndrome of “nonspecifically-induced changes within a biological system”. Stress may adversely affect individual physically or psychologically.

While it has been noted that some amount of stress is necessary for optimal productivity, negative stress or too much stress in working situations is of concern in the work place in terms of worker safety and health (Pulat, 1997). This may lead to Occupational stress. There are many factors which may be responsible for it like excessive workload, low salaries, lack of opportunities etc In a study conducted by the Northwest Life Insurance Company (1991) in America, 35 percent of those interviewed said that their job was extremely or very stressful and 26 percent said that their job was the greatest stressor in their life.

Stress among the Indian military has been increasing, and reported inconsistently. It can be deduced from increases in the rates of suicide, stress related physical disorders, psychiatric illnesses, and substance use. Stressors can vary among different occupations.

In the last decade India has not indulged in any war activity, though several counter-insurgency operations have been accomplished by the Army. The stress levels, however, have still increased. In this regard, Pflanz and Ogle (2006) observed that though military personnel have managed to adapt to the temporary hardships of wartime and humanitarian missions, the chronic stressors faced at the home base are found to be beyond their tolerance limit. Social and occupational environment of a person affects his or her quality of life hence there is a public dimension to QOL to complement the private individual dimension,

Occupational stress arising out of routine military work environment is found to have significant negative impact on their level of occupational functioning and quality of life. Despite volumes of research work available in the domain of occupational stress, there is a lack of

empirical research on the Indian army; thus it is important to study the phenomenon with special consideration to the Indian military.

#### 2. AIM

To study the relationship of Occupational Stress with Occupational Functioning and Quality of Life among the Military Personnel (Rank 3 officers).

#### 3. METHODOLOGY

A cross-sectional study was conducted on 200 Army personnel posted at Army Cantt. (the peace station area) in Rajasthan India. The soldiers included in the study were Rank 3 officers in the Indian army. Ethical approval was taken from appropriate authority and informed consent was taken from subjects before conducting the study. Informed consent was taken before applying tools from all subjects

#### 4. INSTRUMENTS USED:

- Occupational Stress Index (OSI):- A well developed and widely used occupational stress index (OSI) in the Indian context (Srivastava and Singh 1981) was chosen to assess the occupational stress of the sample
- The World Health Organization Quality of Life: It comprises 26 items, which measure the following broad domains: physical health, psychological health, social relationships, and environment and assesses the individual's perceptions in the context of their culture and value systems, and their personal goals, standards and concerns.
- AOF-CV Assessment of Occupational Functioning: The assessment of occupational functioning (AOF) is a screening tool used to collect a broad range of information about person's occupational performance

#### Statistical Analysis:

Statistical calculation was done using SPSS.

#### Conflict of interest - Nil

#### 5. Results and observations

Mean Age of the participants was 32.79yrs  $\pm$  7.61(S.D)

**Table 1: Occupational stress index, Quality of life and Occupational functioning military personnel**

	N	Minimum	Maximum	Mean	S.D
<b>Occupational Stress</b>					
OS total	200	120.00	166.00	149.3762	11.02902
Role Overload	200	18.53	23.00	21.6464	1.45465
Role Ambiguity	200	9.00	15.00	12.3964	1.94454
Role Conflict	200	15.00	18.00	17.3857	1.05354
Unreasonable Group & Pol. Pressure	200	11.84	16.00	14.2907	1.61046

(Responsibility for Person )	200	8.00	13.00	10.1050	1.69068
(Under participation)	200	9.00	16.00	11.8207	2.18649
(Powerlessness)	200	7.00	15.00	9.7714	2.67013
(Poor Peer Relations)	200	12.00	15.00	13.2021	1.18298
(Interinsic Impoverishment)	200	12.77	19.00	14.6243	2.24528
(Law Status)	200	9.00	12.00	10.1900	1.12135
(Strenuous Working condition)	200	10.00	14.00	11.9493	1.33601
(Unprofitability)	200	5.93	8.00	6.8043	.67853
<b>Quality of Life</b>					
(QOLDomain1)	200	25.00	81.00	57.0000	13.31448
(QOLDomain2)	200	31.00	88.00	59.4286	15.26156
(QOLDomain3)	200	31.00	100.00	63.3714	14.52252
(QOLDomain4)	200	31.00	75.00	57.5411	10.94007
QOL TOTAL	200	162.00	307.00	235.8982	44.40387
<b>Occupational Functioning</b>					
(Volition subsystem)	200	21.00	45.00	32.1421	7.30425
(Habituation subsystem)	200	10.00	26.00	16.6100	4.96324
(Occupational Performance Skills)	200	8.00	15.00	10.5271	2.28565

**Table 2. Correlation of occupational stress index with quality of life and occupational functioning in Rank3 Military personnel**

N=200		QOL1	QOL2	QOL3	QOL4	QOL-T	VSS	HSS	OPS
OStotal	p.Correlation	-.459	-.426	-.627	-.471	-.604	-.392	-.398	-.179
	Sig(2-tailed)	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.001</b>	<b>.001</b>	.137
(RO)	P.Correlation	.124	.130	.033	.020	.067	.194	.191	.140
	Sig (2-tailed)	.308	.283	.785	.872	.583	.108	.113	.248
(RA)	P.Correlation	-.584	-.618	-.498	-.138	-.595	-.297	-.323	-.059
	Sig.(2-tailed)	.000	.000	.000	.255	.000	.012	.006	.626
(RC)	P.Correlation	-.347	-.332	-.334	-.287	-.418	-.258	-.234	-.103
	Sig.(2-tailed)	<b>.003</b>	<b>.005</b>	<b>.005</b>	<b>.016</b>	<b>.000</b>	<b>.031</b>	.051	.398
(UGPP)	P.Correlation	-.109	-.140	-.469	-.532	-.339	-.541	-.527	-.110
	Sig.(2-tailed)	.369	.247	.000	.000	.004	.000	.000	.364
(RP)	P.Correlation	.021	.047	-.323	-.396	-.140	-.408	-.481	-.147
	Sig. 2-tailed)	.864	.702	.006	.001	.248	<b>.000</b>	<b>.000</b>	.225
(UP)	Correlation	.452	.577	.285	-.260	.405	-.113	-.131	-.258
	Sig. 2-tailed)	.000	.000	.017	.030	.001	.352	.281	<b>.031</b>
(PL)	Correlation	.336	.374	.076	-.299	.215	-.202	-.182	-.128
	Sig. 2-tailed)	.004	.001	.531	.012	.074	.094	.132	.290
(PPR)	Correlation	-.286	-.133	.223	.024	-.075	.061	.085	-.325
	Sig.(2-tailed)	.016	.272	.064	.843	.538	.618	.485	<b>.006</b>
(II)	Correlation	.518	.533	.139	-.156	.369	.011	-.006	.051
	Sig(2-tailed)	<b>.000</b>	<b>.000</b>	.251	.197	<b>.002</b>	.925	.959	.676
(LS)	Correlation	.266	.090	-.319	.004	.013	.013	-.031	.444
	Sig. 2-tailed)	.026	.460	.007	.976	.917	.913	.799	<b>.000</b>
(SW)	Correlation	-.261	-.228	.037	-.094	-.193	-.072	.036	-.154
	Sig. 2-tailed)	.029	.058	.760	.441	.109	.554	.766	.204
(UPF)	P Correlation	-.302	-.419	-.247	.190	-.327	.188	.225	.324
	Sig.(2-tailed)	.011	.000	.039	.115	.006	.119	.062	<b>.006</b>

Role Overload (RO), Role Ambiguity (RA) Role Conflict (RC), Unreasonable Group & Pol. Pressure(UGPP), Responsibility for Persons (RP), Under participation (UP), Powerlessness(PL), Poor peer relations (PPR), Interinsic Impoverishment (II,) Law Status (LS)Strenuous Working Condition (SW) Unprofitability (UPF), Quality of Life QOL(Domains 1,2,3,4 and Total), Volition Subsystem (VSS), Hibutation Subsystem (HSS), Occupational Performance Skills(OPS)

## 6. DISCUSSION

The study was carried out to identify the occupational stresses affecting the Indian Military personnel and its impact on quality of life and occupational functioning. The twelve subscales of occupational stress are independently experienced by the Military personnel. The factor Role overload, has high score (mean 21.64±1.45) showing to cause severe stress among Indian soldiers. This signifies that working long hours, completing tasks with in insufficient time, too many tasks or those that are too complicated, in adequate rest breaks and unachievable targets create role overload for the soldiers. Similar findings of job aspects of work overload like time pressure, linkage to deadlines (realistic or unrealistic), sleep deprivation related to demanding work schedules was found in many different professions by differernt authors (Pufferand Brakefield 1989, Gignac and Appelbaum 1997, Antoniou et al., 2003, Valk and Srinivasan 2011).

Second factor Role ambiguity has average mean score (12.39±1.94) suggesting its minimal influence on the stress experienced by the Indian soldiers. While vice versa is suggested in another study done on Indian soldiers by Sakshi Sharma in 2015. This may be explained by different group of military personnel included in both the studies. Third factor Role conflict was found to have moderate mean score(17.38±1.05). Role conflict occurs when expectations one had about job differs significantly from the demands made by the organisation (Gignac & Appelbaum, 1997) or there are unsatisfied role expectations Savery et al. (1983). Similar findings were replicated in previous studies. ( Antoniou et al. 2003, Sakshi Sharma 2015. Role conflict is of particular significance in lower rank personnels' occupational stress who have less control over job profiles (Dornstein 1977) Unreasonable Group & Political Pressure had average mean score(14.29±1.61) suggesting that it is not a significant cause of distress in this subgroup of military officers. This may be because political pressure is more directly bearded by upper rank personnel. Apart from these factors Intrinsic impoverishment that is monotonous nature of assignments, opportunity to utilize abilities and experience independently, opportunity to develop aptitude and proficiency, place of suggestion in problem solving also had higher mean score(12.35±.97). Apart from these other factors of occupational stress were in average range

### Quality of Life in Military Personnel and impact of occupational stress

Quality of life of soldiers is the ability to participate in professional activities during the military. The aim of this study was to establish the quality of life, which are important for soldiers' adjustment during the military service. In our study, as shown in, quality of life is on a lower range in military personnel. Four domains of quality of life are:- Physical health ( $57.0 \pm 13.31448$ ), Psychological ( $59.42 \pm 15.26$ ). Social relationships ( $63.37 \pm 14.52$ ) Environment ( $57.54 \pm 10.94$ ) Results are similar to other studies done in this field although scarce (Dedić G et al). As clear from Table 2 that significantly affected domains of occupational stress ie role overload (RO) and role conflict (RC) are significantly negatively strongly correlated with all quality of life scores ( $P = .000, .000, .000, .000$  for all four domains with RO and  $P = .003, .005, .005, .016$  with all four domains of QOL with RC) negatively which means more is occupational stress poor is quality of life. Intrinsic impoverishment was particularly negatively correlated with Physical ( $P = .000$ ) and Psychological ( $P = .044$ ) QOL domains. This shows that monotonous nature of assignments may have deteriorating effect on psychological well being due to lack of novelty and learning. Quality of life is shown by frequent illnesses, increased divorce rates. Similarly in 2005 Pentagon officials announced a significant spike in military divorce rates, noting that cases doubled from 5,658 to 10,477 between 2001 and 2004 among active-duty Army officers and enlisted personnel. (americanprogress.org 2007)

### Occupational stress and Occupational functioning of military Personnel

We also studied occupational functioning and its correlation with occupational stressors. We found that occupational functioning in all the three domains Volition Subsystem (VSS) ( $32.14 \pm 7.30$ ), Habituation Subsystem (HSS) ( $16.61 \pm 4.96$ ), Occupational Performance Skills (OPS) ( $10.52 \pm 2.28$ ) of occupational functioning were affected and a strong negative correlation was found between RO ( $P = .026, .029$ , and  $.022$  respectively) RC ( $P = .012$  and  $.000$  with HSS and OPS respectively) and II ( $P = .000, .000$  with HSS and OPS respectively) domains and HSS and OPS domains of occupational functioning. This shows that Occupational stress affects values, roles habits and overall occupational performance of military personnel.

### 7. CONCLUSION

From this study, it can be concluded that in rank three military personnel, are mainly affected by three occupational stressors role overload, role conflict and Intrinsic impoverishment. Furthermore, these have significant impact on their quality of life and overall occupational functioning. All these factors act independently as well as interact with each other to cause subjective dissatisfaction and stress.

#### Delimitations

### 8. LIMITATIONS

Firstly, owing to the sensitive nature of topic of research, Army personnel might have underreported or underestimated their stress levels. Secondly, the study being cross-sectional restricts its generalizability Inclusion of single unit and Rank is another limitation of this study.

### 9. REFERENCES:

1. Antoniou et al, 2003 A.-S. G. Antoniou, M.J. Davidson, C.L. Cooper Occupational stress, job satisfaction and health state in male and female junior hospital doctors in Greece *Journal of Managerial Psychology*, 18 (6) (2003), pp. 592-621
2. Dornstein, 1977 M. Dornstein Organizational conflict and role stress among chief executives in state business enterprises *Journal of Occupational Psychology*, 50 (1977), pp. 253-263
3. Gignac, Appelbaum, 1997 A. Gignac, S.H. Appelbaum The impact of stress on customer service representatives: a comparative study *Journal of Workplace Learning*, 9 (1) (1997), pp. 20-33
4. Pflanz, Ogle, 2006 S.E. Pflanz, A.D. Ogle Job stress, depression, work performance, and perceptions of supervisors in military personnel *Military Medicine*, 171 (9) (2006), pp. 861-865
5. Puffer, Brakefield, 1989 S.M. Puffer, J.T. Brakefield The role of task complexity as a moderator of the stress and coping process *Human Relations*, 42 (3) (1989), pp. 199-217
6. Pulat, B. (1997). *Fundamentals of Industrial Ergonomics* (2nd ed.). Prosect Heights, Illinois: Waveland Press.
7. Sakshi Sharma, Occupational stress in the armed forces: An Indian army perspective *Volume 27, Issue 3, September 2015, Pages 185-195*
8. Savery et al, 1983 L. Savery, K. Hall, E. Collier Management stress—Exploring the job expectation and job reality match *Management Research News*, 6 (4) (1983), pp. 20-24
9. Valk, Srinivasan, 2011 R. Valk, V. Srinivasan Work-family balance of Indian women software professionals: a qualitative study *IIMB Management Review*, 23 (2011), pp. 39-50
10. Watts JH, Kielhofner G, Bauer DF, Gregory MD, Valentine DB. *Am J Occup Ther*. 1986 Apr;40(4):231-40. 11 The assessment of occupational functioning: a screening tool for use in long-term care.
11. World Health Organization: whoqol-bref introduction, administration, scoring and generic version of the assessment. programme on mental health. Field Trial Version December 1996:5 & 6.