Original Article: Investigating the Relationship Between Job Stress and General Health in Military Personnel of Zahedan, Iran

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A B S T R A C T

Job is one of the most important areas of each person's life. Job-induced stress, if severe, can cause mental and physical harm to people. This study was conducted to investigate the relationship between job stress and general health in the military personnel of the 88th Armored Division of Zahedan Army in 2015-2016. This research is a descriptive-analytical study that has been performed on 120 personnel of the 88th Armored Division of Zahedan. Occupational stress (HSE) and general health (GHQ) questionnaires were used to collect information. The data obtained from the general health questionnaire show high anxiety in staff and the job stress questionnaire indicates a problem in the subscales of control and change. In other subscales of general health and job stress, no problem was reported and in general, the staff is in good condition. There is a significant relationship between general health scores and job stress at the level of pp <0.05. Each job according to its specific working conditions can be the cause of specific job stressors of the same job. Therefore, it is recommended to take the necessary measures to reduce these problems.

Introduction

Stress is a natural reaction to the pressures of the outside world, such as the workplace, family, or the inside, such as the desire to succeed or be accepted. Therefore, stress is not just a stimulus or response, but a process that people understand and use to deal with threats and challenges [1]. According to the National Institute of Occupational Safety and Health (NIOSH), job stress occurs when there is no coordination between job needs and abilities, capabilities and desires [2]. Symptoms of job stress appear in three areas: mental, physical and behavioral. The psychological domain of job stress is associated with job dissatisfaction. This dissatisfaction is one of the most common consequences of job stress that causes depression, anxiety, boredom, sexual disorders, feelings of failure, isolation and disgust [3]. Among the

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physical symptoms of job stress are cardiovascular, gastrointestinal diseases, allergies and skin diseases, sleep disorders, headaches and respiratory disorders. Behavioral symptoms also include individual behaviors such as abstinence from work, alcohol consumption, smoking, coffee and drugs, overeating or anorexia, militant behaviors towards co-workers or family members, and organizational behaviors such as absenteeism, leaving work, increasing accidents, and decreased productivity and performance [4] The National Institute for Occupational Safety and Health considers job stress to be caused by many problems in the workplace, constant changes out of control, constant movement, overtime, long working hours, and irregular working hours. [5]

The progress, dynamism and promotion of any society is nothing but having healthy and efficient elements and members in that society, people who, in addition to being physically fit, are also in a balanced and desirable state in terms of mental and psychological condition. Undoubtedly, the symmetry of physical and mental health is the main result of having a prosperous and future society. Mental health is a very important category because the effect of soul and mind on physical function is not hidden from anyone [6]. New approaches to health invade traditional boundaries of physical and mental health and view health in an intertwined form. The World Health Organization (WHO) also defines health as complete physical, mental, and social well-being, not just the absence of disease and discomfort. Health is considered in a holistic perspective from psycho-social and physical aspects. Its relationship with the environment is also considered. Psychological health is also the definition given by psychologists and social and behavioral scientists about the effectiveness and appropriate psychological performance of human beings [7].

Materials and Method

This study is descriptive-analytical. The study population was all the personnel of the 88th Armored Division barracks in Zahedan, 120 of whom were selected as a sample. Data collection tools included personal information form, including age, history, degree and degree, and health questionnaires. General Goldberg (GHQ) and job stress (HSE).

The Goldelberg General Health Questionnaire

The 28-item General Health Test (Goldelberg,1987) assesses a person's general health under the Physical Health, Anxiety, Social Dysfunction, and Depression scales, which are rated on a scale of 0 to 3 [8]. Out of 28 items of the questionnaire, items 1 to 7 are related to the scale of physical symptoms. Cases 8 to 14 examine anxiety symptoms and sleep disorders, and cases 15 to 21 relate to assessing social functioning symptoms, and finally cases 22 to 28 assess depressive symptoms [2]. Under the scales, scores range from zero to 7 in the category Mild, 8 to 14 are classified as moderate and 15 to 21 as severe in terms of problems in the areas of physicality, anxiety, social dysfunction and depression. Yazdan Panah's (2009) reliability of the general health questionnaire by internal consistency method and our calculated Cronbach's alpha coefficient equal to 0.74 assured the reliability of the instrument. Also, Mirkheshti (2019) reported the reliability of the questionnaire by 0. 92 [5].

Job Stress Questionnaire

It consists of 7 sections:

1. Role, including questions 1,4,11,13,17, which examines the level of awareness of a person about his duties and job powers.
2. Communication, including questions 5, 14, 21, and 34, which examine the health of the relationship between employees and show the individual's satisfaction and dissatisfaction with these relationships.
3. The support of the officials, including questions 8, 23, 29, 33, 35, which examines the trust and support received by the person from his superiors to perform his duties better.
4. Support from colleagues, including questions 7, 24, 27, 31, which is to examine the emotional relationship of colleagues and get their help and cooperation when needed.
5. Control, includes questions 30, 10, 15, 19, 25, 2, which examine the degree of authority and freedom of choice of the individual in how to perform the assigned duties and responsibilities.
6. Demand, including questions 18, 6, 9, 12, 16, 3, 20, 22, which examines the work pressure and the weight of a person's responsibility, as well as his ability to perform his duties. and

7. Changes, including questions 32, 28, and 26, which examine a person's involvement in making changes, as well as informing them of the reasons and how to make these changes in the workplace.

This questionnaire was designed in 1990 under the supervision and guidance of the UK Office for Safety and Labor to identify occupational stressors [12]. The Health and Safety Questionnaire (HSE) includes a 5-choice Likert scale with a range of 1 to 5, in which 1 is undesirable and 5 is favorable. High scores indicate more health and safety in terms of stress and scores. Low scores indicate more stress. A score less than 1.5 is considered as high stress, 1.5 to 2.5 as moderate stress, 2.5 to 3.5 as low stress and a score higher than 3.5 is classified as stress-free. Azad Marzabadi and Gholami Fesharaki (2019) in reviewing and validating the Job Stress Questionnaire in Iran reported this questionnaire as valid and in total Cronbach's alpha was 78. This study was carried out after the approval of the proposal and obtaining the necessary permits for conducting research on all personnel of the 88th Armored Division barracks in Zahedan. At first, we explained the purpose of the research to the research units and if they want to cooperate, we provided them with the relevant questionnaires to complete it [12-15].

Results

On the relationship between the general condition of the participants and general health, it became clear that the relationship between being a cadre and anxiety symptoms, being a soldier with depressive symptoms, being indigenous with physical symptoms, being non-indigenous with anxiety symptoms and being non-resident with depressive symptoms was significant.

Table 1. The sample of this study

58	Resident	28	Native	53	Single	80	Staff
62	Non-resident	92	Non-native	67	Married	40	Soldier
120	Total	120	Total	120	Total	120	Total

In addition, there was a significant negative relationship between age and history with anxiety symptoms and depressive symptoms and a significant positive relationship between degree and anxiety symptoms.

Table 2. Relationship between public health and general status among military personnel

Symptoms of depression	Social symptoms	Anxiety symptoms	Physical symptoms	Staff
+0.16	+0.08	*+0.36	+0.05	Soldier
*+0.32	+0.07	0.13	+0.10	Single
+0.06	+0.03	+0.11	+0.09	Married
+0.14	+0.06	+0.15	+0.01	Native
+0.08	+0.04	+0.01	*+.038	Non-native
+0.10	+0.12	*+0.32	+0.03	Resident
+0.06	+0.05	+0.04	+0.01	Non-resident
+0.07	+0.13	+0.11	+0.07	Staff

Table 3. Relationship between public health and demographic factors among military personnel

Symptoms of depression	Social symptoms	Anxiety symptoms	Physical symptoms	
*-0.33	-0.14	*-0.38	+0.13	Age
*-0.30	-0.15	*-0.36	+0.12	History
+0.11	-0.10	+0.08	-0.06	education
-0.19	-0.11	*+0.33	+0.17	Degree

Studying the relationship between the general status of participants with job stress, we found that there was a significant relationship between being a cadre with the subscales of role and support of

colleagues, between being a soldier and the subscale of change, between being married and demand. There was also a significant positive relationship between age and background with the role and support of colleagues and also between the degree with the role, support of colleagues and changes.

Table 4. The relationship between job stress and the general situation among military personnel

Changes	Demand	Control	Partner support	Official support	Relationship	Role	Staff
+0.12	+0.09	+0.03	*+0.46	+0.16	+0.13	*+0.24	**Soldier**
*+0.03	+0.05	0.00	+0.14	+0.06	+0.15	+0.11	**Single**
+0.01	+0.07	0.00	+0.14	+0.16	+0.04	+0.03	**Married**
+0.01	*+0.23	0.00	+0.10	+0.11	+0.03	+0.02	**Native**
+0.03	+0.11	+0.04	+0.16	+0.13	+0.21	+0.09	**Non-native**
+0.06	+0.15	+0.01	+0.14	+0.16	+0.19	+0.13	**Resident**
+0.04	+0.11	+0.04	+0.15	+0.11	+0.20	+0.10	**Non-resident**
+0.06	+0.13	+0.01	+0.14	+0.16	+0.18	+0.12	**Staff**

Table 5. Relationship between job stress and demographic factors among military personnel

Changes	Demand	Control	Partner support	Official support	Relationship	Role	Age
+0.13	+0.06	+0.03	*+0.29	+0.12	+0.13	*+0.37	**History**
+0.14	+0.05	+0.04	*+0.26	+0.14	+0.11	*+0.35	**education**
-0.16	+0.02	-0.03	+0.01	+0.11	+0.08	+0.06	**Degree**
*+0.43	-0.18	+0.13	*+0.30	+0.09	-0.01	*+0.39	**Age**

The results indicate a relationship between job stress scores and general health, which one can see in more detail in Table 6 below.

Table 6. The relationship between general health and job stress among military personnel

Changes	Demand	Control	Partner support	Official support	Relationship	Role	
-0.19	-0.57	-0.27	-0.24	-0.26	-0.14	-0.23	**physical**
*-0.49	-0.25	-0.58	-0.42	-0.31	-0.22	-0.12	**Anxiety**
-0.27	-0.12	-0.11	*-0.59	*-0.62	*-0.43	-0.17	**social**
*-0.62	-0.18	*-0.73	-0.35	-0.20	*-0.39	-0.09	**Depression**

According to Table 6 above, presented the qualitative data, based on the classification of quantitative data, in association with the personnel of the Zahedan Army. General health scale scores are divided into three parts: mild (0 to 7), moderate (8 to 14) and severe (15 to 21) and job stress scores are divided into three parts: low (less than 1/5 in total subscale). We divided them into medium (between 1.5 to 2.5) and high (above 2.5). In contrast to general health in the case of job stress, the higher the scores, the better the individual's condition.

Table 7. Qualitative description of general health and job stress in military personnel

Physical symptoms	Physical symptoms		Physical symptoms		Physical symptoms	
Light	Light		Light		**Light**	
Role	Role	Role	Role	Role	Role	**Role**
Much	Much	Much	Much	Much	Much	**Much**

Discussion

Job stress in Zahedan Army personnel is generally satisfactory. Regarding the role factors, the relationship is quite favorable and the support of officials and colleagues and the demand is moderate, but in the case of control and changes low scores were reported. These results are in agreement with those of Azad Marzabadi and Niknaf (2019) in physical activity. Satisfaction with life and their role in job stress of military personnel in Iran in 1993. The environment brings more pressure and more dangers for people, causes more empathy and communication between people of the same type; therefore, the communication subscale in Zahedan employees is in a more favorable condition. Regarding the general health of the army personnel, the situation is generally good, with physical and social symptoms being mild. The state of depression is moderate, but the personnel have reported high anxiety. The general health status in the four groups is as follows: Staff experience worse conditions for anxiety symptoms, but the rate of depression in soldiers is significantly higher. In other cases, the difference is not significant. No significant differences were observed in the single and married groups. In the case of indigenous and non-indigenous groups, the results showed that the indigenous group reported higher physical symptoms and the non-indigenous group showed higher anxiety symptoms.

These results are consistent with those, Fathi Ashtiani, Salimi, Azad Marzabadi and Ismaili. Also, with increasing job demand, more physical problems have been reported by staff. Changes are also significantly associated with anxiety symptoms. Thus, there is a significant relationship between feeling weak and difficult in not getting support from colleagues, not having control over working conditions and not intervening and aware of changes with severe anxiety symptoms. There is also a significant relationship between communication factors, support of officials and colleagues with social symptoms. Thus, reduced communication, lack of support from officials and colleagues exacerbates problems in the social life of individuals. There is a significant change in the changes in health conditions and emotional communication, lack of control over working conditions and non-interference in job and work changes that could lead to depression.

These results are in line with the research by Aghilinejad *et al.* (2018) investigating the relationship between job stress and mental health, personality type and event. Life stresses in traffic police officers in Tehran are positively correlated between job stress and general health and their subscales. There is a significant positive relationship between age and role factors and peer support, in the sense that with age, awareness of the role and a sense of interest and support for colleague's increases. The results obtained about the history are also consistent with the results obtained from the age conditions of individuals in such a way that with increasing history, awareness of the role and sense of support from colleagues also increases. No significant relationship was found between education and job stress factors.

Regarding the degree, the results showed a significant relationship with the role, support of colleagues and changes. This means that higher degrees report better awareness of the role, higher support of colleagues and more awareness and involvement in change.

Conclusion

Each job, according to its specific circumstances, has certain consequences, which are among the specific pathologies of that profession and occupation, and whether or not, due to the appropriateness of that job, negative factors of job stress can affect people working in that field. Therefore, the task of a researcher is to show these problems, which, if possible, should be eliminated or reduced by managers with special measures. General health tests show a higher rate of physical symptoms and problems, and thus, due to the responsibility and job sensitivity of natural soldiers, their anxiety symptoms appear to be higher. Depressive symptoms are more common, especially in non-native soldiers. It is recommended that the necessary measures be considered to reduce it.

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