

Occupational Stress Faced by Doctors of Public and Private Sector of Pakistan: Comparative Study

Namood-e-Sahar (✉ namoodphil17@nip.edu.pk)

National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan <https://orcid.org/0000-0003-2086-4482>

Maira Saman

Quaid-i-Azam University, Islamabad, Pakistan

Meerab Malik

Quaid-i-Azam University, Islamabad, Pakistan

Research Article

Keywords: occupational stress, doctors, public sector, private sector

Posted Date: January 28th, 2021

DOI: <https://doi.org/10.21203/rs.3.rs-153110/v1>

License:  This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

Abstract

The survey on comparative account of occupational role stress among doctor of public and private sectors was conducted by using the Occupational Role Stress Scale (ORS), devised by Pareek (1983). Sample comprised of doctors from public ($n= 30$) and from private sector ($n= 30$). The data obtained was statistically analyzed by taking the mean of scores obtained by the doctors of both sectors, for public doctors the arithmetic mean was ($M= 27.13$) and for private doctors the scores were ($M= 48.8$). So, it was clear that mean score for occupational stress in private sector was more as compared to the Public one and thus research hypothesis was accepted.

Background

The word stress, like success, failure, or happiness, means different things to different people and, except for a few specialized scientists, no one has really tried to define it although it has become part of our daily vocabulary. According to Selye (1956), the businessman who is under constant pressure from his clients and employees alike, the air traffic controller who knows that a moment of distraction may mean death to hundreds of people, the athlete who desperately wants to win a race, and the husband who helplessly watches his wife slowly and painfully die of cancer all suffer from stress. The problems they face are totally different, but medical research has shown that their bodies respond in a stereotyped manner with identical biochemical changes, meant fundamentally to cope with the stressful circumstances.

Stress is defined as the non-specific response of the body to any demand for change. It is the force, pressure or strain exerted upon a material, object or person which resist these forces and attempt to maintain its original state (Selye, 1956). A stressor on the other hand is the stress causing agents or situations that are experienced as a perceived threat to one's wellbeing or position in life, when the challenge of dealing with which, exceeds the person's perceived available resources (Scott, 1990). Stressors could be of varied types; such as, physiochemical, social, biological, and mental stressors. External environment constitutes the physiochemical stressor which is represented by nature, for example change in climate and weather, pollution, disaster, and chemical substance. The social stressor could be change in economic condition, international position of a country on the level of society and on the individual level it comprised of life environment such as work, home, and school, human relationship. The internal biological environment could act as biological stressor such as sickness, injury, fatigue, and sleep disruption. Mental stressors could be psychological condition that is associated with unpleasantness.

Each stressor is closely related and work together causing stress condition in a person, no matter in which field of life he/she is. As in case of our research topic occupational stress among doctors of government and private sectors, factors contribute in causing the stress are demands of work, long duty hours, excessive work load, financial problems, low level of reward, conflicts between professional and

personal lives, frustration with the working environment, problems with patients, and those related to occurrence of death (Herzberg, 2002).

Theoretical Perspective

Stress responses involve actual physiological changes to body systems and organs, a good bit of attention has been paid to acute physiological stress responses and how they might possibly lead to subsequent chronic stress responses (McEwen & Stellar, 1993). Historically, both Cannon (1929) and Selye (1956) provided the foundation for the current interest in this physiological process.

Cannon, (1929) was the first to use the term 'homeostasis.' According to him the body possesses an internal mechanism to maintain stable bodily functioning or equilibrium. As the environment presents the organism with various challenges, the body must respond to each new situation by adjusting various physiological systems to compensate for the resources being taxed. Failure of the body to respond to environmental challenges by maintaining bodily homeostasis results in damage to target organs and eventually death. Translating his work with physical challenges associated with eating, drinking, and physical activity into those of a psychological nature, Cannon hypothesized that common homeostatic mechanisms were involved. Accordingly, if an organism's response to threat involves significant sympathetic nervous system arousal so that respiration and heart rate increase significantly, the body's compensatory response should involve either reducing sympathetic nervous system activity or increasing parasympathetic nervous system counter-activity. If the compensatory response is inadequate, tissue damage can result, placing the organism at a greater risk for subsequent medical problems associated with the damaged tissue. In brief, the concept of homeostasis introduced by Cannon has proved to be very valuable in explaining how physiological stress responses to threats of survival lead toward stress responses.

Another relevant theoretical perspective of stress is one by Selye (1956) who observed the body's reaction to stress in laboratory animals and in human patients. He found that the fight or flight response was only the first in a series of reactions, which he called the general adaptation syndrome (GAS). The GAS consists of three stages these; alarm reaction, stage of resistance, and stage of exhaustion. The *alarm reaction* is like the fight or flight response to an emergency. The body is mobilized. At the beginning of the arousal blood pressure drops below normal for a moment, but then quickly rises to above normal. This arousal is produced by the release of hormones by the endocrine system: the pituitary glands secrete ACTH, which causes a heightened release of adrenaline, noradrenalin, and cortisol by the adrenal glands into the bloodstream. The body cannot stay in this state for long without serious consequences. Some organisms in a continuous state of alarm have died within hours or days. If the reaction continues and is not strong enough to cause death the physiological reaction enters the *stage of resistance*. The body tries to adapt to the stressor. Physiological arousal declines but remains higher than normal and the body replenishes the hormones released by the adrenal glands. The organism may show few outward signs of stress. However, the body may not be able to resist new stresses. The body becomes increasingly vulnerable to health problems. These health problems include ulcers, high blood pressure, asthma, and

illnesses that result from impaired immune function. Severe long-term or repeated stress will cause the organism to enter the third stage, the *stage of exhaustion*. The immune system and the body's energy reserves are weakened until resistance is very limited. If the stress continues, disease and physiological damage become increasingly likely and death may result.

Lazarus and Folkman (1984) also proposed a model explaining stress which emphasizes the transactional nature of stress. Stress is a two-way process; the environment produces stressors and the individual finds ways to deal with these. Cognitive appraisal is a mental process by which people assessed two factors these are a demand threatens their wellbeing and a person considers that they have the resources to meet the demand of the stressor. Two types of appraisals are primary and secondary. During the *primary appraisal* stage a person will be seeking answers as to the meaning of the situation with regard to their wellbeing. Three types of appraisals could be made that it is irrelevant, it is good (benign-positive) and it is stressful. Further appraisals are made with regard to three implications: Harm-loss, threat, and challenge. Harm-loss refers to the amount of damage that has already occurred. There may have been an injury. The seriousness of this injury could be exaggerated producing a lot of stress. Threat is the expectation of future harm, for example the fear of losing one's job and income. Much stress depends on appraisals that involve harm-loss and threat. Challenge is a way of viewing the stress in a positive way. The stress of a higher-level job could be seen as an opportunity to expand skills, demonstrate ability, and make more money. *Secondary appraisal* also occurs at the same time as primary appraisals. A secondary appraisal can actually cause a primary appraisal. Secondary appraisals include feelings of not being able to deal with the problems. Stress can occur without appraisal such as when your car is involved in an accident and you haven't had time to think about what has happened. Accidents can often cause a person to be in shock. It is difficult for people to make appraisals whilst in shock as their cognitive functioning is impaired.

Occupational Stress

Occupational stress occurs when there is a discrepancy between demands of workplace and individual's ability to carry out and complete these demands. One of the main causes of stress is work over load. Occupational stress is often caused by an increased work load without addition of employees to take an additional work. Instead, increased amount of work is given to current employee to finish. This results in high demands and time pressure, which again play significant role in increasing stress level (Bryeinn & Igol, 2006).

Interpersonal conflicts, within the workplace, uncertainty about the stability of job security and unutilized job facilities are also cause of occupational stress. According to one school of thought, differences in individual's characteristics such as personality and coping skills are very important in predicting whether certain job condition will result in stress. A person's status in workplace can also affect levels of stress while workplace stress has the potential to effect employees of all categories from those who have very little influence to those who make major decisions for the organization. However, less powerful employees are more likely to suffer stress than powerful workers (Primm, 2006).

Sluiter et al. (2001) demonstrated in a longitudinal study that workers were, on average, more distressed before reorganization and shortly after the reorganization than at any other time. Also, the topic of recovery from daily strains receives attention in studies. Recovery does lead towards decreases in levels of job stress and burnout and an increase in life satisfaction. Stress at work depends on high job demands in relation to the worker's abilities or resources, frustrated aspirations and dissatisfaction with valued goals (Pousette & Hanse, 2002; Sonnentag, 2003).

Workplace stress may also result in behavioral problems, such as increased alcohol consumption and smoking Dollard and Winefield (2002). Management practices also affect both perceived work stress and depression of those being supervised (Mackie et al., 2001). Uncertainty about occupational future and role ambiguity during an organizational change appeared to be associated with reduction in mental health (Pollard, 2001). A common finding is that work stress has negative effects on families and home life (Muchinsky, 2000).

Studies also indicated that the managerial role is a significant source of stress and can affect people's mental health, particularly for managers at the middle level but not for the top management Sin et al. (1997). Lack of social support appeared to be part of an overall job stress measure and did predict reduced mental/physical health and job satisfaction Kirkcaldy, Cooper and Brown (1995). Greenberg and Baron (1995) also proposed and tested a general stressor-strain model that can be interpreted in Lazarus' framework. In this model the moderators are the cognitive appraisal leading to stress and the last column contains the strain symptoms. The model was empirically supported by a study of Sin et al. (1995). Sutherland and Cooper (1993) found that psychological ill health (anxiety, depression, stress) was primarily predicted by high levels of job demands, demanding customers, lack of social support, coping strategies and administrative tasks.

Occupational stress is an increasing important occupational health problem and a significant cause of economic loss. Occupational stress may produce overt psychological & physiological disabilities. However, it may also cause subtle manifestation of morbidity that can affect personal well-being and productivity, Quick et al. (1992). The organizational work stress is dependent on various factors. It has long been related to job satisfaction. Job satisfaction is strongly connected to wages and salary. Therefore, wages and monetary gains have an important part to play in the assessment of stress level. In this concern, various researches have been made. Steel and Warner (1990) study suggests a definite sample of government and non-government workers in different organizations at Florida and they found that employees in government sector show a greater level of satisfaction than that the employees in private sector. So, in this regard, private sector employees face more stress than that of public sector employees. It makes sense that the outcomes of occupational stress are not confined to work. As Repetti (1987) suggested, when negative affect develops as a result of stressors in one sphere, it subsequently transfers to other life spheres.

Similarly, Baldwin (1987), work to study the job security factor and its effects on stress situation and he found that public sector employees feel more secure about their jobs than that of employees in private

sector. Beehr and Newmann (1978) defined occupational role stress as, a condition arising from the interaction of people and their jobs are characterized by changes within people that force them to deviate from the normal functioning. Miles and Perrault (1976) identify four different types of conflicts. These are intra-sender role conflict, inter-sender role conflict, person role conflict and role overload. Cobb (1975) has the opinion that the responsibility load creates severe stress among workers and managers. If the individual manager cannot cope with increased responsibilities, it may lead to several physical and psychological disorders among them. Brook (1973) reported that qualitative changes in the job create adjustment problems among employees. The interpersonal relationships within the department and between the departments create qualitative difficulties within the organizations to great extent.

Rationale of Study

In the world of industrialization today employees are commonly facing greater demands and less job security, both of which are likely to be stressful, thus psychological disorders may increasingly be caused by work-related stressors. To compare the amount of occupational stress among doctors of government and private sectors by using the questionnaire developed by Pareek (1983) the results can be obtained. The main stressors observed in this regard are long duty hours, intensity of demands on doctors and sense of isolation from the family and friends.

Method

Aims and Objectives

- To analyse the level of occupational stress among doctors of government and non-government sector.
- To evaluate the impact of stress on an individual's physical and psychological health.
- To evaluate the impact of role confusion in occupational stress.

Hypothesis

Doctors of non-government sector face more occupational stress than doctors of government sector.

Operational Definition

The variable of study is occupational stress which is believed that occupational stress is associated with the aversive, unpleasant emotional state that people experience as a consequence of their work. Kyriacou and Sutcliffe (1978). Organizational role or occupational role represents an assigned position in the organization, which is defined by the expectations of the significant people. The role occupant performs in the organization to fulfil his/her expectations (Pareek, 2004). Organizational roles have an inbuilt potential for stress. Stress resulting from the occupation of an organizational role and performing or not being able to perform therein.

Instrument

We have selected the questionnaire or survey method for data collection. Occupational Stress scale was used in this research which was devised by Pareek (1983). It is a 5-point Likert scale having 25 items in the scale. According to this scale people have different feelings about their roles. Statements describing some of these feelings are given in the questionnaire. Participants have to read each statement and were asked to point out to which level they agree with each item, all items were positively phrased. The responses range from 0 (never) to 4 (very frequently). High scores indicate high levels of occupational stress, while low scores indicate low levels of occupational stress.

Sample

The sample of the present study was comprised of 60 doctors taken from the public and private hospitals of Islamabad, Pakistan. Age ranges from 30-50 years. The sample was comprised of equal number of male ($n = 30$) and female ($n = 30$) doctors. Participants were approached through convenient sampling technique.

Research Design

We used the survey method for conducting the present study. The survey is a non-experimental, descriptive research method. Surveys are useful when we want to collect data on phenomena that cannot be directly observed.

Procedure

The doctors for the present research were individually approached during office hours at their work places. After taking the informed consent, they were briefed about the purpose of the study and were requested to give their responses and not leave any question unanswered. They were told that their information would be kept confidential and would be used only for research purposes. At the end they were thanked for their cooperation.

Table 1.

The Scores Obtained by the Doctors of Public and Private Hospitals (N=60)

Mean scores for public doctors (N=30)	Mean scores for private doctors (N=30)
41	49
30	59
07	60
39	54
18	37
66	39
41	42
55	40
11	36
43	44
50	51
37	35
10	41
38	42
28	38
14	54
11	60
22	56
44	55
17	36
28	45
13	40
24	59
18	64
15	58
21	60
11	49
08	50
20	59
34	52
$\sum X_1 = 814$	$\sum X_2 = 1464$

Mean score for the public doctors is given below:

$$\bar{X}_1 = \frac{\sum \bar{X}_1}{N} = \frac{814}{30} = 27.13$$

Mean score for the private doctors is given below:

$$\bar{X}_2 = \frac{\sum \bar{X}_2}{N} = \frac{1464}{30} = 48.8$$

The mean value of occupational stress is greater for doctors of Non- Govt. sector. Hence the research hypothesis is proved.

Discussion And Conclusion

The results of the research strongly verify the hypothesis that non-government doctors experience more stress than that of government doctors. By observing and analyzing the government and private organizations, we come to know that there are so many differences related to workplace environment, job demands and security level between these two sectors. In this regard a five year follow up study of stress among nurses in government and private hospitals was made in March 2004 in Thailand, according to which the stress in nurses of private sector is more as compared to the public or government one. So, the results of this study are in accordance with our research hypothesis. A longitudinal perspective on 14 hospitals in Thailand examined sources of occupational stress, coping strategies, and job satisfaction. A sample of 200 nurses was compared to 147 nurses sampled from the same hospital wards after 5 years and revealed a significant increase in nurses' workload, involvement with life and death situations, and pressure from being required to perform tasks outside of their competence. Although nurses working in public hospitals generally reported more stress than private hospitals, surprisingly nurses' satisfaction with their job increased particularly in public hospitals, which may be attributable to age, improvements in monetary compensation, and organizational support. By our research it is concluded that the occupational stress in non-government doctors is more as compared to the government one.

Limitations

Our research is limited to only a small sample of the government and non-government doctors and only one variable of occupational stress is studied. Using this Organizational Role Stress Scale by Pareek (1983) on a large scale and taking other variables like job satisfaction along with occupational stress correlation study can also be made.

References

- Beehr, T. A., & O'Hara, K. (1987). Methodological designs for the evaluation of occupational stress interventions. *Stress and Health: Issues in Research Methodology*, 79-112.
- Cohen, S., & Edwards, J. R. (1989). *Personality characteristics as moderators of the relationship between stress and disorder*. In R. W. J. Neufeld (Ed.), *Wiley series on health psychology/behavioral medicine. Advances in the investigation of psychological stress* (p. 235–283). John Wiley & Sons.
- Cooper, C. L. & Marshall, J. (1976). Occupational sources of stress: a review of the literature relating to CHD and mental ill-health. *Journal of Occupational Psychology*, 49,11-28.
- Cooper, C. L., Rout, U., & Faragher, B. (1989). Mental health, job satisfaction, and job stress among general practitioners. *British Medical Journal*, 298(6670), 366-370.
- Selye, H. (1976). Stress without distress. In *Psychopathology of human adaptation* (pp. 137-146). Boston, MA: Springer.
- Selye, H. (1956). *The Stress of Life*. New York :McGraw-Hill.

Tyson, P. D., & Pongruengphant, R. (2004). Five-year follow-up study of stress among nurses in public and private hospitals in Thailand. *International Journal of Nursing Studies*, 41(3), 247-254.