

## Occupational Stress - A Study with Reference to Staff Members in Technical Education Institutions

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### Abstract

Occupational stress is one of the biggest stressors in modern life. Stress occurs in a wide range of work circumstances but is often made worse when employees feel they have little control over work processes as well as little support from supervisors and colleagues. However, pressure at the workplace is unavoidable due to the demands of the contemporary work environment. An effort has been made in this study to analyse the stress level of various categories of staff in technical education institutions. Moreover, suggestions are made to control occupational stress and improve job performance.

### Key Words

Occupational Stress, Stress Coping Strategies, Technical Education Institutions, Psychosomatic Disorders

### INTRODUCTION

In the recent years, the inter-institution competition has increased manifold due to tremendous boom in the field of education. It has resulted into pressure on both the teaching and non-teaching staff by the management of these institutions to get maximum output and increased profitability, thus causing stress among the staff members. Stress is concerned as a fundamental factor in psychosomatic troubles, absenteeism, grievances, worker's reward/incentive claims, lower efficiency, poor productivity, employee stealing, low spirits, and turnover. The stress perceived at workplace is not only left in the organization, rather it has a spillover effect at family life. The sources for workplace stress are numerous including physical

situation, job design, work responsibility, technology, relationships with co-workers, time pressures, job insecurity etc.

A number of research studies have been undertaken with regard to occupational stress of teaching and non-teaching staff and its relationship with other factors in past several years. Individuals of all professions are perennially exposed to work stress cutting across cultures (Mokdad, 2005). Amongst teachers, the combination of long working hours, insufficient pay, role ambiguity, poor teaching facilities, lack of social recognition, poor organizational climate, strained relationship with colleagues make a stressful recipe. Ahsan, Abdullah, Fie and Alam (2009) identified stress inducing factors in academic staff which include work overload, homework interface, role ambiguity and performance pressure. In support of stress on academic staff, Abouserie (1996) found workload and conducting research as factors of stress. Additional sources of academic stress identified in studies by Rutter, Herzberg and Paice (2002) showed high self expectation, securing financial support for research, insufficient development in the field, inadequate salary, manuscript preparation, role overload, conflicting job demands, slow progress on career advancement, frequent interruptions and long meetings as causes of stress among academic staff. Nosheen & Bano (2012) indicated that significant gender and institutional differences among public and private sector university teachers were on occupational role stress, whereas a non-significant difference was found between females of both sectors and men experienced slightly high levels of stress than women.

Research on occupational stress among academicians has been started only in last few years, and in India it is still sparse especially in the field of technical education. Now, Stress management has caught the eye of not only administrators in public sector or private sector but also the social activists to maximize the productivity. The endeavour is to educate the individuals through various techniques so that they are better equipped to face the challenges of life and tackle the problems without feeling the impact of stress. Although excess stress is apparently undesirable but the total absence of stress can also lead to unanticipated consequences.

### **OBJECTIVES**

The objectives of the study are as follows :

1. To analyse the stress level of various categories of staff in technical education institutions of Punjab.
2. To suggest some specific workable measures for improvement of job performance and to control occupational stress.

## RESEARCH METHODOLOGY

The present study has been primarily designed to devise certain techniques to manage occupational stress among employees working in technical education institutions of Punjab. To achieve this aim, it is required to understand whether employees in teaching and non-teaching departments and males and females differ on the quality and quantity of occupational stress. To make this exploration more reliable, data for different variables was collected from 300 participants belonging to different departments of technical education institutions of Punjab. All four regions of Punjab have equal representation in the sample. Out of 300 participants, 150 participants were from teaching profession and 150 participants were from non-teaching departments. To control confounding of gender, equal number of males and females were from each department. Data was collected with the help of several questionnaires and rating scales measuring one or more psychosocial aspects related to occupational stress.

The instrument used in this study includes Holmes and Rahe Stress Scale. The Holmes and Rahe Stress Scale is a list of 43 stressful life events that can contribute to illness. Their results were published as the Social Readjustment Rating Scale (SRRS), known more commonly as the Holmes and Rahe Stress Scale. The scale is based on the observation that important life changes, whether positive such as marriage or negative such as death of a close friend, all induce stress. In this scale, each life event is assigned a value in arbitrary "life changing units" chosen to reflect the relative amount of stress the event causes. To measure stress according to the Holmes and Rahe Stress Scale, the numbers of "Life Change Units" that apply to events in the past year of an individual's life are added and the final score will give a rough estimate of how stress affects health. Total of 150 or less is good, suggesting a low level of stress in one's life and a low probability of developing a stress-related disorder. If the score is 300 or more, almost 80% chance of getting sick in the near future. If the score is 150 to 299, the chances are about 50%.

## DATA ANALYSIS

The data was collected with the help of Holmes and Rahe Stress Scale measuring one or more aspects related to occupational stress and thus measurement of adaptation has been found. The data was analyzed using descriptive statistics and significance was evaluated using t-tests and two way ANOVA. Table 1 presents comparison of employees belonging to teaching and non-teaching staff of technical institutes of Punjab. As shown, on Measurement of Adaptation(MOA) which measures stress level of the employees, non-teaching staff score more ( $M = 179.63$ ,

SD = 59.30) as compared to teaching staff (M = 175.16, SD = 59.32). As per the findings of this study, the sample from non-teaching staff is experiencing more stress as compared to teaching staff but the difference between both the groups came out to be statistically non-significant  $\{t(298)=0.65, p<0.05\}$ . It is imperative here that issues related to stress level among non-teaching staff must be dealt effectively so that the stress level of non-teaching employees can be reduced and their productivity as well as general health can be promoted.

**Table 1**  
Comparison of Teaching and Non-Teaching Staff with regard to Measurement of Adaptation

Variable	MOA
Mean Non-Teaching	179.63
Mean Teaching	175.16
Std. Dev. Non-Teaching	59.30
Std. Dev. Teaching	59.32
T-Value	0.65
Df	298.00
P	0.51

Table 2 presents comparison of male and female staff of technical institutes of Punjab on the variable assessed in the study. As shown, on Measurement of Adaptation (MOA) which measures stress level of the employees, males and females scored almost equally (M=177.09, SD=58.44). As per the findings of this study, the sample from male staff is experiencing equal stress as experienced by female staff. The difference between both the groups came out to be statistically non-significant  $\{t(298)=0.09, p<0.05\}$ . Overall, it can be observed from the Table 3 that gender has not been found to be a significant variable in occupational stress. It is imperative here that issue related to stress level among male and female staff can be dealt with equally.

**Table 2**

**Comparison of Teaching and Non-Teaching Staff with regard to Measurement of Adaptation**

Variable	MOA
Mean Non-Teaching	177.09
Mean Teaching	177.69
Std. Dev. Non-Teaching	58.44
Std. Dev. Teaching	60.26
T-Value	-0.09
Df	298.00
P	0.93

Further exploration of the data lead the researcher to a very interesting finding that however no main effect of gender has been observed in the result but gender is interacting with profession of the sample in significant manner i.e. there is significant interaction effect between profession and gender for stress. As in Table 3, there is a large difference between males and females on stress levels of employees when observed separately among non-teaching and teaching staff. Among non-teaching staff, females are experiencing less stress ( $M=175.77$ ,  $SD=60.34$ ) than males ( $M=183.48$ ,  $SD=58.55$ ), however the scenario is different in teaching profession wherein females are experiencing more stress ( $M=179.61$ ,  $SD=60.50$ ) than males ( $M=170.70$ ,  $SD=59.32$ ).

**Table 3**

**Interaction of Profession and Gender for Stress Level of Employees**

Profession	Gender	Mean	Std. Deviation	N
Non-Teaching	Females	175.7733	60.34710	75
	Males	183.4800	58.38557	75
	Total	179.6267	59.30102	150
Teaching	Females	179.6133	60.50952	75
	Males	170.7067	58.17629	75
	Total	175.1600	59.32337	150

Table 4 presents summary of ANOVA for the effect of profession and gender on stress level of employees, which clearly depicts that neither main effects nor interaction effect of profession and gender was found to be statistically significant.

**Table 4**  
**Effect of Profession and Gender on Stress Level of Employees**

Source of Variance	Type III Sum of Squares	df	Mean Square	F	Sig.
Profession	1496.333	1	1496.333	.425	.515
Gender	27.000	1	27.000	.008	.930
Profession * Gender	5175.053	1	5175.053	1.468	.227
Error	1043143.200	296	3524.132		

### CONCLUSION & SUGGESTIONS

The primary aim of the present study is to analyse the stress level among teaching and non-teaching staff of technical institutes of Punjab. As per the findings of the study, the sample from non-teaching staff is experiencing more stress as compared to teaching staff, but the difference between both the groups came out to be statistically non-significant  $\{t(298)=0.65, p<0.05\}$ . Participants from both kinds of jobs experience almost equal amount of stress, but the nature of stressors may vary in both types of jobs. Non-teaching staff may experience stress arising from the management, overwork load, poor salary, monotonous jobs etc. and among teachers the combination of long working hours, insufficient pay, role ambiguity, lack of social recognition, poor organizational climate and unhealthy relationship with colleagues may increase their stress.

Moreover, effect of gender on stress level of teaching and non-teaching staff of technical institutes of Punjab was also assessed. As shown in the findings, the sample from male staff experienced equal stress as experienced by the female staff. The difference between both the groups came out to be statistically non-significant  $\{t(298)=0.09, p<0.05\}$ .

Further exploration of the data lead the researcher to a very interesting finding that however no main effect of gender and profession has been observed in the results but gender is interacting with profession of the sample in significant manner i.e. there is a significant interaction effect between profession and gender for stress. There is a large difference between males and females on stress levels of employees when observed separately among non-teaching and teaching staff.

We, therefore, conclude that all the teaching, non-teaching, male and female staff members experience moderate occupational stress and need to be trained to cope up with stress, but males among teaching staff and females among non-teaching staff require immediate and extensive stress management training as

compared to their counterparts. Therefore, there is a dire need to reduce occupational stress among employees. It can be achieved in two ways; through stress management exercises or by bringing changes in organizational setup. Individual counseling can be provided to employees with both work and personal problems. No single strategy can be useful alone, therefore, a variety of techniques involving stress management and organizational change is often the most useful method for avoiding stress at job. Thus, this study would help in devising specific strategies to deal with occupational stress among the employees. The management of technical institutions can, therefore, redefine and reframe their stress management strategies according to the needs of their teaching and non-teaching staff members.

### References

- Abousierie, R. (1996), Stress, Coping Strategies and Job Satisfaction in University Academic Staff, *Educational Psychology*, 16 (1) : 49-56.
- Aggrawal, Y. P. (2002), *Statistical Methods*, Sterling Publishers' Private Limited, New Delhi.
- Cooper, C. L. (Ed.) (1998), *Theories of Organizational Stress*, Oxford, New York.
- Mokdad, M. (2005), Occupational Stress Among Algerian Teachers, *African Newsletter on Occupational Health and Safety*, 15, 46-47.
- Nosheen, S.; and Bano, Maher (2012), Occupational Role Stress Among Public and Private University Teachers, *Putaj Humanities and Social Sciences*, Vol. 19.
- Rutter, H.; Herzberg J.; and Paice, E. (2002), Stress in Doctors and Dentist who Teach, *Medical Education*, (36) : 543-549.
- Zeidner, M.; and Endler, N. S. (1996), *Handbook of Coping*, John Wiley, New York.

