The Empirical Study of Work Environment and Job Stress among Technical Faculty

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Abstract: *The purpose of the study is to explore the faculty perception about their work environment and the impact on job stress. Stress is a term commonly used to describe feelings of tensions or exhaustion usually associated with work overload or overly demanding work. An individual's daily life stress is a natural phenomenon. In the workplace, it can serve to enhance the individual's performance, satisfaction, motivation, and personal achievement. Samples of 120 faculty members were selected from different private engineering colleges in Nagpur, Maharashtra. It is a descriptive research study and the data was gathered by using a standardized questionnaire. The data gathered was analyzed through descriptive and inferential statistics by using SPSS 20. The findings of the study show that the male faculty experienced more stress when compared to the female faculty in private engineering colleges. Higher technical Institutions should focus not only on identifying the Job Stress factors but also try to manage their emotional abilities through a conducive work environment which will enhance the job satisfaction. This research will benefit the faculty in coping with work-related stress.*
Keywords: *Work environment, Job stress, Higher education, Engineering faculty.*

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I. Introduction

Over the past few decades, stress is emerging as an increasing problem in organizations. Stress is vigorous state in which a person is confronted with an opportunity, demand, or resource related to what the individual wishes and for which the outcome is perceived to be both vague and vital. Stress as the force, pressure, or tension subjected upon an individual who resists these forces and attempts to uphold its true state and also it is an individual's reaction to an environmental force that effects an individual performance. The term stress is basically from physical science where it means the force placed upon an object to cause damage, bending, or breaking. In case of human beings stress is often used to describe the body's response to demands placed upon it, whether these demands are favorable or unfavorable (Selye, 1936). Stress as a situation which will force a person to deviate from normal functioning due to the change (i.e. disrupt or enhance) in his/her psychological and/or physiological condition, such that the person is forced to deviate from normal functioning (Beehr and Newman, 1978). Workload stress can be defined as reluctance to come to work and a feeling of constant pressure accompanied by the general physiological, psychological, and behavioral stress symptoms (Division ofHuman Resource, 2000).

The HSE (HealthSafety Executive Uk) defines stress is an undesirable response people have to tremendous pressures or other types of demands placed upon them. It arises when they worry they cannot deal with. Some stress can be good, and some can be bad. HSE distinguishes between stress and pressure. Pressure is seen as positive and something that actually helps improve our performance We all needs certain pressure on us to perform work in given point of time.However, the problems arise when the sources of pressure become too frequent without time to recover, or when just one source of pressure is too great for us to cope with. Stress can be understood more comprehensively as, it is a condition which happens when one realizes the pressures on them, or the requirements of a situation, are wider than their recognition that they can handle.

Stress has a positive effect on employees up to certain limit when it exceeds above the level of employee expectations it leads to dissatisfaction. Anything that causes stress is called a stressor. "Stress is a condition which happens when one realizes the pressure on them or requirements of the situation are wider than they can handle, and if these requirements are huge and continue for a long period of time without any interval, mental, physical or behavioral problems may occur." Job stress is one of the most important workplace health risk for employees in developed and developing countries (Paul, 2002; Danna and Griffin, 2002). There are a number of workplace factors, called job stressors that make jobs stressful and difficult for a number of employees in services as well as manufacturing industries. Additional stressors concern interpersonal

relationships at work, such as conflicts with the behavior of supervisors, conflicts with colleagues, conflicts with subordinates and conflicts with management policies.

II. Review of Literature

Stress is an unwanted reaction people have to severe pressures or other types of demands placed upon them. A huge and multi fields literature points a lot of key factors such as work environment, management support, workload etc. in determining the stressful the work can be and its effect on employee physical and mental health, (Ganster&Loghan, 2005). According to (Anderson, 2002) work to family conflicts is also a predecessor which creates stress in employees of an organization. Job stress has been also viewed as dysfunctional for organizations and their members. Job-related stress can be mostly immobilizing because of its possible threats to family functioning and individual performance. Job-related stress can create a difference between demands on families and the ability of families to provide material security for them (McCubbin&Figley, 1983). While there is a significant body of research which deals with work and family there is relatively little research (Jacobson, 1987). perceived job insecurity and marriage and family life (Buss &Redburn, 1983). Stress condition which happens when one realizes the pressures on them or the requirements of a situation, are wider than their recognition that they can handle, if these requirements are huge and continue for a longer period of time with an outany interval, mental, physical problems may occur, (Health &Safety Executive UK).

Stress exists in every organization either big or small the workplaces and organizations have become so much complex due to which it exists, workplace stress has significant effects on the employee's job performance, and the organizations in Uk are trying to cope with this scenario, (R. Anderson, 2003). Eleven forces are used as antecedents of stress by researches Overload, Role vagueness, Role conflict, Responsibility for people, Participation, Lack of feedback, Keeping up with quick technological change, Being in an innovative role, Career growth, Organizational structure and environment, and Recent episodic events. In every organization and at every level of management and workers an elevated average level of stress is to be found which mostly has an effect on employee"s job satisfaction.

According to (Rose, 2003) employees have a tendency towards the high level of stress regarding time, working for longer hours which reduces employees urge for performing better. Management support helps in reducing or increases stress in employees (Stamper & Johlke, 2003). (Beehr, Jex, Stacy & Murray, 2000) found the relationship between occupational stressors and the performance of employees of an organization as well as it can affect the employees psychologically. (Jamal, 1984) studied an association between job stress and job performance between managers and blue-collar employees. Stress on the job can be stated as the outcome of an individual due to the working environment from which he feels unsecured. Different relationships are projected between job stress and performance: U-shaped and curvilinear, positive linear, negative linear and no relationship between the stress and performance. If the organization or management does not appreciate its employees for their hard work or contribution toward the organization creates stress. (Ivancevich& Donnelly, 1975) studied the link between anxiety stress with satisfaction and performance of employees, that lower anxiety stress improves the performance of employee"s which he studied in the different managerial level of an organization.

Home-work interface is important for the workers to reduce the level of work-related stress. (Lasky,1995) demands associated with family and finances can be a major source of extra-organizational stress that can complicate, or even precipitate, work-place stress. Russo &Vitaliano (1995) argued that the occurrence of stressors in the workplace either immediately following a period of chronic stress at home, or in conjunction with other major life stressors, is likely to have a marked impact on the outcome. Several studies have highlighted the deleterious consequences of high workloads or work overload. (Wilkes et al., 1998) work overloads and time constraints were significant contributors to work stress among community nurses. A study in the UK indicated that the majority of the workers were unhappy with the current culture where they were required to work extended hours and cope with large workloads while simultaneously meeting production targets and deadlines (Townley, 2000). Several studies have tried to determine the link between stress and job satisfaction. Job satisfaction and job stress are the two hot focuses in human resource management researchers. The stress itself will be affected by a number of stressors. Role conflict is important to job stressor that is faced due to the multiple roles (Butler & Constantine, 2005). Role conflict decreases job satisfaction among both men and women (Coverman 1989). Role conflict involves a contradiction in expectations of an employee sales position.

Job stress is due to organizational aspects, long work hours, lack of organizational support and organizational change lack of support from supervisors and colleagues, and conflict with demands and pressures. As stress affects the performance of the people working in any type of organization, same is the case with air force military pilots. job satisfaction has been found a significant relationship between job stress. Organization factors such as workload and working condition are negatively related with job satisfaction (Stamps & Piedmonte, 1986). The lack of satisfaction can be a source of stress, while high satisfaction can

lighten the effects of stress it means that both of job stress and job satisfaction are interrelated (Fletcher & Payne 1980). Cummings and Cooper (1998) point out the difficulty to develop a coherent theory of stress, as different disciplines (medicine, psychology, sociology, management) and research methodologies have looked into this area.

Too much pressure, however, may have stress-related implications such as employee mental alienation and/or impact on individual performance also, destruction of team spirit, dissatisfaction with or absence or even resignation from work can be manifestations of work stress. While stress is inevitable, it constitutes a real threat to the quality of life for employees not to mention its link to an increased risk of morbidity and mortality (Siegrist, 1998).

Objectives of the Study
1. To find out the work environment factors causing job stress.
2. To explain how the work environment factors influencing the job stress of the employees working in higher education institutions.

Hypothesis
H_0: There is no significant relationship between work environment and job stress.
H_1: There is a significant relationship between work environment and job stress.

III. Methodology

In this survey, respondents have informed the purpose of conducting this study and assured anonymity. The study was conducted on a sample of 120 individuals who is working as a faculty in private engineering colleges in Nagpur, Maharashtra. 60 respondents were females and 60 respondents were male. The sample consisted of faculty with the same occupation with different designations, namely, assistant professors, associate professors, and professors. To test the hypotheses descriptive statistics, correlation and ANOVA were conducted.

The aim of the present study is to understand the influence of work environment dimensions on job stress among teaching staff. The researchers administered a questionnaire on individual participants to fill the items manually with characteristics of age, gender, and work experience to check their level of job stress. Sample items are: my supervisor/boss motivates employees to work together as a team, Compare with other organizations employee benefits here are better, I have a good relationship with the people I work; Management here sees to it that there is cooperation between the departments. The research utilized convenient sampling method that is considered appropriate for the exploratory studies underlying further research (Coolican, 2004). All the items from the questionnaire were rated on an on a 5-point Likert type scale ranging from 1- strongly disagree to 5-strongly agree, 4- agree, 3 -undecided, 2-disagree.

IV. Data analysis and Results
Table 1: Descriptive Statistics

Category	Frequency	Percentage
Gender		
Male	60	50
Female	60	50
Age		
Under 30	26	21.6
31-40	37	30.9
41-50	40	33.4
51 and above	17	14.1
Qualification		
UG	30	25
PG	76	63.3
Ph.D	14	11.6
Work Experience		
0-6 Years	42	35
7-15Years	55	45.8
Above 16 Years	23	19.1

Table 1 explains the demographic data of the sample. The majority of the respondents were male 60 (50%), and female 60 (50%). Respondents age under 30 years 26 (21.6%), 31-40 years 37 (30.9%), 41 -50 years 40 (33.4%), 51 and above years 17 (14.1%). Respondents Qualification in UG were 30 (25%), PG 76 (63.3%),

and Ph.D. 314(11.6%). Work experience from 0 – 6 years were 42 (35%), 7 – 15 years 55 (45.8%), and Above 16 Years 23 (19.1%).

Table 2: Mean and standard deviation

Dimensions	Gender	Mean	SD
Age	Male	42.79	10.58
	Female	38.49	9.26
Workexperience	Male	8.70	7.25
	Female	6 .83	5.73
Work Environment	Male	28.06	5.68
	Female	24.71	4.91
Job Stress	Male	23.52	6.36
	Female	20.22	5.30

Table 2 explains the means and standard deviation of the overall respondents. Age male (Mean = 42.79, *SD* = 10.58) and female (Mean = 38.49, *SD* = 9.26) work experience of male (Mean = 08.70, *SD* = 7.25) and female (Mean = 6.83, *SD* = 5.73). Male Faculty were more satisfied with working environment (Mean = 28.06, *SD* = 5.68) rather than female faculty (Mean = 24.71, *SD* = 4.91). Male faculty were more stressed in their job (Mean = 23.52, *SD* = 6.36) than the female faculty (Mean = 20.22, *SD* = 5.30).

Table 3: t-test to test hypothesis

	JS	*WE*
Mean	6.8833	16.9500
Variance	4.2552	73.8798
Observations	120	120
Pearson Correlation	-0.2572	
Hypothesized Mean Difference	0	
df	119	
t Stat	-11.8053	
P(T<=t) one-tail	0.0000	
t Critical one-tail	1.6578	
P(T<=t) two-tail	0.0000	
t Critical two-tail	1.9801	

JS=job satisfaction, WE=work environment

There is a significant difference between male faculty and female faculty. Male (*M* = 23.52, *SD* = 6.36) and Female (*M* = 20.22, *SD* = 5.30), *df* (119), *t* =-11.80, *p* = 0.000. Since p value is less than 0.05 (P < 0.05) we can say that there is a significant difference between male and female faculty in their perception of the work environment and its impact on job stress.

V. Limitation and future research

Although this study has provided some interesting findings for colleges and higher educational institutions universities that, how faculty perceives their work environment which has an impact on job stress, there are some limitations of this research. Primary, this research is only conducted in few engineering colleges within the same geographic area so the findings may differ if the sample is altered. Subsequent, this study conducted at a single point of time so the findings also may change if the study was conducted at some other point in time. Further, the fact that the study is cross-sectional in nature may suffer from some assumptions which can be overcome in a longitudinal study. Due to the limitation of this research, we recommend conducting further research in terms of longitudinal study with different geographic area and sample. Therefore, this research also recommends exploring other potential variables which have an effect on faculty job stress.

VI. Conclusion

The purpose of the present study is to understand the relationship between the work environment and its impact on job stress. Results revealed that male faculty is more stressed in their job when compared with the female faculty, this shows that female faculty is satisfied with their work environment. Management plays a crucial role and their support helps in reducing the stress in employees (Stamper &Johlke, 2003). Stress in work environment reduces the intention of employees to perform better in jobs with the increasing level of stress the employees thinking to demoralize and his tendency to work well also decreases (Rose, 2003). Management has to put efforts to decrease the level of job stress in faculty and also provide supportive and healthy work environment to the faculty which acts positively in decreasing work-related stress in employees.

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