
Occupation Stress and Its Effects on Employee Performance in It Sector

Nijina Jose,

Ph.D Research Scholar, Department of Commerce, Annamalai University, Annamalai Nagar
– 608 002

Dr. K. Sundar,

Professor, Department of Commerce, Annamalai University, Annamalai Nagar – 608 002

Abstract:

In any organization occupational stress and its effects over the performance of employees has been identified as the prime area of concern. The stressful work environment and related outcomes are evident in IT industry, since it is a fast paced service sector. In this study the main focus is on the level of Occupation stress inferred by the IT employees and its impact on their performance. 138 IT employees from various companies took part in this survey. Questionnaire is used as the survey instrument and the instrument comprises of three sections. . The sampling technique followed is of two stage sampling, in the first stage, for selecting the IT Organisation Purposive sampling method is adopted. In the second stage, for selecting the respondents within the IT companies, Simple random sampling method is adopted. Descriptive measures, Multiple regression analysis and One-way ANOVA are the statistical tools used to establish the objectives. SPSS v23 is used to compile the data and perform data analysis. Reliability of the study is found by assessing Cronbach's Alpha value and it was found to be 0.828 (82.8%). It is noted that Career ambiguity followed by Role in the organization and Essential factors of the job influences the Occupation stress more among the IT employees. It is inferred from the results that Role in the organization, Relationships at work, Career ambiguity and Organizational structure and environment has significant negative effect on Employee performance. Significant influence of age, annual income and experience on Employee performance is noted.

Keywords: occupational stress, employee performance, IT industry

Introduction

The phenomenon of stress depends upon the individuals and their level of tolerances, thus stress is distinctive in nature. Some people have the ability to tolerate and thereby having a high level of stress tolerance. Such people can have the ability to face several stressors in the organization and able to perform better. However, some people perform well unless and until they are subject to a stress level so that it activates and boost them to do better with their best efforts. Yet, they are few others who have very low level of stress tolerance and become paralyzed when they are faced with commonly experienced factors in their day to day life which appears injurious to them. Stress is nothing but an adaptive response of an individual, mediated by distinctive characteristics or a psychological phenomenon which is a resultant of any external action, stimuli, situation or event that places psychological or special demands over an individual. The specific action, stimuli, situation or events are said to be stressors that place an individual to react accordingly, and hence they are said to be antecedents of stress or stressors.

Managers in the organization acknowledge occupational stress as a critical issue and the occupational stressors in the organization leads to organizational inefficiency, absenteeism due to illness, employee turnover, decreased quality and quantity of practice,

lower job satisfaction and increased health care costs. Occupational stress has a greater impact on employee performance. Occupational stress is both physical and mental condition of an individual in which it affects the individual performance, productivity, effectiveness, their personal health as well as work quality. Those employees who are the victims of occupational stress experiences decreased quality of work and performance. Thus, the harmful effects and costly concerns of occupational stress indicate the need for approaches to be developed and adopted to limit the stressors within the organization. Those organizations that does not willing to adopt and follow the strategies may increase the stress, that lead the employees to find better opportunities in some other organizations. In developing countries, the impact of stress due to overwork, long hours of work, and work strengthening leads to major devastating effect on the organizations. However, the process of downsizing, restructuring, and re-engineering has made the companies to become lean, yet it is not possible without incurring greater costs. Since the companies have become lean without building any 'muscle', employees are faced with increased stress and uncertainty, similar to the situation of having diet without exercise. Though the organization weighs less, but the fat percentage which exhibits high stress, less optimal productivity and low morale of employees has really augmented. In fact, few companies have become anorexic as well.

Employee performance at his/her workplace is the major point of concern of any organization regardless of all factors and conditions. Performance of a job by an individual can be observed as an activity performed by the individual to do a task assigned to them successfully, with respect to the normal constraints of using available resources. Employees are considered as an asset to the organization and hence a good performance of employees result in achieving good performance of the organization as well, thus making the organization successful and effective and the vice versa. This leads to further investigation about these moderators and found a strong correlation between organizational commitment and work behaviour against self-reported and for supervisory report over performance. The problem arises only when the organizations started to perceive that they are performing well already at their best level and also with greater efficiency, and moreover there is no need for organizational improvement further. Hence considering all these facts, the barriers should be addressed and the organization should be able to overcome those barriers, if not, it may result in underdeveloped competencies which ultimately lead to organizational ineffectiveness. The employee performance determines ultimate success or failure for any organization. Among the measures of job stress and employee performance, four types of relationships were proposed to exist at a conceptual level. The first relationship is a negative linear relationship that exists between productivity and stress, since productivity decreases with increase of stress level. It is also evident in some cases that productivity increases due to stress, thereby indicating a positive linear relationship among the two. Thirdly, mild stress among the employees may increase the productivity initially till it reaches the level of peak and then it start to decline as the employees descends into a distress state of mind, thus showing a U-shaped or a curvilinear relationship.

After liberalization, IT industry showing tremendous growth and offering very high salary packages to the employees. Even though IT industry quite suffered during recession, but after 2010, again IT industry tries to come back. Yet, IT companies offer world class infrastructure and facilities like canteen, transportation, hostel accommodation, female restrooms, creche facility and so on making the worklife comfortable. Besides, most of the software companies deal with international clients and there exist a transparent and participatory environment among majority of MNC's. Thus, it provides a relaxed environment for the employees. The companies show minimum biasness as they thrive on technical competence as it is measurable, and hence the performers flourish in open environment. There are chances for the employees to go abroad as well. Above all, such industry exhibits best Work Life Balance techniques like Flexi-hours, Creche facility, work from home facility and so on in which lack of these may results in increased stress level among the employees as he or she is unable to balance both their work as well as home. Apart from this, some MNC's organizes time to time family gatherings, child activities, yoga programs etc.

Sources of Occupational Stress

In an employee's work life, many activities that take place within the organization may leads to occupational stress. It is a psychological stress which can have a greater impact on both physical and mental condition of an employee. The following are the various occupational stress sources;

- Harmful Work Environment
- Less positivity of workload
- Isolation from Masses
- Duration of working Hours
- Role Ambiguity and Role conflict
- Obstacles in Career Development
- Cold relations with directors and colleagues
- Social control differentials
- Harassment practices
- Organizational climate change

All these sources together create a situation leading various types of stress in an employee who works in an organization. This study includes various selected occupational stress factors from these sources including job organizational, environmental and interpersonal relations stress factors. Hence, it is essential to handle these stress factors properly, else, then it may leads to severe consequences.

Types of Occupational Stress

In the life of any individual, Occupational stress is regarded as one of the major stresses and hence it is expected that the employee should be able to balance both their work life as well as personal life in order to avoid stress from work. Occupational stress can be faced in the form of:

- a. **Situational Occupational Stress:**In a particular situation faced by the employee, he or she experiences burnout in this situational occupational stress. However, after

encountering the situation, the level of stress gets reduced or removed from the mind of an employee.

- b. **Anticipatory Occupational Stress:** This type of stress is based on the employee anticipation in an organization. The anticipation of an employee may be about any upcoming event in an organization. For example, the employee may experience anticipatory occupational stress when he or she has to do presentation in a short while.
- c. **Encounter Occupational Stress:** When an employee interact with their colleagues, at that time employee may face such stress. The encounter employee stress is related to stress factors of interpersonal relations in which occupational stress in this situation is based upon the interaction skills of the employee in the workplace.
- d. **Time-based Occupational Stress:** This type of stress is due to the time factor in which it may be related to the reaching the job or leaving a job, completing the given task etc. It is necessary for the employee to complete the task given in allocated time duration, thus results in pressure leading to stress of an employee.

Review of literature

Latha and Panchanatham (2007) investigated the implications of job stressors over job performance among 40 software professionals and identified that work load as well as long working hours were the major stressors among them. In addition, around 50% of the professionals didn't feel stress by the promotional chances and working conditions. The study inferred that IT sector offered better working environment/conditions. **Prabhavathi (2009)** examined the work stressors and their influence over job performance among IT personnel. The study results revealed that majority (73.5%) of IT professionals encountered medium level of stress. The factors that lead to stress among them are complexity of information, workload, communication and technology. The job related stress implications include dissatisfaction, lowered service, adverse effect on both physical and mental health of the employees. **Arun Vijay (2013)** studied work related musculoskeletal health disorder among the IT employees in India. The findings revealed that 59% of the IT professionals suffer with neck pain, while 25% of them have low back pain, 14% of them encounter wrist and hand pain, and 13% of them faces shoulder pain. **Manish A. Prasad et al., (2014)** investigated on the prevalence of health disorders and also focused to assess the KAP (Knowledge, Attitude and Practices) among the software employees in Nagpur. The study result showed that 83% of the employees suffered with various health issues such as back ache, visual symptoms, body ache and headache. Around 71% of the software professionals aware of health problems associated with long hours of computer usage and in fact, only very few of them stated that they had a habit of exercising regularly. **Geeta Kumari et al. (2014)** points out the level of stress encountered by the software employees in HCL. The study sample size is 100 and the sampling method employed for the study is random sampling method. When the employees in HCL are asked how often they feel stressed while working, 98 out of 100 stated that they feel stressed daily in terms of physically, emotionally or mentally. Among 100 employees, 16% of them stated that they work for 4-6 hours a day, 32% of them work for about 6-8 hours a day, 30% of them work for 8-10 hours, while remaining 22% of them stated they work for

10-12 hours daily. Regarding the overtime they work, 28% of the employees between the age group 20-29, stated they always do overtime, 54% of them stated often, while 18% of them stated they do overtime rarely. The study also focused on few other aspects related to job satisfaction. **Minali Dutta (2015)** studied occupational stress and level of job satisfaction among software professionals in Bangalore. The findings showed that 60% of middle level professionals' experiences higher job stress level and low job satisfaction. Similarly, 70% of married professional experiences more stress and low job satisfaction, while 85% of the software professionals encountered depression, anxiety and loneliness. **Rathore, Shubhangini & Ahuja, Vandana. (2015)** analyzed the various factors that lead to organizational stress and also focused on the role of demographic factors on role stress among the IT professionals in India. Data were collected among 250 employees from the Delhi NCR region. Using ORS scale, role stress has been measured which includes ten dimensions of role stress which are measured with 50 items. The findings showed that there is a significant impact of demographic factors over role stress among the Indian IT professionals. **Sabbarwal et al. (2017)** studied the causes of stress among the IT employees and this study figures out the impact of stress on both physical and psychological conditions of IT professionals. This study also focused on the measures to reduce stress through stress management programs implemented by few selected IT industry. The results revealed that there are several causes for the stress of an employee irrespective of the efforts made to lower the occupational stress among IT professionals. The study points out the fact that majority of the professionals experience both physical and psychological stress because of heavy workload. **Liaquat et al. (2020)** identified the factors that cause stress among the employees of Software Development Companies: A Case of Sindh Province. A structured questionnaire was employed to collect primary data from them. Around 156 questionnaires had been distributed in which only 136 questionnaires were used for analysis since they were complete in all aspects. The study revealed that employees are stressed when they are bombarded with heavy work load. Some of the reasons for stress among the employees include insufficient salary, politics in workplace, role ambiguity, and lack of career development opportunities. On a contrary, meeting deadlines have insignificant effect on the level of stress among the employees working in Software Development Companies.

Objective of the Study

1. To study the level of Occupation stress among the IT employees.
2. To assess the effect of Occupation stress factors on performance of IT employees.
3. To ascertain the influence of demographic variables on performance of IT employees.

Hypotheses of the study

H₀1: There is no significant impact of occupation stress factors on Employee performance

H₀2: There is no significant influence of demographic variables on Employee performance in IT industry

Methods and Sample selection

In this study the main focus is on the level of Occupation stress inferred by the IT employees and its impact on their performance. 138 IT employees from various companies took part in this survey. This study falls and analytical and descriptive type. Questionnaire is used as the survey instrument and the instrument comprises of three sections. First section covers the demographic details of the respondents, whereas the second covers the Occupation stress factors which covers the scales pertaining to Essential factors of the job, Role in the organization, Relationships at work, Career ambiguity, Organizational structure and environment, Home/work interface. Third section comprises of scales related to Employee Performance. The sampling technique followed is of two stage sampling, in the first stage, for selecting the IT Organisation Purposive sampling method is adopted. In the second stage, for selecting the respondents within the IT companies, Simple random sampling method is adopted. IT employees were selected irrespective of their age, gender, education, experience and annual salary. Descriptive measures like mean and standard deviation is used to study the level of occupation stress inferred by the IT employees. Multiple regression analysis is used to find the effect of Occupation stress factors on Employee performance. One-way ANOVA is used to identify the influence of demographic variables on Employee performance. SPSS v23 is used to compile the data and perform data analysis.

Results and Discussion

Reliability of the study is found by assessing Cronbach's Alpha value and it was found to be 0.828 (82.8%). A sample of 138 IT employees was selected for the study. It is noted that 36.2% of the respondents are having age between 30 to 40 years, 54.5% of them are male and 45.5% of them are female, 42.8% of the respondents are graduates, 59% of the respondents were living as single, 25.7% of the respondents are having an experience of 7 to 10 years and 33.8% of the respondents are getting an annual salary of Rs. 5 to 7.5 lakhs. Table-1 presents the perception of the IT employees on Occupation stress factors of stress inferred by the IT employees.

Table 1: Perception of Occupation stress factors

Occupation stress factors	Mean	SD
Essential factors of the job	3.43	0.763
Role in the organization	3.47	0.741
Relationships at work	3.33	0.923
Career ambiguity	3.88	0.961
Organizational structure and environment	3.23	0.792
Home / work interface	2.87	0.912

Source: Primary data

Table 1 depicts the perception of the IT employees towards the Occupation stress factors. It is noted from the mean values that the IT employees are inferring more stress due to Career ambiguity (3.88). The IT employees felt moderate level of stress through Essential factors of the job (3.43), Role in the organization (3.47), Relationships at work (3.33) and Organizational structure and environment (3.23). However the respondents agreed that they are not facing much stress through Home / work interface (2.87). It is

concluded Career ambiguity followed by Role in the organization and Essential factors of the job influences the Occupation stress more among the IT employees.

Multiple Regression Analysis was conducted by taking Occupational stress factors as independent variables and Employee performance is taken as dependent variable. Table-2 shows the result of effect of occupation stress on Employee performance

Null hypothesis H₀₁: There is no significant impact of occupation stress factors on Employee performance

Table-2: Effect of Occupation stress on Employee performance

Occupation stress factors	F-statistics	Beta	t-value	p-value
(Constant)		6.087	10.252**	.000
Essential factors of the job	28.362**	-0.079	1.657	.076
Role in the organization		-0.272	4.985**	.000
Relationships at work	R-square	-0.164	3.865**	.000
Career ambiguity		-0.346	5.598**	.000
Organizational structure and environment	0.489	-0.133	2.428*	.019
Home / work interface		-0.038	0.942	.167

* Significant at 5% level ** Significant at 1% level

F-value of 28.362 in the Table-2 shows that the regression model is significant at 1% level. It is found that the R-square value of 0.489 shows 48.9% of the variability of Occupation stress factors on Employee performance of IT employees. It is inferred that Role in the organization, Relationships at work, Career ambiguity and Organizational structure and environment has significant effect on Employee performance, the effects are negative. Further it is revealed that single unit increase in the Occupation stress factors like Role in the organization, Relationships at work, Career ambiguity and Organizational structure and environment reduces the employees performance in IT organisations by 0.272, 0.164, 0.346 and 0.133 units respectively. However Essential factors of the job and Home / work interface are not having any significant effect on employee's performance. Hence it is concluded that the Occupation stress factors Career ambiguity followed by Role in the organization and Relationships at work predicts Employee performance more.

Employee's demographic variables influence on employee performance is identified using one way ANOVA. The results are portrayed in the Table-3.

Null Hypothesis H₀₂: There is no significant influence of demographic variables on Employee performance in IT industry

Table-3: Influence of demographic variables on employee performance

	Classification	Mean	SD	F-value
Gender	Male	3.46	0.894	0.718
	Female	3.51	0.709	(p=.379)
Age	18 to 20 years	3.24	0.774	13.415**

	20 to 30 years	3.42	0.811	(p=.000)
	30 to 40 years	3.82	0.857	
	40 to 50 years	3.58	0.817	
	50 years and above	3.67	0.848	
Martial Status	Married	3.48	0.853	1.582
	Unmarried	3.41	0.802	(p=.101)
Education	Below SSLC	3.44	0.694	
	SSLC/HSC	3.51	0.848	2.106
	UG/PG	3.39	0.834	(p=.086)
	Professional	3.52	0.857	
Annual income (in Rs.)	Others	3.48	0.882	
	Below 3 lakhs	3.32	0.812	
	3 -5 lakhs	3.41	0.926	8.174**
	5 - 7.5 lakhs	3.54	0.719	(p=.000)
	7.5 - 10 lakhs	3.71	0.756	
Experience	Above 10 lakhs	3.82	0.841	
	Below 1 year	3.24	0.816	
	1-3 years	3.62	0.965	
	3-7 years	3.51	0.779	6.369**
	7-10 years	3.32	0.752	(p=.000)
	10 years and above	3.75	0.814	

** Significant at 1% level

Significant F-values 13.415 (p=.000), 8.174(p=.000) and 6.369(p=.000) confirms that there is significant influence of age, annual income and experience on Employee performance. Further it is inferred that the respondents in the age group of 30-40 years are showing better prospects in job, whereas the respondents in the age group of 18-20 years are showing relatively lesser level of performance in IT industry. It is noted that the respondents with the annual income of above Rs.10 lakhs shows better prospects in their performance and the IT employees earning annual income of below Rs.3 lakhs are showing lesser level of performance. It is noted that IT employees having an experience of 10 years and above are showing better prospects in their performance, whereas the IT employees with an experience of below 1 year are performing relatively lesser. However gender, marital status and education are not having significant influence on Employee performance.

Conclusion

Occupational stress is usually admitted to be a precarious issue for top leaders of IT industry as occupational stressors incline to subsidize to organizational ineffectiveness, high staff turnover, absenteeism due to illness, decreased excellence, and quantity of preparation, increased costs of health care, and decreased job satisfaction. One of the key impressions of occupational stress is on employee performance. Career ambiguity followed by Role in the organization and Essential factors of the job influences the Occupation stress more among the IT employees. Role in the organization, Relationships at

work, Career ambiguity and Organizational structure and environment has significant negative effect on Employee performance. Occupation stress factors Career ambiguity followed by Role in the organization and Relationships at work predicts Employee performance more. Significant influence of age, annual income and experience on Employee performance is observed. It is inferred that the IT employees in the age group of 30-40 years, earning annual income of above Rs.10 lakhs and having an experience of 10 years and above are showing better prospects in their performance. This study concludes that stress among IT employees could cause prospective obstruction, anxiety, feeling of being fervently exhausted, depression, suffering from psychosomatic illnesses etc., which in turn may result in deviations in behaviors, dis-satisfaction levels, absenteeism, employees performance and job satisfaction. As such an observant, top management should pay attention with respect to their employees, with regard to the organisation policies, practices, working conditions, inter-personal relationships, and formation of a participative environment, having appropriate motivational programmes, improving the IT employees' insight of feeling worth, dignity and satisfaction.

Reference

1. Arun Vijay S (2013). Work-related musculoskeletal health disorders among the information technology professionals in India: A Prevalence Study. *International Journal of Management Research and Business Strategy*, 2(2), 119-128.
2. Barlow, D. H. (2007). *Principles and practice of stress management*. Guilford Press.
3. Gautami S & Anupama T (2016). Organizational Stressors & Occupational Stress of Software Professionals in India. *International Journal of Indian Psychology*, 3(3), 83-88.
4. Geeta Kumari, Gaurav Joshi & Pandey K M (2014). Job Stress in Software Companies: A Case Study of HCL Bangalore, India. *Global Journal of Computer Science and Technology: C Software & Data Engineering*, 14(7). 23-29.
5. Karimi, R., & Alipour, F. (2011). Reduce job stress in organizations: Role of locus of control. *International journal of business and social science*, 2(18), 232-236.
6. Krishnamurthy, K. (2015). Work stress among the employees in information technology (IT) sector in Chennai city. *Asia pacific Journal of Research*, 1 (27).
7. Latha G. & Panchanatham N (2007). Job Stress Related Problems and Coping Strategies, *Journal Computer Guide Research*, 24(3), 235-242.
8. Liaquat Ali Rahoo, Paras Bashir Channar, & Muhammad Ali Khan (2020). Analysis of Stress on the Employees of Software Development Industries of Pakistan. *International Research Journal of Computer Science and Technology*, July - Dec 2020, 6-12.
9. Manish A.Prasad, Vasant Wagh & AbhayMudey (2014). Study of prevalence of health problems among computer professionals in selected Information Technology (IT) company in Nagpur district of Central India. *Innovative Journal of Medical and Health Science*, 4(3), 96-98.
10. Manjula P.S & Srinivasan P.T (2015). Occupational Stress and its impact on Work Exhaustion-An Empirical Study among Information Systems Personnel.

- International Journal of Applied Business and Economic Research, 13(8), 6419-6431.
11. Minali Dutta (2015). Stress at work and its impact on computer professionals in Indian scenario. *International Journal of Advanced Research*, 3(11), 361-363.
 12. Prabhavathi D (2009). Information Professionals' Job Stress Related Problems and Coping Strategies. *Journal of Library and Information Science*, 3(4), 74-77.
 13. Rathore, Shubhangini & Ahuja, Vandana. (2015). A Study of Role Stress among the IT Professionals in India. *International Journal of Human Capital and Information Technology Professionals*, 6, 1-13.
 14. Sabbarwal, Sherry, Singh, Monica & Amiri, Mohammad. (2017). Occupational stress on employees in information technology organizations. *Asian Journal of Social Sciences & Humanities*, 6, 103-110.
 15. Uma Mageswari S & Prabhu N R V (2011). A Study on Job Stress among employees of IT & ITES in Chennai. *Research Journal of Social Science and Management*, 1(8), 1-6.
 16. Gaganpreetkaur, Nandita Mishra, and Puja Singhal. "Concern of construction industry towards occupational safety and health issues." *International Journal of Mechanical and Production, Engineering Research and Development (IJMPERD)*, ISSN (P): 2249-6890; ISSN (E) 2249.8001 (2018): 615-622.
 17. Kumar, G., et al. "The Effect of Ultrasound and Stretching Exercise Versus Ultrasound and Strengthening Exercise to Relieve Pain and to Improve Functional Activity in Lateral Epicondylitis." *International Journal of Physiotherapy & Occupational Therapy (TJPRC: IJPOT)* 2 (2016): 9-16.
 18. Rajalaxmi, V., G. Sperjan, and G. Yuvarani. "To Compare the Effectiveness of Kinesio Taping and Exercise In Patients with Shoulder Impingment Syndrome." *TJPRC: Journal of Physiotherapy & Occupational Therapy (TJPRC: JPOT)* 1 (2015): 35-42.
 19. Senthilnathan, C. V., A. Gurulakshmi, and K. G. Mohan. "Effects of isometric neck exercises in improving cervical range of motion in long time helmet wearers." *TJPRC: International Journal of Physiotherapy & Occupational Therapy (TJPRC: IJPOT)* 1 (2015): 9-16.
 20. Kodali, Swetha, and A. Mrunalini. "Occupational Health Problems among Workers in Concrete Based Manufacturing Industry–A Review of Research." *International Journal of Educational Science and Research (IJESR)* 8.4: 39-44.
 21. Sudhakar, S., and CV Senthil Nathan. "Effects of Deep Stripping Massage with Eccentric Resistance versus Static Stretch with Cryotherapy on Improving Calf Muscle Flexibility." *TJPRC: International Journal of Physiotherapy & Occupational Therapy (TJPRC: IJPOT)* 2 (2016): 45-50.