



ISSN Print: 2394-7500  
ISSN Online: 2394-5869  
Impact Factor: 5.2  
IJAR 2017; 3(7): 1210-1213  
www.allresearchjournal.com  
Received: 16-05-2017  
Accepted: 18-06-2017

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## Impact of stress on the employee performance in information technology industry – A comparative analysis on ITES and BPO Sectors

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### Abstract

Stress is a feeling or condition experienced when an individual perceives that the demands surpass the social and personal resources he is able to mobilize. This paper examines the impact of stress on the employment performance in information technology industry. This study identifies the factors that causes stress among the employee in ITES and BPO sectors and it compares the factors that causes stress among the employee in ITES and BPO sectors. Diagnostic Research Design was adopted for the present study and both primary and secondary data were utilized to draw conclusions from this study. The sample size fixed for this study was 140 and the sample respondents were drawn from ITES and BPO sector companies in the Bangalore region. Data was collected with the help of a structured questionnaire and the statistical analysis was conducted by using Regression Analysis, ANOVA, Chi-square test and Mann –Whitney U test. The study concludes that the stress dynamics are having the significant impact on both employees stress and on organizational climate. The study shows that there is no significant difference among the stress levels experienced by the employees working in ITES and BPO sectors.

**Keywords:** stress, stress dynamics, ITES and BPO

### Introduction

A career in Information Technology (IT) is increasingly marked by struggles against deadlines, rapid mobility in projects and frequently differing reporting relationships, collapsing inter-personal relationship at work, and the shack style of conflict management, temporal dissociation, the night here morning there syndrome, free time misuse than use and growing infections cynicism that lead to despair, distress, pressure and stress. Stress is the latest killer, the causes rather than the effect of several physical, mental, and emotional problems. In fact, a whole range of psychosomatic ailments are linked with stress which seems to be steadily degenerating mankind.

IT, the new age desire and envy of most people, seems to be coming down heavily on its people like a cascading, catastrophic nightmare. Signs of the continuing boom should have led to a raise in the cut throat competition, the drive to excel and retire with the safety chips stashed away for security. Others view it as the challenge, the passion to possess the globe as the world's masters in IT that leads to paranoia which is ignored and denied from the beginning. The early warning signals like pressure, burnout, and fatigue are played down until stress and its depression set in.

Added to the stress due to work family issue, techno-stress also affects employees. The employees in IT have to undergo continuous upgradation of skills and techniques. Constant learning of technologies and implementing in the competitive work situation ultimately leads to techno-stress. The IT industry comprises of various sectors like IT sector, the Information Technology Enabled Services (ITES) and Business Process Outsourcing (BPO) Sectors. Though there were a lot of studies conducted on the aspect of stress in IT industry, very few works of comparative nature were conducted on various sectors in IT industry.

### Statement of the Problem

For the past 15 years the contribution software industry in Indian economy is never ignorant in overall performance of Indian software export. The performance of the software industry

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Depends only on the efficient employees, especially the knowledge of software employees play a very vital part for the development of Indian software industry in global market. Stress and its various consequences have been observed in various sectors and industrial organizations. In the modern times, IT industry has grown to un-assumed heights and along with this aspect the negative factors of organizational growth and productivity like high stress and low quality of work life has doubled themselves leading to severe depletion of employee performance and productivity. Thus there is every need to compare the existence of stress and the causative factors of stress among the employees in various sectors of IT industry. Thus, it was proposed to conduct a research study on the impact of stress on the employee performance in the IT industry and this study specially throws like on the ITES and BPO sectors under the comparative perspectives within the empirical frame.

**Objectives of study**

1. To identify the factors that causes stress among the employee in ITES and BPO sectors
2. To compare the factors that causes stress among the employee in ITES and BPO sectors
3. To suggest certain measures for effectively combating the factors of stress among the employees in the ITES and BPO sectors.

**HypothesEs**

**Ho<sub>1</sub> (Null):** The employees of the BPO sector do not experience more stress than the employees in the ITES sector

**Ha<sub>1</sub> (Alternate):** The employees of the BPO sector experience more stress than the employees in the ITES sector

**Research Methodology**

The present study adopts the Diagnostic Research Design and both primary and secondary data were utilized for the study. The study comprises the respondents drawn from ITES and BPO companies in Bangalore region. The sample respondents were drawn from both ITES and BPO

companies those identified for the study. The organizations for the study the selected on the basis of Turnover, number of employees and the nature of the business. Seventy executives were drawn from ITES sector and seventy executives were drawn from BPO sector and thus the sample size was fixed at 140 comprising both men and women by their gender.

The sampling method chosen to select the required sample was the probability method of sampling using proportionate stratified random sampling.

Data was collected with the help of a structured questionnaire and the questionnaire consists of identified dimensions of stress and the factors that causes stress among the working employees of ITES and BPO sectors. Likert Scaling technique was used for validating the opinions drawn from the sample respondents. Statistical tools like Chi-square test, ANOVA, Regression Analysis and Man-whitney U test were used to verify the statistical significance of the proposed Hypothesis.

**The identified dimensions for this present research study are as follows.**

Dimension-1	Job Involvement
Dimension-2	Work Environment
Dimension-3	Balancing the work life
Dimension-4	Role Performance
Dimension-5	Role Ambiguity
Dimension-6	Family obligations
Dimension-7	Innovative climate
Dimension-8	Cooperation from superiors
Dimension-9	Role change
Dimension-10	Job inflexibility
Dimension-11	Lack of effective Human Resources
Dimension-12	Accomplishment of Targets
Dimension-13	Social factors

**Data Analysis and Interpretation**

In order to evaluate the significant factors that causes stress among the employees of ITES and BPO sector, Regression analysis was applied to evaluate the important dimensions that acts as the stressors or causes of stress.

**Table 1(a)** Results of Regression Analysis on the causes of stress in ITES and BPO sectors

Type of Sector	Dimension	Unstandardized Coefficients		Standardized Coefficients	t- value	p- value
		Beta	Std. Error	Beta		
ITES	Constant	0.107	0.085	-	1.262	0.204
	Job Involvement	0.166	0.034	0.192	4.706	0.000
	Work Environment	0.038	0.029	0.045	1.288	0.196
	Balancing the work life	0.004	0.027	0.002	0.073	0.939
	Role Performance	0.082	0.022	0.106	3.612	0.000
	Role Ambiguity	0.015	0.026	0.018	0.607	0.541
	Family obligations	0.136	0.022	0.173	5.725	0.000
	Innovative climate	0.022	0.021	0.032	1.037	0.302
	Cooperation from superiors	0.026	0.021	0.044	1.247	0.211
	Role change	0.112	0.025	0.159	4.239	0.000
	Job inflexibility	0.046	0.021	0.054	2.079	0.036
	Lack of effective Human Resources	0.176	0.018	0.273	8.759	0.000
	Accomplishment of Targets	0.129	0.028	0.144	4.412	0.000
Social factors	0.178	0.017	0.226	8.892	0.000	
BPO	Constant	-0.355	0.142	-	-2.492	0.012
	Job Involvement	0.026	0.071	0.028	0.379	0.702
	Work Environment	0.247	0.062	0.282	3.966	0.000
	Balancing the work life	0.112	0.082	0.113	1.394	0.165
	Role Performance	0.012	0.067	0.012	0.181	0.853

	Role Ambiguity	0.042	0.065	0.043	0.641	0.523
	Family obligations	0.012	0.052	0.014	0.245	0.804
	Innovative climate	0.183	0.039	0.202	4.484	0.000
	Cooperation from superiors	0.245	0.041	0.312	5.776	0.000
	Role change	0.142	0.046	0.181	3.031	0.002
	Job inflexibility	0.089	0.053	0.102	1.649	0.103
	Lack of effective Human Resources	0.105	0.045	0.131	2.295	0.021
	Accomplishment of Targets	0.113	0.057	0.123	1.995	0.044
	Social factors	0.086	0.052	0.102	1.672	0.095

Source: Computed

The table no.1 (a) shows the results obtained from the regression analysis conducted on the causes of stress in ITES and BPO sectors. In the case of ITES sector, the factors of Job Involvement, Role Performance, Family obligations, Role change, Job inflexibility, Lack of effective Human Resources, Social factors and Accomplishment of Targets have a significant effect on the stress levels of the employees working in ITES sector. Among the existing factors, the factors of lack of effective HR and accomplishment of targets have more impact on the stress levels of the employees.

In the case of BPO sector, the factors of Work Environment, Innovative climate, Cooperation from superiors, Role change, lack of effective HR, Social factors and accomplishment of targets have a significant impact on the stress levels of the employees. Among these causative factors of stress in the BPO sector, the factor cooperation from seniors have more impact on the stress levels of the

employees.

**Table 1(b):** ANOVA Results and Adjusted R square value for stress in ITES and BPO Sectors

Sector	R	R <sup>2</sup>	ANOVA (F-value)	P-Value
ITES	0.872	0.796	139.574	0.000
BPO	0.897	0.849	58.327	0.000

Source: computed

The table no. 1(b) shows the results of the adjusted R<sup>2</sup> of the regression analysis. In this study the stress level was considered as the dependent variable and all the factors that causes stress were taken as independent variables. The regression analysis was conducted separately for ITES and BPO sectors. It shows that the factors that causes the stress has 79.6% influence on job stress in ITES sector and 84.9% influence in BPO sector.

**Table 2:** Results of Chi-square test on stress under the workload factors

Sector		Stress frequency under workload factors				X <sup>2</sup> value	P value
		constantly	Occasionally	seldom	Total		
ITES	Frequency	5	52	13	70	4.186	0.179
	Percentage	7.1	74.3	18.6	100		
BPO	Frequency	6	54	10	70		
	Percentage	8.6	77.1	14.3	100		
Total	Frequency	11	106	23	140		
	Percentage	7.8	75.7	16.5	100		

Source: Computed

**Verification of Hypothesis**

Chi-square test was applied to verify the proposed hypothesis in the study. The chi-square test result shows that the chi-square value is 4.186 and the p value is 0.179 and

hence the proposed Null hypothesis was accepted and it can be stated that the employees of the BPO sector do not experience more stress than the employees in the ITES sector.

**Table 3:** Mann- Whitney U test results for stress levels due to job factors

Dimension	Sector	Mean value	S.D	Percentage of Mean	Z value	P value
Stress level due to job factors	ITES	3.22	0.565	61.49	1.812	0.049
	BPO	3.46	0.706	62.94		

Source: Computed

**Verification of Hypothesis**

The Mann-Whitney U test results for stress levels due to job factors shows that the z value is 1.812 and the p value is 0.049 and they are not significant. Hence the proposed Null hypothesis was accepted and it can be stated that the employees of the BPO sector do not experience more stress than the employees in the ITES sector.

climate. The study shows that there is no significant difference among the stress levels experienced by the employees working in ITES and BPO sectors. Hence, it can be inferred that stress is a common factor that effects the employees on all spheres of their life.

**Suggestions**

There exists an urgent need on part of the IT companies to formulate interventional strategies at organizational level in order to counter act the different stressors that reduces the employee productivity and steps are to be taken to promote the physiological and psychological well-being of their employees.

**Conclusion**

The study results shows that there are several factors that causes stress among the employees working in ITES and BPO sectors. The stress dynamics are having the significant impact on both employees stress and on organizational

**References**

1. Adernika A. Organizational Climate as a Predictor of Employees Job Satisfaction: Evidence from Covenant University. *Business Intelligence Journal*. 2011; 4(1):151-165.
2. Bashir Usman, Ismail Muhammad. Impact of Stress on Employees Performance: A study on Banking Sector of Pakistan. *International Journal of Marketing Studies*. 2010; 2(1):122-126.
3. Mohan P. Stress and work life balance among women employees in banking industry: An empirical study with reference to selected private sector banks in Vijayawada region, *Asian Journal of Multi- Disciplinary Research*. 2018; 4(2):5-9.
4. Parker DF, DeCotiis TA. Organisational Determinants of Job Stress. *Organisational Behaviour and Human Performance*. 2017; 24:160-177.
5. Shahid Muhammad Naeem, Latif Khalid, Sohail Nadeem, Ashraf Muhammad Aleem. Work Stress and Employee Performance in Banking Sector Evidence from District Faisalabad, Pakistan. *Asian Journal of Business and Management Sciences*. 2011; 1(7):38-47.
6. Walker Pam, Wood Elaine. *The Skeletal and Muscular System Understanding the Human Body*. Publisher Lucent Books, 2016.