

**International Journal of Engineering & Technology** 

Website: www.sciencepubco.com/index.php/IJET

Research paper



# Stress at work place and its impact on employee performance

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#### Abstract

The emphasis on management of Stress at work place (WS) in the corporate world assumes that the ability to manage Stress at work place is associated with enhanced employee performance which suggests that WS is a vital tool having sturdy and significant impact on both em-ployee's employee performance and overall employee performance. Performance is important as it determines the survival of the organiza-tion and it also reflects how the organization can cope in today's challenging business environment. The current paper is an attempt to brief the work done in the field of WS and employee performance by discussing various studies conducted around the world. The current paper has compiled the works done on the connection between Stress at work place and workplace performance and based on synthesis of the past studies has created a model that depicts the relationship between the various variables that contribute to Stress at work place and its impact on employee performance.

Keywords: Stress at Work Place; Organizational Performance; Employees; Employee Performance.

# 1. Introduction

Stress at work place has always been a matter of discomfort to employees and other in any organization. It not only affects the employee's performance but also the overall performance of the group or project or the organization as a whole. Behavioral theorists, Human Resource Managers, Researcher's agree that stress at work place is a hazardous issue in many organizations. The effects of Stress at work place are very high in many organizations in recent years. For instance, the International Labor Organization (ILO) reports that "the inefficiencies arising from work may cost up to 10 percent of a country's GNP (Christo and Piernaar, 2006)." Literature indicates that "Work Stress is a predominant factor that influences different factors like job satisfaction, leadership, Organizational Performance, conflict management, stress management, work life balance, and also academic performance" (Backs, 2001; Christo and Piernaar, 2006; Schaubroeck et al, 2010). The main objective of this research is to accumulate the work done on the bonding between 'Stresses at work place' & 'Organizational Performance' thereby toting up to the literature on the same.

# 2. Literature review

#### 2.1. Stress at work place

Work stress is known as "the understanding of a disagreement between ecological wants (stressors) and businesses capacity to achieve these wants." (Delve,Skagert&Vilhelmsson, 2007; Hetland, Sandal &Johnsen, 2007; Wager, Fieldman& Hussey 2003). Friese (2015). For example, feeling of loss of occupation, and safety, long working hours, lack of security, and lack of independence in the occupation can cause work stress. Stress at work place is known as "the understanding of a disagreement between ecological wants (stressors) and businesses capacity to achieve these wants." (Delve, Skagert & Vilhelmsson, 2007; Hetland, Sandal &Johnsen, 2007; Wager, Fieldman& Hussey 2003). Friese (2015) for example, sensitivity or emotion towards of loss of occupation and safety, long working hours, lack of safety and security, and lack of freedom in the organization can cause Stress at work place. Stress in an organization can be caused due to declination of revenue, loss of assets, long working hours, working beyond the specified time, failure towards targets, in ability to meet deadlines, peer pressure and working environment are considered as prime contributors to personnel stress. Stress at work place habitually exhibits extreme displeasure, dissatisfaction, disapproval, discontent and in many cases resulting to frustration among employees. In some cases, transfers, relocation of project, inconsistent Performance affects the interpersonal relationship at work place which may result in unsociable or isolated life style. The diagnosis of stress at work place is always challenging for both the job seeker and job provider as the symptoms of stress at work place were always unexposed or pretended to be normal or ignored. In many cases the job seeker or the job provider doesn't take this as an issue or neither takes any serious action in reducing the stress and its related issues.

Therefore, this research is aimed to find out feasible solutions for stress at work place on individual performance with the organizational performance and interventions that can be implemented by the organization and employees to cope with stress in an effective, systematic and scientific manner. In order to obtain an in depth understanding of these variables; stress at work place, we will initially focus on conceptual understanding of Stress at work place and measure the variable with means of available statistical tools in order to evaluate the performance of the employee and employer from base value to an extreme value.

#### 2.2. Organizational performance

Organizational performance has usually been defined as "gathering of profits, manufacturing, service, and stable goals (Friese, 2015)". Employer's concern on the subject of work-related stress



has normally focused on the how this type of stress effects the production and profits negatively. This conventional definition of employee performance, although, focuses only on part of the equation. Choosing an alternative but more wide-ranging definition of employee performance, Schaubroeck et al (2010) wrote about an advanced opinion of organizational health performance to fight the existing risks and prevent them from occurring again in the work place. Topper (2007) suggested that the heads of the organization shall focus on employee's health in spite of just focusing the profits and manufacturing which he considered as narrow goals.

Researchers have gained a lot of curiosity in discovering the personality and significance of Organizational Performance in the field of industrial psyche. This is interest if because of the significance of organizations. One of the main definitions of Organizational Performance was given by Backs (2001) and according to him employee performances were the steps taken by the organization to analyze the standards set and the actual performance of the company. Ornelas and Kleiner (2003) defined Organizational Performance as the level of achievement after putting in efforts. Performance is a group phenomenon with ecological factors which effect the Performance of an association through their ability and motivational level (Erkutlu&Chafra, 2006).

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Organizational Performance is the level of effort and organization will put in to achieve its goals (Christo and Piernaar, 2006). Caldwell (2007) defined Organizational Performance as the strategy and plan of an association to perform and complete a work in a particular time period. Kleiner (2003) defined Organizational Performance as the quality and quantity of work one by the group or individual workers. Rayner&Mclvor (2006) suggested that the feel of Organizational Performance relies on the job requirement, goals, beliefs and objectives of the organization.

#### 2.3. Relationship between stress at work place and organizational performance

With the intention to better understand the harmful effects that work-related stress can have on both workers and corporation a. research on work-related stress has recommended an association between unmitigated stress and burnout, defining burnout as the primary manifestation of the mental, objective, and behavioral aspects of stress (Friese, 2015), effects on employee performance (Ornelas and Kleiner, 2003). Burnout as a mental circumstance happening in response to chronic stressors has been characterized through the signs of emotional exhaustion, depersonalization, and decreased personal accomplishment (Christo and Piernaar, 2006). further to burnout, work strain can purpose absenteeism, high group of workers turnover, and reduced efficiency and overall performance (Erkutlu&Chafra, 2006). Researchers have noted that the long-time period effects of non-stop work strain could have poor outcomes for each worker and the corporations wherein they work (Ornelas and Kleiner, 2003). As a end result, work pressure is a developing subject for management due to its dysfunctional outcomes on employee performance.

### 3. Research methodology

The present research employs secondary research method to attain the objectives. the research has analyzed past literature and studies on connection between Stress at work place and employee performance to create a model that explains the factors of employee performance that are impacted due to Stress at work place. This model can be used by practitioners, businesses as well as academicians.

#### 3.1. Methodology

The study is systematic, critical and analytical. It gives a detailed description about the stress at work force, problems faced by the employees, methods and tools used to evaluate the performance, and the standards practices implemented to cope with stress. It is a dual practice which focuses both on employee and employer side to deal with the problem or a situation. The data is collected based on the two attributes; the 'Micro Data' and the 'Macro Data.' The Micro data is the data accumulated from the standard sources like libraries, journals, books and web portals where as Macro Date is collected from the employees working in the IT sector where there is a possibility of high stressful environment. A sample of 100 employees is selected to gather the data and well structured questionnaires were designed to gather the data. Utmost care was taken to keep the questionnaires away from errors or mistakes. There questionnaires were tested among these 100 employees keeping the standards of standardized testing and keeping it away from various biases and inclanations.

#### **3.2.** Sampling design

The Proportionate Stratified Sampling Method was used to select the respondents in IT and IT oriented and BPO sectors in Hyderabad city. This sample consists of employees from Cognizant, Verizon, Valuelabs, Infosys BPO, Tata Consultancy Servises BPO, and HP Technologies Ltd. Professional employees were selected to study the sample. The sample size constitutes of 1 per cent of the universe i.e., 970 employees where as the universe constitutes 97000 employees. The sample space was classified on the basis of their nature of service.

#### 3.3. Area of the study

The study was conducted in Hyderabad, India. The IT, IT oriented and BPO Industry in Hyderabad has registered an extensive growth in since a few decades. In the present Scenario, Hyderabad is the second largest producer of IT, IT oriented and BPO employees in India. In this regard, Hyderabad is the most suitable place to conduct this research in India. For this study, Cognizant, Verizon, Valuelabs, Infosys BPO, Tata Consultancy Services BPO, and HP Technologies Ltd. were chosen, as they are the top five IT, IT oriented and BPO companies in the Hyderabad. Therefore, Hyderabad is selected for the study.

#### 4. Discussion of findings

The synthesis of past literature has shown that the relationship between work, the work environment, work schedules, and resources and equipment and Stress at work place. This implies that organizational stress is a function of the work environment in any organization. Furthermore, the results also indicate that decrease in productivity, higher attrition rates, debilitated leaves, mishaps, low employment fulfillment, low quality products and services, poor internal communication and clashes inside the corporation are the key consequences of Stress at work place. The results also point out that that stress management has high noteworthy association with worker motivation and profitability. Based on the research findings the following model is constructed: (Source: Self Constructed)In order to examine the significant differentiation between demographic profiles of the employees with respect to the stress factors, a t-test is applied. The respondents responses are recorded with respect to the stress factors like, Stress at work place, Peer pressure, time of work, flexibility in working hours, deadline stress, project stress, personal stress, Psychological stress, physical stress, environmental stress, climatic stress, emotional stress, self-respect stress, family stress, social stress, individual, Change stress, Aging stress etc. Such variables are observed and its impact or influence on several factors is recorded. For example impact of stress on work, family, job; organization, individual etc are recorded. The steps taken by the organization in order to cope with the stress like implementing fair working hours, implementing flexible working hours, organizing picnics and team meets, appointing psychological counselors and conducting counseling sessions to its employees is recorded.

H01: There is no significant differentiation between demographic profiles of the employees with respect to the stress factors.

Source: Computed from Primary data \* Significant at 5 per cent level

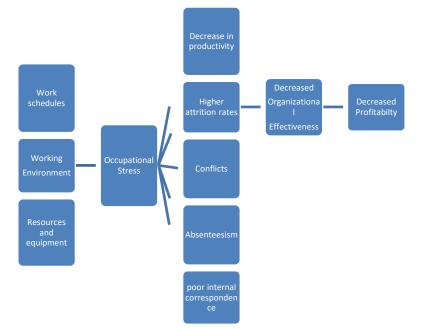


Fig. 1: Model of Relationship between the Various Variables That Contribute To Stress at Work Place and Its Impact on Employee Performance.

Variables	Gender	N	Mean	SD	SEm	T-Value	Sig. (2-tailed)
	Male	585	48.023	4.871	0.201		
Nonflexible working hours	Female	385	47.824	4.342	0.222	.638	.432
0	Total	973	49.848	4.566	0.181		
	Male	583	59.608	5.067	0.210		
Working Hours Stress	Female	387	58.585	5.748	0.292	2.721	.008*
6	Total	960	58.873	5.367	0.174		
	Male	583	62.363	6.341	0.277		
Project Stress	Female	377	61.594	6.093	0.307	.422	.675
	Total	960	61.679	6.229	0.207		
	Male	573	53.878	4.797	0.199		
Deadlines	Female	397	54.016	4.324	0.218	.466	.645
	Total	980	53.938	4.709	0.157		
	Male	593	27.021	4.867	0.203		
Organizational Stress	Female	397	28.249	4.890	0.246	3.807	.004*
0	Total	980	27.519	4.907	0.157		
	Male	593	23.709	3.148	0.120		
Environmental Stress	Female	397	23.011	3.415	0.172	3.234	.001*
	Total	960	23.435	3.283	0.125		
	Male	573	25.099	3.804	0.163		
Psychology Stress	Female	389	24.977	4.089	0.231	.546	.675
, .,	Total	976	25.073	3.786	0.109		
	Male	588	24.839	5.426	0.236		
Emotional Stress	Female	383	25.899	5.045	0.269	2.545	.021*
	Total	970	25.295	5.297	0.180		
	Male	583	34.160	4.984	0.204		
Individual Stress	Female	387	35.684	5.643	0.265	1.534	.132
	Total	970	35.356	5.240	0.156		

The calculated t value 0.627, 0.420, 0.465, 0.547 1.533 is not significant at five per cent level. The value indicates that there is no significant differentiation between demographic profiles of the employees with respect to the stress factors like non flexible working hours, individual stress, emotional stress, environmental stress, organizational stress etc. Hence, the formulated hypothesis

Testing the significant differentiation between demographic profiles of the employees with respect to the stress factors. H02: There is significant differentiation between demographic profiles of the employees with respect to the stress factors. Source: Computed from Primary data \* Significant at 5 per cent level The calculated t value of 0.203, 0.531, 0.580, 1.226 and it is not weighty at five per cent level. The value indicates that there significant differentiation between demographic profiles of the employees with respect to the stress factors. The individual and also the organ-ization need to take necessary steps in coping stress factors so that they can reduce the risk on its employees and also on the organiza-tion. They must implement some significant practices to reduce the stress factors among the individuals so that the employee feels safe and secure in the organization. The stress

influences the health fac-tors of the employees. There was more impact of stress on female employees when compared to the male employees.

Testing the significant differentiation between the different stress factors with respect to their Age

H02 (a): There is no significant differentiation between the different stress factors with respect to their Age

Table 2: T Test for Im	pact and Management o	of Stress Factors on th	e Source of Gender

Variables	Gender	Ν	Mean	SD	SEM	t-value	Sig. (2-tailed)
Impact of Stress							
Impact of Strass	Male	47.290	582	7.149	0.296	0.203	0.839
Impact of Stress	Female	47.374	388	5.591	0.284	0.205	0.839
	Total	47.324	970	6.567	0.211		
	Male	32.036	582	5.507	0.228	2.308	0.021*
Stress impact in the work	Female	32.797	388	4.767	0.242	2.508	0.021*
	Total	32.339	970	5.239	0.168		
	Male	35.097	582	5.783	0.240	3.011	0.003*
Stress impact on family	Female	36.149	388	4.999	0.254	5.011	0.003
	Total	35.517	970	5.506	0.179		
Managing Stress							
	Male	52.704	582	6.009	0.247	3.696	
	Female	51.423	388	4.764	0.247		0.001*
Flexible Working Hours	Total	52.193	970	5.576	0.177	0.531	
Team Meets	Male						
Team weets	Female	52.506	582	6.091	0.259	0.531	0.595
	Total	52.724	388	6.542	0.336		0.395
	Total	52.587	970	6.273	0.203	0.554	
	Female	42.257	582	5.164	0.215	0.554	0.580
Recreation & Sports	Total	42.430	388	4.545	0.237		0.380
-	Total	42.326	970	4.925	0.159		
Organizational Health							
Health Chaba	Female	46.242	582	6.244	0.257		
Health Clubs	Total	45.799	388	4.973	0.251		0.220

 Table 3: One Way ANOVA for Various Stress Factors Because of Age

Individual	Age	N	Mean	SD	SEM	F-value	P Value
stress							
	20 to 30 years	46.484	223	4.871	0.326		
Individual	31 to 40 years	48.866	396	4.407	0.221		
stress	41-50 years	51.324	244	4.620	0.296	7.984	.001*
	Above 50 years	48.963	107	1.434	0.139		
	Total	48.947	970	4.664	0.150		
20 to 30 years							
	31 to 40 years	56.507	223	5.312	0.356		
	41-50 years	59.967	396	5.790	0.291		
Organizational Stress	Above 50 years	59.328	244	4.593	0.294	2.983	.001*
	Total	59.850	107	3.668	0.355		
	Total	58.998	970	5.368	0.172		
Environmental Stress	20 to 30 years	60.363	223	8.088	0.542		
	31 to 40 years	60.803	396	4.922	0.247		
Environmental Stress	41-50 years	63.049	244	5.771	0.369	7.800	.001*
	Above 50 years	64.449	107	5.693	0.550		
	Total	61.669	970	6.228	0.200		
Personal stress							
actors							
	20 to 30 years	50.130	223	3.891	0.262		
Personal stress	31 to 40 years	54.184	396	3.817	0.192		
factors	41-50 years	55.111	244	3.826	0.244	19.714	.001*
	Above 50 years	58.243	107	4.682	0.452		

20 to 30 years	Total	53.933	970	4.608	0.148		
20 to 50 years	31 to 40 years	26.570	223	5.518	0.148		
	41-50 years	20.370	396	4.859	0.244		
	41-50 years	21.039	390	4.039	0.244		
	Climatic Stress	26.877	244	4.043	0.259	1.768	.001*
Climatic Stress							
20 to 30 years	Above 50 years	29.626	107	4.801	0.464		
2010/00/jears	Total	27.510	970	4.906	0.158		
	31 to 40 years	20.915	223	1.961	0.133		
Physical Stress	41-50 years	22.939	396	3.384	0.173		
Thysical Stress	11 50 years	22.939	570	5.501	0.175		
		25.730	244	2.357	0.151	39.331	.001*
	Above 50 years	25.215	107	2.223	0.214		
	Total	23.427	970	3.274	0.105		
0 to 30 years							
, , , , , , , , , , , , , , , , , , ,	31 to 40 years	22.955	223	4.293	0.287		
Psychological Stress	41-50 years	25.023	396	3.643	0.183		
	·						
		25.967	244	3.312	0.212	3.368	.001*
		05.054	105		0.070		
	Above 50 years	27.271	107	2.587	0.250		
	Total	25.033	970	3.858	0.124		
	31 to 40 years	22.830	223	6.097	0.409		
Emotional Stress	41-50 years	24.609	396	5.001	0.252		
		27.701	244	3.595	0.231	4.782	.001*
		27.701	244	5.393	0.251	4.762	.001**
	Above 50 years	27.150	107	4.956	0.480		
	Above 50 years	27.150	107	4.950	0.480		
	Total	25.258	970	5.298	0.170		
	31 to 40 years	32.466	223	4.500	0.302		
Social Stress	41-50 years	35.611	396	6.049	0.303		
		37.135	244	3.442	0.221	6.457	.001*
		57.155	211	5. 172	0.221	0.157	.001
	Above 50 years	36.206	107	4.708	0.454		
	Total	35.337	970	5.270	0.169		

Source: computed from primary data \* Significant at 5 per cent level.

The calculated F value of 47.984, 22.983, 17.800, 119.714, 11.768, 139.331, 43.368, 44.782 and 36.457 is recorded in the above respective variables. Hence the formulated hypothesis.

REASON FOR STRESS-(Comparative Studies of the Reasons for Various Stress Factors)

The reason for Stress at work place among the employees in the following companies has been presented in Table 1.4 (a)

Table 4: A) Reason for Stress

Name of the	No. of Re-	Mean	Standard	Coefficient of
Company	spondents	Score	Deviation	Variation
Cognizant	270	48.83	4.57	20.93
Verizon	200	47.67	7.30	53.24
Valuelabs	250	49.14	4.57	20.88
Infosis	160	48.80	4.85	23.51
HP	90	48.96	4.63	21.44
Total	970	48.68	5.31	28.22

Source: Computed from Primary Data.

Table 1.4(a) indicates the Valuelabs has the highest average acceptance score of 49.14. HP Technologies has the average receipt score of 48.96. The Cognizant with average receipt score of 48.83. The Infosis has an average acceptance score of 48.80. The Verizon has the least average receipt score 47.67.

Testing the significant difference between reasons for stress H03: There is no significant differentiation between comparative studies of the reasons for various stress factors.

Table 4: B): One Way ANOVA for Reason for Stress							
	Sum of Squares	Df	Mean Square	F	Sig.		
Among Clusters	275.114	4	68.529	2.443	.045		
Within Clusters	27070.240	965	28.052				
Total	27344.355	969					

Source: Computed from Primary Data.

From the Table 1.4(b), it clearly shows that:

The measured F value of 2.443 is significant. The F value depicts that there is a significant differentiation in the reason for stress among the employees.

## 5. Conclusion

In the current study, we attempted to compile the work done in the field of Stress at work place and its relationship with Organizational Performance to find how Stress at work place affects employee performance. The research indicates that decrease in productivity, higher attrition rates, debilitated leaves, mishaps; low employment fulfillment, low quality products and services, poor internal communication and clashes inside the corporation are the key consequences of Stress at work place and are major reasons for the outcomes of Stress at work place. While nature of work, the working environment, work schedules, resources and equipment have been found as major factors contributing to Stress. A model has been derived in this research that depicts the relationship between the various variables that contribute to Stress at work place and its impact on organization.

## References

- Anderson, E. S. (2002) Social- Cognitive determinants of stress. Health Pyschology 19, 479-486.
- [2] Backs, R. W. (2001) an autonomic space approach to the psychophysiological assessment of workload. In P. A. Hncock, & P. A. Desmond, Stress, workload, and fatigue (pp. 279-289). Mahwah, NJ: L. Erlbaum.
- [3] Bono, J. E. Folders, H. J. Vinson, G., &Muros, J. P. (2007). Workplace emotions: the role of supervision and leadership. Journal of Applied psychology, 92(5), 1357-1367.
- [4] Caldwell, J. A. (1997). An in-flight investigation of the efficacy of dextroamphetamine for sustaining helicopter pilot performance. Aviation, Space, and Environmental Medicine, 68, 1073-1080.
- [5] Christo, B. and Piernaar, J. (2006), South Africa Correctional Official Stress at work place: The Role of Psychological Strenghts, Journal of Criminal Justice, 34(1): 73-84
- [6] Critchley, H.D., Mathias, C.J. (2003). Blood pressure, attention and cognition: drivers and air traffic controllers. Clinical Autonomic Research, 13, 399-401.
- [7] Delve, L. Skagert, K. &Vilhelmsson, R. (2007). Leadership in workplace health promotion projects: 1-and 2-year effects on longterm work attendance. European Journal of public Health, 17 (5), 471-476.
- [8] Hetland, H. Sandal, G. M. &Johnsen, T.B. (2007). Burnout in the information technology sector: Does leadership matter?. European Journal of work and organizational psychology, 16 (1).
- [9] Ornelas, S. and Kleiner, B. H. (2003), New Development in Managing Job Related Stress, Journal of Equal Opportunities International, 2(5): 64-70.
- [10] Rayner, C. &Mclvor, K. (2006). Report to the Dignity at Work project Steering Committee. Dignity at work report: Portsmouth University.
- [11] Schaubroeck, J. Walumbwa, F, F. O., Ganster, D. C. &Kepe, S. (2007). Destructive leadership traits and the neutralising influence of an 'enriched' job. Leadership Quarterly, 18(3), 236-251.
- [12] Vermut, R. and Steensma, H. (2005), how can Justice be Used to Manage Stress in Organizations, in Greenberg, J.A. (Eds.), Handbook of Organizational Justice, pp. 383-410, Earlbaum, Mahwah, NJ.
- [13] Wager, N., Fieldman, G., Hussey, T. (2003). The effect on ambulatory blood pressure of working under favourably and unfavourably perceived supervisors. Work and environmental Medicine, 60, 468-474.
- [14] Erkutlu HV, Chafra J (2006). Relationship between leadership power bases and job stress of subordinates: example from boutique hotels. Management Research News 29(5): 285-297.
- [15] Jayashree, R., (2010). Stress Management with Special Reference to Public Sector Bank Employees in Hyderabad. International Journal of Enterprise and Innovation Management Studies (IJEIMS) Vol. 1 No. 3, Pp. 34- 35.