

GENDER DIFFERENCE IN ORGANISATIONAL ROLE STRESS: A STUDY OF EMPLOYEES IN IT SECTOR IN MANGALORE CITY

Ms. Coral Barboza,

Research Scholar
Tumkur University, India

Dr. Babu Thomas,

Research Guide,
AIMIT, Mangalore, India

ABSTRACT

This study was conducted to find out the gender difference in organisational role stress on performance of the employees in the Information Technology sector in the city of Mangalore. In carrying out the study, simple random sample technique was used to select 458 employees from the IT sector. Udai Pareek's ORS scale was used to assess the level of organisational role stress among the employees of the IT sector. Ten dimensions of role stress were measured using ORS scale. The hypothesis were tested using t-test. A quantitative, explorative and descriptive research design was employed in this study to gather information about the gender differences in occupational stress on the performance of employees. After gathering relevant data, analysis was conducted to determine the stress level between the male and female employees. The findings of the study reveal that there exists a significant relationship between in the gender differences in organisational stress in the IT sector.

Keywords: Occupational stress, Gender, Role ambiguity, employee performance.

Introduction:

One of the important issues most organizations face today is increasing occupational stress. The modern workplace is potentially considered to be one of the sources of stress for most employees because of the quantity of work expected from them for the amount of time they spent in their respective job. Selye (1956) focused research attention on stressors and patterned physiological changes in reaction to them. He further opines that stress is not necessarily something bad – it all depends on how you take it. The stress of exhilarating, creative successful work is beneficial, while that of failure, humiliation or infection is detrimental. Faye K and James (2004) stress is a term that is used by people almost every day and therefore a distinction needs to be made to identify healthy and effective performance and those that deviate from an individual's healthy performance. Accordingly performance is believed to be increase to an optimal level as stress load rises, creating it as good stress. IT professionals, are considered to be a group of people with high stress occupations along with other professionals such as medical professionals, teachers,

pilots, police and social workers (Cooper et al.1989). This kind of occupational stress has brought negative impact not only on employee performance- psychologically and physiologically but also on the economic cost of the organisation. Prior Research studies have shown that high level of stress and associated burnout among IT professionals leads to decreased performance and less job satisfaction. (Luthans (1995, Scheuler 1980). The continuous changing environment of professional, economic, political, cultural and social life and the increased specialization of IT professionals has increased the level of stress among the employees in the IT sector.

Organisational Role Stress in IT sector:

Information Technology sector in modern India has got a tremendous boost due to globalization, liberalisation, privatisation, government policies and the move towards making India digital. Stress is perceived by people in different ways. While stress for some seems to be positive, others view it as negative. Stress is seen to be high in IT professionals because of their nature of work, unrealistic deadlines, sedentary

lifestyle, night shift, unfair distribution of work, monotony at work, over work load, inadequate break times and so on. Some of the major stressors identified in any IT work environment, that has a major influence on employee performance and job satisfaction include, work overload, unsupportive relationship, work life imbalance, poor communication, poor working conditions and changes in organisational process. Dynamic business environments often results in employees experience stress owing to roles performed by them in the organizations. Technostress is the word used to explain the phenomenon of stress arising due to the usage of computers. It is a modern disease of adaptation caused by the inability to cope with new computer technologies in a healthy manner. IT has brought in faster processing and transformation of information exposing the IT professionals to ever increasing flow of information thereby causing information overload leading to stressful conditions (Raitoharju, 2005).

Organizational Stress Level among Male and Female employees in IT Sector:

Gender is an important determinant of human health, and there is a clear pattern for the sex-specific prevalence rates of various mental and physical disorders Rohit (2011). Men and women report different reactions to stress, both physically and mentally. This is because they try to manage stress in very different ways and also perceive their ability to do so. It is characterized by 'fight-or-flight' in men and 'tend-and-befriend' in women Taylor SE (2000). The observed gender-specific disparity may be partly attributed to effects of sex hormones. Parkhouse and Ellin (1988) have suggested that gender-linked stress can lead women employees to make important compromises between their personal lives and careers. A study by the American Psychological Association (2010), on Gender and Stress, Women are more likely than men (28 percent vs. 20 percent) to report having a great deal of stress and are more likely to report physical and emotional symptoms of stress than men, such as having had a headache (41 percent vs. 30 percent), having felt as though they could cry (44 percent vs. 15 percent), or having had an upset stomach or indigestion (32 percent vs. 21 percent) in the past month. American Psychological Association (2011), on Research shows that prolonged periods of stress — which releases the hormone cortisol — can decrease proper cell function, thereby contributing to numerous emotional and physical disorders including depression, anxiety, heart attacks, stroke, hypertension and immune system disturbances that increase susceptibility to infections.

Methodology:

The survey research design was utilized for this study. The sample for this study consisted of

458 employees from Mangalore employed in IT sector. The questionnaire was divided into two parts; the first part was designed to capture the demographic responses. Demographical characteristics of the employees were categorized as Personal attributes, comprising age, gender, marital status, number of dependants, educational qualification; Job attributes that includes number of days leaves availed, total experience, nature of work. The second part was the ORSS (Organizational Role Stress Scale) questionnaire. Gender difference was calculated by dividing the sample based on men and women employees.

Tool Used:

To measure the job stress, Organisational Role Stress Scale (ORS) scale developed by Udai Pareek (1983) is being used. The ORS scale contains five items for each Role Stress (a total of 50 statements); it uses a 5 point scale of 0-4. (0 for rarely/not applicable and 4 for nearly always/very frequently applicable). The scale measures the following ten role stressors which are as follows:

1. **Inter-Role Distance (IRD):** is experienced when there is a conflict between organizational and non-organizational roles.
2. **Role Stagnation (RS):** is the feeling of being stuck in the same role for long due to lack of opportunities or development.
3. **Role Expectation Conflict (REC):** arises out of conflicting demands originating from superiors, subordinates or peers.
4. **Role Erosion (RE):** arises when a role occupant feels that others are performing certain functions, which should have been a part of his role.
5. **Role Overload (RO):** is the feeling that an employee is given work more than required.
6. **Role Isolation (RI):** arises when a person feels that his role is isolated from the mainstream of organizational life.
7. **Personal Inadequacy (PI):** is created by the lack of adequate skills and the resulting inability to meet the demands of one's role.
8. **Self-Role Distance (SRD):** arises from a gap between one's concept of self and the demands of his role.
9. **Role Ambiguity (RA):** is experienced when there is a lack of clarity about the demands of the role.
10. **Resource Inadequacy (RIN):** arises when human and material resources allocated are inadequate to meet the demands of the role.

Findings of the Study:

This study mainly highlights on the gender differences relating to stress among employees in IT sector.

H1: There will be a significant difference on gender of employees of IT sector.

To find out the level of Job stress among employees of IT Sector, Mean value presented in Table 2 and independent-samples t-test presented in table 3 is discussed as follows:

An independent-samples t-test was conducted to study the gender differences relating to stress among employees in IT sector on the above mentioned ten dimensions of Organisational Role Stress scale. In measuring the first dimension of Inter Role Distance stressor, the result shows that there is a significant difference in the scores for male respondents ($M=2.9520$, $SD=.516$) and female respondents ($M=3.0206$, $SD=0.534$) conditions; $t(416)=1.333$, $p = 0.183$. These results suggest that Inter Role Distance stressor is more in female respondents as compared to male respondents.

In order to find out the possible differences in gender differences relating to stress regards Role Stagnation stressor, the result shows that there is a significant difference in the scores for male respondents ($M=2.9716$, $SD=.562$) and female respondents ($M=3.0710$, $SD=0.531$) conditions; $t(416)= 1.859$, $p = 0.064$. These results suggest that Role Stagnation stressor is more in female respondents as compared to male respondents.

In comparing the results of the gender differences relating to stress among employees in IT sector regards Role Expectation Conflict the result shows that there is a significant difference in the scores for male respondents ($M=3.0333$, $SD=.818$) and female respondents ($M=2.0449$, $SD=0.598$) conditions; $t(416)=1.266$, $p = 0.206$. These results suggest that Role Expectation Conflict stressor is more in male respondents as compared to female respondents.

While assessing the gender differences relating to stress among employees in IT sector on Role Erosion the result shows that there is a significant difference in the scores for male respondents ($M=2.9451$, $SD=.526$) and female respondents ($M=2.9514$, $SD=0.514$) conditions; $t(416)=0.124$, $p = 0.902$. These results suggest that Role Erosion stressor is more in female respondents as compared to male respondents.

To compare Role Overload, the result shows that there is a significant difference in the scores for male respondents ($M=2.9333$, $SD=.551$) and female respondents ($M=3.9421$, $SD=0.732$) conditions; $t(416)= 0.137$, $p = 0.891$. These results suggest that Role Overload stressor is more in female respondents as compared to male respondents.

In checking the possible gender differences relating to stress regards Role Isolation, result shows that there is a significant difference in the scores for male respondents ($M=2.0225$, $SD=.543$) and female respondents ($M=2.9897$, $SD=0.511$) conditions; $t(416)=0.636$, $p = 0.525$. These results suggest that Role Isolation stressor is more in female respondents as compared to male respondents.

To check the gender contrast relating to stress on Personal Inadequacy result shows that there is a significant difference in the scores for male respondents ($M=3.9667$, $SD=.519$) and female respondents ($M=3.2336$, $SD=0.604$) conditions; $t(416)=0.598$, $p = 0.550$. These results suggest that Personal Inadequacy stressor is more in male respondents as compared to female respondents.

To weigh the possible gender differences relating to stress regards Self Role Distance the result shows that there is a significant difference in the scores for male respondents ($M=2.9471$, $SD=.588$) and female respondents ($M=3.0019$, $SD=0.545$) conditions; $t(416)= 0.988$, $p = 0.324$. These results suggest that Self Role Distance stressor is more in female respondents as compared to male respondents.

In estimating the possible gender differences on assessing Role Ambiguity, result shows that there is a significant difference in the scores for male respondents ($M=2.9873$, $SD=.553$) and female respondents ($M=3.0224$, $SD=0.558$) conditions; $t(416)= 0.646$, $p = 0.519$. These results suggest that Role Ambiguity stressor is more in female respondents as compared to male respondents.

In measuring the possible gender differences regards Resources Inadequacy, the result shows that there is a significant difference in the scores for male respondents ($M=2.8284$, $SD=.601$) and female respondents ($M=2.9308$, $SD=0.512$) conditions; $t(416)= 1.877$, $p = 0.061$. These results suggest that Resources Inadequacy is more in female respondents as compared to male respondents.

Also from the above table it can be inferred that all the parameters are not significant between male and female employees in the IT sector. There is significant difference between the means of male and female employees except for Role Erosion, Role Overload, Personal Inadequacy, Resources Inadequacy. Hence the hypothesis that there will be significant difference between the stress levels of male and female employees stands partially confirmed for Inter Role Distance, Role Stagnation, Role Expectation Conflict, Role Isolation, Self-Role Distance and Role Ambiguity.

Conclusion:

The daily impact of Information Technology seems to continue among employees in all walks of life. As innovations and computer capacities are rapidly increasing, stress will continue to influence and grow in the coming years at an increasing rate. As technology advances, there is also increased stress that is associated with it called as "technology stress." The results of the above study clearly shows that stress affects both categories of gender irrespective of their sex. However the study reveals that there is a significant difference in the role dimension between male and female employees in the IT sector. It is further noticed that women employees experience

higher role stress compared to the men employees. With the increasing challenges in work environment, young and dynamic people adding to the IT profession, it is imperative for the organisations to formulate appropriate measures to combat stressful work life and support a stress free work life.

References:

- American Psychological Association (2010). *On Gender and Stress*. Last accessed on 30-12-2016.
- American Psychological Association (2011). *On Stress and Physical Illness between the Genders*. Last accessed on 30-12-2016.
- Brunner EJ, Marmot MG. (2006). Social organisation, stress and health. In: Marmot MG, Wilkinson RG, editors. *Social Determinants of Health*. Oxford: Oxford University Press; 6–30.
- Cooper, C.L, Rout, U., Faragher B. (1989). Mental health, job satisfaction and job stress among general practitioners. *British Medical Journal*, 298, 366-70.
- Eric S. Parilla, (2012). Levels of stress experienced by NWU employees: Towards developing a stress management, *Asian journal of Management Research*, 2(2), 778-781.
- Faye K.C, James Q. (2004). The negative effects of positive stereotypes: ethnicity-related stressors and implications on organizational health, *Journal of Organisational Behaviour*, 25, 781-785.
- Geeta Kumari, K.M. Pandey, (2011). Studies on Stress Management: A case Study of Avatar Steel Industries, Chennai, India, *International Journal of Innovation Management and technology*, 2(5), 360-367.
- Lai, G., Chan, K.B., Ko, Y.C. & Boey, K.W. (2000). Institutional context and stress appraisal: The experience of life insurance agents in Singapore, *Journal of Asian and African Studies*, 35, 209–228.
- Luthans (1995). The Prettiest addiction you might have. *Personnel Today*, XXIV (2).
- Malhotra S., and Sachdeva S (2005). Social Roles and Role Conflict: An Interprofessional Study among Women. *Journal of the Indian Academy of Applied Psychology*, Vol 31(1), 37-42.
- Otte C, Hart S, Neylan TC, Marmar CR, Yaffe K, Mohr DC. (2005). A meta-analysis of cortisol response to challenge in human aging: Importance of gender. *Psycho neuroendocrinology*. 30, 80–91.
- Pareek, Uday and Purohit, Surabhi (2010). *Training instrument in HRD and OD*. New Delhi: Tata McGraw-Hill.
- Parkhouse, J. and Ellin, D. (1988). Reasons for doctors career choice and change of choice, *British Medical Journal*, 296, 1651-3.
- Pia Muriel Cardos. Gender Difference and Marital Status in Organisational Role Stress Among Medical Doctors. *Scottish Journal of Arts, Social Sciences and Scientific Studies*. 100-107
- Raitoharju, R. (2005). Information Technology-Related Stress. Paper presented at the. 28th Information System Research Seminar in Scandinavia (IRIS28), August 6-9, 2005.
- Ramasethu, December (2014), A Study on the Effect of Job Stress on the Employees Performance in Crux Technologies Private Limited, Chennai, *IOSR Journal of Business and Management*, 16(12), 06-14.
- Rohit Verma, Yatan Pal Singh Balhara, and Chandra Shekhar Gupta. (2011). Gender differences in stress response: Role of developmental and biological determinants, *Industrial Psychiatry Journal* 20(1), 4–10.
- Schuler (1980). A meta-analysis of the relationships between individual job satisfaction and individual performance. *Academy of Management Review*, 9, 712-721.
- Selye, H. (1956). Confusion and controversy in the stress field. *Journal of Human Stress*, 1(2), 37-44.
- Sudha Gurubabu, (1999). Distress, wellness and organizational role stress among IT professionals: Role of life events and coping resources. *Journal of the Indian Academy of Applied Psychology*, Vol 33(2), 169-178.
- Taylor SE, Klein LC, Lewis BP, Gruenewald TL, Gurung RA, Updegraff JA. (2000). Biobehavioral responses to stress in females: Tend-and-befriend, not fight-or-flight. *Psychological Review*, 107, 411–29.
- V. Padma, N. N. Anand, S. M. G. Swaminatha Gurukul, S. M. A. Syed Mohammed Javid, Arun Prasad, and S. Arun (2015). Health problems and stress in Information Technology and Business Process Outsourcing employees. *Journal of Pharmacy and Bioallied Sciences*, 9-13 accessed on 03-01-2017
- Vivek Sundar, (2013). A Survey on Occupational Stress of Bank Employees, *International Journal of Management*, 4(6), 36-42.

Table 1: Table showing the level of Stress among employees of IT Sector

Group Statistics ^a					
Stressors	Gender	N	Mean	Std. Deviation	Std. Error Mean
Inter Role Distance	Male	204	2.9520	.51676	.03618
	Female	214	3.0206	.53423	.03652
Role Stagnation	Male	204	2.9716	.56235	.03937
	Female	214	3.0710	.53163	.03634
Role Expectation Conflict	Male	204	3.0333	.81855	.05731
	Female	214	2.0449	.59808	.04088
Role Erosion	Male	204	2.9451	.52609	.03683
	Female	214	2.9514	.51483	.03519
Role Overload	Male	204	2.9333	.55110	.03858
	Female	214	3.9421	.73236	.05006
Role Isolation	Male	204	2.0225	.54337	.03804
	Female	214	2.9897	.51136	.03496
Personal Inadequacy	Male	204	3.9667	.61963	.03638
	Female	214	3.2336	.60412	.04130
Self-Role Distance	Male	204	2.9471	.58851	.04120
	Female	214	3.0019	.54540	.03728
Role Ambiguity	Male	204	2.9873	.55375	.03877
	Female	214	3.0224	.55889	.03820
Resources Inadequacy	Male	204	2.8284	.60162	.04212
	Female	214	2.9308	.51209	.03501
a. Sector = Service (IT)					

Table 2: Independent Samples test among Employees of IT sector

Independent Samples Test ^a										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Inter Role Distance	Equal variances assumed	.484	.487	-1.333	416	.183	-.06860	.05145	-.16973	.03253
	Equal variances not assumed			-1.334	415.910	.183	-.06860	.05141	-.16965	.03245
Role Stagnation	Equal variances assumed	1.615	.205	-1.859	416	.064	-.09946	.05351	-.20464	.00572
	Equal variances not assumed			-1.856	411.549	.064	-.09946	.05358	-.20478	.00587
Role Expectation Conflict	Equal variances assumed	.796	.373	1.266	416	.206	.08847	.06989	-.04890	.22585
	Equal variances not assumed			1.257	370.695	.210	.08847	.07040	-.04996	.22690
Role Erosion	Equal variances assumed	.128	.721	-.124	416	.902	-.00630	.05092	-.10639	.09378
	Equal variances not assumed			-.124	413.994	.902	-.00630	.05094	-.10644	.09384
Role Overload	Equal variances assumed	.264	.608	-.137	416	.891	-.00872	.06363	-.13379	.11635
	Equal variances not assumed			-.138	394.975	.890	-.00872	.06321	-.13299	.11554

Independent Samples Test ^a										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Role Isolation	Equal variances assumed	.276	.599	.636	416	.525	.03283	.05159	-.06858	.13424
	Equal variances not assumed			.635	411.159	.525	.03283	.05166	-.06873	.13439
Personal Inadequacy	Equal variances assumed	5.393	.021	.598	416	.550	.03302	.05523	-.07555	.14160
	Equal variances not assumed			.600	411.712	.549	.03302	.05504	-.07517	.14121
SelfRole Distance	Equal variances assumed	1.418	.234	-.988	416	.324	-.05481	.05547	-.16384	.05422
	Equal variances not assumed			-.986	409.726	.325	-.05481	.05557	-.16404	.05442
Role Ambiguity	Equal variances assumed	.078	.780	-.646	416	.519	-.03518	.05444	-.14219	.07184
	Equal variances not assumed			-.646	415.377	.518	-.03518	.05443	-.14217	.07182
Resources Inadequacy	Equal variances assumed	5.196	.023	-1.877	416	.061	-.10241	.05456	-.20966	.00484
	Equal variances not assumed			-1.870	398.897	.062	-.10241	.05477	-.21008	.00526
