The Impact of Work Role on Job Stress of Software Professionals at IBM India Pvt. Ltd, Gurgaon, India

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Abstract: This research study was carried out to investigate the impact of work role on job stress of software professionals at IBM India Pvt. Ltd., Gurgaon. The work role outcomes that are affected by job stress on employee's performance are investigated in this paper. It was indicated that how software professionals at IBM India Pvt. Ltd, Gurgaon experience the stress from work role dimensions like supervision, administration,, promotional policy, role conflict, income policy, role ambiguity and work stagnation. The main objective of this research paper is to investigate the level of job stress from work role variables between staff and officer in IBM India Pvt.ltd. The well-designed pretested questionnaire was used for data collection. The total sample size for research study was taken to be 100. Out of these 100 employees, 62 were male and 38 were female. The convenience sampling was used for the study and the statistical tools correlation and regression and T test method were used to analyse the data. The regression analysis confirmed that the work role dimension only 62.2% influences to job stress of software professionals at IBM India Pvt. Ltd, Gurgaon, India. So based on the finding of this study, the study concluded that work role has got significant impact on job stress of software professional at IBM India Pvt. Ltd. Gurgaon, India.

Key words: Work role, job Stress, supervision, and administration.

INTRODUCTION

Job stress is generally acknowledged to be a critical issue form an agers of organizations as job stressors tend to contribute to work role inefficiency, employees are under a great deal of stress related to a different kind of job related stress. Job related stress contributes to organizational inefficiency like high staff turnover, absenteeism due to sickness, decreased quality, and quantity of practice, increased costs of health care, and decreased job satisfaction. One of the work role outcomes that was affected by job stress is performance of employees. Job stress is a mental and physical condition, which affects an individual's productivity,

effectiveness, personal health and quality of work.. The impact of stress from overwork, long hours at work and work intensification has had major and often devastating effects on organizations of developed nations. The process of restructuring, downsizing and re-engineering have helped companies to become lean, but not without great costs.

REVIEW OF LITERATURE

Arnold and Feldman [1] define stress as the reactions of individuals to new or threatening factors in their work environment. Since the work environments often contain new situations, this definition suggests that stress is inevitable. This definition also highlights the fact that reactions to stressful situations are individualized and can result in emotional, perceptual, behavioural and physiological changes. McGrath [2] suggested a definition based on necessary conditions for stress. Therefore, there is a potential for stress when an environmental situation is perceived as presenting a demand that threatens to exceed the person's capabilities and resources availability under conditions where he/she expects a substantial differential in the rewards and costs from meeting the demand versus not meeting it. McGrath's definition implies that the degree of stress is correlated with a person's perceived inability to deal with an environmental demand and work role .This would lead to the conclusion that a person's level of stress depends on their self perceived abilities and self confidence. Stress is correlated with a person's fear of failure. Rose [3] suggested that the employees have tendency towards high level of stress regarding time, working for longer hours which reduces employees urge for performing better. According to Rose et.al., the management support helps in reducing stress in employees. Management support works as a cushion which acts positively in decreasing work related stress in employees. There are a lot of reasons causing stress at worklike family conflicts and work over load. Kahn *et al.* [4] defined work role stressor as the pressure experienced by an individual as a result of organizational and job-specific factors in the form of demands and constraints that have been placed on them. Cooper *et al.* [5] classified role, career development, relationship with others and organizational structure and climate as five of the main categories of work stressors in their model. Lack of career advancement, work load, risk taking and decision making and employee morale and organizational culture were identified as four broad categories of stressors in main clusters of work stressors. Ivancevich *et. al.* [6] suggested that the work stressors is divided into four categories like physical environment, work role, interpersonal relationships and organizational structures. Srivastava *et. al.* [7] developed a job stress index. It assesses perceived job stress related to role overload, role ambiguity, role conflict, group and political pressures, responsibility for persons, under participation, powerlessness, poor peer relations, intrinsic impoverishment, low status, strenuous working conditions and unprofitability. Schuler6 identified job qualities, relationship, organizational structure, physical qualities, career development, change and role as the main categories of work stressors. Parker *et. al.* [8] investigated the six specific causes of work stress which included job characteristics, organizational structure, climate and information flow, role, relationship, career development and external commitments and responsibilities. Quick *et al.* [9] suggested that a task demands, role demands, physical demands and interpersonal demands as four major categories of work stressors. Parasuraman *et al.* [10] identified contextual, role related and personal stressors as three general categories of stressors in organizational settings. Jackson *et al.* [11] found out that Job or role ambiguity is also a potential source of job stress and this occurs when job or task requirements are not clearly outlined or when workers are unsure of their responsibilities and duties. Hendrix *et.al.* [12] identified workload, work autonomy and control supervision and support, role ambiguity and role conflict a major organizational

stressor Cummins[13] suggested role conflict and ambiguity, work overload, under utilization of skills, resource inadequacy and lack of participation as the main categories of work stressors. Summers, DeCotiist et. al suggested a personal characteristics, structural organizational characteristics, procedural organizational characteristics and role characteristics collected by using interview and questionnaire method. The secondary data was mainly drawn from available literature pertaining to the field of knowledge. According to Olusegun *et. al.*[15] investigated that work overload, career development , work family and conflict are considered to likely cause a disruptive effect on performance of workers. The study reveals that worker performance was affected by the factors like tiredness, worry, unhappiness, weakness headache and anger.

Objectives of the study

The main objective of this study, to investigate the level of job stress in terms of work role of software professionals at IBM India Pvt. Ltd., Gurgaon.

Research questions

How is the work role related to job stress of software professionals at IBM India Pvt.Ltd., Gurgaon.

Problem statement of the study

To what extent the work role is influencing to job stress of software professionals at IBM India Pvt. Ltd., Gurgaon.

Hypothesis of Study

For this research study, the hypothesis was formulated on the basis of literature review asmentioned below.

> H1: There is no significant relationship existing between work role dimensions like supervision, administration, promotion policy, role conflict, income policy, work stagnation, role ambiguity and job stress

RESEARCH METHODOLOGIES

This research study is descriptive in nature. The population of the study consists of software professionals at IBM India Pvt. Ltd, Gurgaon, India. Sample size was 100. The convenience method of sampling was used for data collection. There was the pre tested questionnaires used as instrument for data collection. The questionnaires were framed on the basis of Likert 5 point scale from strongly disagree to disagree, where point-1 strongly disagree, 2disagree 3 neither agree nor disagree, 4 agree and 5 strongly agree. The correlation and regression method was used as statistical tools for data analysis.

RESULTS AND DISCUSSION

Data Reliability Statistics

The Cronbach's coefficient alpha measures the internal consistency of data reliability. The reliability statistics provides an indication of the average correlation among all of the items that make up the scale value range from 0 to 1, where higher values indicate the greater reliability. The cronbach's Alpha is .914 on eight items. This value range is near about 1. So it indicates that data is more reliable.

Correlation between work role and job stress

The bivariate correlation signifies the correlation between two continuous variables and it measure of linear relationship between variables. The possible values in this correlation range from-1to+1. Here, the value indicates the strength in the relationship and sign(-1or+1)indicates the direction

Table 4.2
Correlation between job stress and work role

S. No	Variables	1	2	3	4	5	6	7	8
1	Supervision	1							
2	Administration	.516**	1						
3	Promotion policy	.536**	.681**	1					
4	Role conflict	.534**	.612**	.709**	1				
5	Income policy	.650**	.677**	.687**	.720**	1			
6	Work stagnation	.590**	.619**	.700**	.775**	.799**	1		
7	Job stress	.383**	.469**	.433**	.420**	.611**	.513**	1	
8	Role ambiguity	.474**	.527**	.529**	.627**	.675**	.766**	.443**	1

** Correlation is significant at the 0.01 level (2-tailed) *Correlation is significant at the 0.05 level (2-tailed)

The bivariate correlation is undertaken between the respondents. It was hypothesized that a relationship exists between work role dimensions and job stress. The result in table 4.2 shows that the all the eight variables, the P value was less than 0.05. so all the eight variables met the significance level, therefore the relationships were statistically significant.

Work role and Job stress Regression Analysis

Regression analysis is a statistical process for estimating the relationship among variables. In this study, the linear regression was used to check the impact of independent variables work role on dependent variable job stress and summarized results of linear regression is presented in table 4.2.1, 4.2.2 and4.2.3.

Work role and Job Stress Regression Summary

The model summary table 4.2.1 provides the R and R square value. The R value represents the simple correlation and is 62.2 which indicates a high degree of correlation. The R square value indicates how much of the total variation in the dependent variable job stress is explained by the independent variable work role. Here, the R square value is found to be 38.7%

Table 4.3.1
Work role and Job Stress Regression Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
		Model Summary		
1	.622[a]	.387	.340	1.073

The table a. Predictors (constant): work stagnation, supervision, administration, ambiguity, promotion policy, role conflict, and income policy of an organisation

b. job stress.

Table 4.3.2
Work role and Job Stress ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
			ANOVA[a]			
1	Regression	66.030	7	9.433	8.199	.000[b]
	Residual	104.697	91	1.151		
	Total	170.727	98			

Table 4.3.3
Work role and Job Stress Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	Coefficients[a]				
	B	Std. Error	Beta		
1 (Constant)	1.781	.350		5.093	.000
Respondents were satisfied with the supervision by supervisor	-.043	.106	-.045	-.404	.687
Respondents were satisfied with administration	.129	.135	.118	.958	.341
Respondents were satisfied with promotion policy	.000	.131	.000	.003	.998
Respondents had faced role conflict	-.109	.138	-.113	-.792	.430
Respondents were satisfied with income policy in organisation	.510	.149	.545	3.418	.001
Respondents had faced role ambiguity in organisation	.033	.129	.034	.259	.797
Respondents were faced work stagnation	.083	.160	.093	.521	.603

a. Dependent Variable: Respondentswere getting overall stress level

Regression coefficient was R = 0.622; P value = 0.000. This met the threshold for significance since Significant (P) value was less than 0.05. Table 4.2.1 above shows an R adjusted square of 0.340, which indicates that 34% of variation in employees job stress can be explained with variation in work role. The Analysis of variance in table 4.2.2 indicates that F = 8.199 degree of freedom (df) = 7. The P value was 0.000. It is less than 0.05. So, the relationship is statistically significant. The research finding showed that the 34 % employees getting stressed due to work role. From the table 4.2, It was hypothesized that a relationship exists between work role and job stress. The result in table 4.2 shows that the all the eight variables, the P value was less than 0.05. So all the eight variables met the significance level, therefore the relationships were statistically significant.

Impact of work role on male and female software professionals at IBM India Pvt. Ltd., Gurgaon

In Table no. 4.4, the results indicated the range of various job work role dimensions with different mean score value. The average mean value of male software professionals is 1.798 and standard deviation is seen as 0.883 and mean value of female software professional was calculated as 3.845 with the software and standard deviation was found to be 1.053. This finding reported that male software professionals were less affected by work culture as compared to female software professionals. The table 4.4 indicated that there is significant difference between male and female in terms of work role in various work role dimensions like supervision, administration, promotion policy, role conflict, income policy and work stagnation because the all work role variables show the value of two tailed significance value having less than 0.05(p=0.05).

Table 4.4
Results of mean score (M), standard deviation (SD) with significant value (p) of various dimensions in terms of work role of male and female software professionals at IBM India Pvt. Ltd., Gurgaon

S.No.	Dimensions of Organisational climate	Male N=50 Mean (M)	Standard Deviation (SD)	Female N-50 Mean (M)	Standard deviation (SD)	Sig. value of t-test (two tailed) Male	Female
1.	Supervision	1.82	1.010	3.26	1.303	.000	.000
2.	Administration	2.29	1.063	3.70	.937	.000	.000
3.	Promotion Policy	2.13	1.018	3.93	1.063	.000	.000
4.	Role Conflict	1.89	.689	3.87	1.087	.000	.000
5.	Income Policy	1.87	.741	4.28	.777	.000	.000
6.	Work Stagnation	1.68	.739	3.93	1.078	.000	.000
7.	Role ambiguity	2.26	.921	3.95	1.126	.000	.000
	Average	1.798	0.883	3.845	1.053	.000	.000

CONCLUSION

Now a days, the software professionals are facing lots of work related challenges and all challenges gives some positive as well as some negative impact on an individual employe. The software professionals are the biggest asset of the software companies. If the employees are getting favourable work culture to do work then they give more output to the organisation. From the findings, it was concluded that the above mentioned

company maintained a good work culture for their employees. So that the less employees getting stressed due to work role but sometime employees have been getting highly stressed due to organisational target. The finding also indicated that there is significant difference between male and female in terms of work role in various work role dimensions like supervision, administration ,promotion policy, role conflict, income policy and work stagnation because all the work culture variable show the value of two tailed significance value having less than 0.05 (p = 0.05) as analysed from the software used.

LIMITATION

There are the following limitations :

    (i)   The study was limited in software industry only. Therefore, the findings cannot be generalised across all the industries.

    (ii)   The study proceeds with the assumption that the questionnaire on different parameters will elicit a forthright response.

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