

Impact of Occupational Stress and Job Satisfaction among the Employees of Information Technology Industry in Coimbatore

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Abstract: The objective of the study was to study the relationship between occupational stress and job satisfaction among the employees of IT Industry. Eighty-five employees working in IT Industry participated in the study. Structured questionnaires were used to assess the level of stress and job satisfaction. The collected data was analyzed with Mean, Standard Deviation, Correlation, regression and ANOVA tests. Results revealed that there was a significant negative correlation between occupational stress and job satisfaction. Regression analysis revealed that approximately twenty-seven per cent of the variance of job satisfaction was explained by occupational stress.

Keywords: Job satisfaction, Occupational stress, Physiological symptoms, Psychological symptoms, and Role stress.

1. Introduction

Stress is what we feel when we have to respond to a demand on our energy. Stress is a natural part of life, and occurs whenever there are significant changes in our lives, whether positive or negative. It is generally believed that some stress is okay (sometimes referred to as “challenge” or “positive” stress) but when stress occurs in amounts that individuals cannot cope with, both mental and physical changes may occur.

Stress that happens due to a person’s employment is termed occupational stress. According to Cooper & Bright (2001), the most widespread definitions of occupational stress may be classified into three types. The first type of definition is stimulus based. It considers stress as an environmental based stimulus, forced upon the person. The second type of definition is response based. It defines stress as an individual’s psychological or physiological response to the situational forces. The third definition of stress applies an interactive approach often called the stressor-strain approach.

High level of stress causes physiological, psychological, and behavioural problems. Physiological symptoms of distress include heart disease, ulcers, high blood pressure, headaches, sleep disturbances etc. Psychological symptoms include job dissatisfaction, depression, exhaustion, moodiness, burnout, etc. Behavioural consequences of distress include reduced job performance, more accidents, faulty decisions, higher absenteeism, work place aggression, etc.

Ahmad et. al. (1991) examined the relationship between organizational role stress and job satisfaction and personality dimensions of neuroticism – stability and extraversion – introversion. The sample consisted of 50 middle managers of a large industrial organization. The ORS Scale (Pareek, 1983), the Employee Satisfaction – Dissatisfaction Inventory (Pestonjee, 1973) and the Maudsley Personality Inventory (Eysenck, 1959) were used to collect the data. Results indicated that ORS was significantly but negatively correlated with all the four factors of job satisfaction (nature of job, management, personal adjustment, and social relations).

2. Review of Literature

Nurul Ain Bt Syed Alwee (2012) examined the relationship between occupational stress, job satisfaction, and intent to leave towards organizational commitment. A convenience sample group of 130 employees of North Port (Malaysia) Bhd were selected over 2272 of total population at year 2009. A self-administrated survey instrument was developed to measure and test the employee’s external environment occupational stress, job satisfaction, and intent to leave towards organizational commitment. Using SPSS 16.0 two statistical tests were employed to test study hypotheses. First by measuring correlation a Pearson correlation coefficient analysis was used to identify the relationship between predictor and criterion variables.

Likewise, multiple regressions were used to determine the effect between external environment, occupational stress and job satisfaction among related variables. The findings revealed that job satisfaction, occupational stress and intent to leave does affect organizational commitment. At the same time the occupational stress gives to the intent to leave.

Ernest Brewer (2003) examined the relationship between job stress and job satisfaction among a random sample of 133 industrial and technical teacher educators. Correlation analysis revealed a strong inverse relationship between the constructs, with stressors related to lack of organizational support being more strongly associated with job satisfaction than stressors related to the job itself were. There also were significant

differences ($p \leq .05$) in correlations between job satisfaction and frequency of stressors and correlations between job satisfaction and intensity of stressors, suggesting that frequency of stressors had a greater impact on participants' job satisfaction than did intensity of stressors. These results have implications for addressing job stress and job satisfaction in higher education.

In another study, Ahmad and Khanna (1992) investigated the relationship between job stress, job satisfaction and job involvement among 50 middle level hotel managers. The analysis of the data revealed a significant negative relationship between job stress and job satisfaction irrespective of the subjects' sex, marital status, education and experience. Occupational stress was reported to be negatively correlated with job involvement, and the high job involvement group was more satisfied with their job than the low job involvement group.

Sebastian Rothmann (2000) investigated the relationship between job satisfaction, occupational stress, and burnout and work engagement as dimensions of work-related wellbeing in a sample of members of the police force in South Africa. A survey design was used. Stratified random samples of members of the police force ($N = 677$) were taken in the North West Province of South Africa. The Minnesota Job Satisfaction Questionnaire, Police Stress Inventory, Maslach Burnout Inventory – General Survey and Utrecht Work Engagement Scale were used as measuring instruments. The results provided support for a four-factorial model of work-related wellbeing consisting of the following dimensions: job satisfaction (indicating pleasure vs. displeasure), occupational stress (indicating anxiety vs. comfort), burnout (indicating fatigue vs. vigour), and engagement (indicating enthusiasm vs. depression).

3. Objective of the Study

The objective of the present study was to study the impact of occupational stress on job satisfaction among the employees of IT Industry in Coimbatore.

4. Methodology

For the purpose of the study a survey design was used. This design is suitable to study the relationships between different variables. A random sample consisting of 85 employees working in IT Industry in Coimbatore participated in the study. Structured Questionnaires were used to gather primary data. By administering questionnaires occupational stress and job satisfaction among the managers were assessed. The collected data was analyzed with Mean, Standard Deviation, Correlation, regression and ANOVA tests.

A. Tools used

Minnesota Satisfaction Questionnaire (MSQ) Short Form was used to assess the level of job satisfaction among the managers. Responses were scored as follows: Very Dissatisfied = 1; Dissatisfied = 2; Neither Dissatisfied nor Satisfied = 3;

Satisfied = 4; Very Satisfied = 5.

Fifteen items from Occupational Stress Index (Srivastava and Singh, 1981) was used to assess stress. Responses were obtained by using a 5-point Likert type Scale where, Strongly Disagree = 1, Disagree = 2, Neither Disagree nor Agree = 3, Agree = 4, and Strongly Agree = 5.

5. Analysis and Interpretation

This section presents the analysis of the data collected from the respondents.

Table 1
Demographic characteristics of the sample

Characteristics	Classification	Number of Respondents	Percent
Age (in years)	Below 30	23	27.1
	30-40	30	35.3
	Above 40	32	37.6
Gender	Male	37	43.5
	Female	48	56.5
Education	Graduate	48	56.5
	Post graduate	37	43.5
Experience (in years)	Below 5	18	21.2
	5 -10	30	35.3
	Above 10	37	43.5
Income (inrupees)	Below 20000	18	21.2
	20000-30000	29	34.1
	Above 30000	38	44.7

Among the 85 respondents, 23 (27.1%) belong to the below 30 age group; 37 (43.5%) are male; 48 (56.5%) are graduates; 18 (21.2%) belong to below 5 year experience group and another 30 (35.3%) belong to year experience group; and 18 (21.2%) belong to below 20000 income group.

Table 2
Showing the Mean and Standard Deviation of research variables in different age groups

Age		Stress	Job satisfaction
Below 30	Mean	38.13	71.09
	N	23	23
	Std. Deviation	3.520	8.969
30-40	Mean	42.80	65.00
	N	30	30
	Std. Deviation	3.468	6.390
Above 40	Mean	50.34	61.31
	N	32	32
	Std. Deviation	4.224	9.181
Total	Mean	44.38	65.26
	N	85	85
	Std. Deviation	6.254	9.029
F		73.695(.000)	9.439 (.000)

A high level of stress (Mean=50.34) was observed among the respondents of above 40 years' age group and a low level of stress (Mean=38.13) was observed among the respondents of below 30 years' age group. A high level of job satisfaction (Mean=71.09) was observed among the respondents of below 30 years age group and a low level of job satisfaction (Mean=61.31) was observed among the respondents of above 40 years age group. Results of the ANOVA test revealed that there were significant differences in the levels of stress and job

satisfaction among the respondents of different age groups.

Table 3
Showing the Mean and Standard Deviation of research variables in different gender groups

Gender		Stress	Job satisfaction
Male	Mean	50.14	61.35
	N	37	37
	Std. Deviation	4.263	9.343
Female	Mean	39.94	68.27
	N	48	48
	Std. Deviation	3.124	7.587
Total	Mean	44.38	65.26
	N	85	85
	Std. Deviation	6.254	9.029
F		162.014 (.000)	14.199 (.000)

A high level of stress (Mean=50.14) was observed among the male respondents and a low level of stress (Mean=39.94) among the female respondents. A high level of job satisfaction (Mean=68.27) was observed among the female respondents and a low level of job satisfaction (Mean=61.35) was observed among the male respondents. Results of the ANOVA test revealed that there were significant differences in the levels of stress and job satisfaction among the respondents of different gender groups.

Table 4
Showing the Mean and Standard Deviation of research variables in different education groups

Education		Stress	Job satisfaction
Graduate	Mean	43.00	64.88
	N	48	48
	Std. Deviation	6.321	8.727
Post Graduate	Mean	46.16	65.76
	N	37	37
	Std. Deviation	5.771	9.506
Total	Mean	44.38	65.26
	N	85	85
	Std. Deviation	6.254	9.029
F		5.636 (.020)	.197 (.658)

A high level of stress (Mean=46.16) was observed among the post graduate respondents and a low level of stress (Mean=43.00) among the graduate respondents. A high level of job satisfaction (Mean=65.76) was observed among the post graduate respondents and a low level of job satisfaction (Mean=64.88) was observed among the graduate respondents. There was a significant difference in stress among the respondents of different education.

A high level of stress (Mean=50.14) was observed among the above 10years' experience group and a low level of stress (Mean=37.00) among the below 5 year respondents. A high level of job satisfaction (Mean=73.44) was observed among the below 5 year respondents and a low level of job satisfaction (Mean=61.46) was observed among the above 10 years' experience group. Results of the ANOVA test revealed that there were significant differences in the levels of stress and job satisfaction among the respondents of different experience groups.

Table 5
Showing the Mean and Standard Deviation of research variables in different experience groups

Experience		Stress	Job satisfaction
Below 5	Mean	37.00	73.44
	N	18	18
	Std. Deviation	1.572	5.953
5-10	Mean	41.70	65.03
	N	30	30
	Std. Deviation	2.409	6.698
Above 10	Mean	50.14	61.46
	N	37	37
	Std. Deviation	4.263	9.433
Total	Mean	44.38	65.26
	N	85	85
	Std. Deviation	6.254	9.029
F		114.818 (.000)	13.984 (.000)

Table 6
Showing the Mean and Standard Deviation of research variables in different income groups

Income		Stress	Job satisfaction
Below 20000	Mean	37.44	72.00
	N	18	18
	Std. Deviation	2.640	9.628
20000-30000	Mean	42.03	65.17
	N	29	29
	Std. Deviation	1.700	6.628
Above 30000	Mean	49.45	62.13
	N	38	38
	Std. Deviation	5.416	8.780
Total	Mean	44.38	65.26
	N	85	85
	Std. Deviation	6.254	9.029
F		63.860 (.000)	8.621 (.000)

A high level of stress (Mean=49.45) was observed among the above 30000 income group and a low level of stress (Mean=37.44) among the below 20000 income group. A high level of job satisfaction (Mean=72.00) was observed among below 20000 respondents and a low level of job satisfaction (Mean=62.13) was observed among the above 30000 respondents. Results of the ANOVA test revealed that there were significant differences in the levels of stress and job satisfaction among the respondents of different income groups.

Table 7
Showing the correlation among the research variables

Correlations			
		Stress	Job satisfaction
Stress	Pearson Correlation	1	-.525**
	Sig. (2-tailed)		.000
	N	85	85
Job satisfaction	Pearson Correlation		1
	Sig. (2-tailed)		
	N		85
**. Correlation is significant at the 0.01 level (2-tailed).			

Correlation test revealed that there was a significant negative correlation ($r=-.525$ & $p<.01$) between occupational stress and job satisfaction. This finding replicates the findings of the studies conducted by Ashok Pratap Singh and Ashish Kumar Dubey (2011).

Table 8
Showing regression analysis with satisfaction as dependent variable

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.525 ^a	.275	.267	7.732
a. Predictors: (Constant), stress				

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1885.762	1	1885.762	31.540	.000 ^a
	Residual	4962.543	83	59.790		
	Total	6848.306	84			
a. Predictors: (Constant), Stress						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	98.876	6.044		16.358	.000
	Stress	-.758	.135	-.525	-5.616	.000
a. Dependent Variable: Job satisfaction						

Regression analysis was conducted to investigate the association between occupational stress and job satisfaction. F-Test was statistically significant. The R-Squared is .275 which means that approximately 27% of the variance of job satisfaction was explained by occupational stress. This finding is consistent with the findings of the study conducted by Ashok Pratap Singh and Ashish Kumar Dubey (2011).

6. Conclusion

The purpose of the study was to study the impact of stress on job satisfaction among the employees of Information Technology industry in Coimbatore. A sample of 85 employees participated in the study. Structured questionnaires were used to assess the level of stress and job satisfaction. The collected data was analyzed with Mean, Standard Deviation, Correlation, regression and ANOVA tests using SPSS 16. Results showed that a high level of stress was observed among the respondents of above 40 years age group. A high level of job satisfaction was observed among the respondents of below 30 years age group. There were significant differences in occupational stress and job satisfaction among the respondents of different gender. A high level of stress was observed among the male respondents. There were significant differences in occupational stress and job satisfaction among the respondents of different experience, and income groups. Correlation test revealed that there was a significant negative correlation between occupational stress and job satisfaction. Regression analysis revealed that approximately 27% of the variance of job satisfaction was explained by occupational stress.

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