Job Stress of IT Employees in Tamilnadu – An Empirical Study

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Abstract: Stress is a part of our work. Beyond the threshold level, stress causes adverse effect on the physical and mental wellbeing of the workers, whatever may be the work done, proves the research studies. Information Technology (IT) industry employees' jobs, though financially is attractive when compared with other industries, the experienced level of stress is significant greater. In the context of changing policies, globalization, liberalization, competition, downsizing, and arrival of brand-new innovation and technologies work becomes stressful naturally. The present study aims at addressing the problems of IT employees related to job stress. The present study attempted to throw light on the various problems of job stress among IT employees in Chennai city at Tamilnadu State. The tool "Job Stress Scale" was used to measure the stress in terms of ten categories of stressors: Role overload, Role ambiguity, Role conflict, Unreasonable group and political pressure, Responsibility for persons, Under participation, Powerlessness, Poor peer relations, Low status, and Strenuous working conditions. The 103 employees were drawn as a sample from five leading IT companies, occupying various positions. The data were obtained and analysed using correlational, Chi-Square, 't' test, ANOVA and Factor Analysis. The results revealed that role conflict arose because of poor peer-relations. There was significant relationship between marital status of employees and job stress. There was association between role overload and responsibility for persons. Significant difference was found between married and unmarried employees with regard to job stress. No difference was found between different categories of employees. This study throws light on the problems related to job stress among IT employees that would be helpful in managing stress, evolving new policies and act as source for further research.

Keywords: Job Stress, IT companies, IT employees, Stressors,

Introduction

During the past decade, the IT sector has under gone rapid and striking changes like policy changes due to globalization and liberalization, increased competition due to the entrance of more multinational IT companies, downsizing, introduction of new technologies, etc. Due to these changes, the employees in the IT companies are experiencing a high level of stress. This research investigates the relationship between job stress and individual characteristics of the employees of IT companies. It also shows the effect of various factors on the job stress. This study also helps us to identify which factor causes more of stress in work place. Now-a-days, it becomes more important for Information Technology employee to manage stress and this helps to identify and reduce most stress causing factor.

Considering role stress as a debilitating syndrome, this study has been undertaken with an aim to systematically investigate the factors causing job stress amongst IT professionals. IT companies are among the top ten high stress workplaces in India. Elucidating the causes of role stress is important not only for its potential implications for stress management at IT companies but also for enhancing an understanding of strategic human resource management. With this aim, the study makes an effort to identify the sources of job stress experienced by the employees of information technology companies.

Review of Literature

Taylor (2011) suggests that Subjective Well-Being (SWB) is influenced by a range of choices that not all people in society are able to make. Having SWB on large surveys will allow us to test the opportunity of people to obtain higher SWB and the important objective circumstances that allow people to have higher SWB.

Olagunju (2010) pointed out that stress is a manifest of both male and female individuals to defiling basic needs of life in an environment of competing needs. This implies that work related stress tends to have deleterious effects on workers attitude to work as well as their condition of health.

Marzuki & Ishak (2011) concluded in their research that occupational stress at work and individual health and well-being appear to be closely intertwined. Whereas an acceptable work stress can bring good things to an organization, it also hurts health and well-being especially when it lingers on, when passivity and withdrawal dominate the way people cope with stress, and when socio-emotional and relationship issues are at stake causing depleting individual and organizational performance.

Sun & Chiou (2011) explored the determinants of work performance. For this purpose, the target population was aviation ground crews working in Taoyuan International Airport, Taiwan. The result exhibited that occupational stress had a negative impact on work performance, and the coping strategies were the mediator survivals between occupational stress and work performance.

Negeliskii & Lautert (2011) evaluated the relationship between occupational stress and the work capacity index of 368 nurses (82.1% of the population) of a Hospital Group. Results revealed that Occupational stress was present in 23.6% of the nurses, of these 15.2% presented High Strain work and 8.4% Passive Work. Social Support exercised a significant positive influence on all groups - exposed or not to occupational stress.

Hoorn (2007), reported that wellbeing measures can be classified into two broad categories: objective and subjective measures. People's wellbeing is assessed indirectly using cardinal measures. On the other hand, subjective measures of wellbeing capture people's feelings or real experience in a direct way, assessing wellbeing through ordinal measures.

Ortega et al. (2007) point out that police officers work in a unique environment, subjecting themselves to potentially traumatic events in conditions that impact their emotional and physical well-being. Therefore, additional stressors in the police environment such as the imbalance or unavailability of the resources needed to meet the necessity of addressing sources of stress can engender further stress for police officers.

Need for the Study

Modern living has brought with it, not only innumerable means of comfort, but also a plethora of demands that tax human body and mind. Now-a-days everyone talks about stress. Not only justhigh pressure executives are its key victims but it also includes laborers, slum dwellers, working women, businessmen, professionals and even children. Stress is an inevitable and unavoidable component of life due to increasing complexities and competitiveness in living standards. The speed at which change is taking place in the world today is certainly overwhelming and breathe taking. In the fast changing world of today, no individual is free from stress and no profession is stress free. Everyone experiences stress, whether it is within the family, business, organization, study, work, or any other social or economicactivity. Thus, in modern time, stress in general and job stress in particular has become a part of the life and has received considerable attentionin recent years. Stress has become the core concern in the life of everyone, but everybody wants stress-free life. Stress is a subject which is hard to avoid. Stress is a part of day-to-day living. Every individual is subjected to stress either knowingly or unknowingly. Stress, long considered alien to Indian lifestyle, is now a major health problem / hazard. The present study was designed to analyze the factors influencing stress among the selected branch employees of IT companies in Chennai.

Significance of the Study

Subjective wellbeing and job stress have long been worry for employees and employers and it has been deliberate among varied professional groups. In the available review of literature, the work of IT is portrayed as challenging and intrinsically stressful, even a high degree of stress may be measured a part of their job, This study significant because of the insights and contributions in provides for the IT managers to better understand the stressors inherent in the functions of their workforce through the antecedents including age, gender, marital status, educational qualification, experience, monthly salary, and number of dependents. Furthermore, this study develops an understanding of subjective wellbeing and its relationship with job stress. IT companies' management can utilize the research findings to formulate suitable strategies to address the stress related problems of their employees.

Objectives of the Study
1. To assess the occupational stress levels among different categories of employees working in IT companies;
2. To find out major stress causing factors and analyze stress level in IT company employees in relation to individual differences;
3. To identify the degree of relationship among the stress causing factors and also with demographic characteristics; and,
4. To offer valuable suggestion to cop up the stress in the IT companies' employees.

Scope of the Study

Stress can be brought about by pressures at home and at work. Employers cannot usually protect workers from stress arising outside of work, but they can protect them from stress that arises through, work. Stress at work can be a real problem to the organization as well as for its workers. Good management and good work organization are the best forms of stress prevention. This study is helpful in assessing the extent of stress experienced by the employees. Stress-management strategies and seek to extend the wellbeing of the Supervisor relationship with their subordinates.

Limitations of the Study

The research is limited only to five selected IT companies' employees and the study was restricted to Chennai city only.

Research Methodology

A research design is a plan that specifies the objectives of the study, method to be adopted in the data collection, tools in data analysis and hypothesis to be framed. The research design helps in providing direction to the computation and interpretation process to arrive at solutions and recommendations. It is descriptive type of research in nature. Primary data are the first hand information collected by the researcher for the immediate data collection. For the present study, structured questionnaire was used to elicit responses from the respondents because of the simplicity and reliability. Secondary data was collected from various journals, magazines, articles, various sites and private banks records. The population of this study is the total employees in all selected10 IT companies' employees in Chennai. It is a finite population (large size). The sampling technique used in this study is simple random sampling method. This method is also called as the method of chance selection. Each and every item of population has equal chance to be included in the sample.

It refers to the number of items to be selected from the universe to constitute as a sample. The sample size of the study is 103. Data was collected from different IT companies. A structured questionnaire was used. The questionnaire contained close-end questions with 5-points scale rating technique (Likert's type scale). The questionnaire consists of 40 questions with 10 dimensions: 1. Role Overload (RO), 2. Role Ambiguity (RA), 3. Role Conflict (RC), 4. Unreasonable Group Political Pressure (UGPR), 5. Responsibility For Persons (RP), 6. Under Participation (UP), 7. Powerlessness (P), 8. Poor Peer Relations (PPR), 9. Low Status (LS), and 10. Strenuous Working Condition (SWC). Statistics is a tool, but not an aim. The value of statistics lies with organizing and simplifying data, to permit some objective estimate showing that an analysis is under control or that a change has occurred. Analysis of Variance (ANOVA), Correlation, Chi-square, Factor analysis and Independent sample t-test.

Data Analysis and Results

1. Correlation Analysis

(i)   Correlation among the stress causing factors

	RO	RA	RC	UG&PP	RP	UP	PL	PPR	LS	SWC
RO	1									
RA	.054	1								
RC	.284**	.372**	1							
UG&PP	.189	.411**	.068	1						
RP	.365**	-.273**	.046	.151	1					
UP	-.319**	.308**	.020	.045	-.621**	1				
PL	-.272**	.291**	.158	.028	-.563**	.694**	1			
PPR	-.176	.130	.299**	.062	-.322**	.335**	.256**	1		
LS	-.167	.264**	.219*	-.025	-.392**	.374**	.473**	.314**	1	
SWC	.150	.432**	.195*	.395**	-.009	-.017	.004	.221*	-.027	1

**. Correlation issignificant at the 0.01 level (2-tailed).

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

Source: SPSS data analysis output

Result:

1.   It is observed that Role Overload arises because of more responsibility given to the employees and also if the person is under participating, he/she will not experience Role Overload.
2.   Role Ambiguity/confusion arises because of strenuous working condition and if the employees are more responsible then, Role ambiguity is not possible.
3.   Role conflict arises because of Poor peer relations.
4.   Unreasonable Group and political pressure arises because of strenuous working condition and if the person comes under low status then he does not experience Unreasonable Group and political pressure.
5.   If the employee is given more responsibility, then definitely, he/she will not be Under Participative.
6.   Under Participation arises because of Powerlessness of the employees it does not happen because of strenuous working condition.
7.   The employee is powerless if he falls under the category of Low Status and Poor peer relations arise because of Low Status.
8.   Low status of the employee does not depend upon the strenuous workingcondition.

(ii)   Correlation between the stress causing factors and demographic characteristics

	Age	Annual income	Working hours	Experience	Department	Marital status	No of children	Family size	Qualification	Gender
RO	0.066	0.008	0.025	0.071	-0.087	-0.004	-0.019	-0.038	0.046	0.023
RA	-0.123	$-.253^{**}$	-0.176	$-.292^{**}$	0.032	$.195^{*}$	-0.172	0.042	$-.235^{*}$	0.047
RC	-0.148	$.294^{**}$	-0.1	$-.202^{*}$	0.029	-0.009	-0.189	-0.011	$-.196^{*}$	-0.198
UG&PP	$-.313^{**}$	$-.313^{**}$	-0.151	$-.323^{**}$	$.207^{*}$	-0.072	-0.121	-0.065	-0.187	0.029
RP	0.046	$-.210^{*}$	$.301^{**}$	0.134	-0.133	-0.042	0.026	$.247^{*}$	$.301^{**}$	-0.148
UP	-0.148	$-.372^{**}$	$-.388^{**}$	$-.252^{*}$	0.072	0.11	$.263^{**}$	0.146	$-.442^{**}$	0.176
PL	-0.183	$-.372^{**}$	$-.360^{**}$	$-.289^{**}$	0.116	0.06	-0.145	-0.163	$-.436^{**}$	0.193
PPR	-0.078	-0.044	-0.015	-0.182	0.018	0.083	-0.139	-0.015	-0.026	-0.021
LS	-0.05	-0.138	-0.101	-0.173	-0.188	0.021	0.036	0.029	$-.280^{**}$	0.112
SWC	$-.227^{*}$	$-.248^{*}$	$-.294^{**}$	$-.327^{**}$	-0.044	0.15	-0.192	0.093	-0.13	-0.07

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

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

Source: SPSS data analysis output

Result:

1. With respect to age of the employees role overload occurs and age does not relate to unreasonable group and political pressure.
2. Stress due to Role conflict occurs due to difference in income level and income does not depend on under participation and powerlessness.
3. Working hours of employees are affected greatly by responsibility for persons and it does not suit for under participation.
4. Experience happens due to more responsibility given to the employees and does not relate to strenuous working condition.
5. Department of the workers is related to the unreasonable group and political pressure and does not depend on low status.
6. Marital status of the employees depend on role ambiguity to a great extend.
7. If number of children increases under participation occurs.
8. If family size and educational qualification of the employees increases responsibility also increases.
9. Gender difference is mostly related to powerlessness and there is on occurrence of role conflict between the genders.

2. Chi-Square Test

(i)   To find the association between role overload and responsibility for persons

Ho: There is no association between role overload and responsibility for person.

H₁: There is an association between role overload and responsibility for persons.

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.056^{a}	1	**.025**		
Continuity Correction[b]	4.203	1	.040		
Likelihood Ratio	5.095	1	.024		
Fisher's ExactTest				.030	.020
Linear-by-Linear Association	5.007	1	.025		
N of Valid Cases[b]	103				

Source: SPSS data analysis output

Result:

Since the significant value is less than the p-value 0.05 so Ho is rejected. H₁ is accepted there is association between role overload and responsibility for persons, if the employees are given more responsibility, then obviously, they tend to have more workload which causes stress to theemployees.

(ii)   Chi-square 2: To find the association between family size and stress level of the employees.

Ho: There is no association between family size and stress level.
H₁: There is an association between family size and stress level.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.091^a	4	**.024**
Likelihood Ratio	1.029	4	.005
Linear-by-Linear Association	.251	1	.017
N of Valid Cases	103		

Source: SPSS data analysis output

Result: From the chi-square analysis the sig. value is less than the p-value So Ho is rejected H₁is accepted. There is an association between the family size and stress level of the employees, if the family size increases, the stress level of the employees also increases.

3. t-test
(i)   To analyze the stress level of employees based on the marital status
Ho: There is no significant difference between the factors causing stress with respect to marital status of the employees.
H₁: There is significant difference between the factors causing stress with respect to marital status of the employees.

	Levene's Testfor Equality ofVariances		t-test for Equality ofMeans			
	F	**Sig.**	**t**	**df**	**Sig. (2-tailed)**	**Mean Difference**
RO	.006	.939	.038	101	.969	.00383
RA	3.340	.071	-1.999	101	.048	-.19617
RC	.032	.859	.089	101	.929	.00881
UG&PP	5.343	**.023**	-2.126	101	.036	-.20575
RP	.516	.474	.728	101	.468	.07280
UP	2.665	.106	-1.111	101	.269	-.10958
PL	1.197	.276	-.607	101	.545	-.06054
PPR	2.248	.137	-.842	101	.402	-.08238
LS	.179	.673	-.211	101	.833	-.02107
SWC	6.852	**.010**	-1.528	101	.130	-.14943

Source: SPSS data analysis output

Results:

There is difference between marital status towards unreasonable group & political pressure and strenuous working condition i.e., both married and unmarried employees suffer different level of stress for unreasonable group & political pressure and strenuous working condition. And also there is no difference between married and unmarried employees towards other factors i.e. they suffer with same level of stress with other factors.

5.   ANOVA
(i)   To analyses the significant difference of stress in different categories of employees.
Ho: There is no significant difference between the factors causing stress with respect to different category of employees.
H₁: There is significant difference between the factors causing stress with respect to different category of employees.

		Sum ofSquares	Mean Square	F	Sig.
RO	Between Groups	.712	.356	1.438	**.242**
	Within Groups	24.744	.247		
	Total	25.456			
RA	Between Groups	2.790	1.395	6.107	.003
	Within Groups	22.841	.228		
	Total	25.631			
RC	Between Groups	1.085	.542	2.249	**.111**

	WithinGroups	24.119	.241		
	Total	25.204			
UG&PP	Between Groups	4.508	2.254	10.972	.000
	Within Groups	20.541	.205		
	Total	25.049			
RP	Between Groups	2.398	1.199	5.139	.008
	Within Groups	23.330	.233		
	Total	25.728			
UP	Between Groups	2.613	1.306	5.783	.004
	Within Groups	22.591	.226		
	Total	25.204			
PL	Between Groups	3.664	1.832	8.369	.000
	Within Groups	21.889	.219		
	Total	25.553			
PPR	Between Groups	4.016	2.008	9.717	.000
	Within Groups	20.664	.207		
	Total	24.680			
LS	Between Groups	2.786	1.393	6.119	.003
	Within Groups	22.767	.228		
	Total	25.553			
SWC	Between Groups	2.185	1.093	4.779	.010
	Within Groups	22.863	.229		
	Total	25.049			

Result:

There is no difference between different categories employees with respect to role conflict and role overload. All other factors show significant difference with respect to different level of employees. Top level managers, Middle level managers and Operational level workers experience same level of stress based on role conflict and role overload. But all other stress causing factors produce some kind of difference with respect to different categories of employees.

6. Factor Analysis:

(i)   To find out major stress causing factors among bank employees from 10 variables.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure	of Sampling Adequacy. Approx. Chi-Square	.718
Bartlett's Test of Sphericity	df	301.62
	Sig.	45
		.000

Total Variance Explained

Comp onent	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.171	31.706	31.706	3.171	31.706	31.706	3.098	30.985	30.985
2	2.090	20.900	52.606	2.090	20.900	52.606	1.753	17.534	48.519
3	1.064	10.643	63.249	1.064	10.643	63.249	1.473	14.730	63.249
4	.835	8.354	71.603						
5	.677	6.767	78.371						

6	.608	6.079	84.450						
7	.552	5.521	89.971						
8	.445	4.451	94.422						
9	.308	3.083	97.505						
10	.249	2.495	100.000						

Extraction Method: Principal Component Analysis

Rotated component matrix for 10 scales

	Component		
	1	**2**	**3**
Role Overload	-.509	**.529**	.036
Role Ambiguity	.392	**.645**	.276
Role Conflict	.043	**.793**	.089
Unreasonable Group Political Pressure	-.099	.454	**.626**
Responsibility For Persons	-.812	.117	-.026
Under participation	**.828**	.005	.077
Powerlessness	**.811**	.165	-.023
Poor PeerRelations	.477	-.169	**.509**
LowStatus	**.663**	.369	-.115
Strenuous Working Condition	-.059	.131	**.847**

Extraction Method   : Principal Component Analysis.
Rotation Method   : Varimax with Kaiser Normalization

Table showing reduced factors

S.N0	Role Stressors	OrganizationalClimate Stressors	Interpersonal Development Stressors
1.	Role Overload	Under participation	Unreasonable Group & Political Pressure
2.	Role Ambiguity	Powerlessness	Poor PeerRelations
3.	Role Conflict	LowStatus	Strenuous Working Condition

Result

The three major stressors that are identified after factor analysis are as follows:
- Role Stressors
- Organisational Climate Stressors
- Interpersonal Development Stressors

Suggestions

- Organize a Stress Management Program that focuses on different leave categories of employee's at all hierarchical level.
- Take adequate step store design jobs, which are taxing to employees' abilities and capacities.
- Adequate role clarification should be made whenever necessary to eliminate role ambiguity.
- Introduce more job oriented training programs, which improve employees' skill and their confidence to work effectively.
- Encourage open channel of communication to deal work related stress.
- Undertake stress audit at all levels in the organization to identify stress area improving conditions of job and alleviating job stress.
- Introduce 'Pranayamam' (Brain Stilling and control of Vital Force) as a holistic managerial practice.
- Provide counseling on work related and personnel problems and support from a teamof welfare health and counseling staff.
- Attractive systemof reward and recognition ofgood work may be reduced the job stress.

Endnote

The problem of stress is inevitable and unavoidable in the IT sector. The study found that female employees and married employees are more stressed than others. The result also shows that there is a significant relationship with subjective wellbeing and job stress. The findings of the present study also reveals that majority of the employees face severe stress-related ailments and a lot of psychological problems. Hence, the IT company's management must take several initiatives in helping their employees to overcome its disastrous effect. Since stress in IT sectors is mostly due to excess of work pressure and work life imbalance work and family. In an age of highly dynamic and competitive world, human being is exposed to all kinds of stressors that can affect individuals on all realms of life. The growing importance of interventional strategies is felt more at organizational level.

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