

**STUDY ON JOB STRESS AND QUALITY OF LIFE OF
WOMEN SOFTWARE EMPLOYEES**

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ABSTRACT:

Stress at work is a relatively new phenomenon of modern life style. The nature of work has gone through drastic changes over the last century as it is still changing at whirlwind speed. Stress has touched almost all professions. Stress poses a threat to physical health of the individual. Work related stress in the life of organized workers, consequently affects the health of organizations. Stress is high in software profession because of their nature of work, target, achievements, night shift, over work load. Very few though have looked at IT employees, in particular women and their quality of life. Thus, the present study focuses on the job stress and quality of women software employees. Descriptive research design is adopted and universe is the women employees of the software industries at Bangalore. The researcher adopted snow ball sampling technique and sample size of was confirmed to 201. It was concluded that job stress influences the quality of life of software employees. It is also concluded that the demographic variables do influence the level of job stress and quality of life of software employees.

Key Words: job stress, quality of life, software employees, information technology, women employee.

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INTRODUCTION:

The information technology (IT) services and IT enabled services (ITES) industries in India have become highly visible nodes of the global economy, attracting substantial attention from international media and business interests as a prime destination for outsourcing and off-shoring. IT have produced a new global image of India as a rising economic power and moreover, for many political and business leaders in India, IT has come to be regarded as a model for India's future economic growth and development, based on the policies of liberalisation and globalisation.

IT has become the career option of choice for many young educated Indians, for whom it offers salaries unknown in other sectors as well as an opportunity to live and work outside of India. Software engineers, BPO workers, and others employed in IT-related occupations can be said to constitute a new kind of workforce: they are highly educated, well-paid, mobile, and closely linked into the global services economy, whether working in India or abroad. Moreover, work in this industry is distinctive in that it is not only catering to the global market, but is often performed 'virtually', giving rise to new kinds of workplaces, work cultures, and employment issues. The rise of the IT industry has also fed into ongoing processes of globalisation, stimulating significant transformations in the urban middle classes and in the cultural milieu of cities such as Bangalore. These include changes in lifestyles, forms of sociality, family structure, and self-identity, which are linked to the rapid upward socio-economic development.

But on the other hand, the nature of job in IT industry has a negative impact on the employees physical and mental health. IT work tends to be high-pressure and the workflow is regulated by the tyranny of deadlines and project timelines, and software engineers are always struggling to meet unrealistic deadlines and 'firefighting' last minute crises. The IT profession has sprouted suicides, divorces, cardiac ailments, and depression, apparently more than its proportionate share. Along with the access to international travel and the ability to mingle with people of different cultures has also arrived the deep isolation of late hours, no social life outside of immediate family, no hobbies, and few and brief vacations. There is also the loss of job security; employees have to perform and deliver on projects on time to retain their hold on jobs; they also have to refresh their skills constantly, often under pressure of an immediate project deadline. This pattern of work is largely responsible for the high levels of stress that are typical in this

industry. A study by the Associated Chambers of commerce and Industry of India (Assocham), said 54 per cent of the workforce in the IT and ITeS sectors were afflicted with depression, severe headaches, obesity, chronic backache, spondylosis, diabetes and hypertension.

This kind of pressure is there for both men and women but still it is true that women have to cope with practical problems of balancing work at home and office in our social and family set-up. A study shows that high salaries and social status associated with the IT sector has attracted women to take up these jobs, but many suffer on account of various factors like late working hours. Covering 150 women in the IT sector and 50 others in allied areas, the study found that long working hours at the desk and job related pressure creates a lot of physical discomfort and mental tension. (Kerala State Women's Commission , 2010).

Earlier academic literature has looked extensively at IT sector, but mainly from the perspective of how it grew, how it has leveraged existing economic resources, how it has developed and fined-tuned the model of outsourcing, and how structures of labor laws, economic incentives, historical conditions, and labor mobility have helped the industry grow. Very few though have looked at IT employees, in particular women and their quality of life. Thus, the present study focuses on the job stress and quality of women software employees.

REVIEW OF LITERATURE:

Balasubramanian Vimala and Chokalingam Madhavi (2009) The mean values shows that the overall stress is high among employees in the group aged more than 45 years with a mean value of 110.81 and least among employees in the group aged less than 25 years with a mean value of 81.5 and also with the least standard deviation. Analysis of the overall stress level finds that overall stress is high among employees with more than six years of experience with a mean value of 89.60 and low among employees with less than three years of experience with a mean value of 81.34.

Le Blanc, (2000) The concept of social support has referred as the existence of good, pleasant relationship with others, the availability of others, in case of problems and help, understanding and attention provided when one faces with difficulties.

Madhavi.C and Vimala, B (2011)The study establishes that the role stress dimensions experienced by the women software professionals make a significant impact upon their work family issues.

Mohan, N and Ashok, J (2011). Analysis of over all stress level finds that over all stress is high among the women employees with more than Five years and low among the employees less than three years.

Mohsin Aziz, (2004).The research finds differences in the level of stress between married and unmarried employees on several role stressors. However, level of education does not emerge as a significant differentiator of stressors.

Suchitra Srinivas (2005) has stated that at present, there are over one lakh software professionals employed in the information technology sector in and around Chennai. With the expansions and consolidations planned by IT majors, this figure is expected to grow by another 50,000 this year. The Tamil Nadu government has given clearance for 40 more IT parks in and around Chennai. This means jobs for another 75,000 professionals. IT investment in the state has risen from Rs 1,100 crores in 2001 to Rs 6,500 crores today. But the question of whether there has been a simultaneous improvement in the quality of life of software professionals remains unanswered.

Rajib Lochan Dhar and Manju Bhagat (2008). The study found that the participants accepted that they experienced quiet an amount of stress due to their nature of work, although the level of stress observed, varied amongst the participants. Many of the stressors, identified by the participants, seemed to be typically associated with the nature and type of their work. Stress was mainly associated due to the interaction of the person factors with works environment factors. This study highlights the importance of work place social support provided by the superiors and colleagues in order to reduce stress and developing a healthy work environment.

Zaki Rashidi and Amanat Ali Jalbani (2009). A higher degree of stress is found in unmarried people as compared to married people on the average. the average, the age group 25–28 years are reporting the highest stress, The analysis according to various degrees and qualification shows that almost all types of qualifications: BS, MS, BCS, MCS, MBA, B.Sc, or M.Sc are experiencing equal stress. Hence, qualification does not create any significant impact on the job

stress. Those people who are working both as technical and managerial support in the software houses are experiencing more stress, and showed the higher causes of stress as fear of obsolescence, client interaction, and workload.

Importance of the Study:

Stress at work is a relatively new phenomenon of modern life style. The nature of work has gone through drastic changes over the last century as it is still changing at whirlwind speed. Stress has touched almost all professions. Stress poses a threat to physical health of the individual. Work related stress in the life of organized workers, consequently affects the health of organizations. Stress is high in software profession because of their nature of work, target, achievements, night shift, over work load. These in turn affect the quality of life and job satisfaction. Thus, the present study focuses on the job stress and quality of women IT employees.

Objectives:

1. To study the demographic profile of the respondents.
2. To access the level of job stress and quality of life of the respondents.
3. To study the relationship between demographic profile, job stress and quality of life of the respondents.

Hypothesis:

1. There is no significant relationship between age and job stress.
2. There is no significant difference in job stress between married and unmarried.
3. There is no significant relationship between hour of work and job stress.
4. There is no significant relationship between age and quality of life.
5. There is no significant difference in quality of life among married and unmarried.
6. There is no significant relationship between job stress and quality of life.

RESEARCH METHODOLOGY:

Descriptive research design is adopted for the present study. The universe of the present study is the women employees of the software industries at Bangalore. The researcher adopted snow ball sampling technique for selecting the sample for the study. Through references from the employees the samples were selected. The sample size of was confirmed to 201 based on the respondents response for the mailed questionnaire. The questionnaire consists of three sections. 1. Personal details, 2.Job stress and 3.quality of life. The researcher used standardized job stress scale developed by Srivastava A. K. and Singh A. P and quality of life scale developed by D.L.Dubey, Verma.S.K for data collecting. It was assigned that higher the score higher is the level of stress and higher is the score higher is the level of quality of life. Scores of the respondents were categorized as follows

Job stress

Category	Score
Low	47 & Below
Moderate	48 to 66
High	67 & above

Quality of life

Category	Score
Low	63& below
Moderate	64 to 78
High	79 & above

Reliability and Validity:

The researcher adopted Split-half reliability test for finding the reliability of the scales. The items on the scale are divided into two halves and the resulting half scores were correlated in reliability analysis by means of SPSS. The correlation value obtained was 0.75 (job stress) and 0.81 (quality of life). In the present study, to test the validity of the scale, the job stress scale was subjected to face validity. The scale was administered to five experts and got their expertise on the validity of the items in the scales.

Statistical Techniques used for Analysis:

The researcher after collecting the data, the data were edited and coded. The data were then analyzed using various statistical tools like mean, standard deviation, t-test, coefficient of correlation and ANOVA.

ANALYSIS AND INTERPRETATION:**Demographic Variables (Table 1)**

Variables	Particulars	Frequency	Percentage
Age	22-24 years	161	80.1
	25-27 years	32	15.9
	28-30 years	8	4.0
Marital Status	Married	20	10.0
	Unmarried	181	90.0
Educational Qualification	UG	32	15.9
	PG	49	24.4
	B.tech	120	59.7
Designation	Software engineer	148	73.6

	Application developer	8	4.0
	Associate head	8	4.0
	Technical head	8	4.0
	Others	29	14.4
Monthly Income	Below 10000	16	8.0
	11000-15000	32	15.9
	16000-20000	73	36.3
	21000-25000	32	15.9
	26000-30000	28	13.9
	Above 30000	20	10.0
Years of Experience	Below 1years	92	45.8
	1-2 years	89	44.3
	2-3 years	8	4.0
	3-4 years	8	4.0
	Above 4 years	4	2.0
Hours of work	8 hours	29	14.4
	9 hours	95	47.3
	10 hours	69	34.3
	11 hours	8	4.0
Working in night shifts	Yes	20	10.0
	No	181	90.0
Avoid using computer	Yes	108	53.7
	No	93	46.3

The table 1 shows that majority of the respondents (80.1 percent) were between 22-24 years of age group and majority of the respondents (90 percent) were unmarried. Nearly three-fifth (59.7 percent) of the respondents has completed B.Tech and less than one-fifth has completed their PG degree. Majority of the respondents (73.6 percent) were working as software engineers and more than one-third of the respondents (36.3 percent) were earning an monthly income between 16,000 – 20,000 and two-fifth of them (40 percent) were earning an monthly income more than 20,000. Less than half of the respondents (45.8 percent) had work experience below 1 year and less than half of them (44.3 percent) had work experience below 2 years. Less than half of the (47.3 percent) were working for 9 hours per day and more than one-third of them (34.3 percent) were working for 10 hours per day. Findings shows that majority of the respondents (90 percent) do not work during night hours and more than half of them (53.7 percent) avoid using computer when ever possible.

Stress and Quality Of Life (Table 2)

Variables	Particulars	Frequency	Percentage	Mean
Job stress	High	32	15.9	Mean =57.14 SD = 10.08
	Moderate	141	70.1	
	Low	28	13.9	
Quality of life	High	36	17.9	Mean =71.34 SD = 7.93
	Moderate	141	70.1	
	Low	24	11.9	

The table 2 shows that majority of the respondents had a moderate level of job stress and 15.9 percent of them had high level of job stress. The mean job stress score of the respondents is 57.14 and SD is 10.08. The quality of life of majority of the respondents was moderate and 17.9 percent of them had high level of quality of life. The mean quality of life score is 71.3 and SD is 7.93.

Relationship between Demographic and Job Stress (Table 3)

Variables	Statistical Value	Result
Age and Job Stress	$r = 0.24$ ($p < 0.01$)	Significant
Marital Status and Job Stress	$t = 1.72$ ($p > 0.05$)	Not-Significant
Educational Qualification and Job Stress	$F = 7.82$ ($p < 0.01$)	Significant
Designation and Job Stress	$F = 3.82$ ($p < 0.01$)	Significant
Monthly Income and Job Stress	$r = 0.04$ ($p > 0.05$)	Not-Significant
Years of Experience and Job Stress	$r = 0.19$ ($p < 0.01$)	Significant
Working hours and Job Stress	$r = 0.28$ ($p < 0.01$)	Significant
Avoid using computer and Job Stress	$t = 3.40$ ($p < 0.01$)	Significant

The table 3 shows the relationship between demographic factors and job stress of the respondents. The coefficient of correlation value ($r = 0.24$) shows that there is a significant relationship between age and job stress of the respondents at 0.01 level. It is interpreted that higher the age higher is the level of job stress. The t-test value ($t = 1.72$) shows that there is no significant difference in level of job stress among married and unmarried respondents. The ANOVA value ($F = 7.82$) shows that there is a significant difference in the level of job stress with various educational qualification. The mean value shows that the PG degree holders (61.35) suffer more followed by B.tech (56.57). The ANOVA value ($F = 3.82$) shows that there is a significant difference in the level of stress and designation. The mean value shows that the technical head (64.0) suffer more job stress followed by software engineers (57.03). The coefficient of correlation value ($r = 0.04$) shows that there is no significant relationship between monthly income and job stress of the respondents at 0.05 level. The coefficient of correlation value ($r = 0.19$) shows that there is a significant relationship between years of experience and job stress of the respondents at 0.01 level. It is interpreted that higher the years of experience higher is the level of job stress. The coefficient of correlation value ($r = 0.28$) shows that there is a significant relationship between working hours and job stress of the respondents at 0.01 level. It is interpreted that higher the hours of working higher is the level of job stress. The t-test value (t

= 3.40) shows that there is a significant difference in level of job stress among those who avoid using computer and those who use computer. The mean value shows that those who avoid using computer experience more stress compared to those who do not feel so.

Relationship between Demographic and Quality of Life (Table 4)

Variables	Statistical Value	Result
Age and Quality of Life	r = -0.35 (p<0.01)	Significant
Marital Status and Quality of Life	t = 2.74 (p<0.01)	Significant
Educational Qualification and Quality of Life	F = 10.10 (p<0.01)	Significant
Designation and Quality of Life	F = 9.94 (p<0.01)	Significant
Monthly Income and Quality of Life	r = -0.16 (p<0.05)	Significant
Years of Experience and Quality of Life	r = -0.27 (p<0.01)	Significant
Working hours and Quality of Life	r = 0.06 (P>0.05)	Not-Significant
Avoid using computer and Quality of Life	t = 2.47 (P<0.05)	Significant

The table 4 shows the relationship between demographic factors and quality of life of the respondents. The coefficient of correlation value (r = -0.35) shows that there is a significant inverse relationship between age and quality of life of the respondents at 0.01 level. It is interpreted that higher the age, lower is the level of quality of life. The t-test value (t = 2.74) shows that there is a significant difference in level of quality of life between married and unmarried respondents. The mean value shows that unmarried respondents (71.85) had better quality of life than married respondents (66.08). The ANOVA value (F = 10.10) shows that there is a significant difference in the level of quality of life with various educational qualification. The mean value shows that UG degree holders (76.88) had better quality of life followed by PG (75.45) and B.tech (75.23). The ANOVA value (F = 9.94) shows that there is a significant difference in the level of quality of life and designation. The mean value shows that associate head (70.0) had better quality of life followed by application developers. The coefficient of

correlation value ($r = -0.16$) shows that there is a significant inverse relationship between monthly income and quality of life of the respondents at 0.05 level. Higher the monthly income lower is the quality of life. The coefficient of correlation value ($r = -0.27$) shows that there is a significant inverse relationship between years of experience and quality of life of the respondents at 0.01 level. It is interpreted that higher the years of experience lower is the level of quality of life. The coefficient of correlation value ($r = 0.06$) shows that there is no significant relationship between working hours and quality of life of the respondents at 0.05 level. The t-test value ($t = 2.47$) shows that there is a significant difference in level of quality of life among those who avoid using computer and those who use computer. The mean value shows that those who avoid using computer had better quality of life compared to those who do not feel so.

Relationship between Job Stress and Quality Of Life (Table 5)

Variables	Statistical Value	Result
Job Stress and Quality of Life	$r = -0.357$ ($p < 0.01$)	Significant

The table 5 shows the relationship between job stress and quality of life of the respondents. The coefficient of correlation value shows that there is a significant relationship between level of job stress and level of quality of life of the respondents at 0.01 level. It is interpreted that higher the level of job stress, lower is the level of quality of life of the respondents.

HYPOTHESIS TESTING:

Hypothesis 1

Ho: There is no significant relationship between age and job stress.

The coefficient of correlation value ($r = 0.24$) shows that there is a significant relationship between age and job stress of the respondents at 0.01 level. The null hypothesis is rejected and research hypothesis is accepted. It is concluded that age influences the level of job stress of the respondents.

Hypothesis 2

Ho: There is no significant difference in job stress between married and unmarried.

The t-test value ($t = 1.72$) shows that there is no significant difference in level of job stress among married and unmarried respondents. It was failed to reject null hypothesis. It is concluded that marital status does not influences the level of job stress of the respondents.

Hypothesis 3

Ho: There is no significant relationship between hour of work and job stress.

The coefficient of correlation value ($r = 0.28$) shows that there is a significant relationship between working hours and job stress of the respondents at 0.01 level. The null hypothesis is rejected and research hypothesis is accepted. It is concluded that hour of work influences the level of job stress of the respondents.

Hypothesis 4

Ho: There is no significant relationship between age and quality of life.

The coefficient of correlation value ($r = -0.35$) shows that there is a significant inverse relationship between age and quality of life of the respondents at 0.01 level. The null hypothesis is rejected and research hypothesis is accepted. It is concluded that age influences the level of quality of life of the respondents.

Hypothesis 5

Ho: There is no significant difference in quality of life among married and unmarried.

The t-test value ($t = 2.74$) shows that there is a significant difference in level of quality of life between married and unmarried respondents. The null hypothesis is rejected and research hypothesis is accepted. It is concluded that marital status influences the level of quality of life of the respondents.

Hypothesis 6

Ho: There is no significant relationship between job stress and quality of life.

The coefficient of correlation value shows that there is a significant relationship between level of job stress and level of quality of life of the respondents at 0.01 level. The null hypothesis is

rejected and research hypothesis is accepted. It is concluded that job stress influences the level of quality of life of the respondents and vice versa.

FINDINGS AND DISCUSSION:

The study found that demographic variables like age, educational qualification, designation, years of experience, hours of work do influence the level of job stress of the respondents. The study found that job stress was found high among the higher age groups, which may be because of the work pressure and routine nature of job. This finding is supported by Balasubramanian Vimala and Chokalingam Madhavi (2009) the mean values shows that the overall stress is high among employees in the group aged more than 45 years. Years of experience had an influence on job stress and it was found that higher the years of experience, higher was the job stress. This finding is supported Balasubramanian Vimala and Chokalingam Madhavi (2009) analysis of the overall stress level finds that overall stress is high among employees with more than six years of experience with a mean value of 89.60 and low among employees with less than three years of experience with a mean value of 81.34. The study also found that hours of work influence the level of job stress. Higher the hour of work higher is the job stress. Long working hours may cause physical strain and mental strain, which may influence the job stress. This finding is supported by Kerala State Women's Commission, 2010 found that long working hours at the desk and job related pressure creates a lot of physical discomfort and mental tension. The software engineers experienced more stress which may be because of their nature of work, deadlines and workload. This is supported by Zaki Rashidi and Amanat Ali Jalbani (2009). The present study also found that the demographic factors like age, marital status, educational qualification, designation, monthly income and hours of work do influence the quality of life of the respondents. The unmarried had better quality of life than married respondents, which may be because of the family responsibilities hold by the married respondents. The married respondents have to manage both the work and home which may have influenced their level of quality of life. The present study found that level of job stress influences the level of quality of life. It is concluded that higher the level of stress lower is the quality of life and vice versa. Deep isolation of late hours, no social life outside of immediate family, no hobbies, and few and brief vacations may be few reasons for their high stress and low quality of life.

CONCLUSION:

The study concludes that moderate level of job stress and quality of life was found among majority of the respondents. It was concluded that job stress influences the quality of life of software employees. It is also concluded that the demographic variables do influence the level of job stress and quality of life of software employees. It is clear that the demographic profiles with which people enter employer organizations ultimately affect such companies' profitability and effectiveness indirectly by impacting on the employees' job stress and job satisfaction. It is therefore advisable that personnel demographics be recognized and appreciated fully for their considerable potential to affect organizational growth and development. Enterprises should ensure that, as far as practically possible, there is adequate scope for individual customization of work content and performance reward structures, as well as characteristics of the work environment, based on demographic profile. The challenges posed by such an approach are likely to be outweighed by the benefits in terms of business performance.

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