



Occupational stress in organizations with special reference to gender, sector and income

Aparajeeta Borkakoty¹, Manidipa Baruah² and Arpita Sharma Nath³

1. Department of Commerce, Gauhati University, India.

2. Department of Psychology, Gauhati University, India.

3. Gauhati Commerce College, Guwahati, India.

Abstract

The study investigates the extent of occupational stress among two major organizational service sectors within Guwahati city. The participants N = 100 were of two income levels. Additionally, the role of gender has also been explored among the service sectors. $2 \times 2 \times 2$ factorial design was adopted for this purpose. Results indicate no difference in general stress level among both the sectors and levels. Further, results indicate that female participants in public sector organizations experience higher level of stress.

Keywords : Occupational Stress, Organizational service sector, Gender.

1. Introduction

Stress is related to occupation and therefore identified to be an emerging field of social science research. It can manifest either in a positive or negative context. It is the psychological or physiological reaction that occurs when an individual perceives an imbalance between the level of demand placed upon him and his capability for meeting that demand. Many environmental situations can cause stress. The manifestation being an outcome of the environmental forces that impact upon an employee's performance. The constant strive to be the best at workplace, pressure of meeting deadlines at job, conservative company policies, group and political pressures at work, the complex lifestyle, increasing price level, increase in tax pays, stringent government policies, etc are contributing towards employee stress at job. Common individual stressors arise from role overload, role conflict and role ambiguity which result when there is overload of work with no

clear instructions of restructuring, and employees are left with increasing tasks with no proportionate resources. Role conflict as form of stress occurs when employees face competing roles which are conflicting and oppose each other. New employees at times may be uncertain of their responsibilities in new work situations and such ambiguity breeds stress in employees. Moreover research has also identified stressful outcomes to be of paramount significance to employee psychology. Behavioural, psychological and physiological consequences are detrimental to employee well being. It has been perceived by organizations and appropriate redressal and minimization strategy in individual and organizational levels outlined for effective employee performance in the workplace. Stress analysis also encompasses Type A and B personality, prone to be associated with stress easily. This paper therefore is an attempt to analyze stressful situations and characteristics among two distinct organization types with a gender and income perspective to it.

Research states that there are different factors leading to stress among employees in organizations. In a study (Srivastava & Veena 2009) on a sample of industrial supervisors noted that supervisors rating higher on emotionality, dependence and sensitivity and imaginativeness experienced comparatively higher degree of occupational stress. High anxiety also is a frequent source as well as promoter of stress. Indicating the relationship of anxiety to stress, (Speilberger 1979) has stated that in a transaction between person and environment stressors are linked to anxiety reactions by perception of threat. In a number of studies, external locus of control has been reported to be associated with higher degree of stress and anxiety. In a study among a sample of banking personnel, (Srivastava and Krishna 1992) noted that employees with external locus of control experience comparatively higher degree of occupational stress and lower job satisfaction. (Gupta 1999) noted that employees attributing to their efforts, nature of job activities, work conditions and managerial policy fir their success and failures in job life experienced higher role stress as compared to those who attributed to chance or luck for their achievements and failures at work. (Miller *et al.*, 2000) in their research "Occupational Stress and Gender- a cross cultural study" among a sample of male and female managers from four different countries like South Africa, U.K. U.S.A and Taiwan noted that there were virtually no difference in source of work stress for them but there were differences in the consequences of work stress for male & female managers. (Johnson & Sarason 1979) have argued that change, depending upon how it is perceived, is one of the primary causes of stress and organizational stress can be extremely stressful due to the feeling of insecurity it evokes. In an article, (Mack *et al.*, 1998) argued that the impact of organizational change is an individual phenomenon. Individual's psycho-logical, cognitive and perpetual process play an important role in mediating the experience of and reactions to the

stress of organizational change. Differences were found between occupational stress among public and private sector relations officers. Stress also manifests in various forms of emotional disorders. (Singh and Singh, 1992) found that stress gets its reflection in the form of anxiety, depression, helplessness, hopelessness and anger. The stressful people with the slightest provocation are easily induced to anger and anxiety and become unable to relax. In his study, (Dua 1994) reported that the employees suffering from occupational stress generally tend to have low psychological commitment to the organization. (Kivinaki *et al.*, 2000) found that the percentage of employees suffering from high blood pressure doubled after the company laid off 10 percent of its workforce. (Pattanayak 2000) observed that the level of stress experienced does not vary much across the positions. There is not much significant difference between stress experienced by the executives and the supervisor. Employees' responses to work demands and pressures are largely influenced by their personality character-istics, and psychological and behavioural patterns, such as beliefs and values, aspiration and expectancy, need structure, attributions, locus of control, personality traits, coping skills, cognitive patterns, etc. The quality of interpersonal relationship at work plays a dominant role in determining employees' job behaviour and job strains. It has been consistently linked to job stress. (Payne 1980). (Kets de Vries 1984) reported that at least three types of inter personal relationships have been studied, viz., relationship with co-workers, relationship within work groups and relationship with supervisors and superiors. As the social support form the co-workers and work groups, and supervisors buffers the job stress and consequent strains, the poor or strained interpersonal relationships at work is associated with the feeling of threat for the employees.

Higher stress was reported by public sector public relations officers (Mishra 1997). Alienation and organizational frustration was high in private

sector managers as compared to public sector managers (Mishra *et al.*, 1999). The opposite trend was observed by (Mohan and Chauhan 1999) for middle level managers. Employees in both public and private sector experience stress and respond in different ways. The work culture of public and private sector is different in regard to time of work, nature of work, scale of pay, company policies, degree of supervision, leadership etc. (Motowidlo *et al.*, 1986) have classified the causes of stress into two broad categories: organizational stressors and life stressors. (Pestonjee 1987) has classified three important sources where stress emanates from. These are job and organizational; social sector and intra-psychic sector. Stress produces various psychological consequences also. (Lele 1993) observed that job dissatisfaction, moodiness, depression, anger, anxiety, nervousness, irritability and tension are the manifestations of the psychological consequences of stress. Job burnout is however not similar to stress. Some contend that burnout is type of stress itself. (Maslach 1982) described burnout as the process of emotional exhaustion, depersonalization and reduced personal accomplishment resulting from prolonged exposure to stress. In a study (Srivastava 1990) found that inadequate organizational climate was positively correlated with the symptoms of mental ill-health among its employees.

Environmental factors do have impact on employee stress. The environmental factors to which an employee responds mainly includes fast technological change, family demands and obligations; economic and financial conditions, race, caste, class, ethnic identity and relocation and transfers. (Pestonjee 1983). The study reported that public sector managers were more stressed than private sector employees and they perceived the work culture as unsupportive. Voluminous research in different areas indicating and relating occupational stress with different attributes suggest that stress among employees at

work place may be due to varied reasons. Employee stress may be a reason of personality traits which varies from person to person. It may be due to specific job design factors and environment. Good or bad interpersonal relationship with superiors, subordinates or peers can become a source of stress among employees. Research had already been carried out among male and female employees pertaining to causes and consequences of stress. Job insecurity and long hours of work create anxiety among employees and leads to acute stress. Locus of control is also considered to determine the level of occupational stress among employees. Although researches have been carried out to study and compare occupational stress between public and private sector employees, however stress differentials between employees of different managerial cadre and different income bracket has not been done so far. This paper attempts to study stress between different income bracket of employees between public and private sector. The study also undertakes to compare male and female stress. The study is carried out among employees of both public and private sector in Guwahati city. Relevant psychological tests have been adopted in the present investigation and the following hypothesis are formulated—

H1 : There is no difference in the stress level of employees in public and private sector organizations.

H2 : No difference exists in the stress level of male and female employees in public and private sector organizations.

H3 : No difference exists in the stress level of male and female employees in public sector organizations.

H4 : There is no difference in the stress level of male and female employees in private sector organizations

H5 : Discrepancies donot exist in the stress level of employees in public and private sector among low and high income groups.

2. Methodology

2.1 Sample

The sample consists of three independent variables namely, sector, gender and income. The study includes two major organizational sectors. (public sector and private sector). A total of 100 participants were selected from both the sectors out of which N=50 from public sector and N=50 from private sector. Further, N=25 for employees drawing low income and N=25 for employees drawing high income. Low income suggests an income of upto 40,000 and high income suggest an income of 40,000 and above. Again, N=50 covering female employees in public and private

sectors and N = 50 for male employees in both the sectors. The methodology consists of primary data with some inputs from secondary sources. Since study concentrates on measuring occupational stress of managerial personnel, the respondents chosen are the mid and top level career professionals drawn from public and private sectors by using random sampling and judgemental technique. Occupational Stress Index (Srivastava and Singh 1981) was administered on employees belonging to middle and top level management in both public and private sector organizations. Permission is sought from management for interviewing in the organizations.

SAMPLE DISTRIBUTION

Public Sector (N= 50)				Private Sector (N= 50)			
Male (N= 25)		Female (N=25)		Male (N= 25)		Female (N=25)	
High Income (N=13)	Low Income (N=12)	High Income (N=13)	Low Income (N=12)	High Income (N=13)	Low Income (N=12)	High Income (N=11)	Low Income (N=14)

Respondents are grouped based on sector and gender with equal representation except private sector female employees which consists of 14 respondents drawing less than 40,000/- per month. However, only 11 female employees gave valid response in private organizations drawing more than 40,000/- monthly. Occupational Stress Index was administered on equal number of employees sector wise, gender wise and income level wise to facilitate logical comparison. Mean, S.D and t-test were applied to statistically test the level of stress among the employees.

2.2 Measures

A self developed demographic schedule was administered on participants to collect primary data of the respondents. A standardized and widely used Occupational Stress Index (OSI)

scale, developed by Srivastava and Singh, 1981 was chosen to measure the occupational stress of the sample. Total score on the scale was considered for the assessment of occupational stress. The comparison between occupational stress of public and private sector employees, male versus female and low versus high income level employees was made by using results of mean, standard deviation and t-test. It was an exploratory research design.

3. Results and Discussion

The study was conducted in exploratory framework to examine the stress level. The data was subjected to $2 \times 2 \times 2$ factorial design. Stress level of private sector, public sector male and female, income level of both employees in both the sectors were studied.

Table - 1.1 : Comparative analysis of stress level between public and private sector employees.

Sector	N	Mean	S. D	Std. Error Mean	T	Df	Sig. (2 tailed)
Public	50	134.72	19.926	2.818	1.363	98	.176
Private	50	129.72	16.621	2.351			

Significant level is at $P < 0.05$

Source : Independent field survey, 2012.

The mean score of public sector employees is 134.72 among 50 respondents and 129.72 among 50 private sector employees. The standard deviation of employees in public and private sector is 19.926 and 16.621 respectively. The P value of the above table is 0.088 (0.176/2). The significant difference is calculated at 95% of CI level. The scores suggest that there is no significant difference between the stress level of employees in public and private sector. Hence, H1 is accepted. (H1 : There is no difference in the

stress level of employees in public and private sector organizations.)

The present study does not support the observation made by (Mohan and Chauhan 1999), who reported that public sector managers were more stressed than private sector employees and they perceive the work culture as unsupportive. However, opposite trend was found by (Mishra *et al.*, 1999) that private sector employees are more stressed out as compared to public sector employees on grounds of organizational frustration and alienation.

Table - 1.2 : Comparative analysis of stress level between male and female employees engaged in both public and private sector organizations.

Gender	N	Mean	S. D	Std. Error Mean	T	Df	Sig. (2 tailed)
Male	50	132.18	18.791	2.657	-.022	98	.983
Female	50	132.26	18.248	2.581			

Significant level is at $P < 0.05$

Source : Independent field survey, 2012.

The mean score of male employees is 132.18 among 50 respondents and 132.26 among 50 female employees. Again the standard deviation of male and female employees is 18.791 and 18.248 respectively. The P value of the above table is 0.49 (0.983/2). The significant difference is calculated at 95% of CI level. The results indicate that there is no significant difference between the stress level of male and female employees. Hence, H2 is accepted and assumed

that there exists no significant difference among genders in regard to occupational stress. (H2 : No difference exists)

To the contrary, (Tyagi and Sen 2000) found that female managers were more stressed out than male managers. (Deosthalee 2000) concluded that Male engineers experienced more stress than female managers at the work place. (Gaur and Dhawan 2000) noted that women professionals used active coping stance, playfulness and

initiative as adaptive patterns in the work place. (Aditya and Sen 1993) concluded that women cope with stress better than their male counterparts. The reason attributed to it is women are more likely to seek emotional support from others in stressful situations, whereas men try either to change the stressor or use less effective coping strategy.

Table - 1.3 : Comparative analysis of stress level between employees of high income and low income groups in public and private sector organizations.

Income	N	Mean	S. D	Std. Error Mean	T	Df	Sig. (2 tailed)
Low ($\geq 40,000$)	50	131.12	18.758	2.655	-.595	98	.553
Female (<40,000)	50	133.32	18.214	2.576			

Significant level is at $P < 0.05$

Source : Independent field survey, 2012.

The mean value and standard deviation of employees drawing a salary of below 40,000 or low income group are 131.12 and 18.758 respectively and employees belonging to above 40,000 income group are 133.32 and 18.214 respectively. The P value of the above tables is 0.276 ($0.553/2$) which is greater than 0.05. The significant difference is calculated at 95% of CI level. The calculation has been done for the total sample ($N=100$). The results interpret that there lies no significant difference in stress level of

employees drawing different income in organizations. Although researches have been carried out to study and compare occupational stress between public and private sector and male and female employees, stress differentials between employees of different managerial cadre and different income bracket has not been found so far. An attempt has been made in the present study to examine the stress differentials, if any, exist among employees in different income levels.

Table - 1.4 : Overall results in the stress level of the sectors, gender and income.

Gender	N	Mean	S. D	Std. Error Mean	T	Df	Sig. (2 tailed)
Male (Public+Private)	50	132.18	18.791	2.657	-.022	98	.983
Female (Public+Private)	50	132.26	18.248	2.581			
Low income (Male+Female)	50	131.12	18.758	2.653			
High income (Male+Female)	50	133.32	18.214	2.576			

Public sector (Male+Female)	50	134.72	19.926	2.818	1.363	98	.176
Private sector (Male+Female)	50	129.72	16.621	2.351			

Significant level is at $P < 0.05$

Source : Independent field survey, 2012.

Note : Explanation of table 1.4 has been given in the earlier sections under table 1.1, 1.2 and 1.3.

Table - 2 : Comparative analysis of stress level between male and female employees in public and private sector organizations.

Sector	Gender	N	Mean	S. D Deviation	Std. Error mean	T	Df	Sig. (2 tailed)
Public	Male	25	135.12	21.795	4.359	.141	48	.889
	Female	25	134.32	18.311	3.662			
Private	Male	25	129.24	15.095	3.109	-.202	48	.841
	Female	25	130.20	18.321	3.664			

Significant level is at $P < 0.05$

Source : Independent field survey, 2012.

It appears from table 2 above that the mean value and standard deviation of male employees are more than the female employees in public sector. However, the mean and standard deviation of male employees are less than the female employees in private sector. A smaller standard deviation in table 2 shows little individual score deviation from the average. Standard error mean is also very less which indicates less sampling errors affecting the statistic. The P value is 0.44 (.889/2) for public sector male and female employees and 0.42 (0.841/2) for private sector male and female employees. As the P value is more than 0.05 in both the cases hence it can be assumed that there exists no significant difference in the stress level of male and female employees in both the organizational sectors. Hence H3 and

H4 are accepted (H3 : No difference exists in the stress level of male and female employees in public sector organizations. H4 : There is no difference in the stress level of male and female employees in private sector organizations.)

There are 12 sources of occupational stress included in the questionnaire i.e., role overload, role ambiguity, role conflict, unreasonable group and political pressures, responsibility for person, underparticipation, powerlessness, poor peer relation, intrinsic impoverishment, low status, strenuous working conditions and unprofitability. It is found that no significant difference prevails in the stress level of employees working in public sector and private sector and between male and female employees.

Table - 3 : Comparative analysis of stress level between employees of high income and low income groups in public and private sector organizations.

Sector	Income	N	Mean	S. D Deviation	Std. Error mean	T	Df	Sig. (2 tailed)
Public Male	Upto 40,000	14	134.43	22.732	6.075	-.175	23	.829
	Above 40,000	11	136.00	21.606	6.514	-.175	23	
Private Male	Upto 40,000	11	130.00	19.728	5.948	.219	23	.829
	Above 40,000	14	128.64	10.973	2.933	.219	23	
Public Female	Upto 40,000	14	127.00	17.409	4.653	-2.486	23	.021
	Upto 40,000	11	143.64	15.500	4.673	-2.486	23	
Private Female	Upto 40,000	11	133.27	14.954	4.509	.736	23	.469
	Upto 40,000	14	127.79	20.819	5.564	.736	23	

Significant level is at $P < 0.05$

Source : Independent field survey, 2012.

Among the public sector male respondents, the P value is found at 0.431 (0.862/2) which is greater than 0.05. The significant value is calculated at $P < 0.05$. And among the private sector male employees, the P value is 0.414 (0.829/2) which is greater than 0.05. Same is reported in case of private sector female employees where P value (0.234) is higher than 0.05. There is no significant difference in the stress level between different income groups of female employees in private sector. The P value 0.469 is greater than 0.05. P value is calculated at 95% level.

However, there is significant difference between the income groups of public sector

female respondents. The P value is found at 0.010 which is smaller than 0.05. P value is calculated at 95% level. Hence it is assumed that female employees drawing high income are more stressed than low income group in public sector organizations.

4. Conclusion

Individuals under excessive stress tend to find their jobs less satisfying. Some of their intrinsic or extrinsic needs may be thwarted or not met sufficiently. Corroborating many studies in the literature review (Mishra 1997) the findings of the present study also reveal the same. There is no significant difference between stress level of

employees in respect to organizational sectors and genders. However, no study has been reported till date in regard to comparison of stress of employees under different income groups in public and private sectors. Difference has been detected among female employees of public sector in different income groups. The female employees in the public sector organizations belonging to high income group i.e., earning above

40,000 experience higher level of stress as compared to the female employees of low income group in the same sector. Through personal interaction it has been observed that some of the employees feel highly stressed due to unreasonable group and political pressures. Some of them also rate very high on role ambiguity and role overload.

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