EXPLORING THE RELATIONSHIP BETWEEN JOB STRESS AND ORGANIZATIONAL COMMITMENT: 
A STUDY OF THE INDIAN IT SECTOR

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Abstract
The nature of employment in the IT industry is extremely challenging due to its commitment to high service levels and acute flexibility through resource management. The escalating workplace demands and professional aspirations of employees are responsible for making the employee work against all odds of time and potential. Since mostly for all employees, the sources of job reward remain limited to the salary only, expectation to gain early incentives and raises creates a threatening atmosphere of competition and loss of job security. The situation has given rise to the malignant stress that brings a sharp decline in the performance and a lack of commitment towards work. On one hand, where stress is understood in inverse relations with workplace wellness; organizational commitment is understood as an employee’s sense of belonging, acceptance, passion and pride towards his organization that motivates him to work actively for the interest of his organization. This understanding of work stress is seen in direct antithesis with the advantages of having a highly committed workforce. The aim of this paper is to find the relationship between employee stress and organizational commitment in order to ascertain the extent to which workplace stress can affect the commitment levels of employees in the IT sector.

Keywords: Job Stress, Organizational Commitment, IT/ITES Sector, Citizenship Behavior.

1. ORGANIZATIONAL STRESS IN THE IT SECTOR

Hinkle explained that it is difficult to characterize stress, being that ‘stress’ has a different meaning for researchers in various disciplines. Hinkle (1973). Stress is seen as an adverse physical and mental condition in biological and psychological Literature. Researchers also recognize stress as a reaction to any kind of external change as well as a matter of individual perception. Lazarus (1993) refers to stress as a condition or feeling experienced when a person perceives that environmental demands exceed the personal and social resources that the individual is able to mobilize. He focuses more on stress being a
condition in which individual energies deplete and cause one to feel enervated and exhausted. Walter Cannon who discovered the stress response initially explained that stress arose when a steady state balance or equilibrium is upset due to an external demand.

Cooper (1998) explained stress in the contemporary context; as a consequence of, “organizations today being smaller, with fewer people doing more and feeling much less secure” He also highlights the role of new technology as an instrument of information overload with demands for a greater immediacy of response in the accelerating pace of work.

Mack, Nelson, and Quick (1998) have explored the various reasons of work stress in organizations. The researchers have identified four basic factors which are; role factors, job stressors, physical stressors and interpersonal stressors. They have explained the role based factors causing stress by virtue of an expectation set that placed on an individual within an organization; especially if these are confusing, ambiguous or conflicting. Job stressors are explained as factors related to the basic quality and quantity of work performed as well as the feedback and appraisals that individuals receive regarding their job performance. Physical stressors are explained as stressors that affect the senses, such as light, noise, vibration, smell, temperature, etc. Interpersonal stressors are the factors that deal with ones inability to manage and cope with co-workers, friends, family and all associates in general. The IT Sector specifically is associated with a very quick mobility, dynamic markets, need for flexibility and adaptability teamwork. Industries that can excel on all these parameters can create sustenance in the long term.

This sector requires its workforce to be highly mobile and adaptable, as most projects involve onsite and off shore placements from time to time. (Bhatt, Seema, Verma, Prashant) The IT Professionals working under such conditions are well aware of market realities and opportunities, being that they are tech-savvy, educated individuals. Job Stressors like lack of growth opportunities, high workload, employee morale, risk involved in decision making, and organization climate leads to stress among them (Viven, 2001)

Drafke in his book,” The Human Side of Organizations”; enlists the various workplace stressors that impede performance. He highlights Performance Related Factors relating to anxiety, poor planning or goal setting, unclear job requirements, little recognition of performance, insufficient authority and low morale. Environmental Factors such as excessive work demands, Insecurity of job responsibility, Organization politics, working conditions, Peer pressure, Ineffective communication. Leadership Factor such as Inconsistent managers, criticism, Unsupportive boss, Role related Factors involving an under use of skills, work overload and under load and inadequate equipment (Drafke, 2009). Researchers in the IT Sectors are of the opinion that within the IT sector, stress is caused by role and environmental
factors that lead to negative psychological consequences on the employees and results in low employee morale, high accidents rates, high rate of absenteeism and attrition; and low productivity (Longenecker; et.al., 1999)

Bhatt, Seema, Verma, Prashant (2008) studied the general role stressors among the Indian IT professionals. They found that 'Role Boundedness' contributed significantly higher than 'Self Role Distance'. The stressor 'Personal Inadequacy' contributed minimum of the general role stress. This was as the IT professionals are qualified with a minimum graduate degree and are in general competent for the work assigned. It is also observed that professionals belonging to the age groups in their twenties did not occupy many roles; therefore, the conflict that the individual faces when he or she is occupying more than one role are less i.e. inter role distance contributes relatively less. The stressor 'Role Boundedness' was high due to a high pressure work environment, comprising of the long working hours, working on weekends under strict deadlines; leaving them with no work life balance. This eventually culminates into a feeling of inadequacy and stress.

Fulcheri et al. (1995) studied the size of workload, the complexity of tasks and responsibility among the major sources of stress among IT Professionals. They also concluded that there was significant professional frustration due to delay in career development and a slow erosion of status among the IT managers. The IT Professionals have high aspirations for career, expectations from job and are ready to take risk. An important consideration is the salary in this sector which is not comparable to the salaries given in other sectors. In the beginning the professionals are lowly paid, which leads them to switch jobs. The average starting compensation given to IT professional in India is around Rs. 10,000 per month, which is low compared to other sectors that require similar qualification. (Report, "Jobs with Justice", October 2006). Latha and Panchanatham (2007) researched on the job stressors and their implications on the job performance of software professionals. They identified work load acts as significant stressors for software professionals. Long work hours were indirectly associated with psychological distress. Aziz (2003) concluded that in The IT sector Resource Inadequacy followed by Role Stagnation and Inter Role Distance were the major factors that contributed highest to overall stress. For women employees in the Indian IT sector, Resource Inadequacy was the highest contributing factor to overall stress followed by Role Overload and Personal Inadequacy (Mohsin Aziz, 2004).
2. EMPLOYEE COMMITMENT IN THE IT SECTOR

Contemporary Organizations are facing dynamic situations of competition, uncertainty due to continuous and rapidly changing technology as a product of globalization (Prager, 2003; Jones et al., 2000, 2005). Organizational commitment is understood in terms of a sense of belonging, acceptance, identity, loyalty, support, passion and pride feelings ones employers and organization. (Sverke and Sjöberg, 2000). Meyer & Allen (1990) explained commitment as Affective Commitment, Continuance Commitment and Normative commitment. Affective Commitment is explained as, “Ones emotion attachment with the organizations whereby there is identification and involvement with the values of the organization. Continuance commitment is defined as the willingness to remain in an organization because of the investment that the employee has with “nontransferable” investments. Normative commitment is defined as the, “generalized value of loyalty and duty”, being a feeling of obligation to continue employment”. The reason for this was attributed natural to the way we are raised in the society, that can be explained by other commitments such as marriage, family, religion, etc (Meyer & Allen, 1991).

Allen & Mayer suggested that all the three forms of commitment relate negatively employee turnover. They also suggested that affective commitment is expected to have the strongest positive relation; followed by normative commitment and continuance commitment is expected to be unrelated, or related negatively, to the desirable work behaviours. (Meyer, Allen, & Smith 1993). Lee (2000) Studied Organizational Commitment amongst IT professionals and found that that Organizational commitment negatively related to turnover intentions (Lee, 2000). Affective commitment constitutes the primary predictor of turnover intentions. Rathore et.al (2013) studied employee commitment and concluded that high performance was positively correlated to affective commitment.

Research shows that, committed employees are less likely to leave the organization and it has been noted that they often dedicate themselves to offer their best knowledge, skills, experience, abilities and effort for their organizations well-being (Mowday et al., 1979; Mathieu and Zajac, 1990). The importance of this aspect paves way for researchers to proactively respond to employee demands and changes. Various researchers have attempted to understand commitment in many ways. Porter et al. (1974) defined organizational commitment as, “the relative strength of an individual's identification with and involvement in a particular organization”. Mowday et al. (1979) defined organizational commitment as, “an active relationship with the organization, such that individuals are willing to give something of themselves in orders to contribute to the organization’s well-being”. Meyer et al. (2002) identified
several outcomes of affective and normative commitment, which are withdrawal cognition, turnover intention, turnover, on-the-job behavior and employee health and well-being.

IT specialists grant a lot of importance to the alignment between their own values and those conveyed by management and therefore, they look for a work environment which will allow them to develop a strong feeling of belonging (Paré and Tremblay, 2000). Organizational commitment is negatively related to turnover intention (Sjoberg and Sverke, 2000). Organizations that focus on different retention strategies that tap into different mind sets of commitment might have a better chance of retaining key employees (Irving et al., 2002). The organizational commitment has also macro level implications. Organizations with employees having low commitment levels are often less productive and if this occurs broadly throughout a number of organizations then quality of products and services may decline (Johns, 2005).

3. RELATIONSHIP BETWEEN ORGANIZATIONAL STRESS AND WORK COMMITMENT

Researchers have identified a positive relationship between organizational commitment and desirable work outcomes such as performance, adaptability and job satisfaction (Angle & Perry 1981; Hunt, Chonko & Wood 1985; Mowday, Porter & Dubin 1974). Kotze and Roodt (2005) have reported a strong correlation between job satisfaction, employee commitment and retention. Organizational commitment is most probably affected by factors such as type and variety of work, the autonomy involved in the job, the level of responsibility associated with the job, the quality of the social relationship at work, rewards and remuneration, and the opportunities for promotion and career advancement in the company (Riggio 2009).

Siu (2002) reported that Organizational commitment is a significant moderator of stress and emphasized that commitment levels of the employees were related to the psychological outcomes of the workers. Apart from that, organizational commitment was also related to the moderating effects on the stressor-health relationship. Therefore Siu (2002) suggests that this indirect or moderating effect of commitment protects individuals from the negative effect of stress, as it helps them to see some direction in and attach meaning to their work.

Cohen (1992) concluded that organizational commitment has been linked to low rates of absenteeism and also better job performance. This provides a base for us to study commitment in terms of Presentism, which can also be seen in an inverse relationship with stress. Wu & Norman (2006) conducted a research which indicated a positive correlation between job satisfaction and organizational commitment and a negative correlation between job satisfaction and role conflict and ambiguity. This is
attributed to the fact that an employee is likely to be satisfied and committed to his work if his role is clear and respected in the right earnest. On the other side, confusion regarding ones roles in an organization lead to accumulated stress.

Russell & Zinta (2000) investigated the relationship of Organizational Stress to organizational commitment, turnover intentions, and organizational citizenship behaviors. Based on the Conservation of Resources (COR) model, it was found that Stress & emotional exhaustion was negatively related to organizational commitment and supervisory commitment. Emotional exhaustion effected turnover intentions positively. Organizational citizenship behaviors were studied and were found to be negatively related to organizational stress & emotional exhaustion. Therefore a stressed employee was more likable to quit the job. Lee et all (2000) explored the relation between organizational commitment and stress and found that there existed a negative relation between the two factors. Wells et al. (2009) study showed a positive relationship between job stress and organizational commitment and a negative relationship between job stress and career commitment.

Cartwright and Cooper (2002) have devised a model that shows the relation between organizational stressors and commitment and health of employees.

In the present model, occupational stressors such as work relationships work-life imbalance overload, job security, control, resources and communication, pay and benefits aspects have been considered to have an impact on organizational commitment of employee towards organization and organization towards employee. Other aspects of job have also been taken into account, which include a generalized sense of the organizational atmosphere.
All occupational stressors are seen to affect the commitment levels of employees in an organization. Researchers have highlighted the fact that occupational stressors may result in mental, physical and behavioral stress reactions, such as burnout, depression and psychosomatic diseases (Houkes, Janssen, de Jonge & Nijhuis, 2001). Therefore it is important to review the job characteristics and working conditions that the workforce perceive to be stressful, investigate the outcomes of any stressors that are experienced and establish whether any particular sub-group of the working population is at greater risk (Kinman, 2001).

4. METHODOLOGY

This study explores the role of stress and its relationship with commitment among IT professionals (also called varyingly as it engineer, software engineer etc with or without supervisory roles,) in the NCR region. The study excluded professionals from the ITES sector like BPO & KPO.

Sample Size: The sample size was calculated using the formula "n = (P (1-P)/ (A2/Z2) + (P (1-P)/N)/ R".

P = estimated variance in population was considered a safe 50%
N = was estimated to be 10000 based on the facility information
A = desired precision level was set at 3%
Z = Confidence interval 95% (1.96)
R = estimated response rate at 50%. Thus a sample size (n) required was determined at 750

Delhi – NCR has about 600 plus IT/ ITES companies employing around 2.5 lakh people. It has over 10 million square feet of IT space and accounts for around 5 billion $ of IT exports (2010) (thelhindubusinessline.com). The study was conducted in 3 IT/ Business parks of Gurgaon. The three IT parks together had around 10000 employees from IT space as ascertained from the facility managers of the IT parks. ‘Convenience sampling’ was used to collect large number of responses and overcome the resource restriction. The respondents were intercepted at the cafeteria in the 3 chosen business parks.

They were explained about the study and offered a chance to participate in the survey. A total of 770 employees were intercepted, 378 employees consented to participate in the survey, a response rate of 49%.

Data Collection: Data collection was done through a self administered questionnaire. The data collection tool had two parts. One the role stress scale of Pareek to measure the total stress and role stress...
dimensions. The second part measured organizational commitment using scale of Allen & Meyer. Demographic data about the respondent was also collected along with stress and commitment data.

<table>
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<tr>
<th>TABLE 1 - DESCRIPTIVE OF THE SAMPLE</th>
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<tr>
<td>Age (yrs)</td>
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<tr>
<td>N=360</td>
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<td>Std. Deviation</td>
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In all 372 responses were received. After analysis 12 responses were rejected as the respondents were not software professionals, though they worked in a software organization. There were in all 360 questionnaires eligible to be included in the data analysis and all were accepted. The mean age was 37 years, ranging between 26 and 56. The mean work experience was 11.93 years with a range between 2 and 32. The average education was 18.25 years with 17 years being the minimum and 22 years being the maximum. The employees were mostly professional graduates or post graduates (table 1). The sample consisted of 28.3% females (n=102) and 71.7% males (n=258). Managers (employees with supervisory power) constituted 41.7%, of the surveyed sample, and rest 58.3% were executive (employees without supervisory power). Females constituted 28% of the managerial work force (n=42) which was proportionate to their representation in the sample (Table 2).

**Correlation between Stress & Commitment:**

Prior studies have shown a negative relation between stress and commitment. In the current survey to test the relation the following hypothesis were developed. The hypothesis was verified through a correlation t-test.

H0: rho = 0 (there is no significant correlation between organizational stress & employee commitment)
H1: \( \rho < 0 \) (there is a significant correlation between organizational stress & employee commitment).

\( r \) has a \( t \) distribution with \( n-2 \) degrees of freedom, and the test statistic is given by:

\[
T = \frac{\hat{r} \sqrt{n-2}}{\sqrt{1-\hat{r}^2}}
\]

Table 3 shows the Pearson correlation \( r = -0.351 \), significant at 0.01 level.

The \( t \) stat for \( r \) was calculated at 4.83 using the above formula and was more than the table value of 2.59 (2 tailed at 358 degrees of freedom and 99% CI.) suggesting significant correlation between stress and commitment (negative). Hence H0 is rejected and H1 is accepted.

**Stress levels & Role dimensions in stress among the employees**

Table 4 shows the classifications of stress levels among the sample on 10 role dimensions of organizational Stress. All the dimensions together capture the various aspects of workplace stress on an individual.

**Discussion**

The total stress was classified in to four categories Mild, Moderate, Medium & High stress. Mild stress had a mean stress score of 80.44 with SD of 5.53. The corresponding figures for the Moderate, Medium & High categories were 99.96 & 5.04, 117.27 & 6.10 and 135.56 & 5.45, for mean stress and standard deviation. Significant difference was noticed between all the ten dimensions of stress. Overall stress
was indicated by ten role stress dimensions. An analysis of variance was to seek the differences in the role dimensions of various stress categories (table 4). All the role dimensions of total stress varied significantly with stress levels (2 tailed at 356 degrees of freedom and 99% CI.) indicating the contribution of each role dimension in total stress. In the high stress category, it was seen that Role erosion was the largest contributing factor towards organizational stress across all stress levels.

**Commitment Levels among the employees**

Table 5 shows the different types of commitment levels. Levels of different types of commitment; namely Affective, Normative and Continuance commitment are seen below.

**Discussion**

The analysis of variance shows that the levels of total commitment, affective commitment, continuance commitment and normative commitment varied. The different types of commitment reduced as the level of stress increased and the differences were significant between the groups (2 tailed at 356 degrees of freedom and 99% CI.). It is seen that the overall levels of commitment are moderate for all the professionals. Among them affective commitment was seen to be highest and continuance commitment was seen to be low among the professionals across all stress levels.

**Relationship between Organizational Stress and Employee Commitment**

The study further explores the relationship between Organizational stress and employee commitment. Table 6 shows the Pearson’s correlation coefficient between stress and the different types of commitment.
Discussion

Employee commitment shows a significantly negative correlation in relation with organizational stress. The correlation was the highest and significant at 0.01 levels. The correlation between total stress and all types of commitment were also significant at 0.01 levels. However the correlation between continuance commitment and stress was low with ‘r’ being below 0.2.

Validity & Reliability of the Research Instrument

The two most critical questions in a research are about the ‘reliability’ and the ‘validity’ of the research. Reliability addresses the consistency of measure when all other things remain constant. Validity on the other hand deals whether the survey measures what it is purported to be measuring.

The survey instruments used were standard scales with proven ‘reliability’ and ‘validity’ in previous surveys. However as the survey context changes, the reliability and validity of the instrument may change. Reliability: was measured using Cronbach’s Alpha.

The instruments showed a high reliability with Cronbach’s Alpha of 0.849 for the stress scale and varied between 0.842 and 0.854 when individual items were deleted. For the commitment scale it was 0.726, varying between 0.741 and 0.710 if individual items were deleted.

Validity: A test of multi-collinearity was done using SPSS. The VIF (Variance Inflation Factor) values were well below for the 10 stress dimensions and below 1.20 for the 3 commitment dimensions. As multi-collinearity was ruled out an Exploratory Factor analysis was not deemed necessary. The Confirmatory Factor Analysis was done using Smart-PLS software. A PLS based method was used as the model was formative in nature. The overall R2 of total stress was 0.56 and for commitment 0.24. The same can be considered Moderate and mild respectively (Chin 1998). The communality and redundancy for both stress and commitment was well over 0, indicating a good fit of the model and prediction relevance (Jorg Henseler et al.).

Discussion

Table 7 explains the Communality of Variables .The relation between commitment and stress was –Vε and significant at 99% CI. All the demographic variables like age, education, experience, gender and designation showed a significant influence on stress and commitment and the same needs to be further studied. The most influencing demographic variables were age and gender followed by experience as indicated by the respective beta coefficients.
5. CONCLUSIONS

Somers (2009) studied the relationship between organizational stress and employee commitment. He showed a significant relationship between job stress and affective commitment and normative commitment, but no significant relationship between job stress and continuance commitment. On the same lines, Yaghoubi et al. (2008) also explained that there is not a significant relationship between continuance commitment and job stress. The present study is indicative of similar relationships. As we see, the IT professionals experience moderate levels of organizational stress and commitment. In terms of Role stress dimensions, it is seen that there is considerable Role erosion among the
professionals. This was followed by resource inadequacy and personal inadequacy. Role Erosion arises when a role occupant feels that others are performing certain functions, which should have been a part of his role (Pareek, 1993). As precedence shows, the IT professionals do face a sense of stress when it comes to role erosion, being that there are relatively fewer career progressions vertically in the IT sector and the work is segmented in a way that there are less chances of total ownership. Resource Inadequacy, arises when human and material resources allocated are inadequate to meet the demands of the role, this would lead to pressure on the employee, leading to stress (Pareek, 1993). The pressurizing demands on the professionals usually bind them to work in accordance with foreign timings and compliances, creating stress. Personal Inadequacy is created by the lack of adequate skills and the resulting inability to meet the demands of one’s role (Pareek, 1993). Being that the professional usually finish a B.Tech and join work, there is minimal compulsion on them to finish their Masters. Going ahead, this usually blocks many career opportunities for the professionals. The high inverse correlation between normative commitment and organizational stress signifies that the professionals, who are compelled by social norms to stick to an organization, face a greater sense of stress. Professionals with higher affective commitment have a generalized sense of affection for the organization. Professionals with low affective commitment levels show greater stress. They also show considerable levels of stress due to this commitment and connect with the organization. Continuance commitment that signifies one’s continuing of work due to unavailability of other economic alternatives does not bear a significant relationship with stress, as one feels that the economic benefits attached by continuing in this organization are of value to him.

Thus the study confirms the conceptualization of organizational stress in an inverse relationship with workplace organizational commitment. The need of the hour places on prime agenda that commitment levels be increased on the IT professionals to address issues of rampant attrition. Going further, the understanding of factors that contribute to work stress that have been derived from the study can be used to address the issue of organizational stress. At the same developing affective and reducing normative commitment in employees would also help in reducing stress. As the IT sector is a dynamic and fast evolving, the professionals need to constantly skill and re skill themselves to match the changing demands of technology and fresh talent. The Human Resource practitioners therefore need to focus on the employee training and revival of the IT professionals; for sustenance in the extensive competition.
Limitations of the study

The study was limited due to resource constraints. The population for the study was small limited to three technical parks in the NCR of Delhi with about 10000 employees. The study was conducted in only one industry namely Information Technology. The IT industry itself accounts for 2.8 million direct employment and more than 100 billion $ in revenue, year ending 2013 (75 billion $ in export revenue and 32 billion $ in domestic revenue) (http://www.zdnet.com) and this calls for further studies with larger sample sizes. As the study was industry specific extrapolation of the result in to other industry may not be feasible.

REFERENCES


Sanjeev M.A. and Rathore S.
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MANAGEMENT RESEARCH AND PRACTICE VOL. 6 ISSUE 4 (2014) PP: 40-56


Irving, P.G., Cawsey, T.F., Cruikshank, (2002). Organizational Commitment profiles. Implications for turn over intention and psychological contracts. Wilfred Laurier University, ASAC 2002, Winnipeg, Manitoba


Jorg Henseler, Christian M. Ringle and Rudolf R. Sinkovics, New Challenges toInternational Marketing Advances in International Marketing, Volume 20, 277–319 Copyright r 2009


Prager, H. (2003), “Gaining a competitive advantage through customer service training”, Industrial and commercial training, Vol. 35 No 6, pp.259-262


Strategic Review (2006). The IT industry in India. NASSCOM

