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REVIEW ARTICLE

STRESS MANAGEMENT MECHANISM OF IT COMPANIES IN CHENNAI

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ABSTRACT

In today's changing and competitive work environment, stress level is increasing both in the I.T professional as well as the managers. As a result of this , more and more I.T Professional staffs are showing signs of chronic fatigue and burn out. In most cases, stress leads to reduced efficiency in even the best individuals, which in turn leads to reduced working ability. Stress is a problem in almost all the countries of the world, irrespective of whether the economy is strong or week. The stress is called the Disease of civilization stress has been called the Invisible disease. The Study revealed that Most of the Employees in a I.T organization get stress due to work performance, dictatorial management polices, irrational promotional polices and work load disproportionate to salary and favoritism. The Organizational climate influencing stress in the I.T companies are predominant.

INTRODUCTION

Stress dynamics is a growing problem that results in substantial cost to individual employees and work organizations around the globe. Stress dynamics (Oldenburg, Osipow 1988) is a complete dynamical system with causes of stress and the influence o organizational climate over employees and organizations. This domain explains the proportionate relationship between objectives of organizational climate, social factors and quantas of stress among the employees. In all the industries, causes of stress are generally identified as work environment, but it is the objectives of organizational climate which triggers stress among the employees. Stress dynamics systematically observes the origin of stress, influencing factors of climate, efforts of organization to manage the stress and total out put of the successful stress management.

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It also explores the perception of employees about stress mechanism and the respect of stress dynamics on individuals and organizational efficiency. The changing nature of work has placed unprecedented demands on employees, and fuelled concerns about the effect this change is having on the well-being and health of employees and their work organizations. In many large organizations, a period of dramatic downsizing, outsourcing, and globalization raised the stress dynamics to get its full momentum. Although the changes in the organizations have led to greater mobility and more flexible work arrangements for some employees, for others they have raised concerns about employment security, increased work demands, and the loss of 'connectedness' result in the move toward less secure forms of employment . In many organizations, these changes have also been coupled with rapid technological change, and a strong push for greater efficiency, increased

competitiveness, and improved customer service (Belous, 1998).

Recent industrialization and globalizations are changing the Indian occupational morbidity drastically. Traditionally labor-oriented markets are on change towards more automation and mechanization, at the same time general awareness about occupational safety, occupational and environmental hazards were not spread in the society. Occupational research is seen as more complex issue in India. Indian employees are increasingly experiencing the economic transition; occupational research approach should balance between understanding the modern industrial exposures and health risks associated with it. All around the world, countries are undergoing rapid, fundamental changes in almost every aspect of life. In some of these countries, this has created great social stress, whereas others seem to have managed to maintain the relative stability needed for long-term, beneficial transformation processes to flourish[2]. Major determinants of these transformations are the globalization, computerization and mobilization of the production and provision of goods and services. Organizations are becoming flatter, if not smaller.

Literature review

Man's cave-dwelling ancestors faced different stress inducing stimuli than those faced by the individual today. Responding to dangerous animals or other life-threatening situations resulted in an attempt to 'fight' the cause of the threat or to flee. The biochemical and physical responses that took place in early mankind when faced with danger are the same type of physical responses experienced by modern man 25,000 years later (Matteson and Ivancevich, 1989). However, whilst the human nervous system is still responding in the same way to threatening stimuli or stressors, the modern 'stressors' including the environment have changed radically (Matteson and Ivancevich, 1989). Stress is derived from the Latin word *stringere* meaning to draw tight and was used in the 17th century to describe hardships and strain. Earlier definitions of stress applied to physics and engineering, eventually influencing the concept of how stress affects individuals (Cartwright and Cooper, 2005). Levy and Wegman (1988) provide the following terms related to stress:

Stress: A (perceived) substantial imbalance between demand and response capability under conditions where failure to meet demands has important (perceived) consequences.

Stressor: Environmental event, situation, or condition that results in stress

***Stressful*:** Pertaining to an environment that has many stressors

Strain: (or stress reaction) short-term physiologic, psychological or behavioural manifestations of stress.

Hans Selye and Richard Lazarus are amongst the earlier pioneers relating to theories of stress. In the earlier work of Selye (1976) stress is defined as: "the nonspecific responses of the body to any demand". In the classical work of Lazarus (1966) stress is defined as: "A stimulus condition that results in a form of disequilibrium in the system, producing a kind of strain and changes in the system. Psychological stress is a threat, the anticipation of a future confrontation with harm, based on cues which are appraised by recognitive processes". Krantz, Grunberg and Baum (1985) view stressors as a stimulus that makes demands on an organism which has to adapt or adjust to the stimuli. Schlebusch (2000) states that an event or 'stimuli' *only* becomes stressful if the individual interprets it as such. The stimuli comprise of both positive and negative experiences, with both types of experiences resulting in changes of a biological nature within the individual. Thus not all stress is perceived as negative. Strumpfer (1983) distinguishes between 'good' and 'bad' stress. *Distress* or 'bad' stress refers to harmful, unpleasant demands on the individual. Strumpfer refers to 'positive' stress which is described as '*eustress*' and is derived from the Greek word 'eu' meaning good. Eustress denotes a pleasant and facilitating form of stress and can be exemplified in the employee who thrives in a competitive or demanding work environment albeit stressful.

Indian it industry

India is one of the world's fastest growing economies and is becoming a global technology hub. The Information Technology Industry can

broadly be categorised as Software and Hardware. IT and related developments have been engines of growth for economies of different nations today. Developments in IT are causing paradigm shifts in human existence today. Emergence of global village is the outcome of advances facilitated by IT. It has a crucial role to play in rapidly transforming Indian economy and reaping its benefits. Potential for growth, employment and revenue generation are the reasons behind the government's intervention in the form of special incentives. The bulk of revenue contribution with respect to India comes from Software side. The Software Industry especially "application software" capturing much of the market locally and internationally is totally knowledge driven and has been in the limelight. Hence, Indian software professionals are gaining status in the international market for the skill sets and talent. Indian talent is in great demand as there exists a war for talent. Developing countries like China, Malaysia, Singapore, Philippines and other countries are trying to compete in the global market to grab their share. Until India possesses competitive edge in cutting-edge technology and faster learning capacity, the IT industry will not see a boon in the years to come. India could generate the maximum number of engineering graduates leading the country to be identified as human capital goldmine. The economy is facing increased globalisation giving way to the employees to have wider options to choose their employers. The organisation is also facing continuous changes taking place in the external environment. The robust growth pattern with respect to IT industry in India has been encouraging

Need and importance of the study

Stress dynamics is drawing more and more attention nowadays, particularly in the corporate context. There is no such thing as a stress-free job. The employees in their work are exposed to tension, frustration, and anxiety as he gets through the duties assigned to them. The "Human Resources." is the intersection of the two organizational dynamics, human exchange and systemic change that accounts for the challenge and performance of the organization the employees in any work place are able to identify and understand the healthy workplace. As so many forces are working upon the employees in the modern age, and it is extremely difficult to cope under so much pressure (Szymanski, 1999). The stress is called the "disease of civilization." Stress has been called "THE INVISIBLE DISEASE". It is a disease that may affect the organization and any of the people in it, so it is indispensable to study the stress dynamics composed of causes of stress, stress management and out come of stress free work environment. In today's world, every one faces stress on a daily basis, which results from failure to effectively manage with various activities. Occupational stress is regarded as both a serious public health concern and a major impediment to organizational success. In human terms, chronic job stress is associated with a range of physical, psychological, social and behavioural health problems[8]. In any organization, occupational stress can contribute to a number of outcomes which are critical to organizational success, including absenteeism, labour turnover and job performance (Szymanski *et al.,* 2006). The human and economic costs of job stress strongly suggest that the employees and employers involvement as well as efforts are essential to build healthier and less stressful working environments.

Stress in it industry

Indian software professionals are gaining status in the international market for the kill sets and talent. Indian talent is in great demand as there exists a war for talent. Developments in IT are causing paradigm shifts in human existence today. Emergence of global village is the outcome of advances facilitated by IT. It has a crucial role to play in rapidly transforming Indian economy and reaping its benefits. Potential for growth, employment and revenue generation are the reasons behind the government's intervention in the form of special incentives. The bulk of revenue contribution with respect to India comes from Software side. The Software Industry especially "application software" capturing much of the market locally and internationally is totally knowledge driven and has been in the limelight. So IT employees are always spending their official life in the midst of competition and heavy work load. These reasons lead to the enormous amount of

stress among them. The globalization of economy and introduction of new high speed information technology, increased global competitiveness, and reduced staff levels; IT employees have less job security. They are carrying heavier workloads and working longer hours in an attempt to keep their jobs. A marked increase in stress levels at work is being experienced on a universal scale. There are two ways of tackling work stress: Identify sources of stress in their job and try to make appropriate changes. The employees often blame themselves for their problems at work, rather than questioning the job itself. The need for studying stress dynamics and its importance for prudential benefits has acquired good momentum in the present scenario. Objectives of the studies i) To study the various factors causing stress and their influence on the performance of employees. ii) o analyze the physical, behavioral and emotional responses of IT employees in stress affected domains. Iii) To ascertain the stress management techniques adopted by the organizations and the responses of the employees .

Hypotheses

1. Physical, behavioural and emotional responses of IT employees to stress do not differ significantly.
2. There is no significant impact of organizational culture, climate and inter personal relationship in creating stress among the employees.
3. Stress management techniques are highly successful in stress removing among the employees.
4. Stress management techniques in IT organizations do not predict individual and organizational efficiency.

METERIALS AND METHODS

The data is collected for the study by means of a three section questionnaire for the questionnaire is framed to obtain the general information about the employees, deals with different types of stress due to inter personal relationship, work environment and organizational culture and climate. The questionnaire is designed in optional type, where as the designed in likerts 5-point scale, ranging from 5-strongly agree, 4-agree, 3-neutral, 2-disagree, 1-strongly disagree. The questionnaire with covering letter is handed over personally to each and every respondent and they are requested to return the filled in questionnaire after 15 days, when the researchers visits them. The respondents took the period of 15 days to 2 months to return the completed questionnaire.

Sample selection

The multi stage random sampling method is applied to collect the primary data. This sampling method is justified as follows: The whole IT industry is downsized into Software industry in the first stage of sampling. The second stage is preceded with technical employees working in the Software industry. After these two stages, the random sampling method is applied to obtain the responses from the employees. Hence, the multi stage sampling method is justified to collect the samples from the different IT organizations.

Sample size

A sample size of **123** respondents is selected on multistage random sampling method. Out of 123 samples, only 104 returned the questionnaire.

Table 1. Factors of stress due to inter-personal relationship

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.788	34.439	34.439	2.798	25.440	25.440
2	1.424	12.943	47.381	2.053	18.663	44.102
3	1.251	11.377	58.758	1.612	14.656	58.758
4	.937	8.522	67.279			
5	.886	8.055	75.335			
6	.718	6.529	81.863			
7	.591	5.375	87.238			
8	.487	4.431	91.669			
9	.454	4.125	95.794			
10	.262	2.378	98.172			
11	.201	1.828	100.000			

Extraction Method: Principal Component Analysis.

Table 2. Variable loadings of factors of stress due to inter-personal relationship

	Component		
	1	2	3
q5	.804		
q3	.760		
q6	.744		
q4	.689		
q10		.787	
q9		.784	
q1		-.618	
q11		.454	
q7			.813
qa8			.683
q2			.619

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a Rotation converged in 5 iterations.

Table 3. One-Sample Statistics for variables of stress due to inter-personal relationship

	N	Mean	Std. Deviation	Std. Error Mean
q1	100	3.8000	1.08246	.10825
q2	100	3.4500	1.10440	.11044
q3	100	2.4900	1.43192	.14319
q4	100	2.6500	1.28216	.12822
q5	100	2.6700	1.37844	.13784
q6	100	3.0200	1.31794	.13179
q7	100	2.9300	1.32768	.13277
q8	100	2.9500	1.20918	.12092
q9	100	2.6600	1.37231	.13723
q10	100	2.8700	1.07923	.10792
q11	100	3.2100	5.44448	.54445

Among 104 questionnaires 100 of them are found usable. The sample of this study covers all types of employees. Hence, the exact sample of the study is 100.

Data analysis

The sources of data are primary as well as secondary. The data collected from the employees survey constitute primary and information gathered through books, journals, magazines, reports, dailies consists of secondary. The data collected from both the sources are scrutinized edited and tabulated. The data are analyzed using statistical package for social sciences (SPSS) and other computer packages. Factor analysis, t-test and one way analysis of variances are used analyze the primary data.

RESULT AND DISCUSSION

Factors of stress

Factor Analysis by principle component analysis method is applied on the level variables of interpersonal relationship among top, middle and lower level executives.

The following variables are considered for the analysis in this study:

- Do you get on well with your co-workers?
- Do you let others know how you are fee?
- Do you get jealous of your co-workers?
- Do you often get angry with others?
- Do you avoid social contacts in the recent past?
- Do you have difficulty saying `no' to others?
- Do you have time for your hobbies, pass time?
- Do you confide your personal mattes to your friends?
- Do you avoid people whose ideas are different from yours?
- Do you react defensively to constructive criticism?
- Do you look to others to make things happen to you?

From the above table, it is found that the eleven ariables are converted into three major factors. These eleven variables explain 58.75% of the total variance. Table 4 presents the variable loadings of each factor. From the above table, it is inferred that factor one consists of the variables

1. Do you avoid social contacts in the recent past? (0.804)
2. Do you get jealous of your co-workers ?(0.760)
3. Do you have difficulty in saying “No” to others (0.744)
4. Do you often get angry with others? (0.689)

Table 4. One-Sample Test for variables of stress due to inter-personal relationship

	Test Value = 3					
	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
q1	7.391	99	.000	.80000	.5852	1.0148
q2	4.075	99	.000	.45000	.2309	.6691
q3	-3.562	99	.001	-.51000	-.7941	-.2259
q4	-2.730	99	.008	-.35000	-.6044	-.0956
q5	-2.394	99	.019	-.33000	-.6035	-.0565
q6	.152	99	.880	.02000	-.2415	.2815
q7	-.527	99	.599	-.07000	-.3334	.1934
qa8	-.414	99	.680	-.05000	-.2899	.1899
q9	-2.478	99	.015	-.34000	-.6123	-.0677
q10	-1.205	99	.231	-.13000	-.3441	.0841
q11	.386	99	.701	.21000	-.8703	1.2903

The value 4.3 revealed that the mean values of variables of stress due to inter-personal relationship range from 2.49 – 3.80.

Table 5. One-Sample Statistics for factors of inter-personal relationship

Factors	N	Mean	Std. Deviation	Std. Error Mean
SCNON	100	2.7075	1.06307	.10631
OPCOR	100	3.1875	1.49468	.14947
LTSHARE	100	3.1200	.88321	.08832

Table 6. One-Sample Test for factors of inter-personal relationship

	Test Value = 3					
Factors	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
SCNON	-2.751	99	.007	-.29250	-.5034	-.0816
OPCOR	1.254	99	.213	.18750	-.1091	.4841
LTSHARE	1.359	99	.177	.12000	-.0552	.2952

Hence the first factor is named as social contact and non-co operation. The Second factor consists of the following variables:

1. Do you react defensively to constructive criticism? (0.787)
2. 09 Do you avoid people whose ideas are different from yours? (0.784)

a. Do you get on well with your co-workers? (-0.618)

3. Do you look to others to make things happen to you? (0.454)
4. Therefore the second factor can be suitably named as (Cordial) relationships and openness.

The Third factor emerges from the variables

1. Do you have time for your hobbies? (0.813)
2. Do you confide personal matters to your friends? (0.683)
3. Do you let others know your feelings? (0.619)

Therefore this factor can be called as leisure time and sharing the views. So, it is concluded that in the IT Industry, the stress due to interpersonal relationships is evolved in the form of factors; lack of social contacts and non-co operation", "cordial relationships and openness" and "leisure time and sharing of views".

The predominant factors of inter-personal relationship causing stress:

Factors analysis extracted three factors of interpersonal relationships among the employees of the IT Industry namely:

- Social contacts and non co-operation (SCNON)
- Cordial relationships and openness (OPCOR)
- Leisure time and sharing of views (LTSHARE)

The one sample "t" test with test value 3 is applied on eleven variables of stress due to interpersonal relationships and the following results are obtained. The't' test significance is displayed in Table 4. This shows that the employees in the IT Industry agree with stress due to cordial relationship with co-workers, understanding others feelings and maintaining a smooth relationship to achieve the things at work. The employees remain undecided to express their opinion in difficulty in saying "No" to others, confiding the personal matters and having time for their hobbies. They disagree with stress due to jealousy of co-workers, getting angry with others, avoiding social contacts, avoiding ideas from others and reaction to constructive criticism. One sample "t" test is applied on the above-mentioned three factors and the following results are obtained. Table revealed that the mean value of factors ranging are from 2.71 – 3.18. The

"t" test value used for these mean values and the test value 3 show that the employees in the IT Industry disagree with the stress due to social contacts and non–cooperation from the employees. In the case of other factors like "openness and cordial relationships" and "leisure time and sharing view" the employees are not able to decide stress due to openness and sharing of views. So, it is concluded that in the IT Industry stress due to interpersonal relationships is not significant among the employees.

Conclusion

1. Most of the employees in a private organization get stress due to work performance, dictatorial management policies, irrational promotional policies, and workload disproportionate to salary and favouritism.
2. Inter-personal relationship is a vital HRD sub-system which creates a conductive HRD climate. The flaws in this relationship lead to more stress among the employees.
3. Employee's personal health and family circumstances are crucial factors for the quality of work life and stress free environment. The maximum percentage of the poor performance of employees is due to physiological and psychological problems.
4. The organizational climate influencing stress in the IT companies is predominant. It is found that the demographic variables like education, age, salary and experience for all level executives in the IT sector organizations are creating stress among the employees and especially the experience of the employees force them to practice stress management to avoid unnecessary impediments to developmental activities.The top-level executives are very much enthusiastic in implementing the stress management elements. The management policies in favour of stress management, performance appraisal and organizational development are useful for the smooth conduct of the organization without stress..
5. Organizational climate influencing stress in the IT organizations forces the Top-level executives to implement stress management techniques in the organization to accrue the benefits in the form of individual efficiency, organizational efficiency, productivity and environmental change. Optimistic organizational climatic conditions are yet to be implemented in its true sense, it is introduced simultaneously with organizational development, so new innovative methods must be used to add more weightage to organizational climate influencing stress. As far as career planning is concerned the executives and staff are not adequately affected by stress, but the degree of measure of satisfaction in career planning is found in the organization.

REFERENCES

Asworth, Susan. 2005. "Low Morale, Other Issues Push Absences to Five-Year High." Silicon Valley/San Jose Business Journal, 4 March 2005.

Ball, Ron. 2004. "Workplace Stress Sucks $300 Billion Annually From Corporate Profits." Customer Inter@ction Solutions 23 (5): 62.

Barden, Nancy Ray, 2001. "Wellness Programs: Everyone Wins." Commerce and Health, 28–42.

Belous, R. 1998. The shift towards contingent workers, Monthly Labour Review, 112(3): 7-12.

Bull, H. 2006. Stress - fact or fiction: The assessment and management of Workers' Compensation claims for stress: A Commonwealth perspective. In Proceedings of the National Institute of Occupational Safety & Health Conference - Stress in the 90s:A Changing Workforce in a Changing Workplace. Washington: NIOSH.

Cooper, C. L. 2003. Identifying Stressors at Work: Recent Research Developments. Journal of Psychosomatic Research, 27: 369-376.

Cooper, C.L. 2001. Stress in organisations. In M. Smith (Ed). Analysing Organisational Behaviour. London: MacMillan.

Foster, Lucy Barnes, 2002. "Workplace Stress: Changing the Pattern." Sales and Marketing Journal, 32–33.

French, J.R.P., and Caplan, R.D. 2003. Organisational stress and individual strain,. The Failure of Success, American Management Academy. New York.

Harrold, Robert and Wayland, Michael, 2002. "New Methods to Reduce Workplace Stress." Industrial Concepts, 19–21.

Ivancevich, J. M. and Matteson, M. T. 2000. *Stress and Work: A managerialPerspective*. Glenview, IL: Scott Foresman.

Jacobs, R.A. 2004. The invisible workforce: How to align contract and temporary workers with core organisational goals. National Productivity Review, Spring, 169-183

Maurer, Marcia K. 2002. "Is Stress Running Your Life?" Modern Office Innovation, 27–28.

Rosch, P. J. and Pelletier, K. R. 2004. Stress management in the workplace. In O'Donnell, M. P. & Ainsworth, T. (Eds.), Health promotion in the workplace. (pp. 362-390). New York: John Wiley & Sons.

Schorr, Leslie, 2001."Coping with Stress, Boosting Productivity." Employment News, Spring 23

Szymanski, E.M. 1999. Disability, job stress, the changing nature of careers, and the career resilience portfolio. Rehabilitation Counseling Bulletin, 42: 279-284.

Szymanski, E.M., Ryan, C., Merz, M.A., Trevino, B. and Johnson-Rodriguez, S. 2006. Psychosocial and economic aspects of work: Implications for people with disabilities. In E.M. Symanski & R.M. Parker (Eds.). Work and Disability: Issues and Strategies in Career Development and Job Placement (pp. 9-38), Austin, TX: Pro-Ed.

Warshaw, Leon J. Managing Stress: Addison-Wesley Series on Occupational Stress. Reading, MA: 2000.

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