



## STRESS MANAGEMENT OF EMPLOYEES: A STUDY WITH REFERENCE TO BHARAT HEAVY ELECTRICALS LIMITED, TRICHY

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### Abstract

Stress Management constitutes an essential tool of an organization. Employees at all levels may have stress in their work life on a continuous basis. Such stress may make harm for the employees and to the organization. So it is necessary to manage stress. Stress Management is essential for employees to carry out their current and future assignment effectively and efficiency. This study helps the working people and company about how to overcome the stress and how to treat the stressful employees in the organization. The researcher undertakes the study entitled “Stress Management of employees – A study with special reference to BHEL, Trichy”, with a view to analyze different factors which influences and contribute to the overall stress management and to diagnose the stressors and the strategies handled by the employees to overcome stress.

**Keywords:** Stress, Causes, Effects, Types Stress.

### INTRODUCTION

Modern life is full of stress. Stress on individuals ranges from Personal day today life of their organizational activities. Urbanization, Industrialization and increase in scale of operations in the society are causing increasing stresses. In this changing environment, participation, interaction, transition, planning and regulation become key issues, each with its own frustrations attracted. People feel stress as they can no longer have complete control over what happens in life. There is no escape from stress in modern life. In today's context, “stress is a costly business expense that affects both employee health and company profits”. Therefore, our attempt should be to understand stress, its causes and impact, and adopting strategies for minimizing its impact. Stress is the general term applied to the pressures people feel in Life. The presence of stress at work is almost inevitable in many jobs. However, individual differences account for a wide range of reaction to stress a task viewed as challenging by one person may produce high level of anxiety in another. When pressure begins to build up, it can cause adverse strain on a person's emotions, thought processes, and physical condition. When stress becomes excessive, employees develop various symptoms of stress that can harm their ability to cope with performance and health, and even Threaten their ability to cope with the environment. Stress also leads to physical disorders, because the internal body system changes to try to cope with stress. Some physical disorders are short - range, such as an upset stomach. Others are longer - range, such as a stomach ulcer. Stress over a prolonged time also leads to degenerative diseases of the heart, kidney, blood vessels, and other parts of the body. It can result in angina and tension headaches. Therefore, it is important that stress, both on and off the job, be kept at a level enough for most people to tolerate without developing either emotional or physical disorders.

### CAUSES OF STRESS

There may be numerous conditions in which people may feel stress. Conditions that tend to cause stress are called stressors. Although even single stressors may cause major stress, like death of near one, usually stressors combine to press an individual in a variety of ways until stress develops. The various stressors can extra organizational. Within each category, there may be several stressors.

#### 1.2.1 Individual Stressors

These are many stressors at the level of individual which may be generated in the context of organizational life or his personal life. There are several such events which may work as stressors. These are life and career changes, personality type, and role characteristics.

#### 1.2.2 Work Stressors

**Absence of Autonomy** :If an employee's has little input in decision making processes, and no control over the demands of work, he is more likely to experience job stress.

**Workload factors**: Worker can be under simulated with too little challenge or overwhelmed with unrelentingly high workloads. The type on task on employee s engaged in can create job stress. For example, heavy workloads, long work hours and infrequent rest breaks can lead to high level of stress.



**Work conflict:** A major cause of stress at work is unmediated conflict between a worker and his supervisor or colleague(s). Lack of support or help from supervisors and co-workers creates a poor social environment and consequently, greater job stress. Physical isolation also reduces an employee's ability to interact with others, thus diminishing a person's ability to receive help.

**Overload Stress:** Stress is caused due to the feeling that too many expectations from the significant others are failing on him. Role overload is likely to occur where there are large variations in the expected output, and when the delegation or assistance cannot procure more time. Job satisfaction, security and career prospects may not meet the expectations of some workers. The job insecurity created translates into job stress.

### 1.2.3 Environmental Stressors

**Poor physical work environment:** Negative factors include cramped, hot or noisy working conditions also a job environment that lacks communication between the employee affects on employee's job satisfaction. Absence of family friendly policies also has a major impact on the stress level of an employee.

**Family stressors:** Taking work home regularly can create conflict with family members and blur the work – home bound – arise.

**Isolation stress:** Stress is caused due to the feeling that certain roles are psychologically closer, while others are at a much greater distance.

**Life and career changes:** Stress is produced by several changes in life and career. Research studies show that in general, every transition or change produces stress. People in newer places experience such state of transition of stress.

**Personality type:** Personality characteristics such as authoritarianism, rigidity, masculinity, femininity, extroversion, supportiveness, spontaneity, emotionality, tolerance for ambiguity, locus of control, anxiety, and need for achievement are particularly relevant to individual stress.

**Role characteristics:** There may be role stress either because of role conflict or role ambiguity. Role conflict arises because of incompatibility of two or more roles. When people become members of several systems like family, club, voluntary organization, work organization, etc. they are expected to fulfill certain obligations to each system and to fit into defined places in that system.

### 1.2.4 Group Stressors

Group interaction affects human behavior. Therefore, there may be some factors in group processes which act as stressors. Following are the major group stressors.

**Lack of group cohesiveness:** Group cohesiveness is important for the satisfaction of individuals in group interaction. When they are denied the opportunity for this cohesiveness, it becomes very stressing for them as they get negative reaction from group members.

**Lack of social support:** When individuals get social support from members of the group, they are able to satisfy their social need and they are better off when this social support does not come, it becomes stressing for them. Conflict or any conflict arising out of group interaction may become stressing for the individuals, be it interpersonal conflict among the group members or inter – group conflict.

### 1.2.5 Organizational Stressors

Conditions An organization is composed of individuals and groups and therefore, individual and group stressors may also exist in organizational context. However, there are macro level dimensions of organization functioning which may work as stressors. The major organizational stressors are as follows.

- Organizational policies
- Organizational structure
- Organization processes
- Physical

## 1.3 EFFECTS OF STRESS

Generally, stress is considered to be negative, thereby meaning that, it has negative consequences. However, stress has neutral connotation it is only the degree of stress which produces positive or negative consequences. From this point of view, stress can be classified as eustress and distress.

- Eustress
- Distress
- Physical problems
- Psychological problems



- Behavioral problems
- Burnout
- Rust out

#### 1.4 REVIEW OF LITERATURE

Stress is defined as a nonspecific response of the body to a stimulus or event (stressor). Under a general model of the stress response, when an individual experiences a stressor, the stressor will lead to a physiological response, one that can be measured by several indicators, such as elevated heart rate. In related literature, the term “stress” is used to refer to this physiological response. Stressors vary in form and can include extreme temperature or lighting, time pressure, lack of sleep, and exposure to threat or danger, among others. All stressors, however, tend to produce similar physiological responses within the body (Selye, 1956).

Research findings suggest that when an individual comes under stress, his cognitive performance and decision making may be adversely affected. Notably, under conditions of stress, individuals are likely to Screen out peripheral stimuli (Easterbrook, 1959; Janis and Mann, 1977; Staw, Sandelands, and Dutton, 1981) Make decisions based on heuristics (rules of thumb or guidelines) (Shaham, Singer, and Schaeffer, 1992; Klein, 1996) Suffer from performance rigidity or narrow thinking (Friedman and Mann, 1993; Keinan, 1987) Lose their ability to analyze complicated situations and manipulate information (Larsen, 2001).

Also, researchers have found that task completion time may be increased and accuracy reduced by stress (Idzikowski and Baddeley, 1983; McLeod, 1977). In addition to effects on the individual, stress has also been shown to negatively affect group functioning. When stressed, individuals are likely to yield control to their superiors and to allow authority to become more concentrated in the upper levels of the hierarchy. Communication effectiveness may also be reduced (Driskell, Carson, and Moskal, 1988). Stress can also lead to “groupthink,” in which members of the group ignore important cues, force all members to adhere to a consensus decision even an incorrect one and rationalize poor decisions (Janis and Mann, 1977). Even if some level of stress may have a positive effect on performance as suggested by the U-hypothesis, extended exposure to stress or a single exposure to an extreme stressor can have severe negative consequences on non-task performance dimensions. For example, high levels of stress can lead to emotional exhaustion, lower organizational commitment, and increased turnover intentions (Cropanzano, Rapp, and Bryne, 2003). In extreme cases, stress can lead to post-traumatic stress disorder (PTSD), a psychiatric illness that can interfere with life functioning. PTSD has a variety of symptoms, including flashbacks, difficulty sleeping, and social isolation. Deployment and traumas experienced while on deployment are potential causes of PTSD. In fact, PTSD has been found at varying levels in all veteran populations studied, including peacekeeping operations and the recent conflicts in Afghanistan and Iraq (Litz et al., 1997a, 1997b; Adler, Vaitkus, and Martin, 1996; Schlenger et al., 1992; Hoge et al., 2004).

#### COMPANY PROFILE

BHEL is an integrated power plant equipment manufacturer and one of the largest engineering and manufacturing companies in India in terms of turnover. It was established in 1964, ushering in the indigenous Heavy Electrical Equipment industry in India - a dream that has been more than realized with a well-recognized track record of performance. The company has been earning profits continuously since 1971-72 and paying dividends since 1976-77. It is engaged in the design, engineering, manufacture, construction, testing, commissioning and servicing of a wide range of products and services for the core sectors of the economy, viz. Power, Transmission, Industry, Transportation, Renewable Energy, Oil & Gas and Defense. BHEL have 15 manufacturing divisions, 15 regional offices, eight service centers, four overseas offices and 4 power sector regional centers namely PSNR, PSSR, PSER & PSWR and currently operate at more than 160 project sites across India and abroad. BHEL places strong emphasis on innovation and creative development of new technologies. Their research and development (R&D) efforts are aimed not only at improving the performance and efficiency of their existing products, but also at using state-of-the-art technologies and processes to develop new products. This enables them to have a strong customer orientation, to be sensitive to their needs and respond quickly to the changes in the market.

The high level of quality & reliability of BHEL products is due to adherence to international standards by acquiring and adapting some of the best technologies from leading companies in the world including General Electric Company, Alstom SA, Siemens AG and Mitsubishi Heavy Industries Ltd., together with technologies developed in our own R&D centres. Most of their manufacturing units and other entities have been accredited to Quality Management Systems (ISO 9001:2008), Environmental Management Systems (ISO 14001:2004) and Occupational Health & Safety Management Systems (OHSAS 18001:2007).



BHEL has a share of 63% in India's total installed generating capacity contributing 74% (approx.) to the total power generated from utility sets (excluding non-conventional capacity) as of March 31, 2012. It has been exporting their power and industry segment products and services for approximately 40 years. BHEL has exported products and services to more than 70 countries like Indonesia, Malaysia, Gulf countries etc. BHEL had cumulatively installed capacity of over 8,500 MW outside of India in 21 countries, including Malaysia, Iraq, the UAE, Egypt and New Zealand. Their physical exports range from turnkey projects to after sales services.

BHEL work with a vision of becoming a world-class engineering enterprise, committed to enhancing stakeholder value. Their greatest strength is their highly skilled and committed workforce of 46,748 employees. BHEL Trichy alone has a workforce of 11937 employees. Every employee is given an equal opportunity to develop himself and grow in his career. Continuous training and retraining, career planning, a positive work culture and participative style of management - all these have engendered development of a committed and motivated workforce setting new benchmarks in terms of productivity, quality and responsiveness.

### 1.6 NEED FOR THE STUDY

Stress is the wear and tear our bodies experiences as we adjust to our continually changing environment it has physical and emotional effects on us and create positive or negative feelings. As a positive influence, stress can help compel us to action. It can result in a new awareness and an exciting perspective. As a negative influence, it can result in feelings of distrust, rejection, anger and depression, which in turn can lead to health problems such as headaches, upset stomach rashes insomnia, ulcers, high pressure, heart disease and stroke. With death of a loved one, the birth of a child, a job promotion, or a new relationship, we experience stress as we readjust our lives. In so adjusting to different circumstances, stress will help or hinder us depending on how we react to it. Positive stress adds anticipation and excitement to life, and we all thrive under a certain amount of stress. Deadlines, competitions, confrontations, and even our frustrations and sorrows add depth and enrichment to our lives.

The goal is not to eliminate stress but to learn how to manage it and how to use it to help us. Insufficient stress acts as a depressant and may leave us feeling bored or dejected; on the other hand, excessive stress may leave us feeling "tied up in knots". What we need to do is find the optimal level of stress which will individually motivate but not overwhelm each of us.

### 1.7 SIGNIFICANCE OF THE STUDY

Stress Management is essential for the success of any organization. Managing and coping stress not only improves the performance of the organization but also improves the employees to enhance their competencies for the organizational excellence. Stress Management plays a very significant role in the industry like BHEL, which is currently facing acute competition from global companies, fast technological changes, international operations, etc., requires development of more competent workforce. Managing the stress will lead to develop the employees performance and potentials to accomplish the organizational mission and objectives. With a view to reduce stress caused by work pressure, BHEL has implemented SAP R/3 platform during the year 2008. The present study is undertaken by the researcher to study the Stress Management of employees in BHEL. In order to make this study more objective, it encompasses all the significant factors.

### 1.8 OBJECTIVES OF THE STUDY

1. To analyze the importance of Stress Management of employees in BHEL.
2. To study the awareness about stress management among the employees of BHEL, Trichy.
3. To identify the various factors give stress to the employees in BHEL, Trichy.
4. To find out the additional ways required to make the employees stress free.
5. To suggest various measures to improve the Stress Management of employees working in BHEL, Trichy.

### 1.9 RESEARCH DESIGN

"A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure". The researcher has adopted descriptive research design to undertake the study on stress management in BHEL, Trichy. The researcher has collected the opinion of the executives of BHEL about the stress, causes and effects of it and portrays the responses of employees descriptively in this study.

**1.9.1 Sources of data collection:** The researcher has collected both the primary data and secondary data to conduct the study.

**Primary data:** The researcher has prepared the structured questionnaire consisting of almost all the key factors of stress management to collect the data from the respondents.

**Secondary data:**The researcher collected the secondary data from the organization magazines, annual reports, books, journals, manuals and company websites.

### 1.10 POPULATION AND SAMPLES

The population of the study consists of the workforce of the BHEL, Tiruchirappalli. The size of the work force is 7,748. Stratified random sampling has been adopted in this study and 500 workers have been selected as sample workers for this study.

**Table – 1,Sample Break-up**

Category	Total strength of the employees	Percentage of category to total	No. of Samples
Executives	1611	20.8	104 (20.8% of 500)
Supervisors	1703	22.0	110 (22 % of 500)
Artisans	3308	42.8	214 (42.8% of 500)
Clerical and supportive staff	1126	14.4	72 (14.4% of 500)
Total	7,748	100.0	500

Source: Collected from Company records

### 1.11 TOOLS OF DATA COLLECTION

The data collection process was carried out by means of structured questionnaire filled by the respondents in an organization. The researcher prepared the questionnaire that comprises of 37 questions in total. It is split in to two parts. The first part consists of 7 questions explaining the personal details of the respondents. The second part consists of 30 questions which pertaining some dimensions. The questionnaire is formed in the following five point scale rating.

- Strongly Agree
- Agree
- Cannot Say
- Disagree
- Strongly Disagree

### 1.12 LIMITATIONS OF THE STUDY

The study is restricted to BHEL, Trichy only. No comparison is made between other work centers/similar companies in the industry.

Personal opinion of the executives is the base for the present study. Therefore chances of personal bias in the opinion cannot be ruled out.

The result of the study cannot be generalized to other units due to demographical & related cultural differences.

### 1.13 FINDINGS

- Almost majority of the respondents 72% are male, and remaining 28% of the respondents are female.
- Nearly 34% of the respondents are in the age group of 30.1 to 40 years.
- Nearly 32% of the respondents have done Diploma.
- Nearly 24% of the respondents are 1 to 5 years experience.
- Finding Related to Employees Stress
- Family stressors
- Most of the respondents often feel that there is little stress in marital status.
- Most of the respondents often feel that there is no stress to communication between family members.
- Most of the respondents often feel that there is no stress in family illness.
- Most of the respondents often feel that there is little stress in their income meets family expenses.
- Most of the respondents often feel that there is little stress in addition of new family members.
- Work stressors
- It found that most of the respondents often feel that there is little stress in authority structure & management.
- It found that most of the respondents often feel that there is no stress in working hours and working condition.
- It found that most of the respondents often feel that there is no stress in new type of work.



- It found that most of the respondents often feel that there is no stress in discipline conduct by supervisors.
- It found that most of the respondents often feel that there is no stress in boring routine work.
- It found that most of the respondents often feel that there is no stress in lack of positive feedback.
- It found that most of the respondents often feel that there is no stress in decision making at work.
- It found that most of the respondents often feel that there is little stress in work load.
- It found that most of the respondents often feel that there is no stress in lack of effective training.
- Physical stressors
- Most of the respondents often feel that there is moderate stress in physical habits (alcohol, smoking).
- Most of the respondents often feel that there is little stress in irregular sleeping & eating pattern.
- Most of the respondents often feel that there is no stress in recent operation and injuries.
- Interpersonal relationship stressors
- Most of the respondents often feel that there is no stress in trouble to make friends.
- Most of the respondents often feel that there is little stress in significant human relationship.
- Most of the respondents often feel that there is no stress in lonely feelings
- Most of the respondents often feel that there is little stress with colleagues.
- Most of the respondents often feel that there is no stress in feelings of inferiority.
- Environmental stressors
- Most of the respondents often feel that there is little stress in work peaceful.
- Most of the respondents often feel that there is moderate stress in housing environment.
- Most of the respondents often feel that there is moderate stress to adjusting with work environment.
- Most of the respondents often feel that there is little stress in working environment.
- Findings related to hypothesis
- There is no significant relationship between the age of the respondents and their importance in job.
- There is no significant relationship between the experience of the respondents and their job responsibilities.

#### 1.14 SUGGESTIONS AND CONCLUSIONS

After studying the BHEL, Trichy the researcher found that nearly 66% of the respondents belong to the category of middle age means more than 30 years of age, 72% of the respondents are male, 40% of them are having less 5 years of experience and more than half (52%) of them are possess only the school education (SSLC & HSC). No one is illiterate in the company. From the empirical study, the researcher found that marital issue, family income and the new entrants of the family (spouse & Children) are the major Family Stressors for the employees of the BHEL, Trichy.

Hence, the BHEL, arrange family counselors to counsel the issues and help to coup up with the family and extend their precious family life with happy. Regarding the work stress, authority and management style and the work load factors are the important stressors of the respondents. Since the issues are arise because of the company stringently follows the ISO and other international quality systems. So, the company may spent time for creating awareness about those systems and its purpose, benefits of each other, etc., And it surely makes the people more involved.

The Physical stressors are the most serious issues for BHEL, Trichy, More than 70% of them are having problem with their families, and more than 30% than of them are having the habit of alcohol, smoking and chewing tobacco, etc. and 62% of them are having irregular sleeping and eating patterns. These issues are inter linked and it directly affected the physical health in the form of ulcers, heart disease, lungs problem and cancer.

Hence the BHEL, Trichy, take some sincere steps to create awareness and de-addiction camps for their employees and support them to come up for the normal life. Regarding the Inter Personal Relationships the employees of BHEL, Trichy, having little stress with their colleagues.

Regarding the Environmental stressors, present working atmosphere is very hot, humid and noisy. The organization may take necessary steps to reduce noise pollutions and to protect the hearing ability of employees. Majority of the employees got bored with the routine work. The BHEL, Trichy, may introduce the system of Job rotation and implement it rigorously. That's make the employee more involved and it paved the way for multi-skilling of employee.

In light of the available research, it is unfortunate that so few of the worksite health promotion programs offer more than the occasional seminar on stress or time management for employees. Many corporations may have enlisted the services of employee assistance programs for the treatment of stress related disorders, but too often preventive programs are lacking. In



examining other aspects of the health promotion program, it is common to see extensive fitness and exercise facilities staffed by well-trained personnel. One is much less likely to see qualified staff and facilities devoted to the prevention of employee stress. In addition to the above, The BHEL may establish stress management relaxation center is a logical venue for the management of group instructional classes and useful addition to the stress management and relaxation center.

The stress management and relaxation center can be situated within an employee assistance program, a worksite medical facility, or adjacent to a fitness facility. Decisions concerning location and management will be based upon the existing organizational framework of the health promotion program and possibly to some extent on existing space allocations. As with any facility of this type one would hope for a location that is convenient and easily accessible to all employees. Depending on the size of the workforce and the demand of the employees, it may be possible for one person to manage the stress management and relaxation center. From the description of the equipment and the facility, one can see that this coordinator should have a certain degree of professional knowledge and skills. Employees should have somewhere that they can go, preferably on site, to train and learn new skills to help them deal with stress. The purpose of the center is to provide: individual stress management assessments and prescriptions, followed by exploration and practice in various techniques, and finally skill development. In this program, employees schedule appointments with the center's coordinator who oversees operations and is available for individual consultation. First time visitors are offered a comprehensive computerized stress management assessment and a tour of the facility. This allows the coordinator to identify which techniques may be most appropriate for each individual.

A stress management and relaxation center should be part of any complete worksite health promotion program. The emphasis of such a center is on allowing individuals to experience a variety of stress management techniques and to develop competence in one or more techniques. A commitment by the employer to reduce work related stress while promoting the concept of a stress management and relaxation facility, demonstrates a concern in the lives of the workers and the stress in their lives. By empowering individuals to better manage their stress and relax, health promotion professionals will ensure a healthier and more productive workforce.

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