CHAPTER IV

STRESS MANAGEMENT - AN OVERVIEW

4.1 Introduction

The term stress is derived from the Latin term ‘stringere’, which means to clutch, compress or bind. In the 15th century, the term was used to describe ‘troubles or pain’. A century later the term was used to describe ‘burden, force or pressure, especially on a person’s body or soul’. In the seventeenth century, stress denoted ‘hardship, straits, adversity or affliction’. During the 18th and 19th century it meant ‘force, pressure, strain or strong effort’. Stress is a term basically used in physical sciences which means pressure of one object to another. From physical science, the term stress came to medical science and finally to social science. As per the medical explanation, the term stress is the body’s general response to environmental situations. Stress management encompasses techniques intended to equip a person with effective coping mechanisms for dealing with stress. Stress management is effective when a person utilizes strategies to cope with or alter stressful situations.

4.2 The General Adaptation Syndrome

Hans Selye\(^1\), the world’s foremost authority on stress was the first to describe systematically the changes through which the body passes to deal with a perceived threat. He determined that people have a fairly consistent physiological response to stressful situations. This response, called the General Adaptation Syndrome (GAS), provides an automatic defense system to help in coping with environmental demands. The adaptive response occurs in three phases:

4.2.1 Alarm Stage

According to this model, the general adaptation syndrome begins when a person encounters a stressor and enters the alarm stage. A person in this stage wonders how to cope and feels anxiety, even panic. The person breathes faster, blood pressure rises, pupil dilates and muscles tense. At this stage, the person is coping ineffectively.
4.2.2 Resistance Stage

The person’s ability to cope with the environmental demand rises above normal state during the resistance stage because the body has activated various biochemicals, psychological and behavioral mechanisms. For example, we have a higher than normal level of adrenaline during this stage, which gives us more energy to overcome or remove the source of stress. However, our resistance is directed to only one or two environmental demands, so that we become more vulnerable to other challenges. This explains why people are more likely to catch a cold or other illness when they have been working under pressure. The body aims to provide long-term protection and more hormones are produced, increasing blood sugar levels to sustain energy, and raising blood pressure. If this phase continues the symptoms of “burnout” start to show and take over. Fatigue, concentration lapses, irritability, loss of appetite might start to show, amongst other things.

4.2.3 Exhaustion Stage

Many stressors are short-term in nature that is the person manages to solve the problem, or the situation ends on its own. In such cases, the general adaptation syndrome ends during resistance stage. But occasionally, a stressor persists. In situations where stressor persists, the person now enters the third stage called exhaustion. In this stage, the symptoms of the alarm stage return and the person eventually uses up his/her adaptive energy. The body has run out of its reserve of body energy and immunity. Mental, physical and emotional resources suffer heavily. The body experiences “adrenal exhaustion”. The blood sugar levels decrease as the adrenals become depleted, leading to decreased stress tolerance, progressive mental and physical exhaustion, illness and collapse. The consequences of this can lead to more serious illness because of the lowered immune system.

4.3 Approaches to Stress

There are four different approaches to define stress that will give complete understanding of what stress is.

4.3.1 Homeostatic/ Medical Approach

Walter B. Cannon\(^2\) was the medical psychologist who originally discovered stress and called it “the emergency response” or “the militaristic response, arguing
that it was rooted in “the fighting emotion”. According to Cannon, stress resulted when an external environmental demand upset the person’s natural steady state balance referred to as “homeostatis”. He called the stress response the flight or fight response. He believed that the body was designed with natural defense mechanisms to keep it in homeostatis.

4.3.2 Cognitive Appraisal Approach

According to Richard Lazarus, “stress is a situation that someone regards as threatening and as possibly exceeding his/her resources”. Richard Lazarus pointed out, that the stress evoked by an event depends on how people interpret the event and what they can do about it. Lazarus saw stress as a result of a person-environment interaction and he emphasized the person’s cognitive appraisal in classifying persons or events as stressful or not. Individuals differ in their appraisal of events and people. What is stressful for one person may not be stressful for another. Perception and cognitive appraisal are important processes in determining what is stressful and a person’s organizational position can shape such perceptions.

4.3.3 Psychoanalytic Approach

Harry Leveson believes that two elements of the personality interact to cause stress. They are ego-ideal and self-image. Ego-Ideal is the first element, the embodiment of a person’s perfect self. Self-image tells how the person really sees himself/herself, both positively and negatively. Stress results from the discrepancy between the idealized self (ego-ideal) and the real self-image; the greater the discrepancy, the more stress a person experiences. Psychoanalytic theory helps to understand the role of unconscious personality factors as causes of stress within a person.

4.3.4 Person-Environmental Approach

Robert Khan’s approach emphasized how confusing and conflicting expectations of a person in a social role create stress for the person. A good person-environment fit occurs when a person’s skills and abilities match a clearly defined, consistent set of role expectations. Stress occurs when the role expectations are confusing and conflicting or when the person’s skills and abilities are not able to meet the demands of the social role.
4.4 Factors Causing Stress

The workplace is an important source of both demands and pressures causing stress. According to Michie\(^4\), “the workplace factors that have been found to be associated with stress and health risks can be categorized as those to do with the content of work and those to do with the social and organizational context of work”. The factors that are intrinsic to the job include long hours, work overload, time pressure, difficult or complex tasks, lack of breaks, lack of variety and poor work conditions. Conflicting roles and boundaries can cause stress. The other sources of stress are under-promotion, lack of promotion, lack of training, job insecurity, relationship at work and the organizational culture.

4.5 Consequences of Stress

Debra L. Nelson and James Campbell Quick\(^5\) stated that all the consequences cannot be negative. 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 or distress. Eustress denotes the presence of optimum level of stress in an individual which contributes positively to his performance. These lead employees to new and better ways of doing their jobs. In certain jobs such as sales, creativity (journalism, radio/television announcement where time pressure is significant), a mild level of stress contributes positively to productivity. Distress denotes the presence of high level of stress in an individual which affects job performance adversely and creates many types of physical, psychological and behavioral problems. The three consequences of stress stated by Debra L. Nelson and James Campbell Quick are:

4.5.1 Performance and Health Benefits of Stress

The stress response is not inherently bad. Performance and health benefits of stress indicate that stress leads to improved performance upto an optimum point. Beyond the optimum point, further stress and arousal have a detrimental effect on performance. Therefore, healthy amounts of eustress are desirable to improve performance by arousing a person to action. The stress response does provide momentary strength and physical force for brief periods, thus providing a basis for peak performance.
4.5.2 Individual Distress

In general, individual distress usually takes one of the three basic forms such as physiological symptoms, psychological symptoms and behavioral symptoms. Most of the early concern with stress was direct at physiological symptoms. The significant medical illnesses of this form are heart disease and strokes, backaches, peptic ulcers and headaches. The common types of psychological distress are depression, burnout and psychogenic disorders. In the early stages, depression and burnout result in decline in efficiency, diminished interest in work and fatigue. Behaviorally related stress symptoms include changes in productivity, absence and turnover, changes in eating habits, increased smoking or consumption of alcohol, rapid speech, violence, substance abuse and sleep disorders.

4.5.3 Organizational Distress

Organizational distress is the identity of indirect costs of mismanaged stress for the organization such as low morale, dissatisfaction, breakdowns in communication and disruption of working relationships. The problems caused by organizational distress are participation problems, performance decrements and compensation awards.

4.6 Stress Effects on Health

Many research suggested that 60 to 90 per cent of illness is stress-related. The physical wear and tear of stress includes damage to the cardiovascular system and immune system suppression. Stress compromises the ability to fight off disease and infection, throws our digestive system off-balance and can even stunt growth in children. Stress is also linked to strokes, IBS (irritable bowel syndrome), ulcers, diabetes, muscle and joint pain, miscarriage during pregnancy, allergies and even premature tooth loss.

Stress significantly reduces brain functions such as memory, concentration, and learning. Some health effects caused by stress are reversible and the body and mind reverts to normal when the stress is relieved. According to the National Institute for Occupational Safety and Health, early warning signs of job stress include headache, sleep disturbance, stomach upset, difficulty in concentrating,
irritability, low morale, poor relations with family and friends. While these early signs are relatively easy to recognize, it is harder to see how job stress affects chronic health problems, since chronic conditions develop over time and is influenced by factors other than stress. Under sustained or severe stress, even the well-adjusted person loses the ability to adapt.

A healthy organization is defined as one that has low rates of illness, injury, and disability in its workforce and is also competitive in the marketplace. NIOSH research has identified organizational characteristics associated with both healthy, low-stress work and high levels of productivity. Examples of these characteristics include recognition of employees for good work performance, opportunities for career development, an organizational culture that values the individual worker and management actions that are consistent with organizational values.

4.7 Stress and Productivity

Some employers assume that stressful working conditions are a necessary evil that companies must turn up the pressure on workers and set aside health concerns to remain productive and profitable in today’s economy. The stress that an employee encounters at the workplace adversely affects the productivity of an organization. Unmanaged stress has a debilitating impact on the organization and the consequences vary from loss of individual productivity to increased absenteeism and rise in employee attrition. Team morale and company productivity are also adversely affected.

4.8 Stress and Employee Attrition

The growth of attrition rate has been a major concern for the last couple of decades. The words ‘attrition’ and ‘retention’ are profoundly significant in the context of corporate and professional institutions. Attrition is the separation of employees from an organization, due to resignation, retirement etc. It is defined as the loss of workforce due to unavoidable circumstances. It is growing every day and creating havoc. Firms that do not tackle the problem of workplace stress will have difficulty in attracting and keeping qualified people to remain competitive in today’s economy with problems like increased staff turnover, poor performance, reduced morale, low job
loyalty, and limited innovation. A high attrition reflects poorly on an organization’s ability to retain its people. NIOSH report says that 40 percent of job turnover occurs due to stress. Attrition does not only reflect the hiring policies of an organization, but also induction/retention strategies, training methodologies, work culture and many other factors.

4.9 Stress Management

Stress management refers to a wide spectrum of techniques and psychotherapies aimed at controlling a person's levels of stress, especially chronic stress, usually for the purpose of improving everyday functioning. In this context, the term 'stress' refers only to the stress with significant negative consequences, or distress in the terminology advocated by Hans Selye, rather than what he calls eustress, a stress whose consequences are helpful or otherwise positive.

Stress produces numerous symptoms which vary according to persons, situations, and severity. These can include physical health decline as well as depression. The process of stress management is named as one of the keys to a happy and successful life in modern society. Although life provides numerous demands that can prove difficult to handle, stress management provides a number of ways to manage anxiety and maintain overall well-being.

Despite stress often being thought of as a subjective experience, levels of stress are readily measureable using various physiological tests, similar to those used in polygraphs. Many practical stress management techniques are available, some for use by health practitioners and others for self-help, which may help an individual to reduce stress, provide positive feelings of being in control of one’s life and promote general well-being.

The effectiveness of the different stress management techniques can be difficult to assess, as few of them have received significant attention from researchers. Consequently, the amount and quality of evidence for the various techniques vary widely. Some are accepted as effective treatments for use in psychotherapy, whilst others with less evidence favouring them are considered alternative therapies. Many professional organisations exist to promote and provide training in conventional or alternative therapies.
Stress is an inevitable feature of work and personal life. Therefore, actions are required for developing adaptive behavior so as to overcome the consequences of stress. Such actions should be taken at individual level as well as at organizational level. At the individual level, an employee can take personal responsibility for reducing his/her stress level. Individual strategies include implementing time management techniques, increasing physical exercise, relaxation training, expanding the social support network, adjusting perceptions, having optimistic thoughts and engaging in leisure activities.

At the organization level, the organization can support employees’ efforts to cope with stress by improving the work environment, job redesigning, clarifying roles, offering wellness programmes, providing organization communication, developing supportive social relationships at the work place which can foster a supportive organizational culture. The three stages of stress prevention given by J.D. Quick, R.S. Horn and J.S. Quick are primary, secondary and tertiary prevention. Primary prevention is intended to reduce, modify or eliminate the demand or stressor causing stress. True organizational stress prevention is largely primary in nature because it changes and shapes the demands the organization places on people at work.

Secondary prevention is intended to alter or modify the individual’s response to a demand or stressor. People must learn to manage the inevitable. Tertiary prevention is intended to heal the individual of symptoms of distress and strain. Tertiary prevention is therapeutic, aimed at arresting distress and healing the individual.

4.9.1 Historical Foundations

Walter Cannon and Hans Selye used animal studies to establish the earliest scientific basis for the study of stress. They measured the physiological responses of animals to external pressures, such as heat and cold, prolonged restraint, and surgical procedures, and then extrapolated from these studies to human beings.

Subsequent studies of stress in humans by Richard Rahe and others established the view that stress is caused by distinct, measureable life stressors, and further, that
these life stressors can be ranked by the median degree of stress they produce (leading to
the Holmes and Rahe Stress Scale). Thus, stress was traditionally conceptualized to be a
result of external insults beyond the control of those experiencing the stress. More
recently, however, it has been argued that external circumstances do not have any
intrinsic capacity to produce stress, but instead their effect is mediated by the individual's
perceptions, capacities, and understanding.

4.9.2 Transactional Model

Richard Lazarus and Susan Folkman suggested in 1984 that stress can be
thought of as resulting from an “imbalance between demands and resources” or as
occurring when “pressure exceeds one's perceived ability to cope”. According to
Mills, “Stress management was developed and premised on the idea that stress is
not a direct response to a stressor but rather one’s resources and ability to mediate
the stress response and are amenable to change, thus allowing stress to be
controllable”\textsuperscript{10}.

In order to develop an effective stress management programme it is first
necessary to identify the factors that are central to a person controlling his/her
stress, and to identify the intervention methods which effectively target these
factors. Lazarus and Folkman’s interpretation of stress focuses on the transaction
between people and their external environment (known as the Transactional
Model). The model contends that stress may not be a stressor if the person does not
perceive the stressor as a threat but rather as positive or even challenging. Also, if
the person possesses or can use adequate coping skills, then stress may not actually
be a result or develop because of the stressor. The model proposes that people can
be taught to manage their stress and cope with their stressors. They may learn to
change their perspective of the stressor and provide them with the ability and
confidence to improve their lives and handle all of types of stressors.

4.9.3 Health Realization/Innate Health Model

The health realization/innate health model of stress is also founded on the
idea that stress does not necessarily follow the presence of a potential stressor.
Instead of focusing on the individual’s appraisal of so-called stressors in relation to
his or her own coping skills (as the transactional model does), the health realization model focuses on the nature of thought, stating that it is ultimately a person’s thought processes that determine the response to potentially stressful external circumstances. In this model, stress results from appraising oneself and one’s circumstances through a mental filter of insecurity and negativity, whereas a feeling of well-being results from approaching the world with a “quiet mind”\textsuperscript{11}.

This model proposes that helping stressed individuals understand the nature of thought especially providing them with the ability to recognize when they are in the grip of insecure thinking, disengage from it, and access natural positive feelings will reduce their stress.

**4.9.4 Stress Management Techniques**

High demand levels load the person with extra effort and work. A new time schedule is worked up, and until the period of abnormally high, personal demand has passed, the normal frequency and duration of former schedules is limited.

Many techniques helped to cope with the stress life such as autogenic training, social activity, cognitive therapy, conflict resolution, exercise, getting a hobby, meditation, mindfulness (psychology), deep breathing, yoga nidra, reading novels, prayer, relaxation techniques, artistic expression, fractional relaxation, progressive relaxation, somatics training, natural medicine, clinically validated alternative treatments, time management, planning and decision making, listening to music and spending time with pets. Techniques of stress management will vary according to the philosophical paradigm\textsuperscript{12}.

**4.9.5 Stress Prevention and Resilience**

Although many techniques have traditionally been developed to deal with the consequences of stress, considerable research has also been conducted on the prevention of stress, a subject closely related to psychological resilience-building. A number of self-help approaches to stress-prevention and resilience-building have been developed, drawing mainly on the theory and practice of cognitive-behavioral therapy\textsuperscript{13}.
4.9.6 Measuring Stress

Levels of stress can be measured. One way is through the use of psychological testing: the Holmes and Rahe Stress Scale is used to rate stressful life events, while the DASS contains a scale for stress based on self-report items. Changes in blood pressure and galvanic skin response can also be measured to test stress levels, and changes in stress levels. A digital thermometer can be used to evaluate changes in skin temperature, which can indicate activation of the fight-or-flight response drawing blood away from the extremities. Cortisol is the main hormone released during a stress response and measuring cortisol from hair will give a 60-90 baseline stress level of an individual. This method of measuring stress is currently the most popular method in the clinic.

4.9.7 Effectiveness

Stress management has physiological and immune benefits\textsuperscript{14}. Positive outcomes are observed using a combination of non-drug interventions\textsuperscript{15}. They are treatment of anger or hostility, autogenic training, talking therapy (around relationship or existential issues), biofeedback and cognitive therapy for anxiety or clinical depression.

4.10 Stress Management Model

The stress management model says that a person either will learn to cope with stress, or will try to fight it or flee from it. According to Coon (1986), “Stress triggers bodily effects, upsetting thoughts and ineffective behavior”. Coon suggests exercise and meditation to eliminate stress by relaxing. He recommends music, taking nature walks, and hobbies. He also proposes a method of “progressive relaxation”. This teaches stress victims to tighten each of their muscles and then voluntarily relax them. Progressive relaxation was designed by Edmund Jacobson in 1970. According to the adherents of this method, by tensing and relaxing each area of the body, it is possible, with practice, to greatly reduce tension. Coon (1986) also states that stress over long periods can lead to burnout\textsuperscript{16}. Dyer (1990) lists the following three states of stress:

1. Alarm Stage
2. Resistance Stage
3. Exhaustion Stage
According to him, the consequences of stress include: subjective effects, behavioral effects, cognitive effects, physiological effects, and organizational effects (poor productivity, high turnover rate, job dissatisfaction). His list of stressors in the work environment includes:

1. Physical: lighting, noise, temperature, vibration, air pollution.
2. Individual: role conflict, work overload (“too much work for the time allowed”).

According to Lefton (1985), Stress at work usually occurs because a workload is too light and under stimulating or because it is too heavy and burdensome. Coping strategies should begin at the biological level. The psychological insight of Zimbardo (1985) needs to be considered as well. Zimbardo (1985) states that, “Stress is the pattern of specific and non-specific responses an organism makes to stimulus events that disturb its equilibrium and tax or exceed its ability to cope”, and he adds, “A stressor is a stimulus event that places a demand on an organism for some kind of adoptive response”. Thus he throws a psychological light on the subject, and opens up stress to an organism’s response to a disturbing stimulus. He points out that stress affects competence and intelligence, and that it can actually lower a person’s IQ. The stress management model is given in the Figure 4.1. The conceptual model for the study is given in Figure 4.2.
Figure 4.1
Stress Management Model

Figure 4.2
Conceptual Model for the Study
FOOTNOTES


