Chapter Two

Historical Perspective
Stress - as a subject has been explored for a very long time ... yet it remains an important phenomenon as the fundamentals of life revolve around stress. During the eighteenth and nineteenth centuries - stress was equated with force, pressure and strain. It was only in 1936 that Hans Selye first introduced the concept of stress as an adaptation to a situation.

The concept of adaptation originated in biology and was a corner stone in Darwin's (1859), theory of evolution. It referred to the biological structure and process that facilitated the survival of the species. Psychology renamed adaptation as adjustment to emphasise the individual's struggle with the environment.

Selye (1956) explained the biological roots of a finite reserve of adaptation energy against which one can draw in meeting the stressful situation in life. To quote Selye ...

"...the evolution of diverse species was largely dependent upon the development of processes that permitted many cells to live in harmony with a maximum of stress between them serving their own best interests by ensuring the survival of the entire complex structure.... For man, the aim of life is to maintain his identity and express his innate abilities and drives with the least possible frustration ..."
Since stress is a psycho – physio – social phenomenon, it needed to be viewed through the developments in these three fields. Hence, the current chapter is being evolved to focus on the following:

- **Psychological Studies**: Development in psychological studies viewing the effect of stress on the psychological make-up of the individual.
- **Physiological Studies**: Development in physiological research studies showing that stress leads to physiological changes in the body.
- **Socio – Economic Studies**: Development in the field of work stress and coping on the job which has its effect on performance and the production.

### 2.1. Psychological developments in the field of stress:

Stress is not a modern term. Eastern as well as Western scriptures show evidence of many therapies developed during ancient periods which mainly focused on handling stress of life. When one carefully studies Patanjali’s yoga or the Oriental concept of energy “Chi” or Zen philosophy, one slowly becomes aware of their paths being the way of facing life with its stressful challenges. All the ancient sub-therapies such as massage-therapy, bath and sauna-therapy, different herbal and natural treatments, therapies prescribed in Ayurveda, and other similar therapies are nothing but ways of coping with stress.

The earliest contribution to stress is by researcher Walter Cannon (1932) who described fight – or – flight response. Cannon reasoned that on the one hand, the fight – or – flight response is adaptive because it enables
the organism to respond quickly to threat - while on the other hand - he concluded that stress could be harmful to the organism because it disrupts emotional and physiological functioning.

It was Lazarus (1966) who brought stress in the forefront stating that stress is a function of the degree of a person - environment fit. When individual resources are more than adequate to deal with a difficult situation, he or she may feel less stress. It has been proved that stress is the process of appraising events (as harmful, threatening or challenging), of assessing potential responses and of responding to these events - whereby the responses may include physiological, cognitive, emotional and behavioural changes (Shelley and Taylor, 1991).

A. Personality and Stress :

The way we behave, react and what we think of ourselves are considered as the elements of our personality. It has been proved that children develop self - perception by evaluating their power and self - worth based upon the input from family, friends and other people who hold significant place in their life. Eventually, this self - perception gives rise to "personality". This self - perception has been proved to contribute a great deal towards stress responses. From 1970 a series of studies were conducted to establish a correlation between stress and personality factors.
**Type A**: In 1974, Friedman and Rosenman formulated a construct of action, emotion, and behavioural pattern most commonly visible in coronary prone individuals. They referred to this construct as Type A personality which showed the following patterns:

- An intense sense of time urgency, a tendency to race against the clock, a need to do more and obtain more in the shortest possible time.
- An aggressive personality that at times evolved into hostile behaviour. Thus the person may be highly motivated, yet may lose his temper very easily; a high sense of competitiveness, often with a desire to make a contest out of everything, the inability to 'play for fun'
- An intense achievement motive
- A polyphasic behaviour, i.e. the involvement in multiple and diverse tasks at the same time.

This study proved that type A behaviour pattern precedes the development of coronary heart diseases. It has been proven that sympathetic over responsiveness is the key pathogenic reasons for increased cardiovascular risk.

Weiss, Herd and Fox (1972) pointed out that a socio-cultural environment with high parental expectations and frequent urging and criticism of action, as well as an intensely competitive atmosphere leads to the development of type A personality. Type A persons are confident, do not fear losing the struggle with life and work; they are aggressive, ambitious and competitive and are not fearful or anxious and do not as a
rule suffer from neurotic states (Girdano and Everly 1986). They try and control the environment, and such behaviour is reinforced by society:'

The Anxious Reactive Personality: It has been observed that people who suffer from chronic anxiety also complain of stress-related disorders. The 'anxious reactive' individuals experience stress that seems to persist or increase, even after the stressor is gone. The anxiety reaction begins at the point when an individual perceives a stimulus (person, plan or thing) as challenging or threatening (Eysenck, 1964; Fisher, 1984). Most of these individuals suffer from hyper arousal and it comes in three forms: cognitive, visceral and musculo-skeletal reactions.

Most anxious reactive persons perceive a stressful event as far worse than it really is. This tendency to over react consistently may result in severe mental and physical incapacitation and trauma during stress reaction and may bring on psychosomatic disease at an early age.

Sensation Seeking Personality: Different people show a varied need for stimulation and tolerance to it. Studies conducted on the sensation seeking personality and stress responses have suggested that people, who have a low need for stimulation, experience more distress when they encounter a stressful event than people who are high in sensation seeking (Shelley and Taylor, 1991).
Optimistic Personality: An optimistic nature can lead people to cope more effectively with stress and consequently reduce their risk for illness. Scheier and Carver (1985) developed a measure called Life Orientation Test (LOT) to study undergraduates. They found that students who reported being highly optimistic were less likely to be bothered by physical symptoms. Such optimism was associated with more use of problem-focused coping, seeking social support and emphasising positive aspects of a stressful situation.

Hardy Personality: In her studies on middle and upper level executives Kobassa (1981) found that highly stressed but healthy executives had a multi-faceted personality style which she termed as “hardiness”. Hardiness was found to comprise of many characteristics such as a sense of commitment, belief in control and to see problems as challenges.

- Commitment – where an individual goes to the extent of discovering meaning and purpose in his activities.
- Challenge - where an individual views problems not as a threat but as an opportunity for growth.
- Control - where a person feels that he can influence the event.

These people are supposed to have an internal locus of control against an external locus. However, there are studies that say that hardy people focus on the positive aspects of their lives and therefore do not report as much stress as non-hardy individuals. Others have argued that hardiness is not a unitary construct, the sub-components of
commitment, control and challenge are poorly related to each other and also to health outcomes.

Many other psychologists have tried to relate personality with the experience of stress. The Chart 2.1 given below elucidates an account of a variety of views of different psychologists and philosophers on the relationship between personality and stress.

Chart 2.1: Indicates the Different views of different psychologists and philosophers

<table>
<thead>
<tr>
<th>Personality</th>
<th>Characteristics</th>
<th>Stress response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hippocrates:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choleric</td>
<td>Irritable</td>
<td>reach out with anger</td>
</tr>
<tr>
<td>Melancholic</td>
<td>Depressed</td>
<td>“gives up”</td>
</tr>
<tr>
<td>Sanguine</td>
<td>Optimistic</td>
<td>reacts positively</td>
</tr>
<tr>
<td>Phlegmatic</td>
<td>Calm and listless</td>
<td>reacts ineffectively</td>
</tr>
<tr>
<td><strong>Jung:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introvert</td>
<td>Withdrawn</td>
<td>Internalising</td>
</tr>
<tr>
<td>Extrovert</td>
<td>Outgoing</td>
<td>blows off steam</td>
</tr>
<tr>
<td><strong>Sheldon:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endomorph</td>
<td>Overweight</td>
<td>lets things “roll off”</td>
</tr>
<tr>
<td>Mesomorph</td>
<td>Muscular</td>
<td>‘grabs the bull by the horn’</td>
</tr>
<tr>
<td>Ectomorph</td>
<td>Underweight</td>
<td>reach out poorly</td>
</tr>
<tr>
<td><strong>Kraepelin:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggressive</td>
<td>Explosive</td>
<td>loses control</td>
</tr>
<tr>
<td>Obsessive compulsive</td>
<td>attends to details</td>
<td>reacts poorly, avoids stress</td>
</tr>
<tr>
<td>Hysterical</td>
<td>Masochistic</td>
<td>reacts with pains and suffering</td>
</tr>
<tr>
<td>Negativistic</td>
<td>Non aggressive</td>
<td>internalises, avoids stressor</td>
</tr>
</tbody>
</table>
| Passive - dependent | Sad, shy and submissive | reacts poorly  
| Sociopathic Aesthenic | Sadistic | reacts with frustration  
| Dependent Narcissistic | low energy level | reacts with fatigue  
| Solomon : | passive inept | reacts with frustration  
| Stress seeker | Egocentric | reacts poorly  
| Dumbar : | Masochistic | Tolerate stress so that he can enjoy relief  
| Accident prone | Aggressive, self punishing, angry and hostile | reacts poorly, prone to accidents  
| Weine : | prim, tidy, mild mannered, conscientious | reacts poorly  
| Ulcer type | conscientious | suppresses anger, prone to ulcers  
| Le Shan : | low-gear, depressed | reacts poorly, suppresses emotions, prone to cancer  
| Cancer type | punctual, tidy, perfectionist | reacts poorly, easily frustrated, prone to rheumatoid arthritis  
| Moos and Solomon : | |  
| Rheumatoid arthritis | |  
| Grace, Wolf and Wolf | Mild, well mannered, over dependent | reacts poorly, prone to ulceration, colitis  
| Ulcerative Colitis | |  
| Sword : | hard-working, conscientious, inwardly, tormented | reacts poorly, prone to depression  
| Depression prone | | |
The above discussion brings to the forefront the correlation between different personality traits such as introversion, extroversion, type A, hardy personality, anxiety prone personality and stress experienced by them. It is also very clear that the study of stress invariably leads to the study of personality.

B. Stress and Coping:

Generally, two types of coping efforts can be distinguished: problem solving and emotion-focused efforts (Folkman, Lazarus 1979; Laventhal and Nerenz 1982; Pearlin and Schooler 1978). Problem solving efforts are attempts to do something constructive about stressful conditions whereas emotion-focused coping involves efforts to regulate emotional consequences of the stressful event.

Lazarus and his colleagues further explored varied and complex distinction between these two coping strategies as confrontation coping, seeking social support, planned problem solving, self-control, distancing, positive reappraisal, accepting responsibility and escape/avoidance.
Cohen and Lazarus (1973) explained coping as illustrated in flow - chart.

*Flow - chart 2.2 : Indicates the interrelation between coping styles and resources :*

*External Resources*

<table>
<thead>
<tr>
<th>Tangible resources such as money and time</th>
<th>Social support</th>
<th>Other life stressors such as Major life events and daily - hassles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisal and interpretation of stressors - Primary and Secondary appraisal</td>
<td>Coping responses and strategies of problem</td>
<td>Coping tasks - To reduce harmful environment To maintain a positive self image</td>
</tr>
<tr>
<td>Other personality factors that influence selection of coping responses and strategies</td>
<td>Usual coping styles</td>
<td>Coping Outcomes - Psychological functioning</td>
</tr>
</tbody>
</table>

*Internal resource*

Every individual tends to use one or the other coping style, some individuals may deal with stress by talking about it with others whereas some keep their problems to themselves. Some cope with the help of external resources including time, money, education, standard of living, and social support. Social support has been defined as information from others that one is loved and cared for, esteemed and valued and a part of a network of communication and mutual obligations (Cobb. 1976).
Family, friends and even a pet may provide tangible or emotional support. The lack of social support during times of need can itself be very stressful, especially for people with high needs for social support. There is also evidence that too much or overly intrusive social support may actually add to the stress levels (Lieberman 1982). Individuals belonging to a “dense” social network may find themselves besieged by advice and interference at the time of stress.

2.2. Physiological developments in the field of stress:
For centuries, the most fascinating phenomenon of the living world has been the Homo sapiens. Man has always wondered about his own functioning and existence. A number of theories on human functioning and the intricate mechanisms behind the existence of the human being have interested every physiologist. Different sciences have tried to understand the human being from their own framework and have tried to describe human functioning, sometimes from their narrow frame - of - reference. Along with psychology, many other sciences such as sociology, physiology, anatomy, chemistry and physics have attempted to describe human functioning. Yet, as one reviews the work of these different sciences, it feels as if we are still looking at only a part of the whole - just as the blind men looked and described that part of the elephant as the only one they could feel and understand. Therefore, it is necessary to understand human functioning, not just from a single angle but many different angles through an integrated study.
To begin with the first ever - physiological study on stress. Selye in his 1936 paper, spoke of three stages in progression of the stress response. The first stage which occurred 6 – 48 hours after the initial injury was termed as “alarm phase”, characterised by rapid decrease in the size of thymus, spleen, lymph glands and liver, the disappearance of fat tissue, oedema formation especially in the thymus and loose connective tissues, accumulation of pleural and peritonial transudate, loss of muscular tone, fall of body temperature, acute ulceration of digestive tract, particularly in the stomach, small intestine and appendix and loss of cortical liquids and chromaffin substance from the adrenals. In very severe cases, one observed necrosis of liver and sometimes a dense clouding of the crystalline lens.

The second stage begins approximately 48 hours after the induction of the stressors. This phase was termed as the “adjustment of the adaptation phase” or the stage of “resistance” where the adrenal glands continue to exhibit a hypertrophied state and tend to regain their lipoid granules. Vascularisation occurs in the medullary chromaffin tissue, the oedema starts disappearing, basophils invade the pituitary and the thyroid shows a tendency towards hyperplasia.

The final phase or the “exhaustion” phase occurs after a period of one to three months depending on the severity of the agent. The symptoms were similar to those observed in alarm stage. These phases can be diagrammatically explained as follows:
Major physiological studies in the field of stress were conducted on animals, which emphasised the importance of the autonomous and hormonal systems in relation to the responses to stress and coping. During these studies it was found that mass sympathetic discharge increases in many ways. The capability of the body to perform vigorous muscular activities and the arterial pressure increases; the blood flow to active muscles and organs, rates of cellular metabolism, blood glucose concentration, glycolysis in muscles along with the rate of blood coagulation also increases.

It is frequently said that the purpose of the sympathetic system is to provide extra activation to the body in the state of stress. This is known as the "sympathetic stress reaction."

The Sympathetic Nervous System (SNS) also activates many emotional states via the hypothalamus known as the "sympathetic alarm reaction." In this state, the individual decides almost instantly whether to stand and fight or to run.
It is now a known fact that the 'alarm reaction leads to an:

1. increase in sympathetic adreno - cortical activity whereby the adreno - corticotropic hormone (ACTH), corticotropin releasing factor (CRF), and cortico steroids levels increases in the blood.
2. increase in sympathetic, adrenomedullary activity and an increase in catecholamine levels.
3. increased in plasma and urine levels of 17-hydroxycorticosteriods.

The blood glucose level increases in the initial stages of stressful experiences. Sometimes it remains normal but in a prolonged stressful condition, final exhaustion occurs accompanied by a collapse mainly due to hypoglycaemia.

The nervous and endocrine systems were found to play an important role in the aetiology of the stress related reactions of the body. It is now a well - established fact that levels of several hormones are related to different emotions. Regardless of these interactions, the ways in which emotions and the endocrine functions are linked provide an important insight into the nature of emotion and the relationship between the mind and the body.

A. Stress and Emotions:

Stress response is often associated with emotions such as anger, fear, anxiety, depression, grief, guilt, jealousy and shame. Cox (1976) stated
that it is most likely that the aetiology of emotions is multifactorial and that stress is but one factor, albeit, an important one.

It has been found that the psychological signs and symptoms observed in an individual are a result of ineffective handling of the emotions and disordered thinking patterns. Lachman (1983) classified these symptoms as emotional and intellectual:

**Emotional**: An irritable mood, over reaction to some relatively minor situation, angry outbursts, short tempered reactions hostility, jealousy, lack of interest, withdrawal, apathetic behaviour, inability to get up in the morning, crying and feeling tearful, blaming others, having a suspicious attitude, self-depreciation, diminished initiative, reduced personal involvement with others, negative or cynical attitude.

**Intellectual**: Forgetfulness, preoccupation, an increased fantasy life, decreased concentration, inattention to detail, past rather than present orientation, decreased creativity, slower thinking, and a slower response, difficulty in learning, mental ‘Laziness’, inclination to the path of least resistance.

**B. Bodily Responses to Stress**

It is proved that the stress - illness relationship is complex and has a number of intervening factors. Stress may have a direct effect on illness
or it may have an indirect one. Shelley and Taylor (1986) proposed the following model to explain the relationship.

*Flow Chart 2.3: Indicates the model proposed by Taylor (1986)*

When an individual has to make a substantial adjustment with the environment there is likelihood of a higher possibility of illness. Based on this assumption, Holmes and Rahe (1967) developed the social readjustment rating scale (SRRS) in which they listed potentially stressful events.

Several studies conducted on stress responses have shown that stress affects the body in varied ways. In 1970 to 1980, phenomenal work was conducted in the area of stress and its effect on the body. Cox (1976) highlighted responses to stress such as muscular, gastro-intestinal, cerebral, cardio-vascular and skin.
The Muscular Response: In stressful situations, muscular posture and tension extend over a long period of time. In highly anxious people, it has been proved that a great amount of muscular tension exists that can be measured on an electro-myograph (EMG).

The Gastro-Intestinal Responses: The gastro-intestinal system responds to emotional situation in a manner more complex than the typical sympathetic and parasympathetic processes. Rage, anger, resentment and aggression increase hydrochloric acid secretion from the lining of the stomach. Alteration of Peristaltic rhythms along with diarrhoea and constipation are some other classic reactions of the gastro-intestinal tract towards stress.

The Cerebral response: It has been proved that during stress cerebral waves go through an altered pattern. A 'mood disturbance' is often one characteristic of the stress reaction, also the circadian, ultradian and infradian rhythms show changes due to stress experienced by the individual.

Cardio-vascular response: Sympathetic and parasympathetic nervous system with the hormone epinephrine, influence the functioning of the heart. Stress elevates blood pressure i.e., "hypertension". Blood vessels also have been shown to reflect stress reactions by an alteration of their diameter as a physical response to an imaginable threat. Myocardial infarction - where oxygen supply to the heart diminishes due to a narrowing of the coronary artery has also been associated with stress.
There are, of course, many other factors along with stress that contribute to heart diseases such as a high cholesterol diet, lack of exercise, smoking, obesity, gender, age, heredity and other similar factors.

Another vascular problem associated with stress is the vascular headache known as migraine. Migraines are said to happen because of an exaggerated constriction of blood vessels in and around the brain, followed by a toxic chemical that irritates local nerve endings and adds to the pain. Physiologically, the system shows a depletion of the hormone ‘serotonin’.

**The Skin Response:** Skin has two response patterns: the electrical responses (this electrical activity can be measured on the surface of the skin) and temperature i.e., during anxious periods, the skin appears pale and the temperature decreases. Prolonged emotional responses change skin activity resulting in malfunctioning and diseases. Eczema and skin lesions have been associated with stress.

A number of studies have established a close correlation between stress and the vulnerability of the immune system. The relation between stress and illness is mentioned in Chapter 1.

The physiology of stress - though very important - has remained a less researched area, due to the need for sophisticated instruments required for the study of stress. One needs instruments like an ECG, arterograph, air encepholograph and various other gadgets to check blood plasma...
levels of different hormones and other related tests. It is also necessary to understand the effect of stress on vision, bones, hormonal levels, heart, skin, muscular functioning, reproduction, the digestive and urinary system. One needs to use a battery of tests to study stress from different dimensions.

2.3 Socio – economical Development:

Cox (1976) in his classical book on “Stress” said that:

Stress - that the man in past had experienced - was different than the one today, so also the stress in the rural conditions is different from the urban situation. Man in the past had to deal with more physiological needs and security needs, which the man of today has overcome to some extent. The day to day concerns and luxury is taken care of. However, his problem is more with psychological needs. The high standard of living and luxuries does not reduce the stress. The stress of today’s man has a deep root in his ability to think, feel, act and function in accordance with the need of the situation.

One of the most socio – economically important aspects of an individual’s life is his job. The studies on occupational stress – which started some three hundred years ago as a branch in the medical science has currently become a major part of psychological and physiological researches. Going back to the industrial era, one finds that work became the most important part of life and there was an introduction of Taylorian Scientific Management. However, it was soon found that these
management practices were adding more stress to the worker rather than really helping the individual to enjoy his work.

Three hundred years back studies on occupational hazards started in a big way and when one reviews the recent literature on stress - there seems to be no dearth of studies on executive stress, stress faced by blue collar workers, stress faced by managers at different levels, stress faced by the entrepreneur, women managers and so on ...

Wolf and Finestone (1986) elaborated the historical background of occupational medicine. It was mentioned that three hundred years ago, Bernardino Ramazzini in Italy, proposed a relationship between work and types of diseases. He described in detail diseases of people engaged in some forty types of work and his book ‘De Morbis artificum diatriba’ published in 1700 brought him the honour of being known as the “father of occupational - medicine”.

In the eighteenth century, in France, Pierre-Jean-Georges Cabanis reported that thoughts and emotions were responsible for general somatic and visceral behaviour. In 1831, Charles Turner Thackrah investigated and dealt with several diseases incident to different trades and occupations.

In 1910 in Chicago, Alice Hamilton started her career in industrial hygiene with her publication about lead poisoning. Hugo Musterberg
(1863 - 1916) was America’s first applied psychologists, who extended psychology into industry. He and his colleagues studied the effect of fatigue on occupation and recommended the institution of rest periods to improve the workers morale as well as their productivity.

Studies on 'occupational hazards' have proved that work - stress has its effects on the personal life of an individual and vice-versa. Further, while reviewing the literature on occupation, one comes across rigorous research done by many to understand stressors at work.

**Stressors at job and the coping mechanism adopted by the individuals:**

Organisations, due to their structure, technologies and competitive environment, become so complex that at times the human element is reduced to a mere insignificant aspect of it. This tends to build a feeling of powerlessness, meaninglessness, and a feeling of low importance that itself can be very stressful to an individual. Majority of people, at some time in their lives, experience stress at work. Often this may be short lived, however, at times it can be more prolonged and damaging.

In 1966, Herzberg described motivation - hygiene factors and argued that job satisfaction depends upon motivational factors. However, many other studies have failed to support Herzberg's theory. Job satisfaction depends upon physical and psychological need satisfaction. One of the
most important need being “personal growth” itself. The most important factors relating to job satisfaction are:

1. Mentally challenging work that the individual can cope with successfully.
2. Personal interest in the work itself.
3. Reward for performance consistent with the individual’s aspirations.
4. Working conditions.
5. High self esteem on the part of the individual.
6. Basic values which are not violated.

If some or all of these criteria are not met, then dissatisfaction results which further brings ill effects on physical and psychological health.

In 1981, Frankenhaeuser conducted a study on 3000 workers from light and medium engineering firms and he found that certain demands of the task could produce what he called as “work neurosis”:

1. More than 75 hours of work per week.
2. Domestic factors, such as inadequate diet, reduced leisure time, illness in the family, financial problems or excessive travelling.
3. Boring or dislike of work.
4. Work requiring skills inappropriate to the workers level of attainment.
5. Very light or sedentary work.
6. Work requiring constant attention, but little scope for initiation or responsibility.
7. Work programmes that offer little variety.
8. Task for which the lighting is unsatisfactory.
In 1976, Theorell conducted a study to look at the relationship between occurrence of life events and occurrence of myocardial infarctions. He found eight aspects which could cause myocardial infarctions: change to a different line of work, retirement from work, major change in work schedules, increased responsibility, decreased responsibility, trouble with boss, trouble with colleagues, unemployment for more than one month.

Although the concept of occupational stress originated about three hundred years ago, the focus on studies regarding frustration and coping of stress were initiated in India only between the 1950s and 1960s. In the 1970s, Sinha initiated a large number of studies on anxiety. Then in the 1980s, the study on stress became the major scenario of research in the field of organisational research. The studies on stress were mainly on two areas: the general population for whom critical life events were seen as the source of stress, and in the organisational context in which role was conceived as a central construct.

Udai Pareek initiated major studies on organisational role and coping strategies in the early 1970s. These studies were further taken seriously by Sen in the 1982, Sharma in 1983, and Pestonjee (1992) further discussed them in detail. According to Pareek (1988), stress is like electricity. It can make a bulb light up and provide brilliant illumination, but if the voltage is higher than what the bulb can cope with then it gets burnt. The rapid changes in psycho-social environment has its own
effects on stress at organisation, especially stress due to external factors such as fast changing technology, competitive environment, pressure to improve performance, organisational climate, various management processes, physical and psychological condition in the organisation and so on.

Role is conceived as the position a person occupies in a system. It is found that a role that requires continuous work with people experiences burnout reaction more than roles requiring less contact with people. Also highly routine/mechanical roles produce burnout syndrome.

Other than personality factors, it is found that cynicism (low interpersonal trust), sense of loneliness, external locus of control, low self-esteem, rigidity and alienation are the other factors that cause stress.

The important stressors found in organisations are an alienating role, hostile relationship, stress-prone life-style, avoidance oriented role style, use of dysfunctional coping mode, and hostile organisational climate. Sen (1982) developed a functional model of Organisational Role Stress.

Flow – Chart 2.4: Functional model of Organisational Role Stress by Sen:
Pestonjee (1989) conducted a series of studies on type A patterns, locus of control, state – trait anger, job anxiety, need for achievement, ego strength, job involvement and age, in the top and middle management groups. He identified three important sectors of life in which stress originates – a) job and the organisation (work related). b) social sector - religion, caste, language, and c) intra psychic sector - temperament, values, abilities, and health. At times, there are signs of cracks and breakdown, which are indicative of high stress at a specific situation.

Overall, studies show that the relationships between stress and other peripheral elements are complex and it requires a holistic. As one looks at these seemingly external factors, one can slowly begin to see how they are mainly connected to the individual himself.

In conclusion, this chapter is an attempt to develop a link between a historical perspective of stress and the present scenario at work. Several scientific researches have made an attempt to view stress as holistically as possible. Many have tried to keep the physio – psycho - socio - economic link intact whereas others have studied stress from a narrow perspective, yet, adding to the “Body of Knowledge”.

The next chapter is developed to gain insight into the review of the literature pertaining to stress and coping.