CHAPTER 3
HISTORY OF STUDY

3.1 Stress

Stress and anxiety have become pervading features of people’s life in the modern world. Despite tremendous advancements in science and technology, and remarkable growth of economy and sources of luxury, majority of people all over the world seem to be experiencing moderate to high degree of psychological stress in various spheres of their lives. Consistently increasing rate of psychosomatic and psychological disorders and feelings of frustration and dissatisfaction with life in general reflects the high stress being experienced by the people in the present day world. Not that people in societies in the past were entirely free from stress. People must have been experiencing stress right since the origin of structured societies. However, the causes of stress in those societies were episodic in nature and low in severity and frequency. During the last two decades, frequency, severity, and span of psycho-social stress have drastically increased. The basic reason is the tremendously changed physical and socio-cultural environment of the contemporary societies and lifestyle of the people.

People’s life in contemporary societies has become more diversely demanding, complicated, mechanical, and dependent and is running by the clock. Even increasing needs and aspirations, high competition, pressures of meeting deadlines and uncertainty of future and weekend social support system have made the life of people highly stressful in modern societies. The reaction to intense psychological stress has become a major concern of psychological, psychiatric aspects of the term stress as a prime intellectual tool for understanding and explaining individual’s behavior and pathologies have not been yet fully realized by the stress researchers.

*Selye (1980) has accordingly stated that the concept of stress is still fraught with definitional contradictions and suffers from the mixed blessing of being too well known and too little understood.
The term stress is derived from the Latin word string ‘*ere*’ which means to draw tight. The term was used to refer to hardship, strain, adversity, or affliction. Various terms have been synonymously used with stress, namely anxiety, frustration, conflict, pressure, strain and other.

The physiologist *Walter Conon* (1914) in his work on homeostasis has used the term stress to describe emotional states that had possible detrimental physical impact on the focal organism.

In 1935, *Conon modified the use of the term stress to describe physical stimuli and used the term strain for organism’s response to the stressor. Some have described the term stress as the quality of stimulus *(Dunbar 1947)*, while others defined it as the quality of both stimulus and the response. *Wolf* (1950) described it as a state of human organism. Some others have described it as that class of stimuli, which produce anxiety and reportable experience of tense dread *(Basowitz, Persky, Korchin, Grinker, 1958)*.

The Concise Oxford Dictionary defines stress in three different ways. The first definition offered is that of constraining or impelling force (for example under the stress examination). The second definition treats stress as an effect or demand an energy (for example subjected to great stress). The third definition talks of a force exerted on the body.

In Penguin Medical Encyclopedia *(Wingate 1972)* Stress has been described as any influence which disturbs the natural equilibrium of the body, and includes within its reference, physical injury, exposure, deprivation all kinds of disease and emotional disturbance. These dictionary definitions of Stress may be presented in a model, which denotes stress as a constraining force action on a person, who is attempting to cope with this force exerts him, and consequently feels fatigued or distressed.

However the concept of stress seems to have had special place in the mind of laymen and scientists ever since *Selye* (1956) popularized the term in his writing on “General Adaptation Syndrome (GAS)”. He defined stress as “Non specific responses of the body to any demand made upon it. He was of the opinion that organism makes a universal pattern to response all types of internal or
external demands made on the body. The GAS has three stages i.e. alarm, resistance and collapse. The alarm stage is the body’s initial response to stressor. For example, increase heart rate and blood pressure and release of glucose to provide energy for action. If the stress is prolonged, the stage of resistance emerges. The process of homeostasis comes into play at this stage. The body tries to maintain equilibrium. There is continuing effort to adapt to the stressor during this stage. The body cannot go on coping with stress indefinitely. The third stage of collapse is characterized by a loss of resistance to the stressor and exhaustion, collapse, and even death can occur. The stress researchers have challenged this model of GAS as it does not give any significance to cognitive processes and individual differences in these physical responses to stressor.

3.1.1 Stimulus Perspective of Stress

Stress conceived as a stimulus has been used to describe environmental situations or conditions characterized as new, intense, rapidly changing, demanding, sudden, or unexpected. A stressful stimulus includes stimulus deficit, absence of expected stimulation, highly persistent stimulation, fatigue, or boredom. In this perspective, stress has been treated as an independent variable. This model of stress is an engineering one in which external stressor gives rise to stress reaction or strain within the individual *(Cox 1978).* Lazarus (1966) also considered such events as failure or the threat of failure, noxious or unpleasant agents in the environment, isolation, and rapid social changes as stress stimuli.

Other stimulus situations mentioned in the literature as stressful are
a) Loses of personal, physical, cognitive, or affective function.
b) Frustration of anticipated reward or goal attainment.
c) Failure change in social feedback mechanism.
d) Impulse flooding.
e) Approach avoidance conflict situations.

The stress as stimulus has triggered active research on relationship between stress and somatic illness. *Meyer (1958) long back argued that certain alternations of life circumstances have potential influence on balance between*

Studies conducted by Holmes and Rahe (1967) generated a hierarchical list of life event changes likely to require a significant alternation in the ongoing adaptive patterns of the individual. The crucial life events are not the direct causes of illness. The important factor, which causes illness, is the new demand on the usual adaptive patterns of the person. The greater the demand of social situation or event, for making new adaptive efforts to readjust to it, more is the likelihood that an inadequate response will be that of utilized, thus eliciting pathological physiological reactions. These social situations require the focal person to make excessive adaptive effort. The question that arises is which conditions can be accepted as stressful, what their common characteristics are, and what the common features of stressful stimuli are undesirable, unpleasant, uncomfortable, threatening, and demanding.

*Weitz (1970) enlisted eight types of stressful situations namely speeded information processing, noxious environmental stimuli, perceived threat, disrupted psychological function, isolation, confinement, blocking, group pressures and frustration.* *Lazarus (1966) considered perceived threat as the central characteristic of stressful situation. *Frankenhaeuser (1975) has denoted lack of control over events as stressful situations.

Thus, all undesirable and excessively demanding stimuli or situations have been considered as stress. The stimulus situations are very likely to cause or generate the feelings of stress in most of the focal persons, but not necessarily in everyone. It is quite difficult to generalize that certain kinds of situations are inherently stressful and certain others are not. People react to their life situations or social conditions in terms of their own interpretative meaning of these situations or events. Much depends upon context, mood, and experience when people come to interpret the meaning of an event. The actual amount of stress felt is determined by the stressful situations in combination with other personal and situational variables.
3.1.2 Response Perspective of Stress

The term stress has been used to refer to the response to stressor by *Beehr (1984), Caplan, Cobb, French, Harrison and Pinneau (1975) and Kahn and Quinn (1970). The response based definition of stress concerns with the specification of the particular response or response patterns, which may be taken as evidence that the person is or has been under pressure from a disturbing environment. That response or pattern of response is treated as stress as its defining parameter. (Cox 1978)

There may be something excessive or unusual about a reaction that produces psychological or physiological consequences detrimental to the organism. The presence of emotional activity has been used as a post facto index to determine the existence of stress. From this perspective, stress would be regarded as the demands placed upon the individual to respond adaptively to a stimulus appraised as noxious.

Theorists who define stress from a response perspective see it as an imbalance between the requirements of an adaptive response and the repertoire of the individual. The greater the fraction of expectancies in a situation, and the greater the perceived discrepancy between demand of the situation, and capacity and the higher the appraised cost of making such a reaction the more stress there will be acting on the individual.

The work of *Selye (1966) first set the model for response theories of stress. *Tache and Selye (1978) stated that ‘Stress is the non-specific response of the body to any demand made upon it.’ He described stress quite equivocally as the person’s response to the demands of his environment. There are three basic themes build by Selye on concept of stress.

(i) The physiological stress response does not depend upon the nature of stressor, and not on the organism in which it evoked. The response syndrome represents a universal pattern of reactions, which protect the person, and preserves its integrity.
(ii) He believes that defense reactions progress in three stages in the exposure to stress is continuous, namely alarm reactions, resistance-bodily changes marking the person’s adaptation to the external force and exhaustion.

(iii) Selye’s concept of stress is that if these defense responses were severe and prolonged, it would result in disease states. However, Selye did not explicitly include cognitive or emotional factors and their impact on the adaptive processes. It has been observed that some noxious physical conditions do not produce the general adaptation syndrome. It has now been suggested that much of the physiological response is not directly determined by the actual presence of the stressor agent but by its psychological impact on the person.

3.1.3 Transactional Perspective of Stress

In this perspective, stress has been described as part of a complex and dynamic system of transaction between the person and his environment. It emphasizes that stress is an individual perceptual phenomenon rooted in psychological process. This model has been developed largely by *Lazarus and his colleagues (Lazarus and Lanier 1978), (Lazarus and Folkman 1984). According to this view, stress is said to occur in the face of ‘Demands that tax or exceed the resources of the system or to put it in slightly different way, demand to which there are no readily available adaptive responses’. The transactional perspective emphasizes ‘Cognitive appraisals and coping responses’. A stressful transaction begins with a primary cognitive appraisal that a situation requires an effective response to avoid or reduce physical or psychological threat or harm and a secondary appraisal that no completely effective response is immediately available. It becomes a source of stress only when the focal person appraises it as to be threat for him and to exceed his capability to deal with it. The person makes the best response possible, actively defines, and shapes stressful transactions by means of his cognitive appraisals and coping responses.

The concept of stress is bound to the person and is subjective experience. The physical and psychosocial situations become stressors via cognitive appraisal and interpretation of the threat situations by the focal person. Lazarus’s model begins when the person evaluates a particular event, situation, or demand. After
perceiving the situation, the focal person makes two types of appraisal at his cognitive level; primary and secondary appraisals.

In primary appraisals, the individual evaluates the threats or loss likely to happen. Further, in secondary appraisal the individual appraises his capability, resources, and deals with the confronting situation. The severity of the felt stress is determined by the degree of imbalance between Cognitively Appraised Demand or threat (CAD) and Cognitively Appraised Supplies of the human and physical resources (CAS). A stress reaction in the individual is the joint effect of his psychic and somatic dispositions and the stress provoking quality of situational condition. *Appley and Trumbell (1967) state that stressfulness of stimulus exposure or event is dependent upon the pattern of stimulus organism interaction in a particular time and a particular place.

*McGrath (1976) has defined stress as “An environmental situation perceived as presenting a demand which threatens to exceed person’s capacities and resources for meeting it under conditions where he expects a substantial differential in the rewards and the costs for meeting the demands versus not meeting it.”

*Cox (1978) has defined stress as ‘Stress can only be sensibly defined as a perceptual phenomenon arising from a comparison between the demand on the person and his ability to cope. An imbalance in this mechanism, when coping is important gives rise to the experience of stress, and to stress response.’

The main confusion over the definition of stress has arisen because of disciplinary or conceptual bias. In physics, stress has a meaning or force which action on a body produces strain or deformation. In physiology, the various changes in the physiological function in response to evocative agent denote stress. In psychology, stress refers to a state of the organism resulted from some interaction with the environment. In psychophysiology, stress is that stimulus which imposes detectable strain that cannot be easily accommodated by the body and so presents in impairing effects on health or/and behaviors. Thus, psycho physiologists hold that stress can only be considered in terms of both stimulus and
response, and influence of mild stress on health may become evident as either physical signs or mental symptoms or both.

The stress researchers in various disciplines have used such terms as systematic stress, biological stress, psychological stress, physiological, psychological, and sociological levels of stress and social psychological stress to refer to the concept of stress. The limiting adjectives if used may help in identifying

a) The concept in which the term is used: For instance, stress when used in primarily psychological contexts is not necessarily equivalent to systematic stress.

b) The discipline of researcher and the nature of stimuli considered as stressor: For instance physical and humoral stimuli are primarily studied in physiology and psychobiology (systematic stress) and psychological stimuli in psychology.

c) The response relevant to scientists: For instance, Physiologist, primarily concern with physiological changes, psycho physiologists with health, and behaviour, and psychologists with deviation at the psychological and behavior level.

Ram Chandra Rao (1983) has highlighted the origin of stress in ancient Indian thought. Tracing it back to the ‘Samakhya’ and ‘Yoga’ systems he pointed out two Sanskrit words ‘Klesa’ and ‘Dukha’ which correspond not only to the concept of stress in common use but also to an extent to the concept in its technical sense. The concept of ‘Klesa’ has its origin in the root ‘Khis’ which means to torment’ to cause pain or to afflict. The ‘Klesa’ is not a mental process but is a set of ‘hindering load’ on mental process. Thus the concept ‘Klesa’ system views ’Dukha’ to signify the stress that the individual experiences in the course of his interaction with the world around him.

On the basis of a review of ancient Indian literature, Rao concluded that the conceptual model of appraisal of the self (Asmita), the object (Raga), and the threat (Dwesha). In fact, the cognitive appraisal constitutes the functional framework for the conceptual model of stress not only in ‘Samakhya-Yoga’ system but also in ‘Vedanta’ and ‘Buddhism’. He has referred to three types of
stress, which ‘Samkhya’ speaks Adhyatmik (personal), ‘Adhibhoutik’ (situational), and Adhidavic (Environmental).

3.1.4 Occupational Stress

Stress at work resulting from increasing complexities of work and its divergent demand, has become a prominent and pervading feature of the modern organizations. The researchers in the area of organizational psychology and management have used the term job stress to denote employee’s mental state aroused by a job situation or a combination of job situations perceived as presenting excessive and divergent demands. Some stress researchers have emphasized the role of job situations in their definition of job occupational stress. *Caplan Cobb and French (1975) have accordingly defined occupational stress as “Any characteristic of job environment which poses a threat to the individual”*  
*Copper and Marshall (1976) have expressed that “By occupational stress is meant negative environmental factors or stressors associated with a particular job.”*

Some other stress researchers have tried to define it in terms of interaction between worker and work environment. The stressfulness of job situation or a factor is determined not only by the divergent or by threatening demands of the situation and evaluates it with reference to his own capability and characteristic. The definition proposed by *Margolis, Kores and Quinn (1974) falls in this category. They defined stress as “A condition at work interaction with workers characteristics to disrupt his psychological or physiological homeostasis.”*

*Selye, Beehr and Newman (1978) described job stress as “A condition wherein job related factors interact with the worker to change (disrupt or enhance) his psychological conditions such that the person is forced to deviate from normal functioning.”*

*Parasuraman and Alluto (1981) also reported that job demands constraints and job related events or situations were not in themselves stressful, but that they may be capable of producing psychological stress and strain, depending upon personal attributes and other factors.*
Allen, Hilt, and Green (1982) have defined “Occupational stress disruption, in individual is psychological or/and physiological homeostasis that force them to deviate from normal functioning in interaction with their job and work environment.”

Consistent with recent conceptualization, stress denotes the psychological state experienced by an employee when faced with demands, constraints and/or opportunities that have important but uncertain outcomes by *Beehr and Bhagat (1985), Schuler(1980).

3.1.5 Person-Environment Fit Perspective of Occupational Stress

P-E Fit perspective of stress proposed by *French, Rodgers and Cobb(1974) will explains the concept of stress. According to this theory poor fit or misfit between employee and his work and its environment results in stress and psychological and health strains. The theory is based on the assumption that people vary in their requirements, demands, and incentives. When there is poor fit between the characteristics of the employee and of the job, P-E fit theory predicts the employee’s well-being will be affected. In this theory, the fit is not unilateral. It is rather bilateral fit between employee and his job. Both should satisfy each other demands or expectations. Poor or insufficient supply from either side would cause stress.

(i) One form involves the discrepancy between the needs and aspirations of the employee and the supplies in the job and environment to meet his needs and goals. A good P-E fit occurs when the supplies in the environment (money, support from superiors and colleagues, opportunities to satisfy needs for affiliation, power, and achievement) are sufficient to satisfy the motives of the employee.

(ii) The second form involves the relationship between the requirements and demands of the job and the abilities of the employee to meet those demands. If the demands of the job exceed the abilities of the employees or do not match with the temperament and interests of the employee, it will cause stress and result in psychological strain. It supplies for the discrepancies between demand and
abilities the individuals will experience stress. P-E fit theory emphasis the casual relationship between misfit and strains.

Though the exact contents and process of the relationship of the two is not very clear, it is assumed that severity of the strains caused from misfit is determined by the following factors:
a) Needs which are not being satisfied.
b) Abilities to meet the job demands.
c) The generic and socio-cultural background of the employee.
d) Defense and coping precise positions.
e) Situational constraints on particular responses.

In fact, the degree of P-E fit can be determined objectively or subjectively. Objective, P-E fit refers to fit between the objective person and the objective environment; fit independent of individual’s perception of it.

Subjective P-E fit refers to the fit between subjective person and the subjective environment; the individual in perception of P-E fit. P-E fit represents the interaction of the person and the environment rather than an outcome which each cause.

According to *Ross and Altmair (1994) occupational stress is the result of interaction of work conditions with characteristics of the worker such that demands of the work exceeds the ability of the worker to cope with them. They have also defined occupational stress in the P-E fit framework.

*McGrath has described occupational stress as an environmental situation perceived as presenting a job demand, which seems to exceed the capacity and resources of the employee to meet or deal with it. However, the nature and severity of occupational stress may be more adequately and conveniently understood observing physical and psychological symptoms, which occur in the employee under the condition of job stress.

*Beehr and Newman (1976) have outlined three categories of these symptoms:
a) Psychological Symptoms

Those emotional and cognitive problems occur under conditions of job stress. Psychological symptoms of occupational stress include job dissatisfaction, disliking for the job, depression, anxiety, boredom, frustration, isolation, and resentment. Having these problems, the employee is less able to cope with job problems in ways that would improve his work condition and enhance his mental outlook.

b) Physical Symptoms

Though it is difficult to know how much these physical symptoms have been caused by a particular job stress versus other aspects of employees life, it has been established that consistent job stress links with certain physical symptoms of occupational stress are cardiovascular diseases, gastrointestinal problems, allergies and skin diseases, headaches and respiratory diseases.

c) Behavioral Symptoms

The behavioral symptoms of job stress can be classified in two categories. The first category of the symptoms belongs to the focal employees, while the other belongs to the organization. The employee-centered symptoms are avoidance of work, increased intake of alcohol or drugs, overeating or under eating, aggression towards co-workers or family members, and interpersonal problems in general. The organization related symptoms of job stress include absenteeism, leaving the job, accident proneness, and decrease in work efficiency.

Empirical research on social psychological factors in stress has been somewhat inconclusive. Nevertheless *McGrath (1976) has adduced following six general themes or propositions about job stress from the available research literature.

a) Subjectively experienced stress is contingent upon the person’s perception of the situation. The subjectively experienced stress is greatly influenced by the person’s interpretation of the objective or external stress situation.

b) Past experience can operate to affect the level of subjectively experienced stress from a given situation or to modify reactions to that stress.
c) Positive and negative reinforcements can operate to reduce or enhance the level of subjectively experienced stress from a given situation.

d) There is a non-linear, perhaps inverted U-shaped, relationship between degree of stress and level or quality of performance.

e) The nature of task in which person is involved. The relationship of task to the stress condition influences the direction and shape of relationship between experienced stress and performance.

f) The presence or absence of and the activities of other persons in the situation influence both the subjectively experienced stress and behavior in response to stress.

3.1.6 Organizational Role Stress

The concept of “role” is the key concept in understanding the integration of the individual in a system. The first requirement in linking individual and organization is to locate the individual in the total set of ongoing relationship and behaviors comprised of a number of positions and specific roles associated with these positions. *Katz and Kahn (1966) have accordingly extended that an organization is a system of roles. Position or office is essentially a relational concept, defining one position in terms of its relationship to other and to the system as a whole. Each position in the organization is associated with a set of activities, which constitute the role being performed by the person occupying that position. In fact, no role is totally independent and sufficient in itself.

Performance of one’s role is determined also by the performance of interpersonal connectedness within which that role-behavior takes place. This implies that roles are not tied to any specific milieu or setting, but to other transcending setting. A role is normally enacted in relation to many other offices/positions in the organization. It may be directly related to certain others. It is less directly to still others, and only remotely concerned to remaining offices in the organization. These offices make up the ‘role set’ for that particular role.

The people occupying various positions in the role set have a stake in role performance of the focal person. They develop beliefs and attitudes about what the focal person should and should not do as part of his role. These prescriptions
and proscriptions held by the members of a role set are designated as ‘role expectation.’

The members of role set in expectations as communicated directly or indirectly to the focal person; evaluate role performance of a person. These communicated expectations are referred to as ‘sent role’. Thus, we may define job role as “A set of specific normative activities, associated with a position, to be performed in the framework of expectations, prescriptions, and proscriptions, held by the members of the role set.”

Normally, performance of a role satisfies various needs of its occupant. Sometimes it becomes a potential source of stress too for the role-occupant. The problem the role-occupant faces today is that of managing the complex structures of roles by achieving an integration of one’s self with the system of other roles as well as integration of various roles a person may be playing.

Interest in organizational role stress has increased a great deal in recent years. *Kahn, Wolfe, Quinn, Sonek, and Rosenthal (1964) were the earliest to draw attention to organizational stress in general and role stress in particular. These researchers, after systematic exploration identified two basic sources of role stress i.e. role conflict and role ambiguity.

3.1.6.1 Role Conflict

Role conflict arises when various members of the role set, hold quite different or conflicting role expectations towards a focal person. They may impose pressures on that focal person toward different kinds of behavior at a time. To the extent that these different role pressures (expectations) give rise to role forces within him, he will experience a psychological conflict. Actual degree of objective role conflict depends on the configuration of role pressures actually exerted by the role senders (members of the role set) on the role occupant.

*Kahn et al (1964) have described six types of role conflicts, namely sent-role conflict, intra-sender conflict, inter-sender conflict, inter-role conflict, person-role conflict, and role overload.

a) Sent Role Conflict: It is defined as the simultaneous occurrence of two or more set of pressures such that compliance with one would make it more difficult
to comply with other. In its extreme form, compliance with one set of pressures makes the compliance with another set completely impossible; the two set of pressures are mutually contradictory.

b) Intra-Sender Conflict: It arises when a single member of the role set holds opposing expectations, for example, a supervisor instructs his subordinates to work faster and to improve the quality of product.

c) Inter-Sender Conflict: It denotes the role conflict resulting from opposing role expectations from two or more members of role set. Pressures from one role sender are in conflict with the pressures exerted by other role senders e.g. management wants the workers to stick to their duty while the labors union calls for a strike.

d) Inter-Role Conflict: It occurs when role pressures associated with membership in an organization or institution are in conflict with expectations stemming from membership in other group or institutions; for example, family responsibilities of a person conflict with his job responsibilities.

e) Person-Role Conflict: It exists when there is conflict between needs and values of an employee and the demands of his job role. It can occur when role requirements violate moral values of an employee. In another case of person, role conflict the person’s needs and aspiration may lead to behaviors, which are unacceptable to the members of his role set.

f) Role Overload: It is a very prevalent form of role conflict in industrial organizations. Overload could be regarded as a kind of inter-sender conflict in which various role senders may hold quite legitimate expectations that a person performs a wide variety of tasks, all of which are mutually compatible in the abstract. It may be virtually impossible for the focal person to complete all of them within a given time limit. He is likely to experience overload as a conflict of priorities. He must decide which pressure to comply with and which to hold off. If it is impossible to deny any of the pressures, he may be taxed beyond the limits of his abilities. This overload involves a kind of person-role conflict and is perhaps best regarded as a complex, emergent type, combining aspects of inter-sender and person-role conflict.
3.1.6.2 Role Ambiguity

Much of the role conflict can be thought of as a kind of inadequate role sending lack of agreement or co-ordination among role senders. Another pattern of inadequacy in role sending, causing stress constitutes role ambiguity. Each member of an organization must have certain kinds of information at his disposal in order to perform his job adequately and smoothly. He must also know the potential consequences of his role performance and non-performance for himself, his role sender and for the organization in general. Non – availability of the adequate information about the above mentioned job-aspect causes role stress to the focal employee.

Actually, role ambiguity is a direct function of the discrepancy between the information available to the employee and that, which is required for adequate performance of his job role. It may be noted that each of the above-mentioned forms of role ambiguity may exhibit a reciprocal causal relationship with dimensions of role conflict. Thus, even though role conflict and role ambiguity are conceptually distinguishable types of role stress, one should not necessarily expect their empirical indices to be unrelated.

Besides the objective or organizational causes of role ambiguity, there may be subjective counterparts of ambiguity. The subjective or experienced ambiguity is a state of the focal person. It is the expected consequence of objective ambiguity, but the relationship is less than perfect.

Employees with tendency of intolerance for ambiguity and need for cognition-a need for clear, orderly and meaningful cognitive experience are likely to experience more ambiguity and therefore more anxiety and strain.

The extent to which required information are communicated clearly and consistently to a focal person will tend to induce in him an experience of certainty with respect to his role requirements and his position in the organization. To the extent such information is lacking the focal person will experience ambiguity. The relationship between the objective ambiguity and the intensity of the ambiguity experienced by the person are modified by his various personal attributes.
*Kahn and Quinn (1970) suggested that role ambiguity may be regarding activities, responsibilities, personal style and norms. They have also suggested that four different kinds of role are likely to experience ambiguity roles new to the organization, roles in expanding or contracting organizations, roles in organization exposed to frequent changes in demand, and roles on process. On the basis of its causes the role stress are classified under three main headings:
   i) Expectation generated stress includes role conflict and role ambiguity.
   ii) Expectation resources discrepancies include role overload, responsibility, authority dilemma, and inadequate technical information.
   iii) Stresses result from interaction between role and personal characteristics of the focal person.

Another important potential stressor associated with one’s organizational role, besides role conflict and ambiguity is responsibility for people (Cooper and Marshall 1976). Increased responsibility for people frequently meant that one has to spend more time on interaction with others, maintaining co-ordination, attending meetings and in consequence more time in trying to meet deadline pressures and schedules. It has been noted that physical stress was linked to the level of responsibility. It has also been observed that responsibility for people was related to heavy smoking, diastolic blood pressure, serum cholesterol level, and symptoms of coronary heart disease. Lack of participation in decision-making, lack of management support, having to keep pace with increasing standards of performance and coping with rapid technological change have also been mentioned as potential role stressors by Cooper and Marshall.

3.1.6.7 Approach to the Study of Occupational Stress

There has been a lot of controversy regarding the actual meaning of the concept of stress. The basic reason behind this controversy was that stress researchers in different disciplines have different referents for the term stress. Even if everyone used the term with the same meaning, there would still be differences in approaches to the study and stress.

There are at present at least four approaches to studying and treating occupational stress. These four approaches typically focus on the stressors of job
life and consequent strains. These approaches also recommend different target and types of treatment for alleviating the problems that have resulted from job stress.

The following Table No. 3.1 outlines the four identified approaches to the study of occupational stress *(Behr and Frank 1987)*

**Table No. 3.1: Approaches to the study of occupational stress**

<table>
<thead>
<tr>
<th>Approach</th>
<th>Typical</th>
<th>Typical Outcome</th>
<th>Typical Primary Target of Treatment</th>
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</thead>
<tbody>
<tr>
<td>Medical</td>
<td>Physical</td>
<td>Physical Strain</td>
<td>Individual</td>
</tr>
<tr>
<td>Clinical or Counseling Psychology</td>
<td>Psychological</td>
<td>Psychological Strain</td>
<td>Individual</td>
</tr>
<tr>
<td>Engineering Psychology</td>
<td>Physical</td>
<td>Job Performance</td>
<td>Organization</td>
</tr>
<tr>
<td>Organizational Psychology</td>
<td>Psychological</td>
<td>Psychological Strain</td>
<td>Organization</td>
</tr>
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</table>

The medical approach, having its root in the trading of *Conon and Selye*, focus on physical causes and consequences of job stress. The typical primary target of treatment of this approach is individual. Here the treatment of the focal person is done through application of medication. This approach did not develop for primary interest in occupational or workplace, through it is applied to them.

The psychological approach to occupational stress emphasizes psychological causes and consequences of stress. The approach is labeled as clinical or counseling psychology approach and involves the treatment of depression or anxiety through counseling or psychotherapy. This approach also like medical approach was not developed specifically for dealing with the stress prevailing in the workplace.

The third approach engineering psychology, adapted to the study of occupational stress focus on physical characteristics of the work and workplace as
stressors and as job performance as the typical outcome (strain). This approach has implication for the physical design of the work and workplace as treatment. In this approach, the typical primary target of treatments remains the organization not the individual.

The organizational psychology approach accepts that psychological variable prevailing in the organizations cause psychological strains. In this approach, typical target of treatment is making necessary changes or modifications in the organization or the characteristics of workplace. This approach was developed with specific interest in workplace stress.

3.2 Sources of Occupational Stress

Though occupational stress initially arises from constituent factors of job and its psychophysical environment, these factors are not inherently stressors. In fact, personal characteristics of the employee and his cognitive appraisal of the job factors in the framework of his capacity and resources determine the extent of stress, which he would experience from a job factor or situation. This is the reason that we can only hypothetically predict the potency of the job factors or situations for causing stress, but we cannot categorize or generalize any work-setting variable as a universal stressor. However, some job factors or work conditions such as extreme heat or cold, chronic dangers, demotion, loss of job and others are likely to cause stress to majority of the workers. Stress resulted from these factors also vary from one worker to another. The pressures caused from the job factors, in fact are mediated by the personal characteristic of the focal worker. Moreover, certain psychological and behavioral specialties of the employee have also become consistent sources of stress to him. Thus, we can broadly classify all the sources of occupational stress in two categories i.e. individual characteristics and work setting variables.

3.2.1 Individual Characteristics

Personality characteristics of the employees are one of the most prominent factors, which interfere with their job behavior. Employee’s responses to work demands and pressures are largely influenced by their personality characteristics, and psychological and behavioral patterns, such as belief and values, aspiration
and expectancy, need structure, attributes, focus of control, personality traits, coping skill, cognitive patterns and others. An important personal characteristic, which influences the experience of stress, is “sense of control.” Control refers to the perception by the individual worker that his or her action results in expected outcomes, particularly those that are important for the workers. Sense of control has been found to have significant effect on people’s response to stress. “Sense of control” (ability to self-pace in work) over task and work environment cause fewer symptoms of stress *(Frankenheuser and Johnson 1986). Individuals with hardy personality are likely to experience less stress and strain because of these characteristics of commitment, and capability of control and facing challenges (Kobosa 1979). Low level of tolerance and patience, rigidity, low-self-esteem, high anxiety, intra-psychic conflicts, external locus of control and certain cognitive patterns enhance employee’s susceptibility to experience more stress as well as strain.

Personality traits of employees play a significant role in determining the severity of job stress experienced by them. Though personality characteristics and traits are generally not the source of stress, they mediate the stress and moderate the strains. High anxiety is a frequent source as well as a promoter of stress. Anxiety has also been reported as an immediate outcome of felt stress. In the last three decades, anxiety and stress have become the topic of intense interest among psychologists and laymen. Anxiety has been variously defined as a vague fear associated with the emotions of terror, alarm, fright, panic, and dread. It has also been characterized by the feeling of uncertainty and helplessness in the adverse situation. These feeling and emotions associated with anxiety cause stress and also enhance the severity of stress by influencing their cognitive appraisals.

Indication of the relationship of anxiety to stress, *Spielberg (1979) has stated that in a transaction between person and environment, stressors are linked to anxiety reaction, by perception of threat in international model of anxiety. *(Endler 1975, 1980) stress has been defined as a situational variable, the perception of which is influenced by the individual’s predisposition to react to stress in turn increased anxiety. The perception of stress in turn increases the level
of anxiety of the focal person. Trait anxiety is an abiding predisposition and is a relatively stable characteristic, which influence individual’s behavior to a great extent. Trait anxiety refers to people’s disposition or tendency to perceive a wide range of situations with differential elevations in state anxiety is a source of stress as well as an elevator of the stress and a resultant of felt stress.

Employee’s locus of control has been noted to determine the degree of occupational stress experienced by them. In a number of studies, external focus of control has been reported to be associated with higher degree of stress and anxiety. In a study on a sample of banking personnel, *Srivastava and Krishna (1992) noted that employees with external focus of control experience comparatively higher degree of occupational stress and lower job satisfaction. Employees with external locus of control have also been found to be more alienated from work setting and less involved in their job. Employee’s job attribution also determines the extent of stress they experience in their job life. In a recent study *Gupta(1999) note’s that employees attributing to their efforts, nature of job activities work conditions and managerial policy for their success and failures in job life experienced higher role stress as compared to those who attributed to chance or luck for their achievements and failures at work.

Besides mediating the effect of stressors, certain behavioral patterns become direct source of stress. Type A Behavioral patterns *(Friedman and Rosen man, 1974) are the examples of such behavioral sources of occupational stress. Type A Behavioral Patterns such as drive to achieve more and more aggressive striving, high competitiveness, high hostility, hyper alertness, rapid pace in themselves cause stress and become risk factors in certain somatic problems particularly coronary heart disease. Type B people may be resentful and suspicious of others and may easily be angered by people in their environment. In order to achieve more and more, these people ignore the feelings of others.

Employee’s age, sex, health, status, experience, designation, position, family background, marital status, and socio-cultural background have also been found to influence the experience of occupational stress. Variety of social supports (such as emotional, tangible, informational and esteem supports) have
also been reported by stress researchers as dominant mediators of the experiences of occupational stress, as well as moderator (buffer) of the relationship between occupational stress and consequent strains. Cognitive coping has also been reported as mediating the experience of strains. Intellectualization, rationalization, and reversal of effect moderate the severity of stress, while cognitive avoidance and denial might bring temporary relief from the stress but cause severe strain in long term.

3.2.2 Work setting variable

3.2.2.1 Job Role

Job Role is a major source of satisfaction as well as frustration for the employee. Certain characteristics or inadequacies of job role have been noted as prominent source of occupational stress. Researchers have applied “role theory” to understanding stress problems at work and for examining how role pressures occur when an employee’s expectation and demands of the organization vary. Like role ambiguity and role conflict, role overload and role-under load have also been noted as occupational stressors. Pareek (1981) on the basis of theoretical speculation and statistical analysis has identified the following ten situations of role stress.

a) Inter Role Distance: Individual occupies more than one role at a time. His occupational role may come into conflict with family or social rule. These conflicts among different roles represent inter-role distance.

b) Role Stagnation: This kind of stress is the result of the gap between demands of previous role and new role effectively. With the advance of an individual, his role also grows and demand is made on the individual because of the change in role. The need for taking on his new role requires growth. This becomes an acute problem especially when an individual enters new roles after occupying a role for a long period.

c) Role Expectation Conflict: This type of stress arises when two or more members of one’s role set, impose opposing expectations on the role occupant; and he is confused as to whom to please. Stress is created if the same member holds opposing expectations towards the focal person.
d) **Role Erosion:** This type of role stress is the function of the role occupant feeling that some functions, which should properly be the part of his role, are transferred to or being performed by some other. This can happen when the role occupant performs the functions but the credit goes to someone else.

e) **Role Overload:** When the role occupant feels that there are too many expectations from the significant members in his role set, he experiences role overload. There are two aspects of this stress: quantitative and qualitative. The former refers to having “too much to do” while latter refers to “too difficult to do.”

f) **Role Isolation:** This situation of role stress arises from psychological distance between the occupant’s role and other roles in the same role set. The main criteria of role isolation are frequency of interaction with other roles in the role set. In the absence of strong linkage, the stress of role isolation may be high. The gap between the desired and the existing linkage would indicate the degrees of role isolation.

g) **Personal Inadequacy:** Role stress arises when the role occupant feels that he does not have the necessary skills and training for effectively performing the function expected from his role. This is found to happen when proper placements are not made and the organization does not impart periodic training to enable the employees to cope with the fast changes both within and outside the organization.

h) **Self-Role Distance:** When the expectations from one’s role go against his self-concept, he feels this kind of stress. This is essentially a conflict arising out of incongruence between personal attributes of an employee and the attributes required for his job role.

i) **Role Ambiguity:** It arises when the individual is not clear about various expectations people have from his role. Role ambiguity may also be due to lack of information regarding role and its enactment by the role occupant.

j) **Resource Inadequacy:** This type of role stress is evident when the role occupant feels that he is not provided with adequate resources for smoothly performing the functions expected from his role.
3.2.2.2 Job Characteristics and Attributes

Characteristics of the job are a very common source of employee’s satisfaction, frustrations, and stress. Task complexity and difficulty, quantitative and qualitative demands of the job and employee’s controllability over task are the frequent sources of occupational stress. The pace at which an employee is required to do work is one of the characteristics of the job causing stress to the employee. This pace may be controlled either by a machine or by a human being. The employee might control the pacing itself. If there is machine pacing, the employee has to become a machine, which causes stress to the employee. Another source of stress integral to this system is the lack of control over the work progress. The pressure of repetitive work in machine pacing system gradually becomes a continuous source of stress to the worker.

Another important characteristic of the job is its attributes, which refers to the extent of opportunity it provides to satisfy various need of the employees, such as autonomy, social interaction, power and autonomy, use of knowledge, abilities and other attributes. If the job lacks enrichment and provides little opportunity to satisfy these needs, jobs become stressful to their incumbents.

3.2.2.3 Physical Work Conditions and Technology

Another set of factors in work setting which cause stress are related to qualities of physical work environment and technology. Inadequate taxing or hazardous physical conditions at work, such as insufficient or excessive lighting, continued loud noise, extreme cold or heat, fluctuation in temperature, crowded workplace and others. These physical qualities of work environment cause direct sensory stress and indirect psychological stress through their potentiality for causing negative health consequences.

Technical limitations, rapid change in technology, inadequate technical management, incongruence among task, technology and organizational structure, inadequate man-machine system and mechanization of men are the potential sources of stress prevailing in work setting.
3.2.2.4 Performance Feedback and Reward System

Performance feedback is another important factor, which enhances employee’s motivation and performance, but causes dissatisfaction and stress if it is inadequate or absent. If the feedback is not given at adequate time or if it is less frequent, it is likely to cause stress to the concerned worker.

Reward or incentives, which employees receive for their work, also play an important role in enhancing employee’s motivation and performance. But if it is not adequate, it is likely to cause frustration and stress to the employees. The reward for better or exceptional job performance includes monetary compensation or benefits, recognition, appreciation, privilege and promotion. These non-financial rewards are usually more effective in improving employee’s motivation and performance level. If the employees feel they are not being adequately proportionately or timely rewarded for their performance, they are likely to encounter stress. These rewards become less effective or ineffective if they are not given at the proper time.

3.2.2.5 Interpersonal Relations at work

The quality of interpersonal relationship at work plays a dominant role in determining employee’s job behavior and job stress. It has been consistently linked to job stress *(Payne 1980). *Kets de Vries (1984) reported that at least three types of interpersonal relationships have been studied; relationship with co-workers, relationship within work groups and supervisors buffers job stress and consequent strains. The poor or strained interpersonal relationships at work are associated with the feeling of threat for the employees. Poor-co-worker relationship is associated with low trust, low supportiveness and no interest or unwillingness to listen *(French and Captain, 1973).

Those workers who report a greater amount of group echoism are more able to cope with stress on the job *(Kats de Vries 1984). Relationships with supervisor or leaders are equally important in determining the amount of job stress. Certain aspects of this relationship have been identified as potentially affecting job stress. Poor-relationship between workers and supervisor does not cause stress only to the workers but also to the supervisor to a considerable extent.
Another potentially stressful relationship within the workplace is observed in interactions with customers or clients. This relationship often presents a primary focus on the work an employee does. One group of employees who have been identified as being at risk for experiencing job stress are those who are involved in providing service to others *(Schuler 1984) for example the medical personnel having more contact with patient, report high level of emotional exhaustion. *(Maslach and Jackson 1981).

3.2.2.6 Organization Structure and Climate

Besides the role and job characteristics, certain features of the structure, climate and culture of the organization also cause severe psychological stress to its members. The potential effects of the structure of an organization on individual performance and job attitudes have only recently been studied and better understood. The extent to which individual employees are involved in direction and decision making in their work leads to the definition of two kinds of organizational structures: Centralize (tall organization) and decentralized (flat organization). It is generally observed that the structure, which allows employees more decision making power, produces less stress. *Ivancevich and Donnelly (1975) in their study noted that employees in flat organization reported less job stress and more job satisfaction.

These differential effects might be linked to the fact that decision making enhances the meaningfulness in employees find in work and provide the employees with a greater sense of autonomy, responsibility, certainty, control and ownership  *(Schuler 1980, Cooper 1987). Climate and culture of the organization has been found to be the source of satisfaction and stress. Culture of the organization is defined as to refer to the beliefs and expectations shared by the members of the organizations. An important stress that results from organizational culture is the existence of competition. For instance, as organizations decline, especially in relation to downsizing and budget cut, five job stressors emerge, namely feeling of job insecurity, work overload because of unrealistic deadlines, underutilization of employees skill, promotional obstacles and intra and inter group competitions. *(Jick 1985)
Many workers felt stress due to power struggles or office politics prevailing in the organization. Office politics is said to be an important factor in a number of organizational practices viz. promotions and transfers, allocation of supplies or equipment, division of authority and co-ordination between high-level managers. Managers who are engaged in power games and political alliances can place stressful expectations and demands on subordinates *(Matteson and Ivancevich 1987).

*Cooper and Melhuish (1980) reported “relationship within the organization” and “poor organizational climate” to be causing stress and health strains among executives. In a study *Srivastava (1990) found that inadequate organizational climate was positively correlated with the symptoms of mental ill health among its employees.

Another factor of organizational climate, which might cause stress to its employees, involves territory or personal space or area of activities within which an employee works *(Ivancevich and Matteson 1980). Territoriality has been identified as a powerful stressor for workers *(French and Caplan 1973). Territoriality causes stress by arousing the feeling of alienation or isolation in new or distant department.

**3.2.2.7 Occupational Stress in Public and Private Sector Organization**

Structure and climate of the public and private sector organization markedly differ, and so far likely to cause different amount of stress to its members. In a study * Pestonjee and Singh (1978) noted that managers in the private enterprise rated higher on role stress. Similar results were revealed in the studies, conducted by *Singh (1987), Sharma and Shudershan (1983) and Singh (1987). But in a study *Banerjee (1989) observed public sector employees experiencing comparatively more job stress.

In an extensive study of *Srivastava (1990) examined the effect of overall nature (structure, systems, climate and culture) of the organization on employee’s occupational stress. To test the hypothesis, employees operating in public and private sector organizations were compared with regard to their occupational stress.
Employees belonging to the public sector organization experienced markedly higher stress stemming from most of the components of their job, such as role ambiguity, role conflict, group pressures, and responsibility for persons, supervision, and control, under participation, powerlessness, poor-peer-relations, unpredictability, unprofitability, low status, strenuous work conditions, and intrinsic impoverishment. Surprisingly no significant difference could be observed between the employees of the two enterprises so far as the stress of role overload was concerned. It was noted that powerlessness, under participation, and low-profitability were among the predominant job stressor for the public sector employees. Whereas the private sector employees perceived responsibility for persons, low profitability and role overload as prominent job stressors. On the other hand, intrinsic improvement, low status, and poor peer-relation were related quite low as job stressor and by the employees in both types of organizations.

3.2.2.8 Organizational Change

Organizations in the global market place are continuously changing. These consistent changes in organizational structure and its functioning are the results of advancements in technology, economic constraints, and relational competitions. Although most of these changes are necessary and long overdue, the downside includes the risk of huge cost in terms of increased health care expense, lost productivity and lower level of job satisfaction. This cost may be directly attributed to the distress that is created when an organization’s employees encounter consistent changes. These changes at organizational level cause stress at individual level. As a response to the struggling economy, intense foreign competitions and need to compete on global basic, organizations have been right-sized, re-engineered, and restructured on a massive scale. The organizational change occurs when the company alters the way it does business such as computerizing the processes and entering a new market or product line. In the environment of organizational change, the employees are being required to adapt to the changes in order to accommodate or facilitate the needs of the organization (Lawler 1994).
In a changing environment, employees are in a consistent state of slush, uncertainty, and insecurity, which lead to occupational stress. These changes stress the employees by forcing them to function in a different manner and in different environment.

*Johnson and Sarason (1979) have argued that change, depending upon how it is perceived, is one of the primary causes of stress, and organizational change can be extremely stressful due to the feeling of insecurity it evokes. However, the relationship between organizational change and employees stress has not been extensively investigated. Individual’s psychological, cognitive, and perceptual process play an important role in mediating the experience of and reactions to the stress of organizational change. They have suggested to understand the stress of organizational change in the framework of “Cognitive-Affective stress Property” (CAP) construct proposed by *Wofford and Daly (1997”).

3.2.3 Other Sources of Occupational Stress

*McGrath (1976) has suggested the following six sources of occupational stress:

a) Task based stress (for example, difficulty, ambiguity, load, and other).

b) Role based stress (for example, conflict, ambiguity, load, and other).

c) Stress intrinsic to behavior setting (for example, effect of crowding or under staffing, and other).

d) Stress arising from the physical environment itself (for example, extreme hot/cold, hostile forces, and other).

e) Stress arising from social environment in sense of interpersonal relations (For example, interpersonal disagreement, privacy, isolation, and other).

f) Stress within the person system, which the focal person brings with him to the situation (for example, anxiety, perceptual style, motivation experience, and other).

*Cooper and Marshall (1976) have described the following seven categories of the sources of managerial stress.
**a) Factors intrinsic to the job:** Work overload, under load, poor physical working conditions, time pressures, having too many decisions to make.

**b) Career development:** Over promotion, under-promotion, lack of job security, fear of redundancy, thwarted ambition.

**c) Role in the organization:** Role ambiguity, role conflict, and responsibility for people.

**d) Relationship at work:** Poor relations with boss, colleagues and subordinates, lack of trust and supportiveness, difficulties in delegating responsibilities.

**e) Organizational structure and climate:** Lack of effective consultation, restrictions on behavior, poor communication, no sense of belonging, and little or no participation in decision-making.

**f) Extra organizational sources:** Family problems, conflict of personal belief with that of company, conflict of company with family demands, marriage patterns and relocation and mobility.

**g) Characteristics of the individual:** Type A personality, extremes of competitiveness, striving for achievement, impatience, haste, hyper-alertness, low self esteem, lack of ability to cope or adapt to stress situation etc.

*Gross (1970) classified organizational stressors under three categories namely organizational careers, task, and organization structure.*

*Landy and Trumbo (1976) have reported job insecurity, excessive competition, hazardous working conditions, and task demands.*

Large or unusual working hours as major sources of job stress. Factors intrinsic to job i.e. pace-repetitive work, lack of opportunities to use valued skills and abilities, and high costs and penalties for mistake have been indicated as stressors in the work setting *(Kornhauser 1665; Buck 1972).*

Time constraint *(Hall and Lawler, 1970) heavy workload (Buck 1972), excessive and inconvenient work hours *(Kornhauser, 1965; Mott et al 1972) have also been reported as sources of job stress.*

*Quick and Quick (1979) have emphasized the role of interpersonal factors in creating stress at work. Conflict between individuals because of*
incompatible goals or substantives issues on the one hand, and emotional issues on the other create stress.

Small groups may apply pressure upon their members for conformity to norms that are in conflict with member’s needs, values, and standards. These pressures cause occupational stress.

*Parasuraman and Alluto (1981) proposed an integrated model for investigating simultaneously the relationship of contextual task and role-related variables to stressors; inter-unit conflict, technical problems, efficiency problems, role frustrations, staff shortage, and too many meetings in the work environment. They reported that job demands, constraint, and job related events or situations were not in themselves stressful, but that they may be capable of producing psychological stress, and strain depending on personal attributes and other co-existing factors.

*Srivastava and Singh (1981) identified twelve factors, which cause occupational stress, such as role overload, role ambiguity, role conflict, group pressures, and low profitability for people, intrinsic impoverishment, strenuous work conditions, poor peer-relations, and powerlessness.

Besides the stressors prevailing in work setting a number of non-work stress *(Bhagat et al., 1985) posit that total amount of stress and strain experience by a person is a function of both work and non-work stresses. Non-work domain is composed of a number of life domains including family, leisure, recreational, community, social, political, religious roles.

*Crouter (1984) in a study noted that female employees with young children were “at risk” and experienced negative spillover from family responsibility to work, as reflected in tardiness and absenteeism, inattention and inefficiency and inability to accept new responsibilities at work.

*Davidson and Cooper (1988) reported work-family interface to be a major source of stress for female managers and employees.

In a study, *Srivastava and Krishna (1991) observed that female in “dual career couples” with part-time job experienced lesser role stress and maintained better mental health as compared to those who were in full time employment.
Disturbed life patterns of miscellaneous stress *(Neves 1969), stressful life events *(Dohernwend and Dohernwend 1974), and demands of the husband and children of working women (Waldron 1978) have been reported as off-the job source of occupational stress.

Researchers have noted that life stresses were associated with decreased life satisfaction and increased job strain, job alienation and turnover *(Bhagat et. al. 1985; Sarason and Johnson 1979).

All the occupational stressors identified by stress researchers have been summarized below in less than two major categories; objectively defined and subjectively defined job stressors.

a) Objectively Defined Job Stressors

Physical hazards, chronic dangers, pollution, noise, inadequate man-machine design, unusual/non-standard working hours, technical limitations, change in shift patterns, deadlines, and time pressure.

Properties of work and work setting are new work setting, machine pacing, work overload, lack of training, inadequate intrinsic rewards, inadequate extrinsic rewards, poor management-labor relations, job insecurity, territoriality (alienation, isolation), organizational structure, poor organizational climate, negative organizational attitude, inter and intra-group competitions, job complexity, qualitative workload, autocratic leadership, crowding, discrimination in resources and demand, changes in job, loss of job/employment, qualitative changes in job, over promotion, transfer of job locus, null changes, and job/career transition.

b) Subjectively Defined Job Stressors

Occupational role, role ambiguity, role conflict, less control over work processes, responsibility for people, responsibility for things, low participation, feedback and communication problems, self-role distance, role stagnation, resource inadequacy, role erosion, inter-role distance, and role isolation.

c) Miscellaneous

Strained relationship with supervisor, inadequate support from supervisor, strained relationship with co-workers, conflict with subordinates, ambiguity about
future, inequality of pay, quantity-quality conflict, building, and maintaining career, and lesser opportunity for advancement.

d) Off-the job stressors

Stressful life events, Demands of husband and children, Work family conflict, and Spillover effect of non-work stressors.

3.3 Consequences of Occupational Stress

3.3.1 Nature

Stress has been generally denoted as an undesirable and a negative force causing disruption in psychological and physiological homeostasis of the focal person. In a situation of severe stress, human constitution and capacities are taxed severely and his overall effectiveness is distorted.

Majority of stress researchers have concluded that stress gives rise to negative emotional experiences causing significant deterioration in individual’s adjustment, behavioral effectiveness and health.

3.3.2 Consequences

The nature of the response to stress was first studied by *Walter Cannon (1914) and in mid-1920 by Hans Selye. These two physiologists have made significant contribution to the understanding of stress response and effect of its mismanagement.

More recently, there has been an important focus on the health consequences of stress in the workplace, both out of concern for individuals and organizations. This concern is founded on the idea that the intense or persistent stimulation of the stress response can result in a host of health problems.

Researches in organizational stress have dominantly focused on emotional, behavioral and health outcomes of the stress experience at work. *(Brief, Schuler and Van Sell, 1981; Cooper and Marshall 1976; Ivancevich and Matteson 1980). Thus, prolonged severe stress affects the focal person at psychological as well as physiological levels.

At mid level, stress may arouse the individual for improved performance and problem solving, but starts hampering performance when its intensity reaches a disruptive level, which varies with the characteristics of the focal person and the
task being performed. Physiological consequences of stress include increase in serum and cholesterol levels, blood pressure, heart rate, adrenalin levels, and respiratory rates. With prolonged high level of stress a variety of psychosomatic diseases may occur. Various dimensions of job behavior such as performance, job satisfaction, absenteeism, and turnover are also affected by the stresses of job life.

*Schuler (1980) sub-merged all the consequences of job stress under three general categories: physiological, psychological, and behavioral symptoms.

a) **Physiological Symptoms** – Researchers in health and medical sciences have concluded that stress could create changes in metabolism, increased heart and breathing rate, increased blood pressure and bring on headaches and induce heart attack.

b) **Psychological Symptoms** – Job related stress could cause job dissatisfaction, tension, anxiety, irritation, boredom, and procrastination.

c) **Behavioral Symptoms** – Behaviorally related symptoms of stress include changes in productivity absenteeism and turnover as well as changes in eating habits, increased smoking, or consumption of alcohol and sleep disorders.

Holt (1982) enlisted its following consequences. He classified them as Strains and Illnesses.

a) **Strains**

*Table No. 3.2: Strains*

<table>
<thead>
<tr>
<th>Psychological Effects</th>
<th>Behavioral and Social Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job dissatisfaction</td>
<td>Strikes</td>
</tr>
<tr>
<td>Boredom, anxiety, depression, irritation</td>
<td>Early retirement</td>
</tr>
<tr>
<td>Low occupational and self-esteem</td>
<td>Burnout</td>
</tr>
<tr>
<td>Alienation from organization</td>
<td>High rate of smoking and caffeine intake</td>
</tr>
<tr>
<td>Tension, experienced conflict</td>
<td>Use of drugs or alcohol on the job</td>
</tr>
<tr>
<td>Fatigue</td>
<td>Absenteeism</td>
</tr>
<tr>
<td>Low satisfaction with Life</td>
<td>Disrupted performance of social roles</td>
</tr>
<tr>
<td>Sexual maladjustment</td>
<td>Interference with friendship and socializing</td>
</tr>
<tr>
<td></td>
<td>Accidents and errors</td>
</tr>
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<td></td>
<td>Distortion in interpersonal relations</td>
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</tbody>
</table>
b) Illness

Table No. 3.3: Illness

<table>
<thead>
<tr>
<th>Somatic-Physiological Effects</th>
<th>Psychological Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Heart disease</td>
<td>Mental illness</td>
</tr>
<tr>
<td>2) Hyper-tension</td>
<td>Depression</td>
</tr>
<tr>
<td>Cerebral accident</td>
<td>Neurotic Symptoms</td>
</tr>
<tr>
<td>3) Peptic ulcer</td>
<td>Mass psychogenic illness</td>
</tr>
<tr>
<td>4) Arthritis</td>
<td>Suicide</td>
</tr>
<tr>
<td>5) Dermatitis, other skin afflictions</td>
<td>Emotional outburst</td>
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<tr>
<td>6) Diabetes</td>
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</tbody>
</table>

Various consequences of occupation stress have been classified in two categories, namely Job-behavioral outcomes and health outcomes or strain. Job behavioral outcomes include Job dissatisfaction, Disruption in performance, High rate of absenteeism and Low level of job involvement. Health outcomes or strain includes somatic and mental health. In Job behavioral Outcomes, Job satisfaction is the most common and useful outcome measure of occupational stress. The stresses of job life develop negative attitudes about various aspects of the job in the focal employee, which ultimately generate the feeling of job dissatisfaction in the employees. The relationship between job stress and job satisfaction was initially examined by *Kahn and his associates (1964). They reported that job stress arising from role conflicts, role ambiguity, and role overload, results into significant deterioration in job satisfaction of the focal employees.

In several studies, for example, samples of managers, engineers, office assistants and schoolteachers and other, inverse relationship between role stress and job satisfaction was noted; however, role ambiguity was observed to be comparatively more effective in causing deterioration in job satisfaction of the employees.

*Keller (1975) noted that role conflict and role ambiguity were differently related to various dimensions of job satisfaction. Role conflict was negatively related with satisfaction with supervision, pay, and promotion but not with co-workers and work itself.
Caplan, Cobb, and French (1975) reported that stresses arising from underutilization of skills and abilities, low participation in decision-making, job insecurity and poor social report from supervisors and co-workers cause dissatisfaction.

Jadish (1984), Srivastava and Jagdish (1986) reported (1984) that stress arising from various aspects of job, such as role conflict, role ambiguity, role overload, under participation, intrinsic impoverishment, poor-peer relations, unprofitability, insecurity, group-pressures, supervisory style and other negatively correlate with employee’s job satisfaction.

Walshok (1981) examined the sex difference in the degree of negative relationship between job stress and satisfaction. The result indicated that women and men showed quite different levels of job satisfaction for the same jobs.

### 3.3.3 Occupational Stress and Performance

It is generally assumed and observed that there exists a negative relationship between stress and performance. But in fact, the effect of stress on performance varies with the degree of stress and the nature of the task performed. It has been established that high level of job stress causes deterioration in job performance * (McGrath 1976; Behr and Newman 1978). At the same time it has also been reported that very low or no stress is associated with low performance level. In absence of stress the individual lacks arousal and so the motivation to perform.

Hinkle (1973) has accordingly suggested, “To be alive is to be under stress.” The best-known and most thoroughly documented pattern in stress-performance literature is the inverted ‘U’ shaped relationship * (McGrath 1976; Anderson, 1976; Keller 1981).

Moderate level of stress simulates the body and increases its ability to react. In a situation a moderate stress individuals often perform their task better, more intensively or more rapidly.

Besides the degree of stress, certain kinds of stressors have been noted to be functional to the performance. Hall and Lawler (1971) reported that job
pressures involving time, financial responsibility, and quality factors were related to positive organizational outcome.

*Burke (1976) observed that stresses arising from excessive responsibility, large workload, making decisions that affect others were positively related to job satisfaction and so to the performance.

*Mathew (1986) has advocated that particular types of stress are essential for being active. *McGrath (1976) has postulated that stress-performance relationship would be of different nature in conditions when

a) Task itself is a source of stress (for example, a difficult or complicated task).
b) The task is being performed under stressful conditions.

In conditions where task is difficult, in relation to the capability of the focal person-then the more difficult (stressful) it is, the poorer would be the performance. There would be an inverse relationship between stress and performance effectiveness. In contract, in second condition when the task is being performed when other contextual stressors are operating, the availability of the task, as an attention and effort absorber reduces the stressful effects of other stressful conditions.

### 3.3.4 Occupational Stress and Absenteeism and Turnover

Occupational stress has been observed to be associated with alienation and high rate of absenteeism and turnover of the employee. These job behaviors have been identified as symptoms of stress. *(Akerstedt 1976, Schuler 1980, Randall and Altmaier 1984)*. Though absenteeism and turnover represent attempts to cope with occupational stress, since both behaviors allow the employees to withdraw from successful situations, they cost a lot to the organization. These costs include the money it will take to recruit, select, and train a new employee. Additional costs are seen in the decrease of products and the raw employee replaces an experienced employee, the cost incurred are in terms of the increased amount of time it takes to supervise the new employee. Absenteeism affects not only productivity but it also serves to reduce an employee’s level of motivation and thus exacerbate already existing problems. *(Matteson and Ivancevich 1987)*.
Despite the literature on turnover, there is little empirical data to support assertion that stress management programmers reduce job turnover *(Murphy 1985).

Turnover and absenteeism is interdependent. Employees may show higher rate of absence before they actually leave. Turnover usually is a gradual process. People do not leave the jobs all of sudden, they begin to think about leaving and evaluate options before they quit. Turnover might also be determined by employees’ assessment of their ability to find other jobs.

**3.3.5 Occupational Stress and Accidents and Mortality**

Accidents on the job have been a subject of research, much of it is an inconclusive attempt to identify accident proneness. However, not empirically established, occupational stress is assumed to be associated with accident and mortality rates. Thereafter no definite demonstrations show that industrial accidents are caused by occupational stress, but enough the indications from adequately complex research, warrant further careful study of accidents as the resultant of stressful conditions impinging upon dissatisfied employees.

Accidents and errors, with harm to self *(Theurell 1974) and accidents causing harm to others *(Colquhoun 1976) are noted to be caused by job stress. In some studies on air traffic, control reviewed by *Carump (1979), it was found that the relationship between occupational stress and consequent effects infer positive relationship between stress and accidents. It has long been known that mortality rate differs across occupations *(Cobb and Rose 1973, Sales and House 1971) indicating the vital significance of occupational stress. Research on death in general or as suicide, as dependent variable, is usually of a large scale.

Studies of suicide rates by occupation and other demographic classifications have found that such stress-like or strain-like inferred variables of job life are weaknesses of social organizations and are significantly associated with self-destructive acts or attempts.

**3.3.6 Occupational Stress and Job Involvement**

Though job involvement is a relatively new concept it has gained much importance because of its pivotal role of providing link between productivity and employees’ needs and quality of working life. After the pioneering work of
Lodhal and Kejner (1965) a good number of studies have been made by the researchers to explore the components, correlates and behavioral consequences of job involvement.

In the early stage, job involvement was considered as one of the components of job satisfaction. The later researchers have established that job involvement is a separate and independent construct though it is positively related with job satisfaction in most of the causes. Weissnherg and Gruenfeld (1968) examined the relationship between job involvement and job satisfaction. The result of the investigation indicated a positive relationship between the two. Lawler and Hall (1970) and Cumming and Bigelow (1976) also reported positive correlation between job involvement and job satisfaction.

Since the job stress experience by an employee is a product of interaction between environment (job) and personal (employee) characteristics, employee’s job attitudes and job involvement are very likely to interact with their occupational stress. Though not so many, some studies have been made by organizational psychologists in India and abroad to explore the relationship between job involvement and job stress.

Tosi and Tosi (1974) investigated the relationship between role conflict and role ambiguity and various measures of job involvement in a sample of high-level managers. The study yielded negative correlation between role ambiguity and role conflict and the measures of job involvement. It was suggested that organizational level should to be taken into account when studying the relationship between these two variables.

Behr, Walsh and Taber (1976) examined the effect of role stress on individually and organizationally valued stress. The results indicated that role overload was positively correlated with job involvement and other organizationally valued outcomes. Two other role stressors (i.e. role conflict and role ambiguity) were found to put adverse effect on both individually and organizationally valued outcomes including job involvement.

Among Indian researcher Madhu and Hargopal (1976) and Hargopal and Ravikumar (1979) examined the relationship of stress stemming from role conflict.
and role ambiguity with job involvement. The investigation revealed significant negative relationship between role stress and job involvement.

*Hargopal (1980) examined the moderating effect of personality variable; ego-strength, submissiveness and dominance on the relationship of role stress and job involvement. The results indicated that role stress negatively correlated with job involvement of employees with high ego-strength. It was also noted that role conflict and role ambiguity negatively correlate with job involvement of the employees of dominant nature.

*Srivastava and Sinha (1983) examined the effect of ego-strength and job involvement on the experience of role stress i.e. role overload, role conflict and role ambiguity in a sample of middle management personnel. The result of the study indicated that high level of ego-strength and job involvements mitigate the employee’s role stress arising from role overload and role ambiguity. Job involvement was found to be significantly negatively correlated with role overload and role ambiguity but with role conflict.

*Srivastava examined the (1990) relationship between occupational stress and job involvement of the employees operating in public and private sector organizations. Employee’s occupational stress was associated through occupational stress Index while the extent of their involvement in the job was estimated by employing Job Involvement scale.

3.3.7 Occupational Stress and Organizational Effectiveness

Occupational stress affects not only different aspects of job behavior of the individual employee, but also ultimately results in a noticeable deterioration in overall effectiveness of the organization.

*Beehr (1978) suggested that it would be more fruitful to study the effect of stress on both the individual and the organization simultaneously and diachronically.

3.3.8 Health Outcomes of Occupational Stress

One of the most important reasons of why the stress has generated so much of interest is that stress is involved in the etiology of both somatic and psychological illness. It has been largely accepted by stress researchers that high
and consistent stress is unpleasant and dysfunctional and causes significant deterioration in physical and psychological well-being of the focal persons.

3.3.9 Occupational Stress and Physical Health

The relationship between mind and body has fascinated philosophers and scientists throughout the course of history. It was believed that a person’s mental state and physical activities were parts of the individual as a whole. Consciousness, feeling, and thoughts have been conceived of as an epiphenomenon of physical process. Three hypothetical constructs formed the foundation of psychosomatic diseases and medicine. Presently, existing research in psycho-immunology, neuron-endocrinology, neurophysiology is encouraging stress researchers to take new a look at the mind-body relationship, particularly at the issue of how psychological stress causes pathological changes in body function which if intense or chronic lead to various types of somatic diseases.

*Selye’s (1966) (1983) elucidation of the body’s response to stress has led to a better understanding of the biochemical and neurohormonal changes that accompany adoption to stress. However, brain itself identifies threats, activities altering appraisals and coping processes and integrates body reaction with feeling all parts of the body experience a major stress response.

Following regions are particularly vulnerable to be affected by the experience of stress *(Zegans, 1982).

b) Autonomic nervous system-adrenal medulla.
c) Immune system.
d) Reticular activating system.
e) Involuntary and strained muscle system.
f) Cognitive-affective integrating centers of the brain.

**Stress can cause disease by**

a) Lowering the immune response.
b) Creating endocrine problems through hyper-activity or hypo-activity.
c) Altering the balance of autonomic control, resulting in changes in cardiovascular, respiratory secretary, and visceral system.
d) Altering sleep patterns with attendant impaction protein metabolism, hormone secretion and other vegetation functions.

e) Changes in peptide release in extra CNS sites.

f) Affecting neuron transmitter, neuron modulator, and neuron endocrine functions of the brain.

*Rahe and his associates (1964), Rahe (1968) Holmes and Rahe (1967) examined whether changes in individual’s life, which require them to make behavioral readjustments, statistically correlate with the onset of Illness. The psycho physiological studies indicate that naturally occurring and experimentally induced stress evoke significant alternations in the functioning of most bodily tissues, organs, and systems.

These changes in their team lead to a lowering of the body’s resistance to diseases by suppressing the immune system. The greater the magnitude of such life events, the greater is a number of investigators have reported the risk of acquiring illness of a serious nature.

*Halt (1982) has classified two categories.

a) Physiological strains relatively minor side effects of occupational stresses.

b) Illness and mortality impairing effect of occupational stresses on health causing illnesses.

*Holt (1982) has enlisted following strains and illnesses and mortality observed correlated with occupational stress.

**a) Physiological strains**

(i) High pulse rate and blood pressure (Caplan 1975).

(ii) High serum cholesterol, high and low-density le proteins (Chadwiek 1980).

(iii) High serum cholesterol, thyroid hormones, serum uric acid (Caplan et.al.1975).

(iv) Catachdamine excretion (Fronkenhaeuser and Gardell 1978).

(v) High electrocardiogram (serum et.al. 1973).

(vi) Disrupted sleep, bowel function, eating habits. (Mott 1976).

(vii) Somatic complaints (Caplan et.al.1975).
b) Illness and Mortality

(i) Heart disease (Glass 1977).
(ii) Hypertension (Cobb Rose 1973).
(iii) Cerebral stroke (work in America 1973).
(iv) Peptic ulcer (Cobb and Rose 1973).
(v) Arthritis (Cobb 1979).
(vi) Diabetes mellitus (Cobb and Rose 1973).
(vii) General diffuse sickness (Mechanic 1974).
(viii) Total rate of illness (Hinkle 1974, Rahe et al. 1974).
(ix) Mortality rate (Colligan et al. 1997).

One of the most common and fatal resultants of occupational stress are coronary heart diseases. Growing body of evidence indicates that perhaps one half of all the cardiac deaths results not from blockage of coronary arteries, as it is the case of heart attack but from the condition known as “sudden cardiac death” in which death is believed to result from sudden and serious cardiac rhythm disturbances.

In organizational set up the study on the relationship between stresses of job life and coronary heart disease (HD) was initiated by Caplan (1971). Further studies were done by other variables such as personality type, social support, work motivation in these studies a positive relationship was observed between severe occupational stress and risks for CHD. It was also revealed that the relationship between stress and risk for CHD is moderated by personality type, work motivation of the focal person and the social support perceived by him while in the situation of stress.

Even cancer has been reported to be associated with stress. In western countries, about 75% of lung cancers are attributed to smoking. To the extent that organizational stress increases smoking behavior it will increase lung cancer and other tobacco-related cancers such as bladder cancer, stomach cancer, and cancer of mouth, throat, and lungs.

Literature on stress and cancer provides evidence suggesting that stressful events are associated with appearance of a variety of cancers including breast
cancer, uterine cancer and lung cancer *(Tache et.al. 1979, Cooper 1984). Stress appears to have a direct effect on decreasing the immune response, which might otherwise control a small cancer * (McClelland 1985).

### 3.3.10 Occupational Stress and Mortality

Numerous strides reviewed by different stress researchers have associated work overload, job dissatisfaction, job insecurity, role conflict, interpersonal strains, and variety of other work stresses with classic symptoms of stress such as headache, heartburn and generalized fatigue.

### 3.4 Management of Occupational Stress

Though stress has become an inevitable part of people’s life in present day world, it is not entirely uncontrollable and unmanageable. The individual cannot remain in the state of stress, he certainly makes some sort of adaptive behavior to cope with or get rid of the stressful situations. It might be fight or flee. Since their origin, the human beings have been encountering the situations of stress and strain. These coping efforts were not well planned and systematic. In present era of stress and anxiety, when the cost of stress has markedly increased the stress researchers and practitioners have concentrated on evolving systematic techniques for the management of the stresses of life in general and job life in particular. It has become a legitimate field of endeavor and is evolving quickly. The field of stress management has progressed substantially after Lehrer and Wool folk published first edition of Principles and Practice of stress Management in 1984. Like the term psychotherapy, the term stress management is a global concept and involves quite a mix of techniques. The term can be broken into a number of operational steps or phases. Various stress researchers and practitioners have differently classified stress management interventions. Some have classified them on the basis of stages of the process of stress while others have classified them on the basis of orientation or location of the intervention programmers i.e. individual and work settings. Some practitioners have classified them in two categories; Individual Interventions and Group Intervention. While others have grouped them into cognitive behavioral and physiological interventions.
Mathney and his associates (1986) classified individual interventions for stress as
a) Preventive interventions response to alleviate stress as it is initially perceived.
b) Combative coping strategies for mitigating stressors already underway.
In fact, the preventive interventions include three types of strategies; psychological or cognitive behavioral and physiological.

*Murphy (1987) classified the approaches to the problem of stress management into three categories:
i) Organizational change (eliminating the source of stress by altering features of the organization or job tasks.)
ii) Individual centered techniques (education workers to prevent or reduce distress).

Currently most of the writers on stress management refer to one of the following three forms of stress management practices:
a) Employees Assistance Programmes: This has provisions for employees counseling services by the organization (Murphy 1988)
b) Stress Management Training (SMT): The SMT includes training courses designed to provide employees with skill for coping with their job stressors, including techniques such as Meditation, bio-feedback, stress reduction *(Newton 1992).
c) Stress Reduction Interventions: It includes interventions designed to change the level or form of job stressor experienced by employees usually through job redesigning or work reform.

For the present discussion different interventions, strategies and techniques of the management of occupational stress have been classified in five categories in an order of their operational stage. Though this categorization has been made on the basis of different stages of stress management, they are not absolutely separate from each other. Rather they are interlinked in the form of different stages of a process with an ultimate objective to effectively manage the stresses of job life and the consequent strains. One category of stress management
strategies may be combined with the strategies of other categories in order to achieve better results.

There are different stress management strategies at individual level as well as organizational level. In day-to-day life, instead of taking treatment on stress, the use preventive strategies can be made eliminating organizational stressors, coping with occupational stress etc. We will look at the following different stress management strategies.

1) Prevention of Occupational Stress
a) At individual level
   i) Cognitive intervention strategies
   ii) Behavioral intervention strategies
   iii) Physiological intervention strategies
b) At organizational level
2) Eliminating or mitigating organizational stressors
3) Coping with occupational stress
4) Moderating occupational stress and consequent strains
5) Therapeutic treatment of stress disorders

3.4.1 Prevention of Occupational Stress

Since prevention is always better than cure, it would be the best part of stress management, if the occurrences of the circumstances or situations likely to cause stress were prevented to the possible extent at initial stage. Although some situations of stress are inevitable, part of occupational life or beyond control, effective interventions could be made at individual as well as organizational level to prevent the stressors or experience of stress.

3.4.1.1 At Individual Level

Since stress is a very subjective experience, it can be most effectively and conveniently prevented or dealt with through individual efforts. Most of the recent studies on stress management have proved the merits of individual-oriented techniques in preventing or reducing workers distress. (Murphy 1984). The individual – oriented interventions are more popular than organizational change
approaches due to both logistic and conceptual factors e.g. Individual-oriented programmes:

i) Are less or inexpensive and can be established and evaluated quickly without major disruption of work routines.

ii) Address the issue of individual difference in perception and reactions to stress.

iii) Can readily be incorporated into existing employee’s assistance and other company training programs.

At individual level, stresses of job life can be prevented by making necessary restructuring and modifications in employee’s cognitive and behavior patterns and by lowering their physiological arousals and stress reactions.

3.4.1.1 Cognitive Interventions Strategies

Stress circumstances do not take their toll from a passive individual but from an individual who imbues stressful situations with personal meaning and struggles to control or master these situations.

According to transactional mode of stress (Lazarus 1996, Lazarus and Folkman 1984) experience that the reactions to stress largely depend upon focal person’s cognitive appraisal of the stressful situation.

In primary cognitive appraisal of the stressful situation, an employee evaluates severity of the situation and the threats imposed by it. The severity of stress is determined by the employees estimation of how much appears to be at stake in the transaction in terms of their values, motives, or commitments. At the same time, the focal person also evaluates (secondary appraisal) his capabilities and readily available resources to deal with the demands of the confronting situations. The final structure of the stress situation is based upon an equation that takes into account the amount and the probabilities of damage inherent in the threat as opposed to the individual’s capacity to deal with it.

The basic principle of cognitive model of stress reactions elaborates, “One’s cognitive structure of a situation is an active and continuing process that includes successive appraisals of the external situations, and the risks, costs and gains of a particular response. When the individual’s vital interest appears to be at stake, the cognitive process provides a highly selective conceptualization.
Depending upon the content of the cognitive cost ell action, the behavioral inclination may be a desire to flee, attack, approach or avoid.

Whether the method image of the stress situation is broad, skewed or narrow, clear or blurred, actual or distorted depends upon the characteristics of the cognitive set. These cognitive sets determine which aspects are to be magnified, which to be minimized and which to be excluded.

*Kendall and Bennie (1983) suggested the following four guiding principles for cognitive-behavior techniques:

a) Individuals do not respond directly to their environment, they respond to their own cognitive interpretation of the environment.
b) Cognitions (thoughts), emotions, and behaviors (actions) are actually interrelated.
c) The prediction and understanding of negative cognitions and behaviors are enhanced by paying attention to a person’s expectancies, beliefs, and attributions.
d) It is possible and desirable to integrate cognitive approaches to correcting problems with performance based and behavioral contingency management.

The employees can cognitively prevent, moderate, or tolerate the stresses of job life by:

a) Increasing objectivity in perception and evaluation of stressors and probable strains.
b) Avoiding misinterpretations, distortions, and exaggerations of a situation.
c) Increasing perspective seeing the situations in a broader vista, obtaining a more relative concept of magnitude and seriousness of the situation of stress.
d) Intellectualization, analytical orientation towards threat of the whole situation.
e) Rationalization providing plausible reason why situation should be upsetting.
f) Avoid thinking –thinking about the things not relevant to the stressful aspects of the situation.
g) Cognitive avoidance of the situation.

*Srivastava (1997) has prepared an inventory, in the form of rating scale of stress resistant cognitive-behavioral patterns which can be conveniently used as a tool in cognitive intervention programme. The employees may be trained to
develop these cognitive patterns in order to prevent, moderate, or cognitively cope with their occupational stress.

The inventory consists of following stress-resistant cognitive patterns.

a) Consider difficult, adverse, or demanding job situation as an inevitable part of job life.

b) Perceive stressful job situation as a temporary phase of the job.

c) Rationalize the situation of stress and its consequences.

d) Consider the demanding situation as an opportunity to learn, develop new skills and to enhance self-confidence.

e) Take the excessive job demands as a challenge.

f) Access the severity of your job stresses with reference to the others who are facing with similar or more severe stresses in their jobs.

g) Objectively think about why this situation of stress should not have arisen.

h) Believe that life is a mixture of sorrow and happiness.

i) Think that time itself takes care of such situations.

j) Accept the situations of stress thinking that there is nothing you cannot to change then.

k) While dealing with the situation of stress, think about its positive outcomes.

l) Believe that every problem ultimately has some remedy.

m) Keep in mind that no one is totally free from stresses.

n) Accept the situations of stress as realities of life.

o) React to the hardships of job life with optimistic and positive effects.

p) Remind yourself that job is not everything.

q) Believe in Geeta’s philosophy that “your right is to do your job only, not to the fruit thereof. “

r) Accept the situations of stress as God’s will.

s) Have faith in God and his kindness.

*Ivancevich and Matteson (1987) have suggested “tolerance of stressors” at cognitive level as a primarily preventive technique. The employees can prevent or moderate the job stress by modifying their cognitive appraisal or by perspective taking “cognitive restructuring” and “cognitive rehearsing“. The cognitive
appraisal technique involves teaching employees to assess the severity of the stressor by considering the perspective in which they view a particular stress situation.

More specially, employees are encouraged to ask themselves certain questions when a negative event is encountered. The focal employee should objectively analyze the actual causes of the occurrence of the situation of stress, and estimate its worst possible consequences. He must also think over the strategies to cope with stressful situation as well as the consequent outcomes. In addition, the employee might gain a new perspective by considering if any positive result might be associated with the negative event.

The “cognitive restructuring” technique of stress management is based on the premise that many people believe that other people or events are responsible for how they feel. The resulting belies can be irrational and quite often lead to increased stress. The aim of this intervention is to help employees cope with stress by changing their beliefs or cognitions.

One model that has been proposed to understand this relationship is the A-B-C model where ‘A’ represents the Activating event and ‘C’ denotes the Consequences (feeling and behavioral) that occur in relation concerns changing the ‘B’ component of the models, ‘B’ denotes the Belief that occurs between the activating event and consequences.

*Matteson and Ivancevich (1987) noted the importance of keeping in mind that the objective of the cognitive restructuring is not to magically make people feel good about unpleasant events. Rather, the goal is to tolerate stressors by replacing negative feelings with neutral ones or at least less negative ones.

Cognitive appraisal and cognitive restructuring are designed to help people tolerate stressors after they occur. A related technique “cognitive rehearsal “involves helping employees tolerate stressors by anticipating them before they occur. This technique calls for visualizing a potentially stressful event before it occurs and practicing or rehearsing how to respond to the imagined situation. This rehearsal should occur while the employee is relaxed and might include appraisal or restructuring as outlined above. By rehearsing to respond, the employee gets
mentally prepared to face and deal with the situations of stress, which might occur in future.

3.4.1.1.2 Behavioral Intervention Strategies

Since individual’s thoughts, feelings, and actions are interrelated, the individual who has developed stress-resistant cognitive patterns would also adopt certain behavior patterns, which help him preventing or coping with the situations of stress.

By making some specific modifications in their habits, behavioral patterns and acquiring coping skills, the employees can prevent or moderate the stresses of their job life to a considerable extent e.g. the employees with Type A orientation can prevent or moderate their occupation stress by modifying their behavior patterns and by developing some behavior patterns of Type B orientation. Though modifications of certain existing dominant behavior patterns are quite a difficult task, the employees can do so, to a considerable extent through self-imposed behavior modification method. The stress management practitioner can train the employees to learn the stress-resistant behavior patterns and coping skills.

Following is an inventory of some stress-resistant behavioral patterns suggested by the author (1997):

a) Increase self-esteem and the level of tolerance and patience.
b) Do not be rigid in your ways of functioning, attitudes, and decisions.
c) Recognize and potential sources of stress in your job.
d) Do things at work in a planned and systematic manner.
e) Try to separate and maintain co-ordination among your job and other roles.
f) Avoid doing many things simultaneously.
g) Set your priorities for job activities.
h) Do work efficiently but avoid competitions.
i) Work on changing or modifying the style, methodology, and policies, which caused the situation or experience of stress.
j) Devote more time and energy to your job.
k) Discuss the problems with supervisor or land other competent colleagues or superiors.
l) Try to maintain good relationship with your superiors, colleagues, and subordinates and have a few dependable friends.
m) Throw yourself into your job and work harder and sincerely.
n) Avoid time pressures and role overloading being regular and making proper distribution of the time for your job activities.
o) Avoid taking responsibilities or committing beyond your capability and resources.
p) Do not try to reach the perfection level in all routine job activities.
q) Be sincere, but do not be over enthusiastic all the time in discharging your duties.
r) Frankly tell your limitations and inabilities.
s) Try to find out complete or durable solutions to the job related problems.
t) Try to nip the problems in the bud.
u) Be a realist; aspire within the framework of your capabilities and resources.
v) Do not poke your nose in others or irrelevant affairs.
w) Try to overload rather than to react to the irritating situations or behavior of people at work.
x) Before doing something, consider all its possible consequences.
y) If there is no way out, do your best to get out of the situation gracefully.

*Bhandarker and Singh (1986) evolved action plan for preventing or reducing managerial stress at individual organizational and social levels. At individual level, stress can be prevented by
a) Cultivating belief in self.
b) Developing inner-directed personality.
c) Developing self-coping mechanism by adopting the strategy of owning up to stress.
d) Relying on genuine problem solving strategies, and
e) Cultivating positive habit based on interests, such as yoga, meditation, sports, and breathing exercise.

*Singer (1966) long back suggested the following steps to avoid job tension at individual level.
a) Recognize the requirements of your job role.
b) Maintain perspective.
c) Keep a balance between work and recreation, and
d) Identity and accept your emotional needs.

3.4.1.1.2 Innovation Intervention Program: (IIP)

In the framework of behavioral (action) intervention for prevention of occupation stress, *Bunce and West (1996) evolved “Innovation Intervention Program” for prevention of or coping with the stresses of job life. This program involves alternatively dealing with the problems, which might cause strain. Herein employees at their own level innovate the strategies to change environmental pressure, barrier, or procedures to prevent or reduce the stress at work. These innovations not only make the work environment less stressful but also lead to the introduction of procedures, which enhance productivity and quality of work.

Bunce and West examined the effectiveness of IPP. The IPP opened with an overview of the subjects, with particular attention to the causes and manifestations of occupational strain. The program went on to introduce the concept of innovation coping. Participants having identified work-related stresses were encouraged to develop innovative responses to those stressors through group discussion and individual action planning. The subjects were made aware of the factors, which might help or hinder innovation. These factors included individual, group and organizational factors, as well as those intrinsic to the job and associated with working relations, which might influence the initiation and introduction of innovation. The study revealed that interventions promoting innovative responses reduced work related stress and improved innovation among the subjects.

3.4.1.1.2 Changing Stress-Inducing Behavior Patterns

This is basically a stress-preventive strategy and helps in combating the existent stressful situations. It has been empirically established that some specific personality and behavior patterns increases individual’s susceptibility to experience more stress and consequent strains. *Mathney et al (1986) have suggested that by making necessary alternation in behavioral patterns, employees
can prevent stress to a considerable extent one useful construct in understanding this strategy is the Type A Behavior Pattern (Friedman and Rosen man 1974). The individuals diagnosed as being Type A are comparatively more competitive, hard driving, intense, have high need for control, have sense of time urgency, impatient, aggressive and hostile. These individuals are at a high risk for negative stress reactions. Treatment of the individuals exhibiting this behavioral pattern has been the subject of a great deal of research, but specific findings, which lead to treatment, have not been conclusive. It is not very clear as to which aspects of behavioral, psychological, or emotional functioning make them vulnerable to physical strains. Thus, there is no clear direction for an intervention. Behavioral patterns become the part of one’s personality as it is structured because of contribution of the factors like heredity, personality traits, motivational structure, and socio-cultural environment. It can be changed or modified at an early stage of an individual’s development. However, efforts have been made to implement stress management for Type A individuals.

*Suinn (1982) has developed, a behavior modification program for heart patients, which included the training in muscle relaxation, identifying varying degrees of muscle tension, general relaxation and using imaginary to practice behavior incompatible with Type A behavior.

An extensive treatment programme has been extended by *Roskies (1987) in her book stress Management for Healthy Type A. The Table No. 3.4 reveals the programme has been divided into 8 modules as follows.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Modules</th>
<th>Skills to be taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Introduction to the programme</td>
<td>General Overview</td>
</tr>
<tr>
<td>2.</td>
<td>Relax : Learning to control physical stress response</td>
<td>Self monitoring of physical and emotional tension; Progressive muscle relaxation</td>
</tr>
<tr>
<td>3.</td>
<td>Control yourself: learning to control behavioral stress responses</td>
<td>Self monitoring of behavioral sign tension; in compatible behaviors, delay, communication skills</td>
</tr>
<tr>
<td>4.</td>
<td>Think productively: learning to control cognitive stress responses</td>
<td>Self monitoring of self-talk, cognitive restructuring</td>
</tr>
</tbody>
</table>

Table No. 3.4: Programme
<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Modules</th>
<th>Skills to be taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Be prepared: learning to anticipate and plan for predictable stress situations.</td>
<td>Identification of recurrent stress triggers, stress inoculation training</td>
</tr>
<tr>
<td>6.</td>
<td>Cool it: Learning emergency breaking in unpredictable stress situation.</td>
<td>Identification of signs of heightened tension; application of physical behavioral and cognitive controls; anger control</td>
</tr>
<tr>
<td>7.</td>
<td>Building stress resistance: learning to plan for rest and recuperation.</td>
<td>Identification of pleasurable activities; problem solving</td>
</tr>
<tr>
<td>8.</td>
<td>Protecting your investment: stress management as a lifelong investment</td>
<td>Relapse prevention</td>
</tr>
</tbody>
</table>

3.4.1.1.2.3 Stress Inoculation Training

This technique of stress management, developed by *Meichenbaum (1977) combines the cognitive and behavioral strategies. Stress inoculation training focuses on altering the way individual processes information about a stressful situation and identifies ways of reaction to it *(Ivancevich and Matheson 1988). This approach has been used to help people with a variety of stress reactions including anger, anxiety, and fear. The Table No. 3.5 reveals the three stages of stress inoculation training.

**Table No. 3.5: Stage of Stress Inoculation Training**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Stage</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Preparation</td>
<td>Educating the employee about the relationship between maladaptive thoughts and behavioral patterns, and convincing him that he can cope with the situations of stress</td>
</tr>
<tr>
<td>2.</td>
<td>Skill Training</td>
<td>Helping the employee confront stressful situations by using coping skill he already has or by developing new coping skills.</td>
</tr>
<tr>
<td>3.</td>
<td>Application Training</td>
<td>Getting the employee to practice and apply newly developed skills.</td>
</tr>
</tbody>
</table>
These techniques improve the means by which an individual can tolerate stressors by following on the relationship between thoughts and actions. These techniques serve as powerful tools in assisting employees to recognize that they can help controlling stress conditions by changing their thinking.

3.4.1.1.2.4 Developing Coping Skills and Resources

The first intervention among combative strategies to be taken up at an individual level focuses on developing coping resources. In fact, the preventive interventions help in developing coping resources to some extent. Assertiveness is a preventive strategy, but it becomes a combative strategy when it is used to deal with already existing problem. Acquisition of social skill is another source of coping. Research findings suggest that social support is effective in combating stress *(Wells 1984).

Social support reduces employee’s stress in three ways:

a) Social support can directly enhance health by satisfying social needs for affiliation, approval, appreciation, and security.

b) Social support can reduce inter-person tension at work and directly affects the level of stress.

c) Social support buffers the relationship of occupational stress and consequent strains.

Time management has been found to be another useful method for helping workers in developing coping responses. The employees can prevent as well as combat with the stresses of role overload and conflicts through effective management of his time and prioritization of job activities or duties.

3.4.1.1.2.5 Start a Stress Journal

A stress journal can help you identify the regular stressors in your life and the way you deal with them. Each time you feel stressed, keep track of it in your journal. As you keep a daily log, you will begin to see patterns and common themes. Write down:

a) What caused your stress (make a guess if you are unsure?)

b) How you felt, both physically and emotionally
c) How you acted in response

d) What you did to make yourself feel better

3.4.1.2.6 Look at how you currently cope with Stress

Think about the ways you currently manage and cope with stress in your life. Your stress journal can help you identify them. Are your coping strategies healthy or unhealthy, helpful or unproductive? Unfortunately, many people cope with stress in ways that compound the problem.

3.4.1.2.7 Unhealthy Ways of Coping with Stress

These coping strategies may temporarily reduce stress, but they cause more damage in the long run:

a) Smoking
b) Drinking too much
c) Overeating or under eating
d) Zoning out for hours in front of the TV or computer
e) Withdrawing from friends, family, and activities
f) Using pills or drugs to relax
g) Sleeping too much
h) Procrastinating
i) Filling up every minute of the day to avoid facing problems
j) Taking out your stress on others (lash out, angry outbursts, physical violence)

3.4.1.2.8 Learning Healthier ways to Manage Stress

If your methods of coping with stress are not contributing to your greater emotional and physical health, it is time to find healthier ones. There are many healthy ways to manage and cope with stress, but they all require change. You can either change the situation or change your reaction. When deciding which option to choose, it is helpful to think of the four As: avoid, alter, adapt, or accept.

Since everyone has a unique response to stress, there is no “one size fits all” solution to managing it. No single method works for everyone or in every
situation, so experiment with different techniques and strategies. Focus on what makes you feel calm and in control.

3.4.1.2.8 Dealing with Stressful Situations: The Table No. 3.6 reveals that The Four A’s

Table No. 3.6: The Four A’s

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Change the situation</th>
<th>Change your reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Avoid the stressor</td>
<td>Adapt to the stressor</td>
</tr>
<tr>
<td>2.</td>
<td>Alter the stressor</td>
<td>Accept the stressor</td>
</tr>
</tbody>
</table>

3.4.1.2.9 Stress Management Strategies

There are different strategies to avoid unnecessary stress, Alter the situation, Adapt to the stressor, accept the things that you cannot change, Make time for fun and relaxation, Adopt a healthy lifestyle etc. The same will be considered as follows:

Stress Management Strategy No.1: Avoid unnecessary stress

Not all stress can be avoided, and it is not healthy to avoid a situation that needs to be addressed. You may be surprised, however, by the number of stressors in your life that you can eliminate.

a) Learn how to say “no” – Know your limits and stick to them. Whether in your personal or employees life, refuse to accept added responsibilities when you are close to reaching them. Taking on more than you can handle is a surefire recipe for stress.

b) Avoid people who stress you out – If someone consistently causes stress in your life and you cannot turn the relationship around, limit the amount of time you spend with that person or end the relationship entirely.

c) Take control of your environment – If the evening news makes you anxious, turn the TV off. If traffic has got you tense, take a longer but less-traveled route. If going to the market is an unpleasant chore, do your grocery shopping online.

d) Avoid hot-button topics – If you get upset over religion or politics, cross them off your conversation list. If you repeatedly argue about the same subject with the
same people, stop bringing it up or excuse yourself when it is the topic of discussion.

e) **Pare down your to-do list** – Analyze your schedule, responsibilities, and daily tasks. If you have got too much on your plate, distinguish between the “should” and the “musts.” Drop tasks that are not truly necessary to the bottom of the list or eliminate them entirely.

**Stress Management Strategy No.2: Alter the situation**

If you cannot avoid a stressful situation, try to alter it. Figure out what you can do to change things so the problem does not present itself in the future. Often, this involves changing the way you communicate and operate in your daily life.

a) **Express your feelings instead of bottling them up.** If something or someone is bothering you, communicate your concerns in an open and respectful way. If you do not voice your feelings, resentment will build and the situation will likely remain the same.

b) **Be willing to compromise.** When you ask someone to change their behavior, be willing to do the same. If you both are willing to bend at least a little, you will have a good chance of finding a happy middle ground.

c) **Be more assertive.** Do not take a backseat in your own life. Deal with problems head on, doing your best to anticipate and prevent them. If you have an exam to study for and your chatty roommate just has home, say up front that you only have five minutes to talk.

d) **Manage your time better.** Poor time management can cause a lot of stress. When you are stretched too thin and running behind, it is hard to stay calm and focused. However, if you plan and make sure you do not overextend yourself, you can alter the amount of stress you are.

**Stress Management Strategy No.3: Adapt to the stressor**

If you cannot change the stressor, change yourself. You can adapt to stressful situations and regain your sense of control by changing your expectations and attitude.
a) **Reframe problems.** Try to view stressful situations from a more positive perspective. Rather than fuming about a traffic jam, look at it as an opportunity to pause and regroup, listen to your favorite radio station, or enjoy some alone time.

b) **Look at the big picture.** Take perspective of the stressful situation. Ask yourself how important it will be in the long run. Will it matter in a month? A year? Is it really worth getting upset over? If the answer is no, focus your time and energy elsewhere.

c) **Adjust your standards.** Perfectionism is a major source of avoidable stress. Stop setting yourself up for failure by demanding perfection. Set reasonable standards for yourself and others, and learn to be okay with “good enough.”

d) **Focus on the positive.** When stress is getting you down, take a moment to reflect on all the things you appreciate in your life, including your own positive qualities and gifts. This simple strategy can help you keep things in perspective.

**Adjusting Your Attitude**

How you think can have a profound effect on your emotional and physical well-being. Each time you think a negative thought about yourself, your body reacts as if it were in the throes of a tension-filled situation. If you see good things about yourself, you are more likely to feel good; the reverse is also true. Eliminate words such as "always," "never," "should," and "must." These are telltale marks of self-defeating thoughts.

**Stress Management Strategy No.4: Accept the things you cannot change**

Some sources of stress are unavoidable. You cannot prevent or change stressors such as the death of a loved one, a serious illness, or a national recession. In such cases, the best way to cope with stress is to accept things as they are. Acceptance may be difficult, but in the long run, it is easier than railing against a situation you cannot change.

a) **Do not try to control the uncontrollable.** Many things in life are beyond our control— particularly the behavior of other people. Rather than stressing out over them, focus on the things you can control such as the way you choose to react to problems.
b) **Look for the upside.** As the saying goes, “What does not kill us makes us stronger.” When facing major challenges, try to look at them as opportunities for personal growth. If your own poor choices contributed to a stressful situation, reflect on them and learn from your mistakes.

c) **Share your feelings.** Talk to a trusted friend or make an appointment with a therapist. Expressing what you are going through can be very cathartic, even if there is nothing you can do to alter the stressful situation.

d) **Learn to forgive.** Accept the fact that we live in an imperfect world and that people make mistakes. Let go of anger and resentments. Free yourself from negative energy by forgiving and moving on.

**Stress Management Strategy No.5: Make time for fun and relaxation**

Beyond a take-change approach and a positive attitude, you can reduce stress in your life by nurturing yourself. If you regularly make time for fun and relaxation, you will be in a better place to handle life’s stressors when they inevitably come.

**Healthy ways to relax and recharge**

- Go for a walk.
- Spend time in nature.
- Call a good friend.
- Light scented candles.
- Take a long bath.
- Sweat out tension with a good workout.
- Write in your journal.
- Play with a pet.
- Savor a warm cup of coffee or tea.
- Work in your garden.
- Get a massage.
- Curl up with a good book.
- Listen to music.
- Watch a comedy.
- Join gym

Do not get so caught up in the hustle and bustle of life that you forget to take care of your own needs. Nurturing yourself is a necessity, not a luxury.

a) **Set aside relaxation time.** Include rest and relaxation in your daily schedule. Do not allow other obligations to encroach. This is your time to take a break from all responsibilities and recharge your batteries.
b) Connect with others. Spend time with positive people who enhance your life. A strong support system will buffer you from the negative effects of stress.

c) Do something you enjoy every day. Make time for leisure activities that bring you joy, whether it be stargazing, playing the piano, or working on your bike.

d) Keep your sense of humor. This includes the ability to laugh at yourself. The act of laughing helps your body fight stress in a number of ways.

Stress Management Strategy No.6: Adopt a healthy lifestyle

You can increase your resistance to stress by strengthening your physical health.

a) Exercise regularly. Physical activity plays a key role in reducing and preventing the effects of stress. Make time for at least 30 minutes of exercise, three times per week. Nothing beats aerobic exercise for releasing pent-up stress and tension.

b) Eat a healthy diet. Well-nourished bodies are better prepared to cope with stress, so be mindful of what you eat. Start your day right with breakfast, and keep your energy up and your mind clear with balanced, nutritious meals throughout the day.

c) Reduce caffeine and sugar. The temporary "highs" caffeine and sugar provide, often end in with a crash in mood and energy. By reducing the amount of coffee, soft drinks, chocolate, and sugar snacks in your diet, you will feel more relaxed and you will sleep better.

d) Avoid alcohol, cigarettes, and drugs. Self-medicating with alcohol or drugs may provide an easy escape from stress, but the relief is only temporary. Do not avoid or mask the issue at hand; deal with problems head on and with a clear mind.

e) Get enough sleep. Adequate sleep fuels your mind, as well as your body. Feeling tired will increase your stress because it may cause you to think irrationally.

3.4.1.2.11 Stress Management Activities

Stress management is an essential part of our lives these days. It is necessary to find ways and means of dealing with stress. Some stress management activities that could help are:-

a) Regular exercise (this includes breathing exercises)
b) Eating and sleeping well
c) Music therapy
d) Yoga
e) Meditation
f) Going for a walk with a friend
g) Progressive muscle relaxation (tense and relax all the muscles in your body)
h) Sex - it not only relieves tension but de-stress you too.
i) Pamper yourself - take a break from your daily activities. Do something different and out of the ordinary.
j) Do something you really enjoy. Make the time to read a book, watch a play, paint or even spend an evening with your family. Distracting yourself always helps to relieve stress.

Stress can often cause your life to spin out of control. The best way to manage stress is to first identify the reason behind it. The next step is to keep it in perspective. Use the following stress management tips to handle stress:

a) Know yourself and your limits - It is ok to say no at times, far better than saying yes and being stressed later.
b) Reach out for help - Do not keep it all bottled up inside. Talk to a close friend.
c) Take charge of yourself - your emotions, thoughts, and schedule.
d) Keep a stress journal - it will be an outlet for stress as well as a record of what stresses you out.

We learn time management. Time management is the art of arranging one's schedule so as to work effectively and productively. This is necessary for everyone - whether you are a housewife, student, manager, or clerk. Planning is essential for good time management as is organizing one's day in order to get the maximum out of it.

The time management strategies are often focused on two areas: knowledge or information acquisition and skill development. For effective time
management, the employees should have adequate knowledge of job responsibilities, duties, and authorities.

The employee must be trained how to allocate time among his different duties at work. By maintaining the log of time spent on different duties, the employee can allocate/reallocate the time in proper and convenient manner.

Besides the management of time, the employee should also determine the priorities for his different job activities. It is often seen that in absence of schedules and priorities majority of the workers spent more than fifty percent of their time in non-productive activities. Completing the given task in time has no meaning sometimes if their priority has not been taken into consideration. Effective time management training should include instructions and exercises that encourage workers to schedule and prioritize duties of their jobs. Besides the priorities at work, employees should also determine the priorities among their roles on and off the job. The employees should also take into consideration their career goals and values in determining the priorities. Finally, time management interventions should also help them in identifying time robbers such as meetings, visitors, paperwork, trouble shooting, phone calls etc. The employees should also be trained to conserve time, to control time and to make time by adopting convenient methods and behavioral change.

3.4.1.2.12 Monitoring Stressors and Stress Symptoms

One of the primarily preventive strategies, as suggested by Mathney et.al(1994) is focusing on the symptoms of job stress. The employees can avoid stress to a possible extent, if they become aware of potential stressors of job life and the symptoms, which lead to stress reaction. One technique under this category of strategy is to maintaining a stress diary which is a personal record of the events that happen before a negative stress response *(Ivancevich and Matteson)(1980).

The employees would enter in the log a specific description of the events along with a description of the feelings and thoughts that resulted from the event. The individual would also note the time of day when he noticed these symptoms or feelings. Along with the symptoms, the focal employee would also enter in the
diary the events, which have caused these symptoms of stress. The employee must be advised to keep the log for an extended period. The practitioner should help the individual in analyzing the results of the stress diary. The analysis should identify the themes of patterns that point to specific kind of stress responses in relation to specific events, so that specific intervention should be planned in the light of pattern of relationship between stressors and specific responses to them. Based on the case of an employee specific the counselor has suggested interventions stress situations and symptoms in Table No. 3.7 are as follows.

**Table No. 3.7: Symptoms and Interventions**

<table>
<thead>
<tr>
<th>Stress Situation/symptoms</th>
<th>Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muscle Tension</td>
<td>Review progressive muscle relaxation exercise with employees.</td>
</tr>
<tr>
<td>Stress reactions</td>
<td>Examine the relationship between employees of the boss preceded by meeting and develop strategy to improve it.</td>
</tr>
<tr>
<td>Consistent pattern not completing work that was planned for a given day.</td>
<td>Discuss time management skills. See whether daily goals being set are realistic.</td>
</tr>
</tbody>
</table>

**3.4.1.1.2.13 Developing Personal Resource**

Another preventive strategy suggested by *Mathney et. al. (1986)* involves the development of certain behavioral skills, which prepare the employees to cope with stressful situations when they occur. The specific strategies, which are included in this category, are training in social skills and problem solving skills that help employees cope with social interactions, which might lead to stress. By developing their skills, the individual prevents the occurrence of stressful situations. Researchers have developed interventions for social skills training for enabling the employees to prevent the experience of stress arising from “social anxiety.” These skills help an individual in interacting more conveniently with each others.
*Jaremko (1983) developed a program for socially anxious individuals, which includes training, initiating, and maintaining conversations, making and refusing requests, making and receiving criticisms, giving and receiving compliments, and interpreting non-verbal uses in the behavior of others.

“Assertiveness training” is another important component of social skill training. The training helps the individuals in responding in a straightforward manner with regard to what they believe, feel, and wish. Another important subset of social skills to prevent the social stresses is “problem solving skills” *(Mathney et. al. 1986). These skills help the individual to respond with some action that will reduce the stressfulness of a situation.

The employees may be trained to develop the skills, which would help them to be more creating or pro-active in reaching solution to stressful situations. Effective communication and negotiation skills also help the employee in dealing with certain stressful social or interpersonal situations.

### 3.4.1.2.14 Making adjustment Between Work-family Roles

Among the combating stress management strategies, particularly for single parents and dual career couples is to make adjustments between job and family lives. It is a practical and easy intervention. Intervention should be made to help the employees to make good adjustment between the demands of job, marital and family roles. Organizations are only beginning to respond to the needs of changing workplace. It is role of human service practitioners to help individuals cope with stresses they encounter when their work and family lives conflict.

One possible intervention strategy is to offer guidance and training to individuals who attempt to balance the demand of work and home life. Effective communication skills will be helpful for dual career couples who cope with two partners’ careers. Similarly, negotiation and assertiveness training would prove beneficial for the parents who try to propose an alternative work schedule to accommodate childcare needs.

Time management skills might help a single parent in coping with demands of work and home. Interviewing several hundred people, *Dynnerman and Hayes (1991) have compiles a series of practical suggestions for planning...
work-home interface stressors, negotiating flexible work options and dealing with jobs after a creative work schedule or situation has been developed.

3.4.1.1.3 Physiological Intervention Strategies

Physiological strategies for prevention of stress have also been noted as effective interventions and their popularity is consistently increasing all over the world. It is an established fact that human body prepares itself to respond to stresses by changing certain bodily functions such as heart rate, blood flow, muscle tensions etc. These physiological changes can lead to the symptoms of stress if they are prolonged. Stress management practitioners have suggested a set of interventions, which help individuals in preventing the negative effects of stress by lowering physiological arousal, such as deep breathing, progressive muscle relaxation, physical exercise, biofeedback, autogenic training, yoga, and meditation.

3.4.1.1.3.1 Deep Breathing

A very simple but useful technique for lowering down the physiological arousal is deep breathing. The individual must be advised to breathe more deeply from the abdomen, instead of shallow (thoracic) breaths, which are associated with stress response. Physiological arousal is affected by this technique because of the close association between breathing centre and reticular activating system (RAS) in the brain. *Matteson and Ivancevich (1987) reported that the RAS controls neuron muscular functioning and thus deep breathing leads to relaxation in the neuromuscular system. Mason (1980) noted positive results of the invention of deep breathing.

3.4.1.1.3.2 Progressive Muscle Relaxation

It is an extension to the technique of deep breathing developed long back by *Jacobson (1938). In the technique of progressive muscle relaxation, the individual assumes a comfortable position and begins to breathe deeply. Then the individual relaxes groups of muscles one at a time, beginning with the feet muscles. Jacobson argues that through this technique the mind gets relaxed because the relaxed muscles are associated with a decrease in emotional tension. He recommended practicing this exercise twice a day for 15 to 20 minutes.
3.4.1.3.3 Aerobic Exercise

Physical exercise is another effective and popular means of preventing stress-effects by lowering arousal in recent years. Besides the health benefits, physical exercise has been found to result in psychological well being. Stress is said to be triggered by a “fight or flight” response (the alarm stage of the General Adaption Syndrome) which includes changes in heart rate, blood pressure, hormonal secretion, and muscle tension. *Matteson and Ivancevich (1987) explains that the purpose of the fight or flight response is to prepare the body for action.

In many stressful situations, action does not follow exposure to the stressor. Thus, exercise can act as a release for these physical processes. Research has shown that routine vigorous activity is an effective strategy for preventing the negative effects of stress regarding the preventive effect of exercise on stress response.

*Jette (1984) has concluded that three variables are important i.e. type, frequency and duration of exercise. The type of exercise that produces the most effects is aerobic exercise (jogging, cycling, talking with friends, and swimming). Aerobic exercise refers to repetitive movement of large muscle groups in which energy is derived from aerobic metabolism.

In terms of frequency, this exercise should be done normally 3-4 times a week. The duration of these exercise sessions should be about 30-40 minutes at 50-60 percent of maximal working capacity. Compliance is an important factor in physical exercise and its effects.

Strategies such as goal setting and use of distraction or dissociation during exercise may improve compliance.

*Martin and Dubbert (1987) have suggested that exercise program should
a) Be convenient
b) Use group exercise formats
c) Use a participant/supervisor
d) Emphasize individual responsibility for exercise
e) Enforce the exercise habit
f) Use generalization training
g) Use continued feedback and testing.

With regard to psychological effects of exercise, investigations have reported that both acute exercise and chronic exercise lead to improvement in mood, such as decrease anxiety and depression and increased feeling of vigor. (Boutcher and Landers 1989 and Roth and Holmes 1987). These exercises have been reported to prevent or resist the experience of stress.

The primary rationale for examining the effects of exercise and stress response stemmed from the fact that improved physical fitness reduces autonomic ally mediated cardiovascular responses to physical stress; therefore it is assumed that responses to psychological stress might likewise be reduced.

Research in human subjects suggests that acute exercise reduces stress and certain physical response to stress such as blood pressure and cardiovascular reactivity. In addition to its effect on physiological responses to stress, exercise has also been found to affect subjective mood states. Results of the investigations suggest that both acute and chronic exercise may reduce anxiety and depression. In another study, psychological tension was significantly reduced by moderate or intense exercises. Swimming has also been noted to reduce anger, tension, depression, and confusion and an increase in vigor.* (Berger and Owen 1983”).

**Biofeedback (Electromyography)**

In general, biofeedback system operates by detecting changes in the biological environment of the affected person by means of visual and auditory signals. The individual using this precise and immediate information engages in a trial and error strategy of testing in order to make change in signals in the desired direction. By biofeedback as a guide, the individual learns in relatively short order how to control the biological response system generating the biofeedback signals. Biofeedback essentially involves three stages.

The first stage is acquiring awareness of the maladaptive response. By means of biofeedback, the client learns that certain thoughts as well as bodily events influence the response in question. Next guided by the biofeedback signals,
the individual learns to control the response. Finally, the client learns to transfer the control into day-to-day life.

Biofeedback as a technique of stress management developed out of the work in the field of psychology and physiology. In psychology work with laboratory animals in operant conditioning studies led to the discovery that animals could be trained to control certain autonomic bodily functions. This observation was extended to human beings, where it was found that receiving immediate feedback of information on physiological factors could lead to individuals learning to control visceral parameters including brain waves, heart rate, muscle tension, body temperature, stomach acidity, and blood pressure.

Using this methodology biofeedback has been involved in treating disease and in reducing physiological symptoms associated with stress. Special equipment is used to alert the individual to physiological changes. To monitor these changes sensors are attached to the body. The most common of these sensors are electrical sensors used to detect myocardial activity, muscle tension and brainwave activity.

Two types of feedback have been developed; operant conditioning and augmented feedback. Operant conditioning feedback involves using physiological information as reinforced to bring about the desirable physiological changes. Augmented biofeedback is more commonly used as a technique for stress management, which involves providing the individual with continuous feedback about physiological functioning *(Brown 1984).

Biofeedback has been found to be effective in helping individuals in restoring their bodies to non-stressed states. In their study *Matteson and Ivancevich (1987) found that biofeedback training reduced chronic tension, headache and significantly decrease the interference of stress-related symptoms.

However, other studies have not found significant positive results of biofeedback training. It is time consuming and costly method. Better results could be obtained spending the money and effort on other conventional stress management intervention.
3.4.1.1.3.4 Autogenic Training and Stress Management

The German neurologist Schultz is credited with the development of Autogenic Training (AT) which he described as a self-hypnotic procedure. The term “autogenic” derived from the Greek words auto and genos, can aptly be translated as “self exercised or self-induction therapy. The rejected psychoanalysis is promising treatment for psychosomatic disturbances. He was of the opinion that “it is complete non-sense to shoot with psychoanalysis guns after symptom sparrow.” The development of AT as a novel technique appears to be based on two sources: Schultz’s own experience with clinical hypnosis and Vogt’s observation in brain research. This method has been described as “psychophysiological self control therapy “or” psycho physiologic” form of psychotherapy, which the patient carries out himself by using passive concentration upon certain combination of psycho physiologically, adapted stimuli. AT is a unique as an autonomic self-regulation therapy with emphasis on “self-control”. Schultz believed that the self-regularly capacities and ultimately the self-healing powers of body might be left alone to do its work.

The objective of AT is to permit self-regulation in either direction (i.e. deep relaxation or augmentation of a physiological activity) through “passive concentration” or “self-hypnosis.” In this method, the trainee concentrates on his sensations in a passive manner, without trying to bring about change. The trainee is instructed to concentrate on inner sensations rather than environmental stimuli. Here the trainee is instructed not to force for concentration but to allow sensation to happen. He must be simply an observer rather than a manipulator.

3.4.1.1.3.5 Autogenic Biofeedback Training

*Elmer Green and Alyee who confounded and developed the autogenic biofeedback treatment methods decided to pursue their interest in the development of human awareness and volition in order to develop ways of teaching people to become conscious of and to learn control of normally unconscious physiological and psychological processes.

Autogenic training, a system of psychosomatic self-regulation, permits the gradual acquisition of autonomic control. The biofeedback training refers to a
collection of techniques useful in accelerating psychosomatic self-regulation. Autogenic biofeedback training integrates these two self-regulatory techniques. It provides a methodology combining the best features of each. This integrative method has wide range applications in medicine psychology and education. Green developed a plan to study control of conscious processes through their physiological correlates in autonomic nervous function.

Autogenic biofeedback training has begun to emerge on a variety of topics, including deep relaxation, voluntary control of internal psychological and physiological states, self-regulation, and healing, creativity, migraine, headaches and anxiety and tension reduction.

3.4.1.3.6 Yoga and Meditation

Yoga and transcendental meditation are the systems of Indian philosophy and practice. These techniques have been in use in India since ancient times as the techniques of relief from stress and for improvement in physical and psychological health. In contemporary societies, the people all over the world have realized importance and need of yoga. It is being used as preventive as well as therapeutic technique. Yoga has now become a popular technique for stress management.

The word “Yoga” means union of human being and universal energy. It teaches the means by which one can learn to communicate with the “Absolute” or with universal (Patel 1993).

Human beings consist of both material and non-material entities. The material entity is physical body with all its organs and the non-material entities are soul and mind. Yoga attempts to bring within its perspective all the three sides of human life i.e. body, mind, and soul. The physical dimension of human life also includes the natural elements such as air, water, food and sunshine without which humans cannot sustain physical life and a healthy body is necessary to house the inner soul. Yoga by presenting us with various values, techniques and disciplines, teaches us ways of establishing harmony among various sides of life *(Patel 1993).*
Different types of yoga have been developed by Indian yogis, such as “Hatha Yoga” the physical path for the development of the body. ‘Gyan Yoga’ the intellectual path. ‘Bhakti Yoga’ devotional path, ‘Karma Yoga’ the path of practical actions for the unfolding of the mind and realization of the soul. The different paths for developing the mind are based on the fact that the mind has three different aspects i.e. knowing, feeling and willing.

In some people, intellect predominates in other emotion and in still others action. For intellectuals, the yoga of knowledge (Gyan) is prescribed; for emotional people, the devotional path “(Bhakti yoga) of love and faith, and for the people of action, the yoga based on daily action (karma) is prescribed. However, this does not mean that intellect, emotion, and action are exclusive of one another. Although one quality dominates in each individual and the individual can thus benefit from adopting the suitable path, it is important to allow crosscurrents from other systems to intermingle. In “Raja Yoga”, all the systems converge.

3.4.4.1.3.6.1 Hatha Yoga

The main components of Hatha Yoga are

a) Regulation of mind and the body through different breathing exercises;
b) Over 200 balanced physical postures to exercise every muscle in the body in order to prevent skeletal muscular deterioration, to tone up all organs in the body and insure their healthy functioning.
c) Exercise for awakening “Kundalini” reservoir of energy believed to be situated at the base of the spinal cord and making this energy towards higher power.

3.4.1.3.6.2 Gyan Yoga

This path leads to knowledge of one’s self. ‘Who am I?’ is the problem the person of knowledge must solve. According to yoga philosophy, ignorance is the cause of pain and misery in life. The lack of discrimination between temporary and permanent, real and unreal, truth and untruth, the self and non-self is at the roots of illness and diseases. Intellectual exercise involves learning to discriminate between each of these through the process of self-analysis. It is something like cognitive approach in psychological terminology.
The first step in Gyan yoga is asking “Am I my body?”. Here one should realize that “I” does mean “my physical body” because “I” exists when even some organs of my body or sensations are lost. So the “self” or “I” is not the body but it is the centre of consciousness. The second step involves asking, “Am I my mind?” Am I what my mind thinks or feels, desires, hates, likes, dislikes, fears, sympathizes, hostiles or other thought or feelings? According to Gyan Yoga, I does mean mind or feelings and emotions because some people (yogis) withdraw from all experiences of the outer world and from all emotions but the sense of self-existence still remains there. It is possible to disassociate one’s self from the body and the mind through yoga.

The faint recognition of dispassionate pure consciousness is the essence of self-knowledge. When the knowledge of self is realized, following six attainments are thought to be achieved. *(Siddhantalankar and Taraporevala 1969).

a) The agitation and passion of the mind subside, and the mind finds rest in peace and harmony.

b) With knowledge of the spiritual entity separate from the physical body, it becomes possible to control body-pain and pleasure, heat, cold and other.

c) There is willing acceptance of one’s worldly possessions as well as of the person’s one is associated with in life. One should accept willingly whatever one gets after making the necessary efforts.

d) One attains endurance of the hardship of life with a smiling face.

e) One develops an abiding faith and confidence in the design of the grand plan of the universe by the supreme power.

f) Steadfastness, firmness of purpose, constancy, and resolution comprise a settled condition of the mind.

3.4.1.3.6.3 Bhakti Yoga

The essence of the Bhakti yoga or devotional path is love and sacrifice. It is an emotion of heart. The relationship between the devotee and the object of devotion between the soul and the personal God is like the relationship between love and beloved. The devotional path involves concentration on the object of devotion with constancy and faith. “Concentration” means that one is required to
enter the cord of the object of devotion and love until one feels totally merged into it and feels one with it. One completely loses the sense of his separate identity. This theme has been described in Bhagavad Gita as “Mayyev Mana Aaditswa, Mayi Buddhi Niveshaya”, which means “Fix your mind on ME and establish your intellect in Me alone”. (Bhagawad Gita – XII:8). Constancy here means always day and night and every single moment. The third element of devotion is “faith”. It is not blind faith, but the faith that comes from factual and truthful experience. The devotee surrenders consciousness to the “Super Consciousness”, all thoughts, feelings and actions are surrendered to God.

3.4.1.3.6.4 Karma Yoga

The law of “Karma” is the spiritual counterpart of the physical law of the cause and effect. According to this principle, human beings are inextricably bound up in the wheel of cause and effect by their past and present actions. The time span covers not only this life but also past and future lives. Persons who are suffering through what they see as no fault of their own are likely to believe that it is injustice and may rebel against God. But according to law of karma there is no point accusing God or fate for apparent injustice. Goods and evils acquired through deeds by the soul throughout many incarnations are manifested as enduring characteristics from one incarnation to another, being modified by further karmas.

According to the philosophy of karma, what we are in the present life is determined by what we have acted in previous lives and what we do in present life will decide our future in this life as well as in lives to come. As the human soul passes through form one life to another, it learns to recognize the pain that comes from wrong actions and happiness that comes from right and good actions. We are not awarded for our good deeds, but we receive our rewards through by characteristics and qualities we acquire. People often do not believe that they remember the experience of past lives. But karma yoga philosophy insists that these experiences, though not remembered, are not lost to us. They become part of the material of which our minds are composed and are indelibly imprinted on the
fabric of our character. They exist in the form of our feelings, characteristics, inclinations, likes, dislikes, affinities, and repulsions.

According to karma yoga philosophy, we should strive to make our actions good, honest, and desirable without expecting fruits thereof. It is expectations, which bring sorrow or give frustration if not fulfilled. Attachment is the cause of every suffering and frustrations. The only way to get rid of sorrow is non-attachment.

The law of karma teaches to share and care, be compassionate and kind, and reach out to others for the ultimate good of our souls and destinies. By practicing karma yoga, employees can largely prevent, moderate, or cope with their stressors at cognitive as well as behavior level.

3.4.1.3.6.5 Raja yoga

Raja yoga is an integration of all systems of yoga and denoted as a kind of yoga. The exponent of this yoga was Patanjali. He extended teaching to fight against the afflictions of humankind over 2000 years ago. It has an “eightfold spiritual path” involving eight steps namely:
a) “Yama” or the five abstentions (i.e. abstentions from violence, lying, stealing, sexuality, and greed).
b) “Niyama” or five observances (i.e. purification, contentment, self-discipline, studiousness, and surrender to God).
c) “Aasanas” or balanced exercise postures
d) “Pranayam” or regulation of breath
e) “Pratyahara” or withdrawal of senses
f) “Dharana” or concentration
g) “Dhyana” or contemplation
h) “Samadhi” or the meditative state

The most important ingredient in the practice of this yoga is faith. The physical postures in the yoga involve learning to control, regulate, and become aware of one’s physical existence.

During the various exercise, breathing bears a certain relationship to the sequence of the body movements. One is required to give complete mental
attention to each movement, to the exclusion of everything else. Through practice, this awareness is heightened to such an extent that it falls in the field of consciousness. By regularly practicing concentration on body movements, the practitioner gradually strengthens his own personality and different body functions become more integrated with one another as well as with personality.

Regulation breathing enables one to reach the innermost consciousness. The stage of the withdrawal of the senses involves deep muscle relaxation of the body. The reason for observing this rule is to cut down on visceral impulses going to the brain. The next three stages—concentration, contemplation, and meditative state— together form the practice of meditation.

3.4.1.3.6.6 Meditation

Meditation has been part of most of Eastern and Western cultures and religions. It is probably the oldest method of yoga. Recently medical people have realized that it can be used without any religious connotation in the promotion of health.

Meditation involves taking a comfortable position sitting, lying down or standing. But sitting is the most useful and common posture. It then involves being in a quiet environment, regulation the breath, adopting a physically relaxed and mentally positive attitude, and dwelling single minded upon an object.

The object of the concentration in meditation does not have to be physical. It can be an idea or image, it can be mental repetition of a word or phrase (mantra); it can be observing one’s own thoughts, perception, or reaction; or it can be concentrating on some bodily-generated rhythm. In religious practice, the object of concentration if God. As the deeper state of concentration is developed, the process becomes more intimate and compelling. The mind that holds an idea becomes held by it. Again, this power of subconscious can be used to build character. It is actually a state of the greatest silence, an experience of bliss. Another way to describe, meditation is an experience, a state of being.

The practical advantages of meditation are that we can function more efficiently, feel more complete in ourselves, and realize more of our potentials. We feel closer to ourselves and are better able to relate to others. Our personality
structure is strengthened and becomes more integrated. We are able to think and express ourselves with more clarity. We are more effective in our works and clear in our goals.

Other physiological advantages include induction of oxygen consumption, respiratory rate, and cardiac output (indication metabolic rest); a marked decrease in blood lactate level (reduction in anxiety); increase in electrical resistance of the skin (indication autonomic rest) and increase in alpha brainwaves (indication mental rest)* (Wallace and Benson 1972).

3.4.1.3.6.7 Meditation in Action

In this approach, at frequent intervals during the day, if we observe our mind to see what it is doing, it becomes clear that mind is busy with dreaming, daydreaming, and fantasies of the future. Such useless activities waste time and energy and lower the quality of our work. By learning to concentrate on everyday tasks as if it that was the most important thing at that moment and by understanding that each task is a part of the total harmony with the universe, we become closer to reality. When a person is completely engrossed in whatever he or she is doing, he is meditating in the action.

3.4.1.3.6.8 Practical Instruction for Meditation

*Patel (1993) has suggested following instructions for the practice of meditation.

a) Meditate where the distraction of noise, movement, light and activity of other people are within tolerance level.

b) Ensure your physical and mental comfort. Do not practice at least for two hours after a meal. It is beneficial to practice twice a day, for about 15 to 20 minutes each time.

c) Adopt a poised posture. The eyes should be closed and the body should be relaxed.

d) Breathe through the nostrils and down into abdomen. Breathing should be regular, slow, and rhythmical.

e) Dwell single-mindedly on an object of meditation. This can be a physical object, a word or phrase repeated mentally or aloud.
f) Passive awareness is very important. You must develop a passive and relaxed attitude towards distraction. You will find that thoughts and images will flit in and out of your mind. Each time you become conscious that your mind has wandered away, just bring it back to the subject of your meditation. Do this as many times as is necessary. Always maintain relaxed and passive attitude. As you become more experienced, distracting thoughts and images will lessen. Accept that they are inevitable and maintain an attitude of indifference to them. Maintain is received if you keep thinking about meditation.

e) Practice regularly, with practice it becomes easier to still in mind.

Among the modern forms of meditation, “Transcendental Meditation” is most widely known and studied. It may be more accurately described as “transitional” because it retains certain cultic features such as “puja”. Among the clinically oriented meditation techniques “clinically standardized meditation” *(Carrington 1975) and the “Respiratory one method” *(Benson 1975) have been the most widely used to date. These techniques were devised with clinical objectives in mind and are strictly non-cultic. The “Clinically standardized meditation” is relatively permissive technique and may be subjectively experienced as almost effortless. In this method, the trainee selects a sound from a standard list of sounds and then repeats this sound mentally, without internally linking the sound to the breathing pattern or pacing it in any structured manner.

In respiratory one method, the trainee repeats the work “one” to himself mentally and at the same time intentionally linking this word with each exhalation. Thus, it is a relatively disciplined form of meditation with two objects the chosen word and the breath.

Buddhist “mindfulness” meditation is also a common non-concentrative method. It is more difficult method to learn. Success of the trained depends more on the individual expertise and personality of the trainer.

3.4.1.3.7 Relaxation

The state associated with Transcendental Meditation (TM) is achieved when physical and mental relaxation is at a peak. A meditation technique developed by Benson”(1975) is similar to TM. In this technique, the individual
assumes a comfortable position and begins deep breathing. The individual focuses passive attention on a single word, although not a sacred word, as is the “Mantra” in TM.

Relaxation is a form of meditation, a state of concentration. By using the mind to focus upon an object, images, or thoughts, one cancels out all distraction associated with everyday life and counterbalances the stress response. Relaxation response has four elements

a) A quiet environment- to turn off external distractions.
b) A comfortable position-sitting or kneeling with back straight, no tight clothing.
c) As object thought or image to dwell upon (repetition of a word or sound such as “one” focusing upon breathing or saying “I am relaxed”).
d) A passive attitude allowing an emptying of distracting thoughts.

With regular practice once or twice a day for 10-15 minutes, the following results are possible. During relaxation, you will experience.

a) A decrease in the rate of metabolism, a restful state with a drop in heart rate and respiratory rate.
b) A marked decrease in the body’s oxygen consumption.
c) A decrease in blood pressure.
d) A decrease in muscle tension.

After relaxation, you may notice carry over effects including

a) Lower response to stress-less anxiety.
b) Better coping abilities.
c) A new found acceptance of self, more tolerant of own weakness or limitations.
d) Improved learning ability, better presentation and recall.
e) A sense of calm, of being collected a quieter philosophical attitude.

The above-mentioned techniques, though difficult to learn have been found to be quite effective in preventive the psychosomatic problems (such as hypertension, blood pressure, coronary heart diseases, asthma etc.) and coping with the stresses of day-to-day life by increasing resistance and lower down the arousal. However, these techniques have not been frequently used as intervention in the management of occupational stress.
Though it is difficult to adopt these methods, it can be a great help in preventing and coping with the stresses of job life and adapting to the consequent strains. The practice of these exercised by the employees can lower down their physiological arousals and prepares their body to respond to stress by changing certain bodily functions such as heart rate, blood pressure, muscle tension which can produce stress symptoms if they are prolonged.

3.4.1.3.8 Psycho Education Preventive Program

By combing physiological, behavioral, and cognitive preventive interventions, *Kagan and Watson (1944)* developed the psycho educational preventive model for prevention or reduction of job stress. This model, instead of reducing environmental stressors, encompasses the human function. They proposed the following taxonomy of psycho educational interventions for preventing or reducing stress, which includes from controlling one’s physiological reaction, to skill to influence others, to self-awareness:

a) **Physiological Reactions:** Experience of stress can be prevented or reduced by improving ability to control one’s own physiological reactions to environmental events likely to cause stress. These physiological reactions include progressive muscle relaxation, training, meditation, nutrition and others.

b) **Skill for coping with people:** Stress reduction is also assumed to occur through increased confidence and skills to have an impact on and change other people rather than changing one self. The method to cater these abilities and skills include assertiveness, training, and preventive training to cope with stress caused by unexpected or threatening interpersonal events in the environment.

c) **Self and interpersonal awareness:** Stress can also be reduced through increased self-understanding and self-awareness of cognitive and affective reactions to interpersonal events. These skills may be developed through insight therapy, cognitive-affective therapy, stress management, and interpersonal process recall.

3.4.1.2 Stress Prevention at Organization Level

The situation, which cause or are likely to cause stress to the employees can also be prevented by adopting certain precautionary and corrective
interventions at organizational level. The executives of the organization, who are concerned with their own stress as well as of other employees of different levels, must identify the problem sources or causes of stress and nip them in bud by taking necessary precaution and by adopting corrective interventions to the feasible extent at organization level.

At initial organizational level, selection of suitable personnel and their proper training in the framework of the job requirement can largely help in preventing or mitigating the job stress likely to be caused by a misfit between employee and his job demands and from job difficulty. While selecting employees, their needs, values, and attitudes should also be assessed, besides the assessment of their skills and aptitudes. The manager in collaboration with of technical experts may also prevent the job factors and work environment, which could create stress. Proper job design and job enrichment can also prevent job stress or keep its level within desirable limits.

Proper training of new employees also can prevent the experience of stress in work setting. Training has been identified as an important component of interventions to deal with occupational stress. Several areas of training should be pursued with regard to stress management; helping individual’s cope, teaching managers about the importance of job design and inform workers about the job factors that increase the risk of psychological disorders.

Managers should also identify the potential sources of stress in work environment and make efforts to remove correct or control them to the maximum possible extent through effective corrective interventions. At this level, job roles can be clearly defined and allocated in order to prevent or minimize the stress likely to arise from role ambiguities and role conflicts. Stress or role overload can be dealt with by reducing role demands and job rotation.

Improvement in interpersonal relations at work afford the greatest difficult. However, interpersonal compatibility should be taken into consideration in assignments and promotions of employees in order to avoid socio psychological stress in work environment. Management may foresee the potential conflicts and pressures: and adapt necessary measures to avoid them. Supportive
supervision and interpersonal relations at work also can prevent the occurrence of
the situations of interpersonal stress.

Organizational role is a prominent and frequent cause of stress
experienced by most of the employees. Various types of inadequacies,
ambiguities, and conflicts in job role result severe stress to its occupants.

3.4.1.2.1 Socialization and Orientation of New Employees

When a new employee joins in organization, he is faced with the task of
becoming adjusted to new work environment. This period of employee’s
socialization has a great potential for stress.

*Mattson and Ivancevich (1987) noted three stages through which
individual must pass as they enter the organization: getting in, breaking in, and
setting in. In the first stage the employee faces new environment and demands. In
the stage of breaking in the individual learns about the organization including
relationship with co-workers, new job tasks, role clarification, bureaucratic
procedures etc. Finally, in setting in phase of socialization, employees come to
resolve two types of conflict the conflicting demand of work and others in the
environment and the conflicting demands of on the job and off the job lives.

During this period the new employees must completes three important task
building an organizational role identity, learning about new superiors and other
employees and deciphering the reword system and organizational norms.

Anticipatory, socialization, programme proposed by *Kramer (1974)
includes new employees. This program is based on the assumption that stress
results from the gap between the expectation the new employees have and the
reality of the jobs they encounter.

3.4.1.2.2 Improving Organizational Structure and Climate

Structure and climate of the organization largely influence job behavior of
its members as well as its overall effectiveness. A variety of job stress can be
easily prevented by improving organizational behavior.

*Rass and Altmaier (1994) have mentioned three intervention strategies
for dealing with stress arising from inadequate organization structure and climate
decentralization, participative decision making and climate survey.
3.4.1.2.3 Decentralization

The organization with high centralization of power or authority is likely to cause more stress to its members. Strategies for promoting decentralization within organizations have become increasingly popular in recent years.

*Schuler and Sethi (1984) have suggested changing communication patterns and networks within organizations and developing work groups as the effective techniques of decentralization.

In autonomous work group wherein the team had control of pace of their work, rest breaks and allocation of work assignments showed better task identity development and less emotional distress among the workers *(Wall and Clegg 1981).

3.4.1.2.4 Participative Decision Making

Another intervention strategy is participative decision making. It is also related to decentralization and involves creating systems and communication channels in the organization in such a manner that employers of all levels are involved in making important decisions. Being involved in the process of decision-making employees feel a greater sense of influences and control and, so experience lesser ambiguity and destress.

The effectiveness of the participative decision making intervention would depend upon two conditions.

i) Management should be committed to the philosophy of participative decision-making.

ii) The kind of decisions that are offered for employee’s participation.

Employees will feel that they have some say only if they are asked to offer salient input on issues that affect their daily works.

3.4.1.2.5 Climate Survey

It is the third organizational structure improvement method associated with stress management. This intervention is also known as attitude survey, opinion survey or employee reaction surveys. These surveys are designed to elicit employee’s reactions and preferences to help management in developing strategies that might improve organizational effectiveness and employee’s
satisfaction. Management identifies the inadequate and non-congenial aspects of organizational climate and makes possible effort to offer feedback.

3.4.1.2.6 Career Planning and Management

A number of stressors have been identified for the employees as they move beyond the period when they enter the workplace. These stressors are related to the mid-career development of employees.

*Ross and Altmaier (1994) have suggested evolving intervention strategies, which help in avoiding the stresses employees experience in course of their career development. Today a more advanced conceptualization of career development is needed because of the drastic changes taking place, such as structural changes within organization, demographic changes in the workforce, and changes in the nature of work with rapidly advancing technology.

*Hall (1986) has presented a useful mode in understanding the intervention in the stresses associated with career development. He explains career development as being comprised of two components: career planning and career management. Career management is the responsibility of the organization and includes employee’s selection, training, job rotation, performance appraisal, and promotion.

Career planning is the responsibility of the employees and involves the activities of self-assessment, career choice, choice of organization, preparation of career plan and monitoring career opportunities. The practitioners can help combating stress by focusing individual on those career activities within their control. Through seminar, testing, individual counseling, a practitioner can assist the employee for being cautious and active about their career and life planning to take more active role in these activities.

3.4.1.2.7 Career Management Programs

*Pestonjee and Muncherji (1991) have also discussed about the relationship between career paths and health of execution and suggested the ways to avoid stress and strains caused from career development. Crucial points in career development occur at key times during the individual’s life i.e. about the age of thirty, during forties, and again in late fifties. Each career stage is
characterized by different issues and problems. Career management programs to help employees cope with the problems arising out of career development should be run by the HRD department of the organization. The programmers vary greatly in scope and content, but most of them involve effort to

a) Help employees assess their own career strengths.

b) Set priorities and specific career goals.

c) Provide information on different career paths and alternatives within the organization.

d) Offer employees yearly reviews of their progress towards these goals by managers.

In addition, special workshops and technical training opportunities are often parts of such programs. *Pestonjee and Muncherji (1991) have also suggested intervention. Strategies for those employees also who are on the verge of their retirement? This involves a gradual reorientation away from their careers and work towards leisure time activities. It requires careful planning to meet the special challenges faced by retired workers such as loss of status, reduced earning, reduced feeling of accomplishment and a loss of social relations. The employee should try to take a practical view of these major changes and try to adjust to them. The organization should try to re-employ a few capable individuals. Special training programs on post superannuation phase of the career are also vital.

**3.4.1.2.8 Stress Audit**

Restoring (1992) has suggested ‘Stress Audit’ as a proactive intervention which an organization can adopt to manage stress of managerial personnel. When an organization decides to have a scientific look at the mental-cum-physical health status of its executives, it is called a stress audit. A stress audit refers to the attempt an organization to study, explore, and control the various types of stress which the executives experience. In stress audit, a systematic study is made of the dominant stressors prevalent in the organization, its divisions, and departments. A stress audit includes collection of data pertaining to organizational climate, role stress, job satisfaction, job analysis, and others.