Chapter 2
Historic Review

The novelist Arnold Bennett in 'Mental Efficiency' wrote, "The average man flourishes in an atmosphere of peaceful routine. Man destined for success flourishes and finds their ease in an atmosphere of collision and disturbance."

The relation between mind and body has fascinated philosophers and scientists throughout history. In Greece an ancient Morphic tradition regarded the body as corrupt, imprisoning man's pure and immortal soul. Hebraic thought, like earlier primitive attitudes, was monastic, believing that a person's mental state and physical activities were part of an individual's whole.

Today we are developing different perspectives about mind-body issues. Existing research is encouraging us to take another look at the mind-body question and particularly at how psychosocial
stress can effect pathological changes in body function. Medicine is generally coming to regard thoughts, emotions, and environmental inputs as important factors that affect the health process.

Through this chapter we take a look at what stress means to different researchers, the different types of stressors namely: physiological, psychological, cognitive, and psychosocial. We will also look at the theories of stress, and a culturally specific model of stress. The second half of the chapter covers the theoretical antecedents of Coping Concept and assessment of coping resources.

**AI THE CONCEPT OF STRESS**

Pfluzer (1877) crystallized the relationship between active adaptation and the steady state when he noted that, “the cause of every need of living being is also the cause of the satisfaction of the need.” Fredering (1885) also expressed a similar view.
One of the earliest contributions to stress research was Cannon's (1932) description of 'fright-or-flight response'. Cannon proposed that when the organism perceives a threat, the body is rapidly aroused and motivated via the sympathetic nervous system and the endocrine system. This concerted physiological response mobilizes the organism to attack the threat or to flee. Hence it is called the flight-or-fight response.

Cannon (1939) suggested the term 'homeostasis' from the Greek word homoios meaning similar, and stasis, meaning position. Homeostasis may be translated to 'staying power'. He emphasized on the stimulation of the sympathetic nervous system, and the resulting changes that occur during emergencies.

In 1940's, Wolf and Wolf (1947) through their studies with both animals and humans concluded that people develop distinct physiological responses that will manifest themselves across a
wide variety of stressful events. Repeated exposure to a wide range of stressful could eventually lead to the development of disorders.

It was in 1942 that the Australian born Dr. Selye, Director of the Institute of experimental medicine and general surgery at the University of Montreal, introduced the word 'stress', for the first time. According to him, stress is a non-specific response of the body to any demands being made on it. He believed that when you are under stress, you respond with a particular set of signs and symptoms that are manifested by the most vulnerable part(s) of the body.

It is difficult to ascertain just when the word 'stress' assumed importance in the world of human factors. Different investigators have assigned different meanings to the term stress. The term stress is derived from Latin meaning hardship, straits, adversity, or affliction. A seminal influence
on the whole field of stress research comes from Selyes' research (1956, 1960, 1974).

A variety of dissimilar situations causing emotional arousal, fatigue, pain, fear, concentration, and humiliation, are capable of producing stress. Selye considered different facts of human biology. Research shows that, while people face different problems in some respect their body responds in one stereotypical pattern. Bio-chemical changes enable us to cope with any type of increased demand on vital activity.

Furthermore Selye believed that stress could be of two types- eustress, and distress. Eustress is stress of achievement, triumph, and exhilaration. If you do something as an obligation to yourself then it is eustress. Distress is stress of disappointment, inadequacy, defeat, and helplessness.

Selye believed that stress is an abstraction. You cannot see stress, what you can see is the stress'
effect. There are medical indicators of stress such as the blood levels of adrenaline, corticosteroid, ACHT, brain-wave activity, blood pressure, etc. that we can see. Selye believed our goal should not be to avoid stress, but to express ourselves fully. But first we must first find our optimum stress level.

Selye’s model has been criticized on several grounds. First, it assigns very little role to psychological factors. Researchers now believe that psychological appraisal of events is important in the determination of stress (Lazaraus and Folkman, 1948a). A second criticism concerns the assumption that response to stress is uniform (Hozfoll, 1989). There is evidence that particular stress produces distinct endocrinological response (Apply and Thumbull, 1986; Mason, 1974, 1975). Moreover how people respond to stress is substantially influenced by their personality, perception, and biological constitution (Lazerees and Folkman, 1984b; Meiclonbaum, 1977; Moos,
1984). A third criticism concerns the fact that Selye assumed that stress is an outcome, as such that stress was evident only when the general adaptive syndrome was in effect. In this respect, the model confounds the experience of stress with its outcome (Hobfoll, 1989). Despite these limitations, Selye's model remains a corner stone in the field of stress.

Cannon (1932), Bernard (1945), and Selye (1952) emphasized on systematic equilibrium and adjustment mechanism. They also acknowledged personality factors as developments set against certain social contexts, such as family, peer group, and the world of work. These concepts are a part of a larger concept of customs and culture.

Following Selye (1956), sophisticated models of stress response at the physiological and biochemical levels have been developed. Non-physiological approaches have looked primarily at the interactions between vulnerability to stress and
environmental stressors, taking cognizance of the development and capacity of individual tailored coping behavior. Research required distinction between stress as an effect and stress as an agent.

Over the years, we have seen a progression in our understanding of stress and the non-specific response of the body to demands made on it. There was the original emphasis on bodily responses that occurred regardless of the nature of the stress. In time there was a consideration of psychological factors that played a role in the perception of the stress. The frequency and nature of the report of stress responses soon were associated with social factors, which in turn have their antecedents in culture.

Tinburg (1937) shared the Noble Prize for Physiology or Medicine in recognition for his work on etiology and stress diseases. His work appraised autism in the context of psychological stress and psychosomatic disease. Tinburg expressed the
belief that inadequacy of adjustment will become the most disruptive influence in our society.

According to French, Rogers, and Cobb (1974), stress is a misfit between person's skills, ability, and demand, and a misfit of a person's needs supplied by environment. According to Mc'grath (1976), stress involves an interaction of a person and environment, and something happening out there which presents the person with a demand, a constraint, or an opportunity for behavior.

Pre-historic man's response to prolonged and strenuous exertion passes through three stages. First the task was experienced as hardship, he then grew used to the idea, and finally he could stand it no longer.

The French physiologist Bernard (1979) pointed out that the internal environment of the organism must remain fairly constant. Despite changes in external environment, what distinguishes life is
adaptability to change not flexibility. This led to the study of adaptive changes when then steady state is maintained.

Cooc (1981) has defined stress as a perceptual phenomenon arising from a comparison between the demands on a person and his ability to cope. An imbalance in this mechanism gives rise to the experience of stress and stress response.

**B1 psychological appraisal and the experience of stress**

As human population progressed, the importance of psychological factors became evident. Lazarus is a chief proponent of psychological view of stress (Lazarus, 1968: Lazarus and Folkman, 1984a). He maintains that when individuals confront a new changing environment, they engage in a process of primary appraisal to determine the meaning of the event. Events may be perceived as positive, negative or neutral in their consequences. Negative
or potentially negative events are further appraised for their possible harm, threat or challenge.

Once primary appraisals of potentially stressful events have occurred, secondary appraisal is initiated. Secondary appraisal is the assessment of one’s coping abilities and resources and whether or not they will be sufficient to meet the harm, threat and challenge of the event. Ultimately, the subjective experience of stress is the balance between primary and secondary appraisal. When harm and threat are high and coping ability is low, substantial stress is felt, when coping ability is high, stress is minimal.

**C1 Sources of Stress**

People can experience either external or internal stressors.

- External stressors include adverse physical conditions (such as pain or hot or cold temperatures) or stressful psychological
environments (such as poor working conditions or abusive relationships).

- Internal stressors can also be physical (infections, inflammation) or psychological. An example of an internal psychological stressor is intense worry about a harmful event that may or may not occur.

**Internal Stress**

The sources of internal stress are less tangible and specific than those of external stress. In many cases the individual is unaware of what is bothering or why he feels anxious and insecure.

**Physical and Mental Limitations**

Every individual is subjected to situations where he is predestined to fail because of lack of strength, intelligence, ability or talent. The extent to which these failures become stress situations is determined largely by the value the person places on success and accomplishment in a particular endeavor.
**Frustrations and Conflicts**

The most stressful situations facing man are the frustrations of personal needs. Frustration often comes not from a single obstacle but from a conflict of two more or less equally valued needs or goals, in which choosing one means frustration of the other.

When alternatives are not perceived as having equal intensity no conflict exists. The individual follows the choice that he anticipates will bring him the greater reward or the least punishment.

Conflict is defined as "a state of disharmony between incompatible or antithetical persons, ideas, or interests." Psychologically, conflict is a mental struggle, sometimes unconscious, resulting when different representations of the world are held in opposition or exclusivity. Conflicts can occur either between parts of ourselves internally
(inner conflict) or externally with others (interpersonal conflict).

According to Freud "Conflict is produced by frustration...in order to become pathogenic, external frustration must be supplemented by internal frustration...external frustration removes one possibility of satisfaction, internal frustration tries to exclude another possibility, and it is this second possibility which becomes the debate ground of the conflict."

**Conflicts and Unconscious Processes**

Conflicts could be outside the field of awareness, in that of unconscious psychological process. Unconscious conflicts may involve contradictory or ambivalent attitudes. Conscious and unconscious conflicts are frequently present in the same individual. Unconscious conflicts are believed to be the result of early childhood experiences.
Historically there were several theoretical attempts to describe the human code of survival. Some of these attempts tried to present an exclusive explanation, whilst others tried to highlight one aspect in relation to previous theories. One can deduce from these attempts six fundamental elements in explaining human survival. Freud (1933) stressed the affective world, both inner (i.e. unconscious) and overt, (projection and transference). Freud stated that early emotional experiences, conflicts and fixations determine the way a person meets the world. Often this unconscious part overrides the transactions of the real world. Jung, who was originally a student of Freud's emphasised the symbolic and archetypal element, imagination, "the culture heritage" and the fantastic inner and outer world. Jung also mentioned intuition as one of his types. Other psychological theories have dismissed the whole idea of psyche and emotion and have attempted to describe the human behaviour in terms of stimulus and response.
When the source of stress is some external agent, the individual is more likely to be aware of the demands made upon him and more able to appraise them realistically. The Biopsychosocial Model of stress explains stress as environmental events that precede the recognition of stress and elicit a stress response. Stress reaction is elicited by a wide variety of psychosocial stimuli that are either physiologically or emotionally threatening or disrupt the body's homeostasis (Cannon, 1932).

We are usually aware of stressors when we feel conflicted, frustrated, or pressured. Most of the common stressors fall within four broad categories: personal, social/familial, work, and the environment. These stressful events have been linked to a variety of psychological physical complaints. Stressors also differ in their duration. Acute stressors are stressors of relatively short duration and are generally not considered to be a
health risk because they are limited by time. Chronic stressors are of relatively longer duration and can pose a serious health risk due to their prolonged activation of the body's stress response.

**Social Factors**

Social demands and pressures are often a source of stress. Social interaction is a cause of social stress. The stress caused by other people may be done consciously or unconsciously. Frustration, limitation, corrections, demands, aggression etc are other types of interpersonal stress.

Traditionally, stress research has been oriented toward studies involving the body's reaction to stress and the cognitive processes that influence the perception of stress. However, social perspectives of the stress response have noted that different people experiencing similar life conditions are not necessarily affected in the same manner (Pearlin, 1982). Research into the societal and cultural influences of stress may make it
necessary to re-examine how stress is defined and studied.

The average person meets stress in his dealings with other people many times a day. Social institutions may also present stress and frustration to the individual. The family, school, religious institutions etc. exert considerable pressure on the members for confirming to rules, regulations and patterns of behavior. When change is too rapid, strenuous demands are made on the organism for adjustment and consequently stress develops.

**Cultural Factors**

Culture has been defined as methods of thinking and of handling problems and social situations that are brought forward from one generation to another. It is difficult for most people to weather the demand and frustrations imposed on them by the cultural group to which they belong.
Different cultures produce different kinds of personality structure and types of psychopathology. Studies indicate that different cultures present various degrees and kinds of mental and emotional stress as well as differential patterns of reaction to stress.

The literature on the psychology of children in particularly difficult circumstances has described diverse and often contradictory reactions to trauma, ranging from extreme and enduring psychopathology to improved mental health. This is largely because culture influences children's responses to trauma. The child's inner resources and the social context interact with each other (Kostelny & Garbarino, 1994; ICCB, 1995). The question of why and how cultural factors impact a child's response to extreme trauma requires sustained investigation; research tools and paradigmatic choices influence results.
Economic Factors

Money plays an important role in every individual's life and lack of financial resources can be a real source of stress. Money decides what parents can provide their children with. Many families experience economic stress such as job loss and salary cuts. Such stress often has negative effects on children's developmental outcomes. Too often, people are judged by their material possessions rather than by their intellectual endeavors, their contributions to society or the sort of people they are. Socio-economic status is highly esteemed to most people, and the struggle to achieve or maintain it creates a strain on their emotional equilibrium.

Physical Factors

Many kinds of physical barriers prevent people from achieving their wishes and desires or from satisfying their needs. Extensive exposure to loud noises, unpleasant odor, disagreeable colors may also induce stress. Accidents, injuries and illnesses
are other physical stress situations. These may need special adjustment, and impose limitations on functioning.

<table>
<thead>
<tr>
<th>Internal Conflicts</th>
<th>External Conflicts</th>
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<tr>
<td>Love–Hate</td>
<td>Family difficulties</td>
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<td>Success–Failure</td>
<td>Marital problems</td>
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<td>Independence–Dependence</td>
<td>Racial discrimination</td>
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<td>Social satisfaction–differences</td>
<td>Religious</td>
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<td>Sexual inhibition</td>
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<tr>
<td>Facing Reality–Avoiding Reality</td>
<td>Vocational difficulties</td>
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<tr>
<td>Personal Limitations–Levels of aspiration</td>
<td>Education difficulties</td>
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<tr>
<td>Needs of self–Needs of others</td>
<td>Financial problems</td>
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Absence of external physical stimuli may often be sources of stress. Human organism is so constituted that it needs external stimuli in order to ensure its equilibrium.

**Stress Tolerance**

Each individual’s unique pattern of perceiving and dealing with stress are dependent upon the combination of his biological make-up, personality characteristics, previous experiences and interrelated variables. There is a general ‘adaptable energy’ available to the individual for meeting all stress situation. Individuals vary in the total amount of stress that they can withstand and in their vulnerability to different kinds of stress. Every individual however psychologically sound and physically fit, when exposed to severe stress can suffer and eventually reach a breaking point (Louis Thorpe, Barney Katz, 1961).

Persons who suffer from illness, disability or physical defects are generally less able to cope with
stress than those who are physically sound and healthy. Many of the negative effects of stress handicaps result from how the individual and others react to these defects.

**D) TYPES OF STRESS**

*Physiological Stress*

Amongst the physiological stressors are body injury, pain, fever, fatigue, extreme temperature, noise, loss of sleep etc. Biological aspects of affect and mood states, and emotionality may also be stressful (Vernon Hamilton, 1981).

Some of the common physical reactions that occur during stress are increases in breathing rate, pulse rate and hormonal output, as well as stomach acid secretions. In cases of emergency, the body releases adrenaline and cholesterol and blood sugar levels rise.

In normal situations after the period of stress has ended the body returns to a balanced state. During
prolonged periods of stress, the body’s protective mechanisms do not work well. This results in ulcers, aches, blood pressure etc. (Ruthan, Brodstey, 1989)

**Psychological Aspects**

In the 1950s and 1960s, researchers found that mice and rats subjected to stressful stimuli were more likely to develop viral infections and tumors than nonstressed animals (Miller, 1998). Today, that once-pioneering research in psychoneuroimmunology (PNI) has burgeoned into sophisticated clinical studies that look at, for example, how caregiving can affect the immune system, how stress may delay wound healing and how pretreatment with an antidepressant prevents cytokine-induced depression in therapy for cancer.

**Psycho-Social Stress**

The role of extrinsic psychosocial stimuli is not clear. The 27th World Health Assembly Technical Discussions of May 16, 1974 called attention to “three agreed bases” from which to consider the role of psychosocial factors.
(1) The importance of human environment, including the psychosocial, socio-economic factors, for man’s well being.

(2) The increasing awareness to psychosocial factors can cause physical or mental ill health.


**Cognitive Stress**

Cognitive responses to stress include outcome or the appraisal process such as specific beliefs about the harm or threat of an event and about its cause or controllability. Cognitive responses also include involuntary stress responses such as distractibility and inability to concentrate, performance disruptions on cognitive tasks (Cohen, 1989; Zajone, 1965) and intrusive, repetitive or morbid thoughts (Horowitz, 1975). Cognitive responses are also involved in the inhibition of coping activities.
One important issue which contemporary cognitive research addressed is behavior under stress and in emergencies or other abnormal situations. Interest in this problem is not new; it has been expressed throughout the history of psychology as an independent discipline and particularly by governmental agencies and the military, which are especially concerned about performance of people in extraordinary conditions (Dearnaley & Warr, 1979).
Figure 1: Experience of Stress

Potential Stressor
(External event)

Primary Appraisal
Is the event positive, neutral or negative in its implications? If negative, to what extent is it presently harmful. Threatening for the future and potentially challenging

Secondary Appraisal
Are coping abilities and resources sufficient to overcome harm, threat or challenge possesses by the event.

Stress
Physiological, cognitive, emotional and behavioral responses
Several theories have been offered to explain why events perceived as stressful have physiological, cognitive, emotional and behavioral effects. Theories that focus on the specific relationship between external demands (stressors) and bodily processes (stress) can be grouped into two different categories:

1. Approaches to 'systemic stress' based in physiology and psychobiology (e.g. Selye 1976)


Selye's work has been reported earlier in this chapter. Although Selye's work influenced a whole generation of stress researchers, marked
weaknesses in his theory soon became obvious. Mason (1971, 1975b) pointed out that the stressors observed as effective by Selye carried a common emotional meaning: they were novel, strange, and unfamiliar to the animal. Thus, the animal's state could be described in terms of helplessness, uncertainty, and lack of control.

Mason (1975b) demonstrated that in experiments where uncertainty had been eliminated no GAS was observed. This lead to a more profound argument: unlike the physiological stress investigated by Selye, the stress experienced by humans is almost always the result of a cognitive mediation (cf. Arnold 1960, Janis 1958, Lazarus 1966, 1974). Selye, however, fails to specify those mechanisms that may explain the cognitive transformation of 'objective' noxious events into the subjective experience of being distressed. In addition he did not take into account coping mechanisms as

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important mediators of the stress–outcome relationship. Both topics are central to psychological stress theories.

**Lazarus Theory**

Since its first presentation as a comprehensive theory (Lazarus 1966), the Lazarus stress theory has undergone several essential revisions (cf. Lazarus 1991, Lazarus and Folkman 1984, Lazarus and Launier 1978). In the latest revision (Lazarus 1991), stress is regarded as a relational concept, i.e., stress is not defined as a specific kind of external stimulation nor a specific pattern of physiological, behavioral, or subjective reactions. Instead, stress is viewed as a relationship ('transaction') between individuals and their environment. Psychological stress refers to a relationship with the environment that the person appraises as significant for his or her well being and in which the demands tax or exceed available

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coping resources' (Lazarus and Folkman 1986). This definition points to two processes as central mediators within the person-environment transaction: cognitive appraisal and coping. The concept of appraisal, introduced into emotion research by Arnold (1960) and elaborated with respect to stress processes by Lazarus (Lazarus 1966 and Launier 1978), is a key factor for understanding stress-relevant transactions. This concept is based on the idea that emotional processes (including stress) are dependent on actual expectancies that persons manifest with regard to the significance and outcome of a specific encounter. This concept is necessary to explain individual differences in quality, intensity, and duration of an elicited emotion in environments that are objectively equal for different individuals.
Theories of Cognitive Costs

One set of explanations say that stress taxes perceptual and cognitive resources by drawing the attention and overtaxing cognitive resources for other tasks. This approach is called ‘Cognitive Costs Hypothesis’, (Glass and Singer, 1972). This theory proposes that any stressful event requires an individual to expand cognitive resources in order to cope. One must understand what the stressful event is, how bad it is going to be, whether it will be ongoing and the like as these efforts draw resources away from other aspects of life. Thus, there is little time and energy for other tasks or dealing with potential problems, leading to arousal, decrease in performance and other symptoms of stress.

Cohen (1978) argued that attention is overloaded during periods of stress because individual must continually monitor the environment for
threatening stimuli. Attention narrows and fatigue results, reducing the reserve of attention for other tasks.

Supporting the cognitive costs analysis is the fact that unpredictable or uncontrollable events are more stressful than predictable or controlled ones. Less cognitive work is required when a stressor is predictable or controllable than when it is not, because when a predictable stressor is present a person does not have to be constantly vigilant to the possibility of threat.

**Arousal and Stress**

Another viewpoint maintains that the effect of stress follows from physiological arousal. High levels of arousal are known to narrow and focus attention, on simple tasks, moderate arousal can improve performance because it concentrates attention on demand tasks, arousal can interfere
with performance because important cues may escape attention. Thus, as arousal increases with stress, task performance should improve or decline depending on the complexity of the task.

The arousal interpretation may explain some of the cognitive causes of stress and its after effects on performance. It also points to the physiological process through which stresses may erode health. However, it is hard to see why arousal per se would necessarily produce the psychological distress that can be associated with stress. Thus the arousal position contributes to the biopsychological understanding of stress and illness; but it does not explain the stress experienced in its entirety.

*Theory of Emotional Functioning*

Another approach to understanding the effect of stress gives emotional responses central status.
Stress can produce frustration, which is known to cause annoyance and irritation. These mood changes may lead to reduced interest in and performance on subsequent tasks. Irritation can also produce aggression, which may explain why people under stress help others less, and are less likely to engage in other positive social behaviors (Dollard and Mitter, 1950; Lohen, 1980).

However, the explanation based on emotional functioning may apply only to certain kinds of stress. First, not all stress produces a negative mood, yet reduced motivational performance may still be observed. Second, stress does not always produce annoyance. It can also produce fear, depression, and other moods that need not lower motivation and reduce performance. Thus, as in the case of the explanation based on physiological arousal, this is only a partial explanation of the effects of stress.
Helplessness and Stress

Another theory of the effects of stress maintains that stress produces feelings of helplessness. The definition of stress emphasizes that stress results when demands of the environment exceed the individual's resources. The fact that uncontrollable events produce more stress than controllable ones clearly implicates control or loss of it in the experience of stress.

Seligman's Theory of Learned Helplessness

Martin Seligman (1975) in his theory of learned helplessness explains everyone has had the experience of trying to bring about some vent and not succeeding. The central part of learned helplessness theory is that, people can learn to be helpless by experiencing repeated instances of lack of control. Seligman and his colleagues (Maier and Seligman, 1976) maintain that learned helplessness creates three deficits.
1. Motivational- the helpless person makes no effort to take the steps necessary to change the outcome.

2. Cognitive- helpless people fail to learn new responses that could help them avoid the aversive outcome.

3. Emotional- learned helplessness can produce mild or severe depression.

Cause and attributions are important determinants of how chronic and pervasive feelings of helplessness will be (Abramson, Garber, and Seligman, 1980). Three attributional dimensions are important in producing helplessness.

1. Internality – externality. One can attribute helplessness externally or internally.

2. Stability- Stable attributions will produce more helplessness than unstable ones.
3. Gullibility- the extent to which the helplessness is confined to one's fear of life or expands to many spheres of life.

The attributional model is useful in understanding the beneficial effects of control-enhancing interventions in times of stress. Stress effects are less pronounced when individuals are given some response that enable to control or believe they can control the stressor (Glass and Singer, 1972; Thomson, 1981). The helplessness argument would maintain that when a person is encouraged to feel that he has control over a stressful event, he would change his attributions for the cause of stress. His belief that he can bring about desired outcome is restored, therefore, the cognitive, motivational and behavioral deficits associated with helplessness.
Learning-behavioral theories

The old conception of classical conditioning was that an association was learned when a CS and an UCS were paired together several times. That is still the essence of classical conditioning. Thirty years ago it was assumed the mind had nothing to do with this conditioning process. Today, experts say the CS arouses expectancies about the UCS, when we gain experience with the UCS, we evaluate and develop different reactions to the UCS which influences the final conditioned response (CR). Clearly, a lot of mental events influence the CS-UCS connection.
**Figure 2- Conditioning-Cognitive Sequence Davey (1992)**

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<th>4</th>
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<tr>
<td>Conditioned Stimulus (CS)</td>
<td>Outcome Expectations</td>
<td>Cognitive conception of the Unconditioned Stimulus (UCS)</td>
<td>Evaluation of the UCS Response (CR)</td>
<td>Conditioned Response (CR)</td>
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</table>
F) Theories of Stress in Adolescence

Adolescence is a fruitful stage of life during which stress can be examined. During adolescence is a clear change in biological, cognitive, social, and affectional functioning.

Although no theory has specifically addressed stress during adolescence, some theories have implications for understanding stress at that stage. Hall (1904), Bols (1962), Fred (1958) suggested that adolescence must pass through a near psychotic state because of the disruption in biological status. There is little imperial incentive to suggest this perspective. Studies have also shown that not all adolescents have passed through this tumultuous phase (Dower and Aadelson, 1966; Grenker, Orienker, and Timberland, 1962; Offer and Offer, 1975)
Another approach to understand stress during Adolescence is to study stressful life events. Coleman's (1978) focal theory points that adolescents become distressed when the usual developmental changes of adolescence takes place concurrently rather than sequentially. Simmons, Blyth, Van, Cleave, and Bush (1979) found changing school at the seventh grade, beginning dating, becoming pubertal, and being a girl all contribute to increased difficulties.

**G.1 Indian Perspective**

Ramchandra Rao (1983 a) has highlighted the ancient Indian contribution as an alternative way of thinking about stress so that a comprehensive conceptual model of stress culturally specific to India can be developed, confining himself to the indigenous system known as “Samkhya “, “Yoga and Ayurveda”, He highlights two Indian concepts namely, Klesa and Dukha, which correspond to
concept of stress in common use. The concept of Klesa, as crystallized in the yoga framework refers to the stressor aspect and the concept of Dukha in the Samkhya, to the phenomena of stress itself. The Samkhya system views Dukha to the stressor the individual experiences in the course of his interaction with world around him. It describes the individual state involving the experience of emotions and is characterized by an urge to escape or avoid. Ramachandra Rao concludes that the broad-based conceptual model of stress provided by the Yoga-sutra relies on the cognitive-appraisal of stress, the object and the threat. The cognitive-appraisal constitutes the functional framework for the conceptual model of stress, not only in the Samkhya-Yoga system, but also in Vedanta and Buddhism.

Ramachandra Rao has outlined an elaborate ideology of stress based on Ayurveda, the Indian
system of medicine. The Gita also provides an excellent illustration of stress and how it is to be handled (Ramachandra Rao, 1983 b) . The main importance of Gita is to redefine the major aspect of stress in life situations. It brings out the importance of the individuals' perception of himself in his role status, and the objective environment, including the task as assigned to or as accepted by him.

It has been demonstrated that a conceptual model of stress concerns itself much more with cognitive processes that the Western models of stress.

To summarize, stress is the process of appraising event (as harmful, threatening or challenging) of assessing potential responses and of responding to those events. Responses may include physiology, cognitive, emotional, behavioral changes. Events are stressful to the extent that they are perceived
as stressful. Stress responses may create the possibility of a variety of stress, which can be measured in an effort to assess directly the degree of stress, a person experiences.

No one theory of stress can account for the negative consequences of stress. Each may explain part of the stress response or react to a particular kind of stressor. The usefulness of these theories lies in their ability to highlight certain aspects of the stress response, to suggest new ways at looking at stress and its effects, and to suggest ways of managing it.

II- COPING

Each individual responds differently to stress. Through the next few pages, we examine what coping means, the theories of coping, and the assessment of coping skills. We will also look at different coping styles, personality variables,
social support, social class, and other life stressors, among other things.

A) What is Coping?

The impact of any potentially stressful event is substantially influenced by how a person copes with it. Freud's (1926) 'classic' defense mechanisms conception is an example of a state-oriented, macroanalytic approach to coping. Although Freud distinguished a multitude of defense mechanisms, he related these mechanisms to two basic forms: repression and intellectualization (Freud 1936). The trait-oriented correspondence of these basic defenses is the personality dimension repression–sensitization (Byrne 1964, Eriksen 1966). Unlike the macroanalytic, trait-oriented approach that generated a multitude of theoretical conceptions; the microanalytic, trait-oriented strategy is mostly concerned with constructing multidimensional
inventories (overviews in Schwarzer and Schwarzer 1996). Almost all of these measurement approaches, however, lack a solid theoretical foundation (cf. Krohne 1996). The Lazarus model outlined above represents a specific type of coping theory. These theories may be classified according to two independent parameters:

(a) Trait-oriented versus state-oriented,


Trait-oriented and state-oriented research strategies have different objectives. The trait-oriented (or dispositional) strategy aims at early identification of individuals whose coping resources and tendencies are inadequate for the demands of a specific stressful encounter. An early identification of these persons will offer the opportunity for establishing a selection (or
placement) procedure or a successful primary prevention program.

This definition of coping has several important aspects.

1. The relationship between coping and a stressful event represents a dynamic process. Coping is a series of transactions between a person who has a set of resources, values, and commitments (Lazarus, and Laurier 1978). Coping is a set of reciprocal responses, occurring over time, by which the environment and the person influence each other.

2. Coping encompasses a great many actions and reactions to stressful circumstances. Emotional reactions, including anger and depression, can be thought as part of coping process just as are actions that are voluntarily undertaken to confront the event.
In turn the resources that the individual has available moderate coping efforts.

**B) Theories of Coping**

Although coping theories play a central role in contemporary theories of stress; we still know very little about the specific coping processes that people use in adapting to stressful life events. Four relative perspectives have enlightened the search for formulations and measures of coping resources and processes: Psychoanalytic theory, life-cycle theory, evolutionary theory, and behavior-modification cultural and social approaches.

**Psychoanalytical theory**

Freud (1926) believed that ego processes serve to resolve conflicts between an individual's impulses and the constraints of external reality. Their function is to reduce tension by enabling the individual to express sexual and aggressive
impulses indirectly, without recognizing their 'true' intent. These ego processes are cognitive mechanisms (although they may be expressed behaviorally) whose main functions are defensive (reality distortion) and emotion forced (oriented towards tension reduction). Thus defense is a way of coping with a stressful situation.

Freud described nine basic psychological defense mechanisms. The most important of these psychological defense strategies are avoidance, denial, repression, projection, regression, and obsessive behavior. Each of these mechanisms is employed in everyday life and to an extent our personality are shaped by our defenses. Through defense mechanisms we develop a wide range of coping techniques and use them as the occasion demands. We handle stress successfully only if we have mastered the basic techniques of
psychological survival and have the imagination and flexibility to use them appropriately.

Cramer (2000) compared the similarities and differences between defense mechanisms and coping processes. Defense mechanisms are unconscious, nonintentional, dispositional, hierarchical, and associated with pathology, while coping processes are conscious, used intentionally, situationally determined, nonhierarchical, and associated with normality. Defense mechanisms, especially in the classical definition, are designated *a priori* as maladaptive, and are not consciously chosen. Defense mechanisms are traditionally studied via the use of intensive interviews and case studies.

**Macroanalytic, Trait-Oriented Coping Theories**

Research on the processes by which individuals cope with stressful situations has grown
substantially over the past three decades (cf. Lazarus 1991, Zeidner and Endler 1996). Many trait-oriented approaches in this field have established two constructs central to an understanding of cognitive responses to stress: vigilance, that is, the orientation toward stressful aspects of an encounter, and cognitive avoidance, that is, averting attention from stress-related information (cf. Janis 1983, Krohne 1978, 1993, Roth and Cohen 1986). Approaches corresponding to these conceptions are repression-sensitization (Byrne 1964), monitoring-blunting (Miller 1980, 1987), or attention-rejection (Mullen and Suls 1982). Byrne's approach specifies a unidimensional, bipolar structure, while Miller as well as Mullen and Suls leave this question open. Krohne, however, explicitly postulates an independent functioning of the dimensions vigilance and cognitive avoidance.
Erickson (1963) described eight life stages, each of which represents a new challenge or crisis, that must be successfully negotiated for an individual to cope adequately with the next stage. This perspective assumes that adequate resolution of crisis at each stage leads to coping resources that help resolve subsequent crisis. Successful encounters with environmental stressors build a sense of efficacy and a sense of ego integrity. A sense of competence may lead a person to perceive a potentially stressful event as less threatening and to choose a reality oriented coping response that fosters a successful outcome. Coping resources can also help people anticipate and take action to avoid expected social stressors. Although many characteristics of the individual can be seen as coping resources, such constructs as self-efficacy, internal control, sense of mastery and ego maturity has received the most attention.
Evolutionary theory and behavior modification

Darwin’s evolutionary perspective on adaptation provided the basis for a behaviorally oriented counterpoint to the psychoanalytic concern with intra-psychic and cognitive factors. This orientation lead to an emphasis on behavioral problem-solving activities, that contributes to individuals’ and species survival.

Cultural and Socio-Ecological Perspective

The evolutionary approach focuses on the relationship between organism and groups of organisms and the environment. Adaptation to the conditions of physical and cultural environment is facilitated by cooperative efforts of the human community, which are essential in adapting to the environment. The concept of environmental coping resources has emerged from two perspectives. One important domain is the provision of culturally mandated coping resolutions and methods of
teaching the skills needed to attain such resolutions. Another domain is composed of social networks, which provide interpersonal resources as emotional understanding, cognitive guidance, and tangible support.

**C. ASSESSING PERSONAL COPING RESOURCES**

Different life events lead to short-term and long-term stresses. They develop from a combination of environmental and personal factors. Certain factors mediate the perception of stressful events and the selection of specific coping resources. Coping responses are a complex set of personality, attitudinal, and cognitive factors that provide the psychological context for coping.

Social learning approaches have emphasized the importance of effective problem solving behaviors for successful adaptation (Kendall and Hollon, 1980). Several attempts have been made to classify

Children very often lack control over the stressful situations in which they find themselves, and the coping resources available to them vary considerably. When evaluating coping mechanisms among children it is best to focus on the child's coping efforts and strategies rather than on whether their efforts are successful (Lazarus & Folkman, 1984; Compas, 1987; Ryan-Wenger, 1992), even though a child with effective coping skills may well appear better adapted and more socially competent than a child who does not have these skills. A problem-focused approach to generating solutions is probably most adaptive in stressful situation as the condition can be changed by changes in the child's own behavior (Compas, 1987; Ryan-Wenger, 1992). Healthy problem-
focused strategies include gathering information, coming up with more than one solution for the problem, and making a plan of action. If the situation is beyond the child’s control, then emotional or cognitive strategies may allow the child to get on with life tasks. Emotion-focused strategies include reinterpreting the situation in a more positive light, seeking support from others, or doing something to take one’s mind off of the problem.

Interpersonal resources and close relationships with adult caregivers are also especially important coping resources in childhood (Skinner & Wellborn, 1994; Rutter, 1987). Resiliency theory suggests that opportunities to interact with caring non-parental adults take on particular significance for children who have not had the benefit of nurturing relationships within their families (Werner, 1989; Rutter, 1987).
D) MODERATORS OF THE STRESS EXPERIENCE

COPING STYLES

One internal moderator of the stress experience is a person's coping style. Coping style is a general tendency to deal with stressful events in a particular way. Although many coping styles exist, only a few have received systematic study.

Avoidance V/S Confrontation

Researchers have extensively studied individuals who cope with a threatening event by using an avoidant (minimizing) coping style, comparing them with people who are more likely to use a confrontative (vigilant) coping style by gathering information or taking direct action. Each style seems to have its advantages and liabilities, depending on the situation on which it is employed. Vigilant strategies may be more successful than avoidance in coping with stressful events, if one can focus on the information (such
as secondary details) present in the situation, rather than the emotional ones (Holohan, Moos, 1970; Suls & Fletcher, 1985).

**Catharsis**

Many people undergo traumatic events, however they cannot communicate about it. These events may stay with them, producing obsessive thoughts for years. This inhibition of traumatic events involves physiological work. The more people are focused to inhibit their thoughts, emotions, and behavior, the more their physiological activity may increase. Consequently their ability to confide in others or to consequently confront these feelings and perceptions may dominate the need to obsess about and inhibit the event, and it may also reduce the physiological activity associated with it.

There are many reasons to believe that talking about a stressful event or confiding in others
should be useful for coping. Talking with others allows to gain information about the event or about the effective coping. It may also elicit positive reinforcement and emotional support from others.

**Multiple coping strategies**

Successful coping may depend more on matching available coping strategies to the features of stressful event than on finding the particular coping strategy that is more successful. Most stressful events involve a variety of smaller problems, each of which may be conductive to different coping strategies.

**Coping and External Resources**

Coping is influenced not only by internal resources that an individual has but also by external resources. These include time, money, education, standard of living, social support and absence of other life stresses.
Figure 3 - The Coping Process

1. Tangible Resources such as time and money
2. Social Support
3. Other life stressors such as major life events & daily hassles

- The stressful event, its stage and anticipated failure course
- Appraisal & interpretation of stressor:
  - Primary appraisal: loss or threat or degree of challenge
  - Secondary appraisal: Evaluation of coping resources and options
- Coping Responses & strategies for problem solving by emotional regulations
- Other personality factors that influence selection of coping responses and strategies
- Coping tasks to reduce harmful environmental conditions:
  - To tolerate or adjust to negative events, realities
  - To maintain positive health equilibrium
  - To continue satisfying relationship with others
- Coping outcomes:
  - Psychological functions, resumption of usual activities
  - Psychological distress
Social Support

Social ties and relationships with others have long been regarded as emotionally satisfying aspects of life. People undergoing stressful events may turn to others to help them deal with stressful events or to provide them solace. (Bachrach & Zautra, 1985; Ferrara, Mutran & Barrese, 1984). People with high level of social support may experience less stress when they confront a stressful experience and they may cope with it more successfully (Cobb 1976).

One hypothesis maintains that social support is generally beneficial during nonstressful times as well as during highly stressful times. This is called direct-effect hypothesis. The other hypothesis known as buffering hypothesis maintains that the health and mental health benefits of social support are chiefly evident during periods of high stress. When there is little stress, social support may have
few physical or mental health benefits. According to this hypothesis, social support acts as a reserve and resource that blunts the effects of stress or enables the individual to cope with stress more effectively when it is at high levels.

Providing effective social support is not always easy for the support network. It requires substantial skills. When the wrong person provides it, support may be unhealthy or may be rejected.

Thoits (1986) reconceptualised social support as coping assistance, arguing that different stressful events create different needs, which in turn direct coping efforts. She argued that social support might be constructively viewed as assisting those coping efforts. Thus, social support providers should be most effective when social support providers suggest or participate in planning coping strategies that will be most effective in reducing
the problems associated with that particular stressor.

Dunkel Schetter et al (1987) found that individuals' ways of coping were strongly associated with the types of coping support they received. These findings imply that the coping strategies people use when they are under stress communicate that support is needed and what particular kind of support may be needed.

To summarize Coping is the process of managing demands that tax or exceed a person's resources. Coping is influenced by primary and secondary appraisals. Coping efforts may be directed at solving problems or regulating emotions. Coping styles consist of predispositions to cope with stressful situations in particular ways. Internal and external resources guide selection of coping efforts. Social support can be an effective resource.
in times of stress, which reduces psychological
distress and the likelihood of illness by providing
tangible aid, giving information, and providing
emotional support.