THEORETICAL ORIENTATION

Before understanding research in any field of social sciences, it is of paramount importance to understand and explain clearly the concepts underlying the work. Semantic clarifications, definitions, and elaboration of the concepts understudy is an essential element in research. The formulation of hypotheses, statistical analysis of data and interpretation of results is not possible unless the concepts are clear. Therefore, in the following paragraphs an attempt has been made to elaborate upon the conceptual framework of variables included in the present investigation.

CONCEPTUAL FRAMEWORK ON NEGATIVE COGNITION

Two diametrically opposite positions were taken up regarding the relationship between cognitive processes and emotion (Mathews & Macleod, 1994). At one extreme it was claimed that emotion is completely independent of cognition (Zajonc, 1980), and the other, that cognitive appraisals were invariably necessary for the production of emotion (Lazarus, 1982, 1984). Since then, the view that cognitive processes are closely related to emotion has steadily gaining ground, although disagreement continues about the direction and extent of relationship (Izard, 1993). In recent years these ideas have entered the empirical realm of psychopathology (Bebbington, 1985).

Cognitions that may need changing include beliefs and belief systems as well as thoughts and images. A person organizes and uses cognitions through cognitive processes. These processes include: (a) ways of evaluating and organizing information about the environment and oneself; (b) ways of processing information for coping with life and solving problems; and (c) ways of predicting and evaluating future events (Foreyt & Goodrick, 2001). Negative thinking, particularly in relation to the self and the future, is a well established characteristic of episodes of depression (Haaga, Dyck & Ernst, 1991). Although there are a number of directions from which cognitive vulnerability can be understood, a considerable amount of recent
work has been directed toward elucidating the origins of vulnerability of negative cognition.

1. THE COGNITIVE SCHEMA MODELS

Beck postulates that people have relatively stable styles of cognition which he terms 'schemas'. They form the structural organization of depressive thinking and locates the nexus of cognitive vulnerability in childhood experiences.' A schema may be inactive for long periods of time but can be energized by specific environmental inputs (for example, stressful situations)' (Beck et al. 1980, p.13). He emphasized this reciprocity of thought and circumstance and went on to argue that in depression there are ‘prepotent dysfunctional schemas’ which are evoked by a wide range of inappropriate stimuli.

According to the cognitive theory, many of the disturbances associated with depression result from the activation of a set of cognitive patterns that forces the individual to view his or her situation in an idiosyncratic, negative, and pessimistic way (Clark, Beck, & Alford, 1999; Beck, 1967, 1976). This set of negative cognitions is referred to as the cognitive triad, as it consists of thought patterns about the world, the self, and the future. The cognitive triad remains active in depressed individuals because such individuals selectively and inappropriately interpret experiences as being negative in some substantive way. Typical cognitions of depressed individuals show a variety of deviations from logical thinking, including making arbitrary inferences of negative meaning, selectively focusing on negative events, overgeneralizing from one negative experience, employing dichotomous thinking, and catastrophizing. As a consequence of these errors in information processing, the patient automatically makes negative interpretation of situations even though more plausible explanations are readily apparent. These thoughts occur repetitively, unintentionally, and uncontrollably. People in this altered psychological state are less likely to engage in active processing of information and are more likely to be cognitively passive (Sedek and Kofta, 1990). The continued activation and dominance of the negative cognitive triad leads to other phenomena associated with the depressive state, such as sad affect and the lack of motivation (Henriques, 2001).
A close examination of the cognitive triad reveals that its elements are not equivalent. Pacini et al. (1998) found that depressive people utilize selective negative cognition such as dwelling on and overgeneralizing negative events but not positive ones. The results from this finding support that theory of selective memory in depressive people.

2. THE VULNERABILITY MODEL

The second model to be considered was that described by Brown & Harris in their book *Social Origins of Depression*, published in 1978. They developed a complex account of the interaction of social factors in the precipitation of depression. They identified three types of factors: ‘provoking factors’, such as recent life events and chronic difficulties; ‘vulnerability factors’; and ‘symptom formation factors’. There were four vulnerability factors: early loss of mother, involvement in the care of young children, the lack of an adequate confidant, and the absence of gainful employment. This empirically based account can be termed the ‘vulnerability model’.

The authors quite clearly indicate their support for a cognitive aetiology: ‘in most cases, a cognitive appraisal of one’s world is primary’ (Brown & Harris, 1978, p. 235). Brown & Harris, argue that loss events produce hopelessness, and that vulnerability factors impair self-esteem. Low self-esteem increases the intensity of the response to loss through generalization of the hopelessness triggered by it. The pain of this enhanced response to loss leads to denial, and denial is the mechanism by which the normal response to loss is converted into depression. Loss is conceived as deprivation of sources of value or reward (or, in behavioral terms, of reinforcers). Such loss reflects an inability to hold good thoughts about ourselves, our lives and those close to us. Many of these ideas about loss are developed from those of Bowlby (1971, 1973). One particular way, in which events may lead to loss is by their effects on ‘plans of action’. ‘Plans of action’ are prescriptions for behavior which are closely linked to particular role identities, and the authors argue that loss events are particularly demoralizing where the loss is of parts of roles. They emphasized the importance of loss because they see it as the most likely cause of hopelessness. Hopelessness results from the inconceivability of restoring a particular source of value, or of having it restored. Events are particularly powerful when they reactivate
some previous ‘unresolved’ event. This leads to the generalization of hopelessness and this is seen as crucial in the development of depression (Bebbington, 1985).

3. THE REFORMULATED LEARNED HELPLESSNESS MODEL

The original helplessness model of depression is described by Seligman (1975) and proposed that events which the organism attempts to control, but cannot, have peculiarly disruptive effects. The resulting deficits fall into three categories: motivational, cognitive and emotional. The motivational deficit is reflected in retarded initiation of voluntary responses; the cognitive deficit involves erroneously pessimistic expectations of the non-contingency of future outcomes; and the emotional deficit takes the form of depressed mood.

There were a number of inadequacies of this model, developed in animals, when applied to account for depression in humans (Depue & Monroe, 1978; Blaney, 1977). This lead to a reformulation of the model by Abramson and her colleagues (1978) and by Miller & Norman (1979). The major innovation was the introduction of an attributional framework which was the most dominant explanatory style theory. The theory is based on the individual’s stated explanations for the causes of an event and, therefore, it is neutral about the internal representations or cognitive structures that underlie these conscious accounts. In brief, the theory proposes that depressives should perceive bad events as due to causes outside of their control (‘uncontrollable’), due to something about themselves (‘internal’), likely to recur in similar situations (‘stable’), and to affect many other areas of their lives (‘global’). Good events should also be seen as uncontrollable, but in contrast to bad events, their causes should be perceived as external, unstable, and specific (causes such as chance or luck) rather than ability or effort (Brewin & Shapiro, 1984). It must be emphasized that locus of causality is an attribution the subject makes about an outcome which has already happened. Abramson and her colleagues (1978) emphasize that contingency and locus of causality are logically orthogonal. It asserts that depressed people have a tendency to believe that they have little or no control over the events of the world (Pacini et al., 1998). The disproportionately numerous
negative beliefs in the dysfunctional schemas cause the already depressed people to feel unrealistically pessimistic and be excessively demanding of support and confirmation from others, further alienating themselves from other people (Pacini et al., 1998). They then distort social information to construct unfavorable social comparisons in order to maintain that negative view (Albright & Henderson, 1995).

4. LEWINSOHN'S MODEL OF DEPRESSION

Lewinsohn’s original model of depression (Lewinsohn, Weinstein, & Shaw, 1969) was behavioral and was based on earlier formulations by Skinner (1953) and Ferster (1965). The 1969 model emphasized a “reduced rate of response-contingent reinforcement” as a critical antecedent for depression. The model assumed that the behavior of depressed persons does not lead to positive reinforcement to a degree sufficient to maintain their behavior. Hence, depressed persons find it difficult to initiate or maintain their behavior, and they become increasingly passive. The low rate of positive reinforcement was also assumed to cause the dysphoric feelings. The social environment provides reinforcement in the form of sympathy, interest, and concern, which strengthen and maintain depressive behaviors. However, since most people in the depressed person’s environment (and eventually even the person’s family) find these behaviors aversive, they will avoid the person as much as possible, thus decreasing his or her rate of receiving positive reinforcement and further accentuating the depression. A number of different environmental events (e.g., loss due to a death, separation, rejection, poverty, misfortune) and organismic states and traits (e.g., lack of social skills, ignorance) were presumed to be causally related to a low state of positive reinforcement. On the basis of empirical studies (Lewinsohn, Mermelstein, MacPhillamy, & Alexander, 1985; Grosscup & Lewinsohn, 1980; Lewinsohn & Talkington, 1979; Lewinsohn, Youngren, & Grosscup, 1979; Lewinsohn & Amenson, 1978) the theory was expanded to incorporate a relationship between aversive events and depression. An elevated rate of occurrence of aversive events and heightened sensitivity to such events might result in avoidance and withdrawal from aversive situations. The short-term consequence of greater isolation and the long-term consequence of lesser skill acquisition would be expected to
increase the probability that the individual would be in a condition of low positive reinforcement.

In 1985, Lewinsohn, Hoberman, Teri, and Hautzinger proposed an integrative theory of depression. The revision was motivated by the fact that some empirical findings did not support the earlier model as it had not incorporated either the cognitive manifestations of depression or individual differences in vulnerability to depression.

The integrative theory views the occurrence of depression as a product of environmental as well as dispositional factors. The chain of events leading to the occurrence of depression is postulated to begin with the occurrence of an evoking event or antecedent (A) which is assumed to initiate the depressogenic process to the extent that they disrupt substantial, important, and relatively automatic behavior patterns of an individual (B). They lead to a reduction of positive reinforcement or an elevated rate of aversive experience (C); i.e., they shift the balance of the quality of the patient’s interactions with the environment in a negative direction. These efforts will be successful to certain degrees, depending on both environmental and dispositional factors (G). The inability to reverse the impact of the stress is hypothesized to lead to a heightened state of self-awareness (D). Increasing self-awareness causes the individual to become more self-critical, to produce an increase in the discrepancy between ideal self and perceived self, and produce dysphoria leading to some of the cognitive alterations, such as pessimism and attribution of failure to self, leading to many of the cognitive, behavioral, and emotional changes (F) that have been shown to be correlated to depression. These changes (F) are presumed to be quite consequential and to play an important role in the maintenance and exacerbation of the depressed state.

The proposed model allows for the idea that predisposing characteristics of various kinds (G) to either increase (vulnerabilities) or decrease (immunities) the risks for a depressive episode. Predisposing characteristics are assumed to affect all elements of the model. The model allows for ‘‘feedback loops’’ that are seen as
important in determining the level of severity and the duration of an episode of
depression. Thus, becoming depressed (F) and thinking and behaving in the depressed
mode would be expected to interfere with the individual’s problem solving skill (G)
and consequently his or her ability to reverse the disruption (B) and the effects of the
disruption (C). Feedback loops set the stage for a vicious cycle. By reversing any of
the components of the model, the depression will be progressively and increasingly
ameliorated.

5. ASSOCIATIVE NETWORK MODEL

Bower’s (1981) influential associative network theory of mood and memory
suggested that effects of mood on thinking occur at a relatively specific level of
cognitive representation, corresponding to individual concepts and constructs, and
clusters of concepts encoding propositional descriptions of events in episodic
memory. On this view, mood-dependent depressive thinking is the result of a current
depressed state reactivating all the negative concepts, constructs and representations
of events previously activated in association with depressed mood. As a result, there
is a relatively general reduction in the threshold for use of negative constructs and an
increase in the accessibility of negative memories. Both these effects, it is suggested,
contribute to a mood-dependent increase in the tendency to interpret experience more
negatively in the depressed state (Teasdale et al., 1998).

6. MENTAL MODELS

The theory of mental models developed by Johnson-Laird (1983) has focused
primarily on reasoning and discourse comprehension. The general theory incorporates
three main components: a propositional level of representation, a set of procedures
that relate propositions to a higher level of representation and this higher level which
consists of mental models of various types including images. One of the major
advantages of the mental models approach is that extensional properties (the
relationship between an internal representation and the world) are represented in
addition to intensional ones (Power & Champion, 1986). Johnson-Laird
distinguishes two main varieties, namely, ‘physical models’ and ‘conceptual models’.
The application of this proposal to depression can be linked up with the earlier suggestion that negative schemata need not be latent during remission but could be evolved in the processing of incoming information and the control of action; for example, some depressives during remission may have models of themselves which are positive and from which all negative features are inhibited. This negative unconscious processing will limit the depressive’s ability to fully experience pleasure and success. Although such distorted self-models may appear to be highly inaccurate and destructive in the depressive’s current life, developmentally there may well have been a crucial situation (particularly the family) in which these models may have been extremely useful (cf. Bowlby, 1980). Oakhill & Johnson-Laird (1985) reported findings which supported the proposal that prior beliefs interfere with both the process of reasoning and the drawing of conclusions. According to the theory, depressives should be more accurate than controls for negative information that is correct and positive information that is false, whereas normals should show greater accuracy for positive information that is correct and negative information that is false. That is, depressives should be more likely to accept negative information because it is congenial with their negative self-model, whereas normals should be more likely to accept positive information; depending on the circumstances therefore either depressives or normals may be more accurate.

7. THE INTERACTING COGNITIVE SUBSYSTEMS (ICS) APPROACH

Alternatively, negative thinking could reflect changes, with depression, in more generic representations encoding inter-relationships between constructs, or patterns of constructs. The Interacting Cognitive Subsystems (ICS) approach (Teasdale, 1993; Teasdale & Barnard, 1993) suggests that mood-related biases in cognitive processing reflect changes in the schematic mental models used to interpret experience. Mental models are about the structure of our interpreted world (Teasdale & Barnard, 1993; Power & Champion, 1986; Johnson-Laird, 1983). From the ICS perspective, the transition from the non-depressed state to the depressed state is associated with changes in the schematic mental models used to interpret experience, particularly those concerned with self-in-relationship-to-world. The ICS analysis
suggests that schematic models created in depression encode more globally negative views of self than models in the non-depressed state. Further, it is suggested that depression-related models encode a different relationship between self-worth, on the one hand, and social approval / disapproval or personal success / failure, on the other. It is proposed that, in patients, the mental models that become ‘switched in’ with the depressed state imply a much closer dependence of social worth on social approval or personal success than the models that prevail in the non-depressed state. It suggests that shift in endorsement of the dysfunctional attitude with the transition from one mood state to another reflects a shift in the prevailing higher order mental models of self and world dominating information processing. The focus of such schematic models is the inter-relationships between constellations of constructs, rather than simply the level of activation of individual constructs. Often, changes at a schematic level will be reflected in congruous changes at the level of specific constructs. However, because schematic models and specific constructs are at different levels of abstraction, it is possible to arrange situations in which effects at these two levels can operate in opposite directions.

In a study by Teasdale, Taylor, Cooper, Hayhurst & Paykel (1995) took advantage of this counter-intuitive aspect of the schematic model analysis to test predictions derived from that view against predictions derived from the alternative view that negative thinking in depression is the result of increased accessibility of negative constructs. These findings confirmed the predictions from the change in schematic models view: patients with major depression gave reliably more positive completions than non-depressed controls; at follow-up, patients whose mood had improved showed a reliable reduction in positive completions (bringing them to control values), whereas patients whose mood had deteriorated or stayed the same showed a reliable increase in positive completions. By contrast, the construct accessibility view predicts that, other things being equal, the general increase in accessibility view of negative constructs in depressed mood will lead to a greater number of negative completions in depressed patients than in controls, and the number of negative completions will decrease with recovery.
Figure 2.1: The Interacting Cognitive Subsystems (ICS) approach (Teasdale et al., 1995)

Sheppard & Teasdale (1996) subsequently replicated these findings of Teasdale et al. (1995) in another sample of depressed patients and controls. However, in that study, the predicted differences, although statistically reliable, were not as great as in the original study.

8. THE HOPELESSNESS MODEL

In one of the earliest statements specifically focusing on vulnerability origins, Rose and Abramson (1992) suggested several developmental factors that may underlie hopelessness. The negative events affect the child's self-concept, and in doing so may lead to generalized tendencies to internalize these negative events. In general, they argue that this internalizing process precipitates the development of the negative attributional style that in turn creates depression risk. Such tendencies alone, however, are not sufficient to produce a hopelessness attributional style. Rather, if negative events are repetitive and occur in relationships with caregivers, these events will undermine the child's positive self-image as well as his or her optimism about future positive events. Moreover, persistent negative events will produce a pattern of
attributions for these events that, over time, also become global and stable. These patterns thus become trait-like and serve as the foundation for hopelessness in the face of stressors in the future; a process that produces hopelessness depression (Ingram, 2003).

The hopelessness theory of depression (Abramson, Metalsky, & Alloy, 1989) proposes that specific types of attributions (i.e., causal inferences that a person makes following life events) can play an important causal role in the onset of depression. The model posits that individuals who are at risk for developing depression have a consistent style in which they make internal, stable, and global attributions for negative events. These negative attributions act as a cognitive vulnerability or diathesis that is hypothesized to contribute to the onset of depression following stressful life events. According to this theory, persons with a negative attributional style are more likely to develop depression in the presence (but not in the absence) of life stressors (Abramson, Metalsky, & Alloy, 1989).

9. SELF-REGULATORY THEORIES

Another group of cognitive models, include Pyszczynski and Greenberg’s (1987), Duval and Wicklund’s (1972) and Carver and Scheier’s (1981) theories, propose a central role for self-focused attention in determining a variety of functional and dysfunctional responses. Regarding depression more specifically, they each hypothesize that when stress reactive cognitions are self-referential, this may contribute to the onset of a depressive episode. These theories suggest a self-regulatory function for self-focused attention. Duval and Wicklund (1972), Carver and Scheier (1981), and Pyszczynski and Greenberg (1987) have all proposed that self-focus can function as a coping mechanism by which a person attempts to reconcile “real self”—“ideal self” discrepancies brought about by the occurrence of negative life events. According to Pyszczynski and Greenberg (1987), a stressful event that leads to a perceived decrease in a self-relevant dimension (e.g., physical attractiveness, problem-solving ability), in turn, causes a negative discrepancy between the individual’s ideal state and his or her resulting state on that self-relevant dimension. Once the discrepancy exists, the individual then becomes focused on the
self-relevant dimension. Self-focus is theorized to be a coping strategy by which a person attempts to resolve the discrepancy between the ideal state and the perceived state based on the negative life event. When self-focus fails to provide a solution for how to eliminate the discrepancy and the individual is unable to disengage from the self-regulatory cycle, a depressive episode may occur. Carver and Scheier have proposed a similar process whereby failure to either reduce the discrepancy or disengage from the self-regulating self-focus can lead to depression. In addition, Ingram (1990) has proposed a theory of psychopathology in which maladaptive self-focus plays a prominent role in the etiology of numerous forms of psychopathology, including depression. In this theory, self-focus is more generally conceptualized as maladaptive. This is in contrast to the other theories discussed in which self-focus can serve as an adaptive self-regulating cognitive strategy. Therefore, in these relatively separate lines of theoretical and empirical investigation, specific negative cognitive responses to negative life events and the degree to which a person becomes stuck on focusing on his or her negative cognitive responses have been suggested to be risk factors for depression.

Nolen-Hoeksema (1991) proposed a theory of depression that integrated negative content and a specific type of self-focus (referred to as rumination in her theory). In her theory, individuals who exhibit a ruminative response style when they become depressed, focusing on their symptoms of depression and the causes and consequences of those symptoms, are more likely to exacerbate transient negative mood states leading to longer duration, full-blown depressive episodes. The theory does not detail the specific cause of a depressed state, but focuses instead on factors that maintain and prolong depressive symptoms. Several studies have supported Nolen-Hoeksema’s prediction of longer duration and more severe depressive symptoms among people with ruminative response styles (e.g., Just & Alloy, 1997; Nolen-Hoeksema, McBride, & Larson, 1997; Nolen-Hoeksema, Parker, & Larson, 1994; Nolen-Hoeksema, Morrow, & Frederickson, 1993; Nolen-Hoeksema & Morrow, 1991). In addition, a ruminative response style has been found to predict new onsets of depressive episodes among nondepressed individuals once baseline depressive symptoms are controlled (Spasojevic & Alloy, 2001; Nolen-Hoeksema, 2000; Just & Alloy, 1997).
Needles and Abramson (1992) suggest that it is not just cognitive content that contributes to depressed mood, but also the degree to which this content is activated and recursively rehearsed. This study provided empirical support for the role of rumination in activating the critical cognitive component featured in the hopelessness theory: hopelessness. They experimentally manipulated degree of self-focus among dysphoric undergraduates with tasks designed to induce rumination or distraction. They found that participants induced to ruminate demonstrated significantly greater activation of hopelessness and subsequently greater depressive affect than those induced to distract. In addition, whereas the activation of hopelessness was greater among ruminators, the underlying belief in a hopeless future did not differ between ruminators and distractors. Thus, the results of the Needles and Abramson (1992) study suggest that both negative cognitive content and the degree to which this content is activated and rehearsed are important in contributing to depression.

CONCEPTUAL FRAMEWORK ON STRESS

Stress is a term that is often related to a psychological or physical state of health (c.f. Sapolsky, 1994) and is used by many psychological, sociological, and medical scientists as well as laymen. Ideas as to how life stress can influence human’s resistance to disease are found in medical writings dating back to the early Assyrians, Greeks, and Romans. Interests in the implications of emotions for health is age – old, dating back to the origins of holistic approaches to medicine exemplified by the writings of Hippocrates (400 BC). Interest in the influence of psychological factors on emotional functioning has consequently represented a parallel theme of interest over the centuries.

Stressors or stressful circumstances refer to the experience of negative life events and chronic strains. Negative life events are culturally or personally undesirable changes in the usual activities of an individual that require substantial behavioral readjustments (Brown & Harris, 1978; Holmes & Rahe, 1967). Examples include such as normative life transitions as the empty nest syndrome, bereavement, and involuntary retirement, as well as such non-normative changes as
divorce, job loss and serious illness. Chronic strains are persistent conditions that require daily readjustments; these are conditions that repeatedly interfere with the adequate performance of ordinary role-related activities (Pearlin, 1983). Examples include poverty, marital conflict, chronic illness, and excessive job responsibilities. In short, stressors or stressful circumstances refer to undesirable conditions that disrupt usual activities either acutely or chronically. The basic premise is that stress gives rise to distressing emotions, which in turn influence disease (Monroe, 2001). Many researchers have defined stress in different ways in an attempt to operationalize the term.

Cannon (1935) proposed the first definition of the term ‘stress’ and postulated that passing a critical stress level, triggered by physical and emotional stimuli, endangers the homeostatic control of an organism.

Hans Selye (1956) defined “Stress as a nonspecific bodily response to any demand caused by either pleasant or unpleasant conditions”.

Holmes & Rahe (1967) defined stressful life events as those whose advent are either indicative of or require significant change in the ongoing life pattern of the individual.

Hans Selye (1976, p.64) defines this stress as “a state manifested by a syndrome which consists of all the nonspecifically induced changes in a biologic system”.

Rabkin (1982) has defined the stressful life events as discrete changes in the life conditions that are consensually recognized as entailing some degree of distress, challenge, and/or hazard by the individual and member of his or her social group.

According to Lazarus (1984), it is “internal state of individual who perceives threat to physical or mental state”. According to the cognitive transaction model proposed by them, stress is experienced as a process that is initially triggered by situational demands, but then mainly by the cognitive appraisal of these demands and thus they viewed stress as a relational concept between individuals and their
environment. This theory distinguishes two basic forms of appraisal, primary and secondary appraisal.

According to Bloom et al. (1985), "Stress is a condition in which there is marked discrepancy between the demands made an organism’s capability to respond".

Levin and Ursin (1991) have offered a comprehensive definition of stress, distinguishing between (a) input (stress stimuli), (b) individual processing, and (c) outcome (stress reaction).

Chrousos (1992) defined it as an "internal state of disharmony or threatened homeostasis".

Theories that have focus on the specific relationship between external demands (stressors) and bodily processes (stress) can be grouped in different categories: approaches to 'systemic stress' based on physiology and psychobiology; approaches to 'psychological stress' developed within the field of cognitive psychology and the recent approach towards the 'resource theories of stress as a bridge between systemic and cognitive viewpoints (Krohne, 2001).

1. SYSTEMIC STRESS APPROACH

The popularity of the stress concept in science and mass media stems largely from the work of the endocrinologist Hans Selye. According to Selye (1936, 1937), these non-specifically caused changes constitute the stereotypical, i.e. specific, response pattern of systemic stress. He developed the concept of the general adaptation syndrome (GAS), which encompasses the alarm reaction, the stage of resistance, and finally the stage of exhaustion. The bodily responses to massive or ongoing stress are summarized in the stress triad, including (a) the enlargement and hyperactivity of the adrenal cortex, (b) the shrinking or atrophy of the thymus, spleen, lymph nodes, and the lymphatic system, and (c) the appearance of gastrointestinal and bowel ulcers. In the concept of four variations of stress, Selye (1983) emphasized that stress can be based on over-stress (hyperstress) as well as under-stress (hypostress). He also contrasts harmful, damaging stress (distress) from good stress (eustress).
According to Selye, there is always a particularly weak organ or system (due to heredity or external conditions) that is thus likely to break down under stress, which is why he concluded that individuals can develop different types of diseases under the influence of the same kind of stressor (Kudielka & Kirschbaum, 2001).

Selye’s idea of an unspecific stress response to all kinds of stimuli was challenged by Mason (1968, 1975) underlined the importance of specific emotional reactions that determine a specific endocrine stress response. Mason showed that specific situational characteristics, such as novelty, uncontrollability, unpredictability, ambiguity, anticipation of negative consequences, and high ego-involvement, lead to specific hormonal stress response.

A derivate of the systemic approach is the research on critical life events. An example is the influential hypothesis of Holmes and Rahe (1967), based on Selye’s work, that changes in habits, rather than the threat or meaning of critical events, is involved in the genesis of disease. The authors assumed that critical life events, regardless of their specific (e.g., positive or negative) quality, stimulate change that produces challenge to the organism. Most of this research, however, has not been theoretically driven and exhibited little empirical support for this hypothesis (Thoits, 1983).

2. PSYCHOLOGICAL STRESS APPROACH

Two concepts are central to any psychological stress theory: appraisal i.e., individuals’ evaluation of the significance of what is happening for their well-being, and coping, i.e., individuals’ efforts in thought and action to manage specific demands (c.f. Lazarus, 1993). Since its first presentation as a theory (Lazarus, 1966), its undergone essential revisions of the stress theory (c.f. Lazarus, 1991; Lazarus and Folkman, 1984; Lazarus and Launier, 1978). According to the cognitive transaction model by Lazarus and Folkman, stress is experienced as a process that is initially triggered by situational demands, but then mainly by the cognitive appraisal of these demands and thus viewed stress as a relational concept between individuals and their environment.
Arnold (1960) introduced the concept of appraisal, into emotion research and elaborated with respect to stress processes by (Lazarus, 1966; Lazarus and Launier, 1978) is a key factor of 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. These appraisals are determined by a number of personal and situational factors. The most important factors on the personal side are motivational dispositions, goals, values, and generalized expectancies. Relevant situational parameters are predictability, controllability, and imminence of a potentially stressful event.

This theory distinguishes two basic forms of appraisal, primary and secondary appraisal (Lazarus, 1966). Primary appraisal concerns whether something of relevance to the individual’s well being occurs, whereas secondary appraisal concerns coping options. Within primary appraisal, three components are distinguished: goal relevance, goal congruence and type of ego involvement. Likewise, three secondary appraisal components are distinguished: blame or credit, coping potential and future expectations. Specific patterns of primary and secondary appraisal lead to different kinds of stress. Three types are distinguished: harm, threat and challenge (Lazarus and Folkman, 1984). At a more molar level, specific appraisal patterns related to stress or distinct emotional reactions are described as core relational themes.

Lazarus and Folkman (1984) refer to psychological stress as 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 coping resources. The definition points to two processes as central mediators within the person-environment transaction: cognitive appraisal and coping. Coping is intimately related to the concept of cognitive appraisal and, hence, to the stress relevant person-environment transactions. Most approaches in coping research follow Folkman and Lazarus (1980, p.223), who define coping as ‘‘the cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands and conflicts among them’’.
An individual appraisal process determines whether a load becomes a stressor. Differences in processing are based for example on genetic, ontogenetic, and social factors, and early life as well as lifelong experiences (Kudelka and Kirschbaum, 2001).

3. RESOURCE THEORIES OF STRESS: A BRIDGE BETWEEN SYSTEMIC AND COGNITIVE VIEWPOINTS

Resource theories of stress are not primarily concerned with factors that create stress, but with resources that preserve well being in the face of stressful encounters. Several social and personal constructs have been proposed such as social support (Schwarzer and Leppin, 1991), sense of coherence (Antonovsky, 1979), hardiness (Kobasa, 1979), self-efficacy (Bandura, 1977) or optimistic (Scheier and Carver, 1992).

The recently offered conservation of resources (COR) theory, Hobfoll (1989, 1996) assumes that stress occurs in any of three contexts: when people experience loss of resources, when resources are threatened, or when people invest their resources without subsequent gain. Four categories of resources are proposed: object resources, condition resources, personal resources and energy resource.

Sterling and Eyer (1988) gave the concept of allostasis as the regulation of the internal milieu through dynamic change in hormonal and physical parameters. Allostasis is defined as the ability of the body to increase or decrease vital functions to a new steady state on challenge. Mc Ewen and Stellar (1993) extended the concept of allostasis over the dimension of time and introduced the idea of allostasic load. Allostasic load is defined as the cost of chronic exposure to elevated or fluctuating endocrine or neural responses resulting from chronic or repeated challenges that the individual experiences as stressful. Stress, for instance psychological demands, physical threat/danger, or adverse life experiences, activates various adaptive (allostasic) systems, initiating adaptation and coping processes. The SAM and the HPA axes are the main endocrine stress systems of the organism involved in an allostasic response. Four different scenarios can cause allostasic load: (1) frequent exposure to stress, (2) inability to habituate to repeated challenges, (3)
inability to terminate a stress response (4) an inadequate allostasic response in one allostasic system could be related to an increased activation of another allostasic system. Psychological factors, such as anticipating negative consequences, pessimism, anxiety; or worry also contribute allostasic load. While the origin of allostasic load can be based on an individual psychological appraisal process, psychological factors can prolong, intensify, expand or aggravate the amount of existing allostasic load.

At the level of stress responses, physiological, behavioral, and subjective / verbal reactions could be distinguished. Physiological responses primarily include the sympathetic – adrenal – medullary (SAM) axis, hypothalamic – pituitary – adrenal (HPA) axis, and immune system. Behavioral responses, among others, cover attention, arousal, and vigilance; subjective / verbal reactions are interpretations, cognitions, and emotions. The stress reactions to physical and psychological stimuli are primarily determined by the individual interpretation, but also by the social context, the social status, genetic factors, gender, developmental stage, and individual life long experiences (Kuldielka and Kirschbaum, 2001).

<table>
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<tr>
<th>(A) Vulnerable individuals</th>
<th>(B) Non-vulnerable individuals</th>
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<td>Overvalued role or goal</td>
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<td>Negative event</td>
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<td>Matching negative event</td>
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<td>Dominance by negative part of ambivalent self</td>
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<td>Depression</td>
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Figure 2.2: A summary of the proposed model of depression by L. A. Champion and M.J. Power (1995)
STRESS AND THE CENTRAL NERVOUS SYSTEM

There are three current stress model paradigms; environmental, psychological, and biological. Regardless of its etiology, stress exerts a powerful influence on the physiology of every bodily system via its impact on both the cognitive and physiological processes of the central nervous system (CNS). In a normal and beneficial stress response, the challenge is resolved and/or the individual adapts to it, and functioning returns to an appropriate base level. When these responses do not maintain homeostasis, and resistance fails due to inadequate, inappropriate, or excessive activation of the compensatory systems, the individual is at high risk of physical and psychological damage (Peters, 2001).

Due to its variety of specialized extero-and interoceptive sensory transducers and its unique integration capacity, the CNS plays a major role in the defense against and the adaptive response to stress. The normal stress response involves synergistic activation of the sympathetic—adrenal-medullary (SAM) and hypothalamic-pituitary-adrenocortical (HPA) systems through their primary CNS effects of norepinephrine and corticotropin releasing hormone/factor (CRH and CRF, respectively). Of these two systems, the HPA system exerts significant homeostatic control over the stress response. There is clear evidence of HPA activity in the context of overwhelming, chronic threats and distress, including major depression, where hypercortisolism and other findings support HPA activation (Leonard & Song, 1996).

Repeated stress and the resultant hypercortisolism have consequences for brain function, especially for the hippocampal, with its high concentration of glucocorticoid receptors. The hippocampus is essential for learning through its effects on episodic and declarative memory, and is especially important for the memory of context of time and place where events with a strong emotional basis occur. Thus, hippocampal functioning impairment decreases the reliability and accuracy of such memories. The mechanism for stress-induced hippocampal dysfunction and memory impairment is twofold. First, acute stress elevates adrenal steroids and suppresses neuronal mechanisms that subserve short-term memory involving the hippocampus and temporal lobe. These effects are reversible and relatively short-lived. Second,
repeated stress causes atrophy of the dendrites of pyramidal neurons in the CA3 region of the hippocampus, doing so through a mechanism involving both glucocorticoids and excitatory amino acid neurotransmitters released during and in the aftermath of stress. Although, this atrophy is reversible as long as the stress is short lived, stress lasting many months or years appears to, among other things, be capable of killing hippocampal neurons (Sapolsky, 1996).

A third stress response component is endogenous opioid release. Hypercortisolism in the HPA system is accompanied by activation of the endogenous opioid (EO) system. Stress induced analgesia involving endogenous opioid peptides has been demonstrated in animals and humans, both in association with nociceptive stimuli, as well as in response to non-pain cognitive stress (Peters, 2001; Pert and Snyder, 1973).

There is now clear evidence of reciprocal interactions between the immune system (IS) and CNS (Cacioppo et al., 1998). Most hormones secreted during the stress response have immunologic effects. It has become apparent that the IS and CNS are tightly interconnected and interdependent, and interact during development and in the induction of CNS pathology (Herbert & Cohen, 1993). It has been extensively documented that individuals experiencing acute, subacute, and chronic psychological stress are immunodepressed and that stress is linked with higher morbidity (Peters, 2001, pp. 1625).

Besides numerous peripheral effects of stress, stress induced secretion of adrenal steroids can also affect the central nervous system (CNS). For example, elevated glucocorticoid levels can impair hippocampal and temporal lobe functioning, brain areas, which are involved in declarative, episodic, and short-term memory. While acute stress can profoundly impair memory (effects reversible and relatively short lived; Kirschbaum et al. 1996), repeated stress can end up in atrophy of the dendrites of pyramidal neurons in the CA3 region of the hippocampus, causing long-term cognitive impairments. Besides, its role in memory and cognition, the hippocampus is most important for the negative feedback regulation of the HPA axis. Allostatic load during a lifetime may cause loss of resilience of HPA axis...
function, resulting in an attenuation of the negative feedback signal that may lead to hyperactivity of this stress system. The connection between the wear and tear on this region of the brain and the dysregulation of the HPA axis is elaborated in detail in the glucocorticoid cascade hypothesis (Sapolsky et al. 1986).

One of the most challenging issues in the measurement of response to stress is the characterization of the temporal course of stressors, appraisals, and stress response. In addition, there is wide variation among individuals in how each responds to potentially stressful situations. Thus, a multifaceted biopsychosocial approach is required to gain a comprehensive view of the relationship among stressors, stress responses, and pathological sequelae. Inter-person variation depends on three principal factors i.e., how the individual perceives and interprets the situation, individual differences concerning the condition of body itself, and nature of the stressor itself. Stressors can be characterized in a variety of ways: by etiology, duration, complexity, temporal nature or intensity (Peters, 2001).

CONCEPTUAL FRAMEWORK ON GENDER

In recent years, gender has come to be viewed as a multidimensional construct that covers many domains including biological sex, activities and interests, personal social attributes, gender based social relationships, gender based styles and symbols and gender related values (Ruble and Martin, 1998; Huston, 1983). Each domain can be examined in terms of an individual’s self-concepts, self-perceptions, preferences, and behaviors.

Gender role is a broad term referring to the behaviors, attitudes and traits that are associated with being male or female. Gender stereotypes, which are culturally defined expectations about the sexes in terms of personality, appearance, occupations, abilities and interests, have been a very central subject for social psychologists. Gender identity is created in the context of interactions, societal structures, and cultural expectations (Deaux and La France, 1998).

Social pressures to conform to stereotypically feminine vs masculine gender roles become even more salient during the pubertal/adolescent transition. This process
is referred to as gender intensification. This may foster changes in adolescent self-perceptions, as well as in how adolescents organize their personal and social activities. (Larson and Richards, 1989). Gender-linked differences in affiliative style are apparent well before puberty (Maccoby, 1990) as evident in the social interaction patterns displayed in all-girls vs all-boys childhood play groups. There might exist parallel, interactive or actually causative biological processes underlying this intensification of affiliative behavior seen in adolescent females. The increases in OT (neuropeptide oxytocin, a hypothalamic neuro-hormone) activity triggered by female pubertal hormones would fit with the data regarding gender-linked differences in affiliation that become increasingly apparent at adolescence.

The concept of gender has found widespread acceptance and there has been explosion in the number and intensity of effort. Gender identity, in terms of self-perceptions i.e., the sense of oneself as being male or female, has been studied by clinical and developmental psychologists, whereas typical gender identity has been investigated largely by medical researchers (Martin & Dinella, 2001). The multidimensional view of gender has been useful in challenging researchers to examine the interrelations among domains pertaining to gender-related behaviors and characteristics. For the purpose of clarification of the construct, the various viewpoints in relation to gender development have been outlined.

1. **PSYCHOANALYTIC THEORY**: The earliest and most influential theory of gender development was proposed by Sigmund Freud in the 1930’s. Freud contended that boys and girls acquire gender identity by learning to negotiate desires for the opposite sex parent. Although little empirical support has been found for his theoretical framework, his ideas have been very influential in encouraging research on gender development (Martin & Dinella, 2001).

2. **SOCIAL LEARNING THEORY**: Social learning theorists (Bandura, 1977; Mischel, 1966) propose that gender development is accounted for by social factors. Girls and boys learn different roles through the effect of direct reinforcement, differential socialization, and imitation of models.
3. COGNITIVE SOCIAL LEARNING THEORY: In the late 1970's and 1980's, social learning theory was adapted to emphasize the cognitive aspects involved in learning from the social environment (Bandura, 1986). In cognitive social learning theory, emphasis was placed on the processes involved in creating expectancies of other's behaviors and how these expectancies guide one's own actions. This theory has motivated researchers to include a more diverse view of the child's social environment.

4. COGNITIVE DEVELOPMENT THEORY: According to Kohlberg's cognitive development theory, children's cognitive organization of the world around them is the basis for their gender development (Kohlberg, 1966). A debate has ensued over whether Kohlberg's theory requires the acquisition of gender constancy as a necessary antecedent to learning stereotypes and attending to same sex models (Ruble and Martin, 1998).

5. GENDER SCHEMA THEORY: Gender schema is a cognitively based theory that uses an information processing approach to explain how gender development occurs. The basis of this model is the cognitive representation called a schema. A schema is an organizing structure that helps simplify and categorize new information. There are two types of gender related schemas (Martin and Halverson, 1981). The first is a general superordinate schema that helps children categorize objects, characteristics, and traits into basic male and female categories. The second is a more narrow version of schema, called the 'own-sex' schema, that children use to identify and learn in-depth information consistent with their own sex. Gender schema theorists (Bem, 1981; Martin and Halverson, 1981) proposed that gender schemas are developed and applied by children at an early age. Altering information that does not fit into a currently held schema or placing neutral information into a gender schema leads to remembering information in a gender consistent manner, which may not match with how it exists in reality. Gender schema theory emphasizes the child as an active processor of information and that the gender schemas that guide thinking also influence children's behavior. The major strength of gender schema theory is in the understanding it provides about the maintenance and power of gender beliefs.
6. **BIOLOGICAL APPROACHES:** Much of the research using a biological approach has focused on understanding differences between the sexes. Hormones are most likely to affect brain development and behavior during two stages of life: during prenatal development and during puberty. The structure and function of the brain have also been studied to compare the similarities and differences in males and females. One area of brain structure that has been studied is brain lateralization and some studies have shown that women are less lateralized in that they use both hemispheres simultaneously more often than men. Another section of the brain that has been studied as a possible source of gender differences is the corpus callosum (CC). However, studies have shown that women have a larger CC than do men and that enlargement of certain parts of the CC is linked to increased language skills (Martin & Dinella, 2001).

7. **EVOLUTIONARY PERSPECTIVES:** The evolutionary perspective draws on Darwinian principles of evolution and natural selection to explain how gender differences evolve. According to the evolutionary viewpoint, gender differences arise because men and women play different reproductive roles (Trivers, 1972). Gender differences are hypothesized to develop because of differing parental investment levels. Evolutionary theoretical viewpoints have stirred much controversy, and empirical support for the theory's components is mixed. Critiques include the lack of ability to test the theory directly and the heavy dependence on animal studies.

**SEX-ROLE STEREOTYPES & GENDER ROLE SOCIALIZATION AND INTENSIFICATION**

The earliest, termed the 'traditional hypothesis', holds that appropriately sex-typed people (masculine males and feminine females) are psychologically healthier because their behaviour and attitude are consonant with cultural stereotypes and expectations (Pleck, 1975). Discussions of sex-role stereotypes have depicted attributes such as determination to succeed, competitiveness and self-aggrandizement as being typically masculine and characteristics such as empathy, nurturance and warmth in relationships as being typically feminine (Spence & Helmreich, 1978).
These groups of attributes have also been referred to as ‘instrumental’ and ‘expressive’ attributes (Parsons, 1985).

Also masculinity has been found to be the strongest correlate of mental health, with femininity not involved to any great extent (Taylor & Hall, 1982). Masculinity is positively correlated with self-esteem (Lamke, 1982) whilst low self-esteem is widely regarded as a vulnerability factor in the aetiology of depression (Becker, 1972). Masculinity is also related to problem focused coping strategies during stressful episodes, which are more effective in resolving stress than other strategies (Coyne, Aldwyn & Lazarus, 1981). Shaw (1982) has found that low masculine subjects experience more stressful life events, which could be because either instrumental attributes affect appraisal of events, or are somehow related to their frequency.

Broody and Hall (1993) have reviewed much of the literature on gender stereotypes relating to emotional experience and expression. The data they review suggest that individuals hold clear stereotypes about the emotional experiences of men and women. Women are thought to be more expressive of emotions, especially sadness and fear, and men are thought to be more expressive of anger and these stereotypes may become self fulfilling prophecies that influence gender differences in expressed emotion.

Literature reviewed has shown a reciprocal, interactive relationship between androgens and mood, with low levels of androgen being associated with dysphoric mood (Ellis, 1987). Androgens have also been found to be involved in reactions to stress and the coping process (Vaernes, Ursin, Darragh & Lambe, 1982; Ellersten, Johnsen & Ursin, 1978), whilst the synthetic androgen mestolerone has been found to alleviate depression and enhance mental sharpness. If there are links between variations in androgens, psychological masculinity and vulnerability to depression, early adolescence, during which there is a marked divergence between males and females in androgen levels, is a period during which correlated changes in masculinity and depression would be expected.
As girls enter adolescence and gender role socialization intensifies, in addition to being encouraged downplaying traditionally masculine characteristics (Eccles, 1987; Block, 1983). As girls discard masculine qualities, they may display fewer behaviors that typically elicit positive reinforcement from others (Burnett, Anderson, & Heppner, 1995). Consequently, when masculine characteristics are emphasized, females with low levels of masculine traits are at particular risk for low self-esteem. Larson and Richards (1989) have obtained empirical support for the gender intensification hypothesis. Boys increased time spent in solitary activities and in contrast girls spent less time alone and more time in social activities with peers during the adolescent transition.

CONCEPTUAL FRAMEWORK ON SOCIAL SUPPORT

Since the 1970's, the possible influence of social support on health and well-being has attracted the interest of psychologists, sociologists, anthropologists, epidemiologists, and the other public health professionals, seldom has such a diverse group of social and health scientists agreed on the importance of a single factor in promoting health and well-being. Unfortunately this, multidisciplinary interest has not resulted in a unified conceptualization of the meaning of social support, its role in health and mental health, or even how to measure it.

Social support is embedded in ongoing social interactions that are part of an ever changing network of social relationships. While a sharp and generally accepted definition of social support as distinct from other types of social interaction is hard to make, it is possible to present taxonomy of perspectives on social support that provides a useful tool in ordering its effects, and in identifying the social psychological processes involved.

Although, the meaning of the term social support seems to grasp intuitively, the sheer number of divergent definitions proposed in the literature reveals its ambiguity. It has been generally characterized as the degree of support provided to an individual, particularly in times of need, by the persons involved with them-spouse, family, friends, neighbors, co-workers, and members of the larger community (Johnson & Sarason, 1979b; Lin, Simeone, Ensel, & Kuo, 1979).
Cassel (1974) opines that social support consists of feedback conveyed in signs and signals from primary group members that correct deviations from course at the behavioural, cognitive and emotional levels.

Weiss (1974) suggests six "provisions of social relationships is (necessary) to maintain psychological well-being: Attachment, social integration, opportunity for nurturance, reassurance of worth, a sense of reliable alliance and obtaining guidance". However, this list omitted material aid and services.

Caplan (1974) defines support system as: "Continuing social aggregates (namely, continuing interactions with another individual, a network, a group, an organization) that provide the individual with opportunities for feedback about themselves and for validations about others, which may offset deficiencies in these communication within the larger community context". Further he described social support as an enduring pattern of social ties that play a major role in maintaining the psychological and physical integrity of the individual.

Cobb (1976) has defined social support more specifically as information that leads individuals to believe that they are cared for and loved, are esteemed and valued, and belong to a network of communication and mutual obligation. These three areas of information provide the individual with specific kinds of support: esteem support, emotional support, and community support, respectively.

Dean and Lin (1977) suggest that social support may be viewed as being organized around two systems: the instrumental system, which is geared to the fulfillment of tasks, and the expressive system, which is geared to the satisfaction of individual needs and the maintenance of social solidarity.

Walker and coworkers (1977) defined support as behaviour which assures people that their feelings are understood by others and considered normal in the situation.

Kaplan et al. (1977) referred to it as an internal state of met needs, or to the availability of psychosocial resources.
Kahn and Antonucci (1980) defined social support as interpersonal transactions that involve the expression of positive effect, the affirmation or endorsement of person's beliefs or values and/or person's beliefs or values and/or the provision of aid or assistance.

House (1981) regards it as an interpersonal transaction involving concern and, information about one self and the environment.

Schaefer, Coyne, and Lazarus (1981) identified three dimensions of social support: emotional support, which involves intimacy and receiving reassurance; tangible support, or the provision of direct aid and services; and informational support, which includes advice concerning solutions to one's problems and feedback about one's behavior.

Recent advances (Jou, 1994) in research on the dimensions and measurement of social support suggest that social support can be classified into four dimensions: (a) social embeddedness (the number of members in the social support network and their characteristics), (b) needed support (support required by an individual), (c) perceived support (perceived availability of support), and (d) actual support (support actually received in the past). Jou (1994) categorized social embeddedness as structural support and categorized needed, perceived, and actual support as functional support.

Although these definitions are slightly different in their focus, yet there is general agreement about the forms or relationships that constitute social support network. Among the important theorists, Cobb (1976), Kahn and Antonucci (1980) and House (1981) have given more precise definitions by being specific about support provided from different sources. These definitions differ slightly in focus but there is some consensus about the aspects of relationship that are within general domain of social support. However, each of these is precise enough to permit a clear operational definition: whereas authors like Pearlin et al.(1981), and Gottlieb (1981) have offered a vague, circular and imprecise definition to be used theoretically. These definitions measure diverse social support which are not explanatory. Despite lack of agreement about its operationalization, the notion of 'social support' as determinant of
mental and physical well being has found widespread acceptance and there has been an explosion in number and intensity of research effort.

The process and value of social support is placed in broader ecological context by Hobfoll's (1998) Conversation of Resources (COR) theory. COR theory's basic tenet is that people strive to obtain, retain, protect, and foster that which they value are termed resources. Resources are that they value in their own right or serve as a means of obtaining valued ends. There are four basic kinds of resources: objects, conditions, personal characteristics, and energies. COR theory proposes that stress occurs when people (a) are threatened with resource loss, (b) actually lose resources, or (c) fail to gain resources following resource investment. For example, people use self-esteem in order to bolster their self-confidence after doing poorly on an examination. Because resources are often hard to obtain and maintain, resource loss according to COR theory is considered to be more salient and of greater impact than resource gain. COR theory helps explain the importance of social support. People have limited resources and, especially when under stress, they may find their resources inadequate. Through social support people can rely on others to offer the resources they lack, bolster their flagging resources, or remove them from the stressful circumstances so that they can regain resources or the ability to use their resources. This may take the form of offering object resource, such as shelter or transportation, and energy resources, such as money or information.

Buunk (1990) made a distinction between four different conceptualizations of social support. First, from a sociological perspective, social support has primarily been viewed in terms of the number and strength of the connections of the individual to others in his or her environment—in other words, the degree of one's social integration or the size and structure of one's social network (Rook, 1984). A second perspective on social support has been provided by authors who equate social support with the availability of satisfying relationships characterized by love, intimacy, trust or esteem (Cutrona & Russell, 1990). In the third perspective, the perceived helpfulness view, social support constitutes the appraisal that, under stressful circumstances, others can be relied upon for advice, information and empathic understanding, guidance and support (Sarason & Sarason, 1986). Finally, for some
authors the concept of social support refers primarily to the actual receiving of supportive acts from others once a stressful situation has come into existence (Barrera, 1986).

COR theory (Hobfoll, 1998) also explains the potential costs of social support. First, the resources offered may be of poor quality i.e., supportive messages may contain sub messages that are actually undermining; second, using social support means incurring social obligations that may be costly in the future and thirdly, other resources often have to be expended to call on and employ help. Reaching out to others requires time, a critical resource that may already be taxed during stressful conditions. Calling on help may also force people to admit to some inadequacy, which they may not wish to acknowledge. The relationship between the nature of the demand and the adequacy of social support in meeting those demands has been termed social support fit. Emotional support has been found to fit many kinds of demands, and is the most robust, wide-reaching kind of support. COR theory suggests that resource reservoirs are finite and that even if initial support has excellent fit with demand, this does not mean that the right kinds of support will be available for the ongoing demands that ensue (Norris and Kaniasty, 1996).

During the last decade, there has been considerable interest in determining whether social support enhances health and well being. In this process two hypotheses has been developed.

1. Direct effect and

2. Buffering effect.

The direct effect argues that support enhances health and well being irrespective of stress level. Such a direct benefit could occur as a result of the perception that others will provide aid or help. In contrast to direct effect model, the buffering hypothesis argues that support exerts its beneficial effects in the presence of stress by protecting people from the pathogenic effects of such stress.

The dominant social support hypothesis has been that it buffers the impact of stressor. The earlier studies by Cassel (1974) and Cobb (1976) pointed out, under
conditions of high life changes or chronic exposure to stress, social support buffers the individual from potential adverse effects on mood and functioning, facilities coping and adaptation reducing the likelihood of illness (Sandler and Lakey, 1982; Dean and Lin 1977; Caplan 1974). Several studies have revealed the direct effects of social support. These documented a direct relationship between the presence of supportive ties, or the perception of such, and stress free functioning. Kiritiz and Moos (1974) concluded “the social stimuli associated with the relationship dimensions of support, cohesion and affiliation generally have positive effects – enhancing normal development and reducing recovery time from illness”.

**MEDIATORS**

**PERSONAL RESOURCES**
- Constitutional Strengths
- Coping skills
- Personality
cognitions - aspirations

**SOCIAL RESOURCES**
- Kith and kin – ties afforded by network

**STRESSORS**
- Acute life events
- Chronic hardships – “Hassles”

**REATIONS**
- Subjective experience of strain or distress. Signs and symptoms of disequilibrium

**HEALTH OUTCOMES**
- Affective, cognitive, behavioral illness states

**A1**: Direct effect of social support, e.g., prevents exposure to certain stressors; induces more benign appraisal of threat.

**A2**: Direct effect of social support, e.g., boosts morale and sense of well-being.

**B1**: Buffering effect of social support, e.g., preserves feelings of self-esteem and sense of mastery when exposed to adversity.

**B2**: Buffering effect of social support, e.g., protects against depression when stressful reactions occur.

*Figure 2.3: The role of social support in moderating the relationship between distress and health consequences (Medalies and Goldbourt, 1976)*

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Although the concept of social support was introduced in the social sciences in the 1970's, the idea that social relations may have a health-enhancing function is long-standing. The influence of positive social interactions on mental health were first introduced in psychiatry by the French physician, Pinel, in the early nineteenth century and the English and American physicians, Connolly and Rush, in the late eighteenth to mid-nineteenth centuries. Sociological influences into the importance of positive social attachments can be traced to the seminal work of Durkheim (1897), who found suicide to be related to social alienation from others. Certain genetic and morality explanations were the predominant psychological view of the time held by such eminent scholars as Lewis Terman of Standford and Robert Yerkes of Harvard, who argued that Jewish and other ‘brunette’ immigrant groups were genetically inferior and should be prevented from immigrating (Kamin, 1974).

Moving to more empirical investigations, researchers in the 1970’s examined the relationship between social attachments and wellbeing. In a pioneering investigation, Berkman (1977) examined the social relationships and health of a random sample of adults in Alameda County, California. Those individuals who had ongoing social relationships, such as marriage, close friendships and relatives, church membership, and informal and formal group associations, had the lowest mortality rates, i.e., the presence of positive social attachments acted as a resistance resource (as quoted by Hobfoll, 2001). Sarason (1974) suggested that people obtained a psychological sense of community, and theorized that this sense of community contributed to people’s wellbeing. He defined psychological sense of community as “the sense that one was part of a readily available, mutually supportive network of a relationship upon which one could depend...(who are) part of the structure of one’s everyday living....(and) available to one in a “give and get” way. The work of Caplan (1974), a pioneering psychiatrist, was perhaps the first to identify the concept of social support and its importance in the stress process as the active ingredient. Caplan identified the nature of the process by which social relationships provided psychological sustenance, acting ‘to mobilize...psychological resources and master...emotional burdens: share tasks; and supply (needed resources) (Caplan, 1974). He further emphasized that support
provision supplied and activated resources, but also contributed to a positive sense of another critical stress resistance resource – sense of mastery.

ATTACHMENT AND PERCEPTIONS OF SOCIAL SUPPORT:

The attachment system is believed to be universally activated in response to threat, people differ systematically in the way they cope with distress and regulate feelings of security, and these differences are thought to be contingent, at least in part, on one’s history of regulating distress with caretakers and other important attachment figures in childhood and adolescence (Kobak & Sceery, 1988; Bowlby, 1973). On the basis of experiences with attachment figures, individuals develop generalized representations about whether close others will be responsive and supportive in times of need and whether the elf is worthy of support and care.

Attachment theory has obvious relevance to social support processes not only because the attachment behavioral system will be automatically activated in response to stressful or threatening events (Mikulincer, Gillath, & Shaver, 2002) but also because working models of attachment contain both implicit and explicit expectations about the likelihood that significant others will be emotionally available in response to need (Waters & Rodrigues-Doolabh, 2001; Bretherton & Munholland, 1999; Bowlby, 1973). Like other social scripts and schemas, cognitive representations of attachment, once activated, direct attention and memory and organize and filter new information (Collins & Allard, 2001). As such, they should play an important role in the interpretation of, and memory for, support-relevant behaviors and events (Collins & Feeney, 2000).

Support attempts may be ambiguous either because support providers are unskilled at providing effective support – because their behavior contains a mixture of helpful and unhelpful responses – or because they misunderstand the type (or amount) of support that is wanted or needed by the support recipient (Dunkel-Schetter, Balsbad, Feinstein, & Herbert, 1992).

A number of self-report studies provide indirect evidence for attachment style differences in perceptions of social support (Rholes, Simpson, Campbell, &
Grich, 2001). Insecure adults (both anxious and avoidant) report less available support, less satisfaction with the support they receive, and a larger gap between what they say they need and what they say they receive. Insecure attachment is also associated with pessimistic beliefs and expectations about the risks, costs, and futility of seeking help from others (Wallace & Vaux, 1993). Other studies have demonstrated that perceptions of support availability are linked to reports of early experiences with attachment figures (Blain et al., 1993; Kobak & Sceery, 1988). Support recipients contribute to their support experiences in critical ways by mobilizing (or failing to mobilize) support and by cultivating (or failing to cultivate) mutually supportive relationships with others (Collins & Feeney, 2000).

Inspite of inconsistency in work related to direct-main hypothesis and stress buffering effect. There is a need to understand common characteristics related to social support, such as ‘Social Network’ and types of social support, such as social network and social support are interlinked with each other and it depends upon the network as to what kind of social support one is getting.

SOCIAL NETWORK

A network can be described in terms of its composition and structure (e.g., the number of people involved and the number who know each other or by the content of a particular relationship, e.g., friendship, kinship). Mitchell (1969) defined social network as the “specific set of linkages among a defined set of persons” or alternatively, the set of relationships of a particular individual.

It is important to understand the distinction between the number of relationship a person has and the person’s perception of the supportive value of social interactions. The former is usually referred to as the social network, the latter, as perceived social support. The benefits of social relationships are assumed, not measured, in the social network concept. While in the concept of perceived social support an effort is made to assess the person’s evaluation of the supportive quality of a relationship.
Approaches to the analysis of social networks have been both quantitative and qualitative. Quantitative deals with size of network and frequency of contacts among members. Qualitative deals with their emotional valence – whether the behaviour is constructive, destructive, supportive, friendly, intimate, confidential, tolerant, etc (Greenblatt et al., 1982).

Both comparative and community studies have contributed significantly to the analysis of social support by:

1. Debunking the assumption that integrated sets of social ties (i.e., densely knit networks) are necessarily related to access to more support and better health.

2. Forcing the recognition that social ties can perform multiple function, both positive and negative, with varying implications for health (Wellman, 1984).

3. Demonstrating that supportive aid can be understood in terms of network structures and compositional features.

**TYPES OF SOCIAL SUPPORT:**

Evidence from epidemiological studies is compelling in linking social support to physical and psychological well being and is suggestive with regard to the types of functions that may be responsible for these effects. Studies of social network indicate that spouses, friends and family members are a primary avenue of help seeking for distressed persons. The importance of distinguishing among different types of support lies in the possibility that they may have independent effects on health and psychological functioning and each might produce different outcomes because the functions are not necessarily interchangeable in utility for e.g., in some stressful situation, it can be better resolved by a loan or by services than by the offer of emotional support, whereas other stresses such as a blow to self esteem may be better managed by indications of positive regard or affection than through any tangible help.

**Weiss (1974)** suggests six "provisions of social relationships is (necessary) to maintain psychological well-being: Attachment, social integration, opportunity for
nurturance, reassurance of worth, a sense of reliable alliance and obtaining guidance”. However, this list omitted material aid and services.

As Gore (1978) and others (Folkman et al., 1979) have suggested, emotional support may also encourage a person to sustain, redouble, or renew coping efforts that increase the likelihood of stress management or mastery. Furthermore, informational support may affect adaptational outcome by suggesting alternative solutions to a problem or help a person reappraises a situation in the direction of stress reduction.

Some researchers suggest that different dimensions of social support such as affirmation or tangible assistance have different relationship with physical and psychological illness adjustment (Woods et al., 1989).

a) **EMOTIONAL SUPPORT**

This term is also referred to as esteem support, ventilation or confidant relationship. It refers to behaviour that foster feelings of comfort leads an individual to believe that he or she is admired, respected, and loved and that others are available to provide care and security. Studies of social support typically show a large difference in symptomatology between persons who have no such relationship and persons who have at least one such relationship (Cohen & Wills, 1985).

b) **INSTRUMENTAL SUPPORT**

It is termed as aid, tangible support, or material support, which involves direct aid or services and can include loans, gifts of money or goods, and provisions of services such as taking care of needy person or doing a chore for them. There is evidence that instrumental support is a relevant function in general population samples (Schaefer et al., 1981) and instrumental role performance is an important determinant of marital satisfaction (Argyle & Furnham, 1983). This type of support is probably particularly relevant for low income persons, who often are overburdened with instrumental chores, have smaller networks to begin with and are financially unable to buy assistance (Pelton, 1982). Likewise, Dunkel-Schetter (1984) reported
that higher levels of tangible aid, material aid and material assistance from the family were related to higher self-esteem, better mood and improved physical recovery.

c) INFORMATION SUPPORT

It includes giving information and advice which could help a person solve a problem and providing feedback about how a person is doing. Cassel (1976) has speculated that such a feedback may help a person maintain a social identity and a sense of social integration. Dunkel-Schetter (1984) found that in cancer patients informational support and advice were considered important and helpful when provided by health care provider, but not when given by family friends. Further the failure of a health care provider to give anticipated informational support was detrimental to health.

d) RECEIVED AND PERCEIVED SOCIAL SUPPORT:

Social support has been defined as “those social interactions or relationships that provide individuals with actual assistance or that embed individuals within a social system believed to provide love, caring, or sense of attachment to a valued social group or dyad” (Hobfoll, 1988, p.121). This definition eloquently encompasses the two major facets of social support that have dominated research in the last two decades: received social support and perceived social support. Received support refers to naturally occurring helping behaviors that are being provided, whereas perceived support refers to the belief that such helping behaviors would be provided when needed. In a nutshell, received support is helping behavior that did happen, and perceived support is helping behavior that might happen (Barrera, 1986).

Over the years, research has proclaimed the superiority of perceived social support over received support, because it more consistently promotes psychological health and protects it in times of stress (Cassel, 1976; Cobb, 1976). However, researchers who have examined whether received support accounted for the relation between perceived support and well-being have found no evidence for a mediational role for actual support receipt (e.g., Lakey & Cassady, 1990; Wethington &
Kessler, 1986). The immediate beneficial effects of received support may be elusive and confined to specific contexts of particular life events and populations (Dunkel-Schetter & Bennett, 1990), the more general impact of received help on mental health outcomes could be indirect through its influence on perceived support. Wethington & Kessler (1986) suggested this possibility and found some evidence that the effect of received support on psychological distress was mediated by perceptions of support availability. The problem with received support is that, its levels are associated with severity of stressors and psychological reactions, its merit depends on who provides it and who receives it, its receipt may be threatening to self-esteem, its type may not be appropriate, or its delivery may be inept. These collaterals of the helping process have been identified as reasons why the two constructs are relatively independent as well as why the relation between support actually received and psychological well-being is not straightforward at all (Dunkel-Schetter & Bennett, 1990). Even researchers who have conceptualized perceived social support as a relatively stable and elaborate relationship schema (or personality variable) recognize that part of the variance in a person’s global sense of being supported in times of need (Sarason, Sarason & Pierce, 1992).

e) GLOBAL VERSUS DOMAIN-SPECIFIC SOCIAL SUPPORT

Global perceptions of support availability simply reflect a summation of the support perceived to exist in specific relationships; that is, individuals have a global impression of available support that is based directly on their experiences in specific social domains. According to another approach, global support perceptions may represent a stable view, held by the individual, about the general positivity or negativity of the social world; this sense of support (Sarason, Pierce, & Sarason, 1990) reflects the individual’s overall feelings of acceptance by others, and belief that others will generally be helpful in times of difficulty. According to this view, global perceptions of support function essentially as a stable personality characteristic and may be rooted in early childhood relationships (Sarason et al., 1986). In contrast, domain-specific perceptions of support are thought to be more tightly linked to one’s accumulated history of experience with particular individuals and are less reflective of a general outlook on social life. It also appears that domain-specific support does not
fully account for all of the variation in global support perceptions, a pattern consistent with the view that global and domain-specific support are, to a considerable degree, independent of one another.

A considerable amount of recent evidence supports the view that perceptions of global support act, at least to some degree, as a stable, independent personality trait that colors our perceptions of potentially supportive behaviors. Sarason et al. (1986) found that perceptions of global support displayed traitlike levels of temporal stability, with high test-retest correlations over a 3-year period. Global support was more strongly correlated with cognitive personality variables than it was with the actual presence of supportive behaviors in the social environment (Lakey & Cassady, 1990).

Global support perceptions have also been found to be associated with biases in interpreting the supportiveness of hypothetical helping behaviors (Lakey & Cassady, 1990) and with the likelihood of recalling supportive behaviors (Lakey et al., 1992). Thus, the most convincing evidence that global and domain support are independent of one another—namely, a finding that both types of support simultaneously have unique associations with well-being—has not yet reported. If global support perceptions really function as a personality trait that is independent of domain support, then they should have unique effects on all well-being measures regardless of their level of specificity; perceptions of global support should color one’s perception of well-being across all domains and relationships. Domain-specific support perceptions, in contrast, might logically be expected to have more limited associations with well-being; in particular, they should have unique associations only with those well-being measures that tap the kinds of dysphoria relevant to particular social domains.