CHAPTER II
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REVIEW OF RELATED LITERATURE AND FORMULATION OF HYPOTHESES

With a view to seek some guidelines\(^1\) from the previous researches, which could be helpful in formulating the present investigation, the results of some of the representative studies are discussed below. The review of studies has been used for the formulation of hypotheses. The present review is no means exhaustive, it is an attempt to indicate the main trends in research and theory which have a direct or indirect bearing on the present problem.

Disorders in which anxiety or depression is the predominant feature constitute a large part of contemporary psychiatric practice. As such depression is a matter of social and public health concern. Although there is a considerable agreement regarding depression as common and significant problem for the general population and the client in psychotherapy in particular, the literature regarding possible symptoms and correlates of depression is extensive in the literature which stress or examine particular symptoms and factors related to depression.

Serious depressive disorders were among the earliest diseases described in the history of medicine. References to serious depression appear in Pharaonic medical texts such as the Eber Papyrus, the old Testament, and the writings of the Classical Greeks. In general, most of these writers appear to have assumed that depression was endogenously or biologically caused. Greek physicians, for example, referred to depression as “melancholia”, or a disease due to an excess of black bile. The book of Job illustrates the profound mood alteration, loss of interest, social withdrawal, self-deprecation, self-blame, and sleep disturbance that

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\(^{1}\) What is already known, what others have attempted to find out, what problems remain to be solved, what methods of attack have been promising or disappointing, the techniques and methodology followed by earlier investigators, etc.
characterize depression. A 3,900-years old Egyptian manuscript provides a distressingly accurate picture of the sufferer’s pessimism, his loss of faith in others, his inability to carry out the everyday tasks of life, and his serious consideration of suicide (Thacker, 1958).

In the historical perspective, deranged behaviours were typically considered curses from the gods by the Ancients or as a sign of moral or personal weakness. Hippocrates, the first clinician to describe depression carefully, argued that psychiatric problems originated from natural rather than from supernatural causes. He emphasized the critical role of the brain in the development of these disorders (Beck, Brady, & Quen, 1977).

Arētaeus of Cappadocia (A.D. 120-180) was the first to recognize organic (more recently called endogenous) and external (situational) depressions as two separate illnesses. He also described both manic and depressive episodes, noting that some disorders included only recurrent episodes of depression (now called unipolar depressions), whereas others involved episodes of both depression and mania (now called bipolar depressions).

During the Dark Ages, Western civilization returned to beliefs in possession and supernatural forces as explanations for psychiatric disorders. Not until the Renaissance was there a return to enlightened empiricism, observation, and reasoned thought. Johann Weyer (1515-1588), a 16th century physician noted for his opposition to witchcraft, was one of the first to focus his studies on mental illness. He considered depression to be linked to somatic or bodily symptoms. Timothy Bright, a physician at London’s St. Bartholomew’s Hospital, was the first to recognize suicide as a manifestation of despair. In his Anatomy of Melancholy (1630), Robert Burton summarized the existing theories and depicted the range of depressions as extending from natural grief at death or separation to depressive disorders.
A wider recognition of specific psychiatric disorders, as well as tendency toward humane and enlightened treatments, unfolded in the 18th and early 19th centuries. In the late 19th and early 20th centuries, European clinicians focused their attention on both descriptive diagnosis (diagnosis based on the recognition of specific signs and symptoms) and on unconscious factors.

Emil Kraepelin (1856-1926) distinguished manic depressive insanity, an episodic non deteriorating disorder, from dementia praecox — later called "Schizophrenia" a more progressive deteriorating disorder. Eugen Bleuler (1857-1939), a Swiss neurologist, further differentiated the concept of manic-depressive insanity. He coined the term "affective disorders", in which he included manic-depressive insanity, psychoneurotic depressive reactions, and involutional melancholia. He was, however, unable to delineate clearly the specific subtypes of affective disorder, a problem of separation that persists even today.

In more recent times, the concept of depression has been broadened to include milder forms. Clinicians and researchers have debated whether the concept of depression refers to a single disease that varies from mild to severe along a continuum or whether it consists of set of discrete subtypes that differ in phenomenology, and ultimately etiology (Everitt, 1981; Kendell, 1968, 1976; Eysenck, 1970; Hamilton & White, 1959; & Lewis, 1938). This debate has yielded a number of different methods for subtyping depressive disorders, such as endogenous vs reactive, psychotic vs neurotic, and primary vs secondary (Nelson & Charney, 1980; Akiskal, Rosenthal, Rosenthal, Kashgaria, Khani, & Puzantian, 1979; Andreasen & Winokur, 1979a; Bhrolchain, 1979; Bhrolchain, Brown, & Harris, 1979; Akiskal, Bear, Puzantian, Rosenthal, & Walker, 1978; Winokur, Behar, Van Valkenburg, & Lowry, 1978; Lewis, 1971; Kendell & Gourlay, 20

In spite of considerable agreement on the phenomenology of the clinical syndrome of depression, no completely satisfactory explanation has yet been offered to account for the mechanisms underlying the wide variations in symptomatology and course. The identification of psychosocial factors that may cause depression has proven to be an arduous task. The difficulty of demonstrating causal relationships in naturalistic research has been compounded by an overreliance on cross-sectional methodology. Cross sectional research has been successful in demonstrating differences between depressed and non-depressed individuals; that is, it has identified abnormalities in the functioning of depressed individuals that are present during depressive episodes. Many of these abnormalities, such as dysfunctional cognitions, distressed relationships, analytic personality types, and deficits in social behaviors, have been implicated in the etiology of depression by theorists of various orientations (e.g., Abramson, Seligman, & Teasdale, 1978; Brown & Harris, 1978; Beck, 1976; Hirschfeld, Klerman, Chodoff, Korchin, & Barrett, 1976; Lewinsohn, 1976). However, some of these problems in functioning may be symptoms, or concomitants, of depression that appear with the onset of a depressive episode and disappear with remission.

The number of competing viewpoints and nosological systems (Wing, 1976; Akiskal & McKinney, 1973, 1975; Rush, 1975; Beck, 1967) clearly mirrors the incomplete knowledge of etiological and contributory factors in the depressive disorders. Nevertheless, as Akiskal & McKinney’s (1973) "pluralistic" view of depression suggests, most explanatory models, including psychological and biological models, provide a unique perspective that can contribute to a fuller understanding of these clinical syndromes. Furthermore, although recent reviews have discussed the relationships of individual psychosocial variables with depression or related...
psychological disorders (e.g., Coyne, Kahn, & Gotlib, 1987; Gotlib & Colby, 1987; Sweeney, Anderson, & Bailey, 1986; Cohen & Wills, 1985; Akiskal, Hirschfeld, & Yerevanian, 1983), much less consideration has been given to how these variables might interrelate and to how their interactions might affect the development or maintenance of depression.

(A) Cognitive Vulnerability and Depression

The cognitive view of behavior assigns primary importance to the self-evident fact that people think. It assumes that the nature and characteristics of thinking and resultant conclusions determine what people feel and do and how they act and react. This view of behavior and psychopathology has a long history that bridges the disciplines of clinical psychiatry, clinical and academic psychology, and philosophy (Wason, Johnson Laird, 1972; Broadbent, 1971; Adler, 1969; Beck, 1967; Neisser & Kelly, 1955; Craik, 1952). The increasing emphasis on the role of cognition in behavior has been termed the "cognitive revolution" (Dember, 1974). It can be noted that cognition has played an increasingly important role in recent theories of personality and psychopathology (e.g., Meichenbaum, 1977; Mahoney, 1974; Mischel, 1973; Kelly, 1955). Depression is one area of theory and research in which cognitive factors, that is, the manner of perceiving, construing, anticipating, and evaluating events, behaviors, and their consequences have been emphasized. In this context, much of the impetus has come from the theoretical and empirical work of Aaron Beck (1967, 1974), Martin Seligman (1974, 1975), and Peter Lewinsohn (1976). Indeed, the recent empirical literature on the psychology of depression is dominated by studies addressing Beck's cognitive theory, Seligman's learned helplessness model, or Lewinsohn's theory, which attributes depressive states to a low rate of response-contingent positive reinforcement.

The cognitive approach focuses on self-castigation, exaggeration of external problems, and hopelessness as the most
salient symptoms. Beck (1967, 1976) has provided the most comprehensive exposition of the cognitive view of depression. Beck proposed that dysfunctional cognitions are at the core of depressive constructions about the self, the environment, and the future. The depressed person is seen as having a negative view of himself, of the world, and of the future. The depressed affective state is secondary to these negative cognitions.

Aaron Beck discusses what he calls the vulnerability of the depression prone person as "attributable to the constellation of enduring negative attitudes about himself, about the world, and about his future. Even though these attitudes (or concepts) may not be prominent or even discernable at a given time, they persist in a latent state like an explosive charge ready to be detonated by an appropriate set of conditions. Once activated, these concepts dominate the person's thinking and lead to the typical depressive symptomatology" (Beck, 1967). This, cognitive distortions are seen to develop from early life experiences and to be triggered by present environmental conditions or events, thus leading the person to view the self, the world, and the future in a negative way. Beck believes that the activation of these maladaptive thought patterns leads to the affective, motivational, and physical symptoms of depression.

In Beck's theory, depressogenic assumptions, or irrational beliefs, are schema that an individual uses to interpret his or her ongoing experience and that may produce clinical depression when they are activated by life events. For example, a person who believes "unless I am loved I am worthless" may become depressed if his or her spouse leaves. According to Beck, Rush, Shaw, & Emery (1979), the severity of the depressive episode is related to the number of irrational beliefs endorsed. This model is in keeping with the work of Ellis (1962), which proposes that adherence to certain irrational beliefs is a primary cause of emotional disturbance.
Other, more behaviorally-oriented theorists have also stressed the importance of cognition in the understanding and treatment of depression. Seligman has focused on the perception of control of reinforcers in his learned helplessness model of depression (Seligman, Klein, & Miller, 1976), and Lazarus (1974) has identified lack of hope in receiving future rewards as a central feature in depression. Seligman's hypothesis is that reactive depression in humans is essentially a state of learned helplessness, characterized most notably by the perception of non-control. According to the reformulated learned helplessness model (Abramson, Seligman, & Teasdale, 1978), depression can result from attributing the occurrence of negative or aversive events to internal, stable, and global causal factors. Although certain studies designed to test these specific predictions have provided support for this theory, other research had led to conflicting results (Coyne & Gotlib, 1983: critical literature review). Weiner (1974, 1979) and Abramson, Seligman, & Teasdale (1978) in their reformulated learned helplessness model of depression, have applied the constructs of attribution theory in a manner consistent with Beck's observations. They have predicted that depressed persons, compared with non-depressed persons, are more likely to view personal negative events as uncontrollable and caused by personal qualities that are stable and global in their effects. The reformulated learned helplessness model of depression states that depression results when an Individual makes certain attributions about uncontrollable life events. Clinically depressed patients are hypothesized to make internal, stable, and global attributions for negative events. An example is the depressed student who attributes his or her failing grade in an examination to stupidity. This student attributes the causes of the failure to things about him or herself (internal) that are expected to persist over time (stable) and to affect other situations in his or her life (global). In an extension of the model, Seligman, Abramson, Semmel, & von Baeyer (1979) predicted that depressed subjects would make
external, unstable, and specific attributions for the causes of positive events. For example, the depressed student who receives an A on an examination would attribute the good grade to external factors that are not expected to persist over time or to apply to other situations (e.g., "I did well because it was an easy examination.

Several recent studies have examined attributional patterns in depressed and non-depressed college students. A common finding is that depressed students attribute failure on experimental tasks to internal causes, whereas non-depressed students make external attributions for failure (Kuiper, 1978; Rizley, 1978; Klein, Fencil-Morse, & Seligman, 1976). In addition, Rizley (1978) reported that depressed students viewed external factors as causes for success more often than did non-depressed students. Seligman, Abramson, Semmel, & von Baeyer (1979) expanded the examination of student's attributional styles to include globality and stability dimensions as well as locus of causality. They found that depressed students attributed bad outcomes in hypothetical situations to relatively internal, stable, and global causes, when compared to non-depressed students.

In summary, it can be stated that both the reformulated learned helplessness model (Abramson, Seligman, & Teasdale, 1978) and the cognitive theory of depression (Beck, 1967, 1975) hypothesize that specific maladaptive thinking patterns play important roles in the onset or in the maintenance of clinical depression. Each theory hypothesizes that certain maladaptive thinking patterns are latent in depression-prone individuals during asymptomatic periods; these patterns are activated by stressful events, and the result is clinical depression.

Cognitive theory postulates that stresses trigger the activation of specific schemata or dysfunctional attitudes in those individuals predisposed to depression (Rush & Beck, 1978). Once activated, these schemata, which are derived from early experiences, lead individuals to view themselves, their world, and their future in an
unrealistically, negative manner (the negative cognitive triad). These negative views or automatic thoughts are accompanied by certain systematic logical errors (e.g., personalization, overgeneralization). Thus, dysfunctional attitudes explain vulnerability for developing depression (Rush & Beck, 1978). On the other hand, negative automatic thoughts would be a part of the clinical state of depression but should not be present in the remitted or asymptomatic state.

Empirical support for the cognitive approach has been accumulating. Some studies have demonstrated a positive relationship between cognitive distortions and depressive symptoms (Nelson, 1977, Hammond & Krantz, 1976, Weintraub, Segal, & Back, 1974). Although these studies do not address the question of causality, they provide evidence that cognitive distortions are a primary feature of depression. Few more studies (Rush, Beck, Kovacs, & Hollon, 1977, Teasdale & Bancroft, 1977; Ludwig, 1975) provide strong support for the importance of cognitive factors in depression. Thus descriptive, correlative, experimental and clinical treatment studies have supported the hypothesis of the centrality of specific types of cognitive distortions in depression (Hollon & Beck, 1979). Dobson & Shaw's (1986) investigation also found supportive evidence for the cognitive model of depression.

The most widely used measure of cognitive vulnerability to depression is the Dysfunctional Attitudes Scale (DAS; Weissman & Bade 1978). Research using the DAS with university students has demonstrated that mildly depressed subjects endorse significantly more dysfunctional attitudes than do non-depressed subjects (Gotlib, 1984, Dobson & Breiter, 1983; Weissman & Beck, 1978). Similar studies have reported that depressed psychiatric patients exhibit higher scores on the DAS than do normal controls, although they do not differ significantly from non-depressed psychiatric patients (Zimmerman, Coryell, Corenthal, & Wilson, 1986), The results of validation studies suggest that the schemata measured by the DAS are more stable than are self-rated symptoms of depression across
both 6-week (Oliver & Baumgart, 1985) and 2-month (Weissman, 1980) time lags. Finally, the interaction of dysfunctional attitudes with negative life events has also been investigated (Olinger, Kuiper, & Shaw, 1987; Wise & Barnes, 1986), and the results of this research suggest that the depressogenic effect of negative events is more potent among cognitively vulnerable (i.e., high-DAS) subjects than among those subjects who endorse a low number of dysfunctional attitudes. Thus, research has generally supported the hypotheses of Beck’s cognitive model of depression concerning the relationship between schemata and current depression. The model also predicts, at least implicitly, that dysfunctional attitudes are predictive of future depression, particularly through their interaction with stressful life events, that they are relatively stable, and that they are elevated to depressive pro bands who are asymptomatic.

Dobson & Breiter (1983) made an attempt to determine psychometric properties of three cognitive assessment scales. The subjects were 234 male and 222 female first year undergraduate students at the University of Western Ontario participating for credit in an introductory psychology course. All of the subjects completed all of the measures, in random order during a single testing period. A comparison of the Automatic Thought Questionnaire (ATQ), the Dysfunctional Attitude Scale (DAS), and the Interpretation Inventory (Int I) in terms of their internal reliability and concurrent validity showed that the ATQ was a more satisfactory instrument. The question of whether cognitive aspects of depression constitute only one of several components of depression (cf. Coyne, 1982) or are truly casual (cf. Beck, 1967) can only be approached from a research perspective once researchers can reliably and validly conduct cognitive assessment.

Barnett & Gotlib (1988) on the basis of critical review of the literature concluded: It appears from research that a main effect for the DAS in predicting future depression is not a robust finding. Additional research may be required to clarify the role of dysfunctional
attitudes in mediating the effects of stress on depression (p. 106). Overall, then, there is little empirical support for the contentions of the cognitive theorists that dysfunctional attitudes represent a stable vulnerability to depression". (p. 307).

Although dysfunctional attitudes are identified by Beck et al., (1979) as being the primary link in the causal chain that leads to the onset of a depressive episode, the stability and predictive power of diverse cognitions postulated to be associated with depression have been investigated in a number of studies that have controlled for the effects of concurrent symptoms. These cognitions include thoughts of hopelessness (Rholes, Riskind, & Neville, 1985, Blackburn & Bishop, 1983, Hamilton & Abramson, 1983; Hamilton & Blackburn, 1981), thoughts of loss (Rholes et al. 1985), negative self-schemata (Dobson & Shaw, 1987; Hammen, Miklowitz & Dyck, 1986; Haninien, Marks, deMayo, & Mayol, 1985), negative construct accessibility (Gotlib & Cane, 1987), the cognitive triad (i.e., negative view of self, future, and world; Blackburn & Bishop, 1983), perfectionistic attitudes (Hewitt & Dyck, 1986), irrational beliefs (Lewinsohn et al. 1981), cognitive distortions (Dobson & Shaw, 1986; Millar & Norman, 1986; Blackburn & Smyth, 1985; Simons et al. 1984), and negative automatic thoughts (Dobson & Shaw, 1986; Hollon et al, 1986; Blackburn & Smyth, 1985; Eaves & Rush, 1984; Simons at al., 1984).

With two exceptions (Dobson & Shaw, 1986; Rholes et al; 1985), the results of this research support the hypothesis that abnormal cognitive activity is a concomitant or symptom of depression. Dobson & Shaw (1986) obtained data indicating that negative automatic thoughts were more frequent among remitted depressives than among normal controls. This finding is somewhat contrary to recent formulations of cognitive theory in which negative automatic thoughts are seen as relatively unstable, symptomatic cognitions (cf. Beck & Epstein, 1982). Furthermore, it should also be noted that this finding was not replicated in the studies cited earlier
that also examined negative automatic thoughts. In the second study, Rholes et al. found that hopelessness cognitions significantly predicted subsequent depression among initially non depressed subjects, although no information was given regarding subjects level of depression at T2. Future research should be directed to an exploration of the predictive relationship between hopelessness cognitions and more serious depression.

Recent Studies

Negative thinking, particularly in relation to the self and the future, is a well established characteristic of episodes of depression (Haaga, Dyck, & Ernst, 1991). Cognitive theories of depression have been prominent among psychological approaches to understanding depression. Cognitive models (e.g., Ingram, Miranda, & Segal, 1998; Nolen-Hoeksema, 1991; Abramson, Metalsky, & Alloy, 1989; Rehm, 1977; Beck, 1967,1987) emphasize the role of maladaptive beliefs, inferential styles, or information processing biases as vulnerability factors for depression that increase people's risk for becoming depressed when they experience stressful life events. Moreover, a growing body of evidence suggests that negative cognitive styles and information processing do, indeed, increase risk for depression (e.g., Abramson et al., 1999; Alloy et al., 1999; Ingram et al., 1998). If negative cognitive styles do confer vulnerability to depression, then it becomes important to understand the origins of these cognitive styles. Such understanding may lead to the development of early interventions to prevent initial onset and recurrences of depression.

Alloy (2001) reviewed and addressed empirically several potential developmental precursors of cognitive vulnerability to depression. Although the samples included in these studies vary from children to adolescents to young adults, the recurrent theme being exposure to a negative interpersonal context of some kind (e.g., negative parenting practices, negative inferential feedback from significant others, early history of maltreatment, negative appraisals of
competence from significant others, low intimacy in romantic relationships, family discord or disruption) leads to the development of personal cognitive vulnerability to depression. Goodman and Gotlib (1999) suggested a variety of factors that may be associated with the development of negative cognitive structures (e.g., modeling negative cognition and interactions, and exposure to depressive behaviors and affect).

Three types of cognitions are hypothesized to be important to the etiology of depression. A negative view of the self and negative expectations about the future are core parts of cognitive vulnerability according to both Abramson et al. (1989) and Beck (1976). In addition, hopelessness theory (Abramson et al., 1989) highlights the contribution of attributional style to the onset of depression. There is increasing evidence that negative cognitions predict depressive symptoms in both children (e.g., Hilsman & Garber, 1995; Nolen-Hoeksema, Girdus, & Seligman, 1992) and adults (Metalsky, Joiner, Hardin, & Abramson, 1993; Metalsky & Joiner, 1992).

Theories focusing on cognitive schemas in depression (e.g., Beck, 1967) suggest that these schemas develop in response to stressful events in childhood. Once such events are cognitively encoded, schemas sensitize individuals to respond in a dysfunctional fashion to circumstances that resemble those experienced in childhood.

In this regard Beck (1967) argues that, In childhood and adolescence, the depression-prone individual becomes sensitized to certain types of life situations. The traumatic situations initially responsible for embedding or reinforcing the negative attitudes that comprise the depressive constellation are the prototypes of the specific stresses that may later activate these constellations. When a person is subjected to situations reminiscent of the original traumatic experiences, he may then become depressed, (p. 278)

Developmental psychopathology provides a framework for the investigation of cognitive vulnerability to depression during adolescence. Developmental psychopathology proposes that both
normative and atypical development be studied together to identify the onset and consequence of negative trajectories. The period of adolescence is known to be characterized by increased normative challenges.

Joiner (2000) evaluated the hopelessness theory of depression among 60 youth psychiatric inpatients. Results were consistent with all hypotheses derived from hopelessness theory i.e., negative attributional style may cross-sectionally relate to an array of psychopathological symptoms. However, in the presence but not the absence of negative life events, negative attributional style relates to the onset and exacerbation of depressive (not other) symptoms. Moreover, negative attributional style relates to depression onset or exacerbation specifically via changes in hopelessness (not other mediators).

Schwartz et al. (2000) examined the role of attributional style in adolescent’s psychological functioning. Specifically, they examined the cross-sectional correlates of attributional style, as well as the correlates of changes in attributional style over time in a sample of adolescents. Results indicated that attributional style is associated with multiple depression-related variables. In addition, youth experienced significant changes in their attributional styles over time (from adaptive to maladaptive and vice versa). Finally, changes in attributional style were associated with changes in psychological symptoms and other psychosocial variables.

Epkins (2000) examined whether cognitive features in Beck's (1967) model of depression and his cognitive content-specificity hypothesis (Beck, Brown, Steer, Eidelson, & Riskind, 1987) are broadband specific features that distinguish internalizing problems from externalizing problems in a community and clinic sample. Both the internalizing only and comorbid groups reported significantly more cognitive disturbances (negative cognitive triad, cognitive processing distortions, and "depressive" and "anxious" thought content) than both of the externalizing only and control groups in both the
community and clinic samples. The results were not related to either overall level of psychopathology (as reported by mothers) or social desirability in children's reporting.

**Tram and Cole (2000)** conducted a 2-wave longitudinal study among 9th grade students. In longitudinal analyses, negative (but not positive) events related to depressive symptoms. Results suggested that self-perceived competence served as a mediator (but not a moderator) of this relation. Negative events predicted changes in self-perceived competence. Self-perceived competence predicted changes in depressive symptoms. Also the direct effect of negative events on depressive symptoms diminished after controlling for self-perceived competence.

**Leung and Poon (2001)** aimed at testing whether there were different types of dysfunctional schemas and cognitive distortions that could help to differentiate three emotional/behavioural problems, i.e., anxiety, depression, and aggression, from each other. Results showed an indiscriminate pattern of association between dysfunctional schemas, cognitive distortions and the three emotional/behavioural problems. However, when the effects of the confounding correlated emotional/behavioural problems were controlled, different problems did show some specific association with different types of dysfunctional schemas and/or cognitive distortions. Despite some inconsistency, these findings generally supported a specificity hypothesis.

**Lewinsohn et al. (2001)** evaluated the cognitive diathesis-stress models in predicting the onset of major depressive disorder and no-mood disorders in 1,507 adolescents. Analyses supported A.T. Beck's (1976) theory of depression (at the level of a trend) but not the hopelessness theory of depression. Findings were suggestive of a threshold view of vulnerability to depression; for those who experienced negative life events, depressive onset was related to dysfunctional attitudes but only when dysfunctional attitudes exceeded a certain level (low=intermediate<high). For participants who
scored either every high or very low on both dysfunctional attitudes and negative attribution style, non-significant findings were obtained.

**Muris et al. (2001)** investigated the role of various protective and vulnerability factors in the development of depressive symptoms among normal adolescents (N=373). It was found that depression was accompanied by high levels of parental rejection, negative attributions and passive coping, and by low levels of active coping and self-efficacy. Furthermore, a model in which negative parental rearing behaviour and a negative attribution style featured as the primary sources of depression, while coping styles and self-efficacy played a mediating role in the formation of depressive symptoms, provided a reasonable fit for the data.

**Williams et al. (2001)** provides support for the existence of processes associated with cognitive reactivity and the assumptions associated with the mood-state dependency model of cognitive vulnerability in adolescence, i.e., the activation of a negative affective node triggers latent, negative cognitions. They showed that certain differences existed in the cognitive processes between adults and adolescents. Anger and irritability may play a more predominant role in activating negative cognitions in adolescence than adulthood.

Applying a cognitive approach, **Dieserud et al. (2001)** evaluated (a) whether low self-esteem, a low sense of self-efficacy, loneliness, and divorce constituted vulnerability factors for the development of depression; (b) whether hopelessness and suicidal ideation mediated the relationship between depression and suicide attempt; and (c) whether problem-solving deficits mediated the relationship between the vulnerability factors and suicide attempt, separate from depression/ hopelessness. The results indicated a two path model of suicide attempt. The first path began with low self-esteem, loneliness, and separation or divorce, which advanced to depression, and was further mediated by hopelessness and suicidal ideation which led to suicide. The second path developed from low self-esteem and a low
sense of self-efficacy and advanced to suicide attempt, mediated by a negative appraisal of one's own problem-solving skills.

Rudolph and Clark (2001) tested skill-deficit and cognitive-distortion models of depression and aggression in fifth- and sixth-grade children. As anticipated, children with higher levels of depressive symptoms, either alone or in combination with aggression, demonstrated more negative conceptions of both self and peers than did non-symptomatic children. Children with depressive symptoms and children with aggressive symptoms displayed unique profiles of social competence deficits and problematic status in the peer group. Analysis of the accuracy of children's conceptions of relationships revealed support for both skill-deficit and cognitive-distortions models. Consistent with a skill-deficit model, children with depressive and depressive-aggressive symptoms were sensitive to actual differences in their social status. Consistent with a cognitive-distortion model, children with depressive and depressive-aggressive symptoms had more negative conceptions than would be expected given their social status, whereas aggressive-unpopular children demonstrated a self-enhancement bias.

Garber and Flynn (2001) in a prospective study examined the contribution of maternal history of depression, mothers' cognitive style, mothers' parenting style, and stressful life events to depressive cognitions in 240 young adolescents. Results revealed that maternal history of depression was associated with all three types of negative cognitions in offspring; maternal parenting style and stressful life events significantly incremented the prediction of teens' negative cognitions beyond maternal depression. Adolescents' self-worth was significantly predicted by low maternal acceptance. Attribution style was associated with maternal attributional style for child-focused events, and significantly predicted by maternal psychological control and negative life events. Hopelessness was predicted by high levels of stressful life events, particularly among youth with low self-worth.
By applying principles of developmental psychopathology, Williams et al., (2001) examined intimacy in relationships and cognitive vulnerability to depression in late adolescent girls. The results indicated that little to no intimacy in romantic relationships was associated with cognitive reactivity in a negative mood. Little to no intimacy in relationships with best friends, mothers, and fathers was not associated with cognitive reactivity. Romantic relationships appear to play a key role in adolescent girls' well-being in late adolescence, and low intimacy in these relationships is associated with latent, negative cognitions.

Hankin and Abramson (2001) proposed a developmentally sensitive, elaborated cognitive vulnerability-transactional stress model of depression to explain the "big fact" of the emergence of the gender difference in depression. The elaborated causal chain posits that negative events contribute to initial elevations of general negative affect. Generic cognitive vulnerability factors then moderate the likelihood that the initial negative affect will progress to full-blown depression. Increases in depression can lead transitionally to more self-generated dependent negative life events and thus begin the causal chain again. They provided preliminary support for the model as an explanation for the development of the gender difference in depression during adolescence and the female preponderous in depression that begins to emerge around age 13.

Abela (2001) tested the diathesis-stress and causal mediation components of the hopelessness theory of depression in third- and seventh-grade children. Results indicated that a depressogenic attributional style interacted with negative events to predict increases in depressive symptoms in seventh-grade children but not in third-grade children. A depressogenic inferential style about consequences interacted with negative events to predict increases in depressive symptoms in both third- and seventh-grade children. Last, a depressogenic inferential style about the self interacted with negative events to predict increases in depressive symptoms in third- and
seventh-grade girls but not boys. None of these interactions were mediated by hopelessness.

**Wenzlaff and Rude (2002)** examined the possibility that attitudinal precursors to depression exist but are difficult to detect because at-risk individuals are trying to suppress dysfunctional thinking. The results indicated that although formerly depressed individuals-who are at risk for relapse-reported relatively adaptive attitudes, they were more uncertain about those beliefs than were their never-depressed counterparts. Moreover, this greater uncertainty was associated with high levels of thought suppression that, in turn, were related to previous depression.

**Abela and Alessandro (2002)** tested the diathesis-stress and causal mediation components of Beck's (1967, 1983) cognitive theory of depression among high school seniors. Results indicated that consistent with the diathesis-stress component of Beck’s theory, dysfunctional attitudes predicted increases in depressed mood immediately following a negative outcome. In addition, consistent with the causal mediation component of the theory, in negative outcome students, the relationship between dysfunctional attitudes and increases in depressed mood was mediated by negative views of the future. Contrary to predictions, however, this relationship was not mediated by negative views of the self. In addition, contrary to predictions, dysfunctional attitudes did not predict enduring depressed mood after a negative outcome.

**Perez-Smith et al. (2002)** examined the role of neighborhood factors in predicting hopelessness among adolescent suicide attempters. Adolescents who lived in neighborhoods with weak social networks reported higher levels of hopelessness, even after controlling for socio-economic status (SES) and depression. These’ preliminary findings suggest that environmental context may play a role in the emotional status of adolescents who attempt suicide.

**Kwon and Laurenceau (2002)** conducted a ten-week prospective longitudinal study to test the diathesis-stress component
of the hopelessness theory and to test whether negative attributional
style leads to an increased exposure to stressors. Consistent with the
diathesis-stress hypothesis, analyses revealed that attributional style
moderated the impact of daily hassles on depressive symptoms.
Negative attributional style predicted greater depressive symptom
reactivity in response to stress. The results also indicated that
attributional style was not predictive of the number of subsequent
daily hassles. Thus, the data were supportive of a differential reactivity
to stress model, but not supportive of a differential exposure to stress
model.

Garnefski et al. (2002) focused on comparability of adolescents
and adults in the reporting of cognitive coping strategies and their
relationship to symptoms of depression and anxiety. The results
showed that all cognitive coping strategies were reported by
adolescents to a significantly lesser extent than by adults. Further, it
was shown that both in adolescents and adults a considerable
percentage of the variance in symptomatology was explained by the
use of cognitive coping strategies. Although adolescents and adults
differed in relative strength of the relationships, generally speaking,
conclusions were the same: in both groups, the cognitive coping
strategies self-blame, rumination, catastrophizing and positive
reappraisal were shown to play the most important role in the
reporting of symptoms of psychopathology.

Garber et al. (2002) examined the developmental trajectories of
their depressive symptoms using latent factor growth modeling in
adolescents assessed annually in Grades 6 through 11. In the model
with gender and maternal depression, girls reported a greater increase
in depressive symptoms over time than boys, and adolescents of
mothers with histories of mood disorders had higher initial levels of
depressive symptoms than offspring of never-depressed mothers. After
gender and maternal depression were controlled, initial levels of
negative attributions and stressors significantly predicted initial levels
of adolescent-and mother-reported depressive symptoms. Attributional
styles that were increasingly negative across time were associated with significantly higher initial levels (mother reported) and increasing growth (adolescent reported) of depressive symptoms.

Spence et al. (2002) examined the relationship between problem-solving orientation and attributional style and the moderators of the impact of negative life events on the development of depressive symptoms in adolescence. Depressive symptoms at 1-year follow-up, controlling for baseline depression levels, were predicted by negative life events (NLEs) in the previous 12 months, attributional style (AS), negative problem-solving orientation (NPSO), and the interaction between NLEs and NPSO. The presence, but not absence, of high NLEs, NPSO predicted increases in depressive symptoms. In contrast, pessimistic AS predicted future increases in depression irrespective of the occurrence of NLEs.

Waschbusch et al. (2003) evaluated whether anxiety, event valence (positive or negative) and demographic variables (gender, age, socioeconomic status or race) influence the relationship between helpless attributions and depression. Results showed: (1) adolescents with anxiety and depression who were from lower socioeconomic backgrounds made less helpless attributions for negative events than did adolescents from higher socioeconomic backgrounds, (2) male adolescents with anxiety-only had helpless attribution styles that were similar to male adolescents with depression, but the same was not true for female adolescents, and (3) African-American adolescents showed less helpless attributions for negative events than did Caucasian adolescents.

Pomerantz and Rudolph (2003) examined the process by which emotional distress contributes to competence estimation among children in a 3-wave longitudinal study. Emotional distress predicted negative beliefs about the self and the world over time; these beliefs in turn predicted decrements in competence estimation over time. Negative views of the self and the world mediated the path from emotional distress to competence underestimation.
**Kraaij et al. (2003)** examined the effects of parental bonding and cognitive coping in the relationship between negative life events and depressive symptoms in adolescence. Adolescents with a poor parental bonding relationship seemed to be more vulnerable to depressive symptoms in the face of adverse life events than adolescents with more optimal bonding styles. Cognitive coping strategies seemed to play an even more important role. The use of self-blame, rumination, catastrophizing, positive refocusing and positive reappraisal appeared to be related to depressive symptoms. In addition, self-blame, rumination, and positive reappraisal seemed to have a moderating role in the relationship between the amount of stress experienced and depressive symptoms.

**Stewart et al. (2004)** conducted a cross-cultural investigation of cognitions and depressive symptoms in adolescents from Hong Kong and the United States. Depressive symptoms and hopelessness was found to be higher, and self-efficacy and negative cognitive errors were lower in Hong Kong than in the United States. Cognitions were associated with concurrent depressive symptoms and predicted depressive symptoms 6 months later in both cultures. The "reverse" model was also supported with more variance predicted by depressive-symptoms to later cognitions than from cognitions to depressive symptoms. There was some support for the hypothesis that self-efficacy is less salient in collective compared with individualistic cultures.

**Ietsugu et al. (2004)** examined the causal relation between depressogenic schemata and depression. Three structural equation models were tested two times among 149 students during five months: (1) one-way causal relation from depressogenic schemata to depression, (2) one-way causal relation from depression to depressogenic schemata, (3) reciprocal relation between depressogenic schemata and depression. Results showed the third model was the most adequate among three models. It was possible that
depressogenic schemata influences depression and depression also had some effects on depressogenic schemata.

**Miles et al. (2004)** examined whether anxiety and depression in school-aged adolescents would show the same pattern. Small groups completed a memory and future thinking task in which they were asked to generate future and past, positive and negative events. Adolescents with higher levels of depression and those with higher levels of anxiety reported significantly more negative events relative to controls, but neither group generated fewer positive events. The results provide support for the involvement of cognitions in mood disturbance although do not support the idea that these cognitions are different in anxiety and depression.

**Schniering and Rapee (2004)** tested the cognitive content-specificity hypothesis in children and adolescents aged 7-16 years in a community sample of 200 youth and a clinical sample of 160 youth. Results revealed that thoughts on loss or personal failure were the strongest predictors of depressive symptoms, thoughts on social threat were the strongest predictors of anxiety symptoms, and thoughts on hostility or revenge were the strongest predictors of aggression. Results showed clear evidence of cognitive-affective specificity across both internalizing and externalizing problems in youth.

**Gibb et al. (2004)** examined whether the underlying structure of cognitive vulnerability to depression is best conceptualized as dimensional or categorical. Taxometric analyses provided consistent support for the dimensional nature of negative cognitive styles. It appears, therefore, that cognitive vulnerability to depression is best conceptualized as a dimensional construct, present to a greater or lesser extent in all individuals. Despite this, the strength of the relationship between negative cognitive styles and depressive symptoms does appear to vary as a function of where along the cognitive style continuum one falls.
Timbremont and Braet (2004) investigated cognitive vulnerability in remitted depressed children and adolescents. The results indicated that the currently and the remitted depressed group rated more negative words as self-descriptive than the never depressed group. On the recall task, the never depressed group showed positive information processing compared to the currently depressed and the remitted depressed groups. The currently depressed group also showed a negative recall bias compared to the never depressed group.

Hankin et al. (2005) examined the stability and dynamic structure of negative cognitions made to naturalistic stressors and the prediction of depressive symptoms in a daily diary study. Daily cognitions about stressors exhibited moderate stability across time. A traitlike model, rather than a contextual one, explained this pattern of stability best. Hierarchical linear modeling analyses showed that individuals' dispositional depressogenic cognitive style, neuroticism, and their daily negative cognitions about stressors predicted fluctuations in daily depressive symptoms. Dispositional neuroticism and negative cognitive style interacted with daily negative cognitions in different ways to predict daily depressive symptoms.

Hankin et al. (2005) examined the relationship between adult attachment dimensions and specificity of emotional distress symptoms and conducted three prospective investigations of cognitive risk and interpersonal stress generation as mediating mechanisms. Across all three studies, avoidant and anxious attachment prospectively predicted depressive symptoms, and anxious attachment was associated concurrently with anxiety symptoms. Study 2 tested a cognitive risk factors mediational model, and Study 3 tested an interpersonal stress generation mediational model. Both cognitive and interpersonal mediating processes were supported. The cognitive risk factors pathway, including elevated dysfunctional attitudes and low self-esteem, specifically mediated the relation between insecure attachment and prospective elevations in depression but not anxiety.
For the interpersonal stress generation model, experiencing additional interpersonal, but not achievement, stressors over time mediated the association between insecure attachment and prospective elevations in depressive and anxious symptoms.

Han and Kim (2006) attempted to understand the major factors that affect self-esteem of adolescents. The major factors that affect self-esteem of adolescents were depression, social support, body-image, problematic behavior, school adjustment, and family harmony, which explained 54.7% of self-esteem.

Brozina and Abela (2006) examined the specificity of the hopelessness theory in the development of depressive and anxious symptoms in children. All 3 inferential styles interacted with hassles to predict increases in depressive symptoms, although this relation only held for children with low levels of initial symptoms. Consistent with the common etiology hypothesis, after controlling for the association between depressive and anxious symptoms, the effects of inferential styles about consequences and the self persisted.

Papadakis et al. (2006) tested the hypothesis that whereas both actual : ideal discrepancy and ruminative coping style would independently predict depression in adolescent girls, the combination of high levels of actual ideal discrepancy and ruminative coping would predict more severe depressive symptoms. Analyses revealed that a significant main effect for ruminative coping style and a trend for actual : ideal discrepancy, as well as the predicted interaction effect.

Kennard et al. (2006) examined the cross-sectional and longitudinal associations among cognitive variables and depressive symptoms among African American, Caucasian, and Hispanic adolescents in the United States. Self-efficacy, cognitive errors, and hopelessness were associated with concurrent depressive symptoms at baseline. In addition, cognitive errors at baseline, controlling for baseline depressive symptoms and the occurrence of stressful events, predicted depressive symptoms at follow-up. Ethnic differences disappeared when parent education level was controlled. The findings
demonstrate support for the cognitive model of depression across ethnic groups.

Alloy et al. (2006) prospectively examined whether negative cognitive styles provide similar vulnerability to first onsets versus recurrences of depressive disorders, and are these associations specific to depression. High risk participants had 3.5-6.8 times greater odds than the low risk individuals of major, minor, and hopelessness depression. Negative cognitive styles were similarly predictive of first onsets and recurrences of major depression and hopelessness depression but predicted first onsets of minor depression more strongly than recurrences.

Bruce et al. (2006) examined parenting and negative life events as predictors of depressive cognitions, specifically low self-perceived competence, depressive cognitive schemas, and depressogenic attributional style among children and also examined developmental trends in these relations. Results revealed that negative parenting and negative life events corresponded with higher levels of depressive cognitions, whereas positive parenting corresponded with lower levels of depressive cognitions. The relations between negative parenting and negative automatic thoughts were stronger for older children.

(B) RELATIONSHIP OF STRESS WITH ADOLESCENT DEPRESSION

Stress is universal; it is found in every person, in every culture, and in every generation. It is a broad-based phenomenon that exists as a continuum. Individuals showing various stress patterns are likely to be distributed differently across gradients of socioeconomic status but not confined exclusively to one part of the gradient. Thus, it is important to distinguish between the characteristics of groups and the vulnerability of individuals. It is necessary to continue to study the biology-behavior interface to understand the various forms of stress responses and their relationships to health and disease in individuals.

Despite the wide range of stimuli that can potentially produce stress, it appears that many events we find stressful share several characteristics: (1) They are so intense that they produce a state of
overload—we can no longer adapt to them, (2) They evoke incompatible tendencies in us, such as tendencies both to approach and to avoid some object or activity, (3) They are uncontrollable - beyond our limits of control. Indeed, a great deal of evidence suggests that when people can predict, control, or terminate an event or situation, they perceive it to be less stressful than when they feel less in control (Karasek & Theorell, 1990).

Stress has been broadly defined as a stimulus which exerts a demand and requires an adaptation response by the child. The child and the event reciprocally influence each other. Sources of stress during childhood and adolescence have been outlined by Campas (1987). He distinguishes between chronic and acute demands.

1) **Chronic stressors**: In triggering psychological distress, chronic stressors, including characteristics of the psychosocial environment (e.g., socioeconomic status, parental alcoholism, marital discord, family violence, mother's physical or emotional illness, peer group relationships) seem to be more significant than single major life events. Economic factors are critical; more mental illness occurs among poor people, who have to deal with poorer housing, clothing, food, in addition to the psychological stressors. Other chronic stressors may be: Physical illness (children which entail hospitalization, immobilization, and/or pain often have at least one acute depressive episode), learning disabilities (such children have higher rates of depression, lower self-esteem, are high on anxiety, have low ego strength and display over sensitivity (Stevenson & Romney, 1984; Brumback et al., 1977).

2) **Acute stressors**: a) may be specific events, the typical life transitions encountered by most children, such as change, etc., or atypical events, such as death or divorce,  b) may also refer to the minor irritations of daily living which have a cumulative effect. There are times during the life span when the frequency of acute stressors increases. For example, during adolescence many biological and social changes occur, including hormonal changes, school transitions, and
different social expectations, all of which may contribute to the increased incidence of depression. The important factors in acute depressive reactions are the sudden loss of a parent (Lloyd, 1980; Brown, 1977), maternal loss, and other types of single life events that have been studied include hospital admission (Garmezy, 1983), birth of a sibling (Dunn et al, 1981) and divorce (Wallerstein and Kelly, 1980).

SYMPTOMATOLOGY AND CLINICAL PROFILE

For decades, mental health researchers have devoted their energies to the study of patterns of maladaptation and incompetence (Garmezy, 1983). Researchers, like clinicians, have been fascinated with the symptom patterns characteristic of various psychopathological conditions for which they have sought to ascribe etiology, develop methods of treatment, and predict outcomes (Grant et al., 1989). Rutter (1985) has described this preoccupation as a "regrettable tendency to focus gloomily on the ills of mankind and on all that can and does go wrong". He points out that it is exceptional for anyone to study the development of individuals who overcome situations of adversity, survive stress, and rise above disadvantage and equally unusual for anyone to consider the factors or circumstances that are supportive or protective to children reared in such environments.

Typically, life stress models conceptualize mediating factors as being either personal or environmental. For example, investigations of personal factors have examined demographic variables (Dohrenwend, Krasnoff, Askenasy, & Dohrenwend, 1978), temperament (Kagan, 1983), attachment and separation during infancy (Ainsworth, 1979), social problem solving (Mullins, Siegal, & Hodges, 1985), and Type A and B behavior patterns (Dweck & Wortman, 1982). Investigations of environmental factors have focused on social support as a resource for coping (Pryor-Brown & Cowen, 1989; Walker & Greene, 1987; Compas, Wagner, Slavin, & Vannatta, 1986; Barrera, 1981).
Herman and Lester (1994) investigated two main issues (1) are those with psychosomatic stress symptoms more depressed or less depressed than those without such symptoms; and (2) does the presence of psychosomatic stress symptoms increase preoccupation with suicide or decrease such preoccupation in 10th and 11th grade high school students. Results revealed that the total symptom occurrence score was significantly predicted by sex and depression score. Females and those more depressed reported more symptoms. Depression scores were significantly associated with 16 symptoms, including constipation, hyperventilation, nausea-vomiting, migraine headaches, aching of neck and shoulder muscles, heart palpitations and tension headaches, but not the major psychosomatic disorders of asthma, high blood pressure, dermatitis, colitis, or ulcers. The results indicated that high school students with deeper depression are more likely to suffer the major psychosomatic disorders such as asthma and ulcers. The occurrence of stress symptoms, however, was not associated with suicidal preoccupation (past or present) once depression was taken into account.

Haavet et al. (2004) investigated associations between negative life experiences and common illnesses among adolescents in all lower secondary schools (10 grade) in Norway during 2000 and 2001 (n=8316 pupils). Among reported negative life experiences last year were a pressure felt to succeed (62%), death of a close person (26%), exposure to physical violence (22%), bullying at school (15%) and sexual violence (4%). A large number of the pupils had some chronic illness: hay fever (38%), eczema (29%) and asthma (13%). Reported illnesses the previous 12 months were: headache (56%), painful neck or shoulders (35%), sore throat at least three times (15%), lower respiratory tract infection (9%) and mental problems for which help was sought (7%). During the week prior to the survey, 26% of all girls had symptoms of a depressive disorder, while this applied to 10% of all boys. Fifty-three percent of the boys (29% of the girls) who had depressive symptoms had been exposed to physical violence.
Sexually violated boys had a high probability for seeking help for mental problems (OR=2.5). Corresponding odd ratios for girls were 1.7 and 2.5, respectively. Thus, common illnesses in adolescence were significantly associated with negative life experiences.

Breuner et al. (2004) examined possible risk and protective factors for school absenteeism among 283 consecutive adolescents referred to a hospital-based behavioral treatment program and were reviewed for demographics, length of headache history, headache type, current headache activity, symptoms of anxiety and depression, perceived self-efficacy regarding headache control, school performance, participation in extracurricular activities, and school absenteeism. Results revealed that compared with the low absenteeism group, the high absenteeism group had higher scores on depression and lower academic performance. The 2 groups were not statistically different in age, sex, length of headache history, type of headache, current headache frequency or intensity scores, anxiety scores, perceived self-efficacy ratings or participation in extracurricular activities. Thus, in a referred population, students who missed more school due to headache had higher depression scores and lower academic performance than students who missed less school.

Depression and Social Support

C) 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 behaviours that are being provided, whereas perceived support refers to the belief that such helping behaviours would be provided when needed. In
a nutshell, received support is helping behaviour that did happen, and perceived support is helping behavior that might happen (Barrera, 1986).

Social support refers to information or actions (real or potential) that lead individuals to believe that they are cared for, valued, or in a position to receive help from others when they need it (e.g., Heller, 1979). Social support has been conceptualized as a coping resource that affects the extent to which a situation is appraised as stressful (Lazarus & Folkman, 1984) and enables a person under stress to change the situation, to change the meaning of the situation, or to change his or her emotional reactions to the situation (Thoits, 1986).

Social support is associated with better psychological health in general and reduces the negative psychological consequences of exposure to stressful life events (e.g., Cohen & Wills, 1985).

In the recent past, there has been a considerable amount of research showing that support from family, friends, and community networks is related to better physical health and lower levels of psychological symptomatology (e.g., King, Reis, Porter, & Norsen, 1993; House, Landis, & Umberson, 1988; S. Cohen & Syme, 1985).

Individuals with high levels of perceived social support appear to be more resistant to the adverse psychological effects of environmental stressors than do those with relatively low levels of perceived social support (Lepore, Evans, & Schneider, 1992; Cohen & Wills, 1985). The negative effects of environmental stressors can be reduced when individuals have high personal control. When individuals are provided, an essential feature of the experience is that they lose much of their ability to control what happens to them (personal control). Schmidt and Keating (1979) distinguished three forms of personal control: cognitive, behavioural, and decisional. The foregoing researchers

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believed that even under high-density conditions, the stress of crowding may be reduced if one can attain one or more of the three forms of personal control. Individuals with high self-control appraise the stress situation differently from those with low self-control and the different appraisal results in different psychological outcomes (Rosenbaum & Ben-Ari, 1985).

Most of the studies in this specific area of research investigated one of the following hypotheses (Cohen & Wills, 1985):

1. The direct (main) effect: Social support has a direct positive impact on health. For example, the more direct or emotional help people receive, the less likely symptoms of mental or physical ill-health will appear.

2. The indirect (mediating) effect: Social support has a negative impact on stressors at work and thus has a positive impact on health. If, for example, the stressor is quantitative overload and the individual will receive direct instrumental help when the workload exceeds a certain limit, social support directly reduces the stressor and thus reduces the probability of ill-health. In this case, social support has a stress-preventive effect (Barrera, 1986). Methodologically, the social support-health relationship is mediated by the stressors.

3. The moderating (interaction) effect: According to this mechanism which is also known as the buffering effect, social support moderates the relationship between stressors and strains. There is a strong stressor-strain relation when support is low and a weak or no stressor-strain relation when support is high. Social support works as a buffer and prevents stressors from developing their impact on strains. It is the moderating effect that has received the most attention in the literature. One reason may have been the practical implications: Because stressors can sometimes not be reduced,
the negative effect of high stressors can be compensated for by increasing social support.

What makes social support research an interesting field is that many alternative hypotheses are also plausible and have found some empirical support. For example, it has been suggested that healthy and assertive people may receive less support, or that receiving support might decrease self-esteem because it shows one's weaknesses and, by this mechanism, might also negatively affect mental or physical health (Frese, 1999). Using biochemical measures in a study of managerial personnel, Howard, Cunningham, & Rechnizeer (1986) found that the number of social contacts reinforced the stress reactions instead of weakening them.

Whereas the direct effects of social support on stressors and health have found support in the literature (Kahn & Byosiere, 1992; Beehr, 1985, 1995; Cohen & Wills, 1985; LaRocco, House, & French, 1980), the effects of the moderating mechanism were less clear. Kahn and Byosiere (1992) listed 22 studies in their overview and concluded that the pattern of results was consistent for main effects. However, there were several studies that did not show any evidence for moderating effects, and there were also studies (e.g., Ganster, Fusilier, & Mayes, 1986; Kaufmann & Beehr, 1986) that detected a negative moderator effect. According to Beehr's (1995) recent overview, the evidence today does not allow the conclusion that moderating effects occur.

Stress can also lead to decreased support because others turn away from people under stress. Indeed, many stressful situations, particularly stigmatizing or strongly traumatizing events, seem to affect social relationships in a negative way, such as by alienating others, by depleting their resources or even by causing caregiver burnout. Such circumstances may reduce the willingness or ability of others to provide support (Cohen-Silver, Wortman, & Crofton, 1990; Coyne, Ellard, & Smith, 1990; Hobfoll
Parris-Stephens, 1990; Barrera, 1986; Shinn, Lehman, & Wong, 1984). There is also considerable evidence that interacting with depressed individuals is seen to be aversive (e.g. Coyne, 1976). These findings are in line with the literature on social comparison that shows that individuals under stress are often avoided by others, a process through which people who are under stress may end up isolated (e.g. Rabbie, 1963).

Indeed, people seem to prefer the company of others who are equally well off or better off, as this type of interaction provides them with pleasant interactions and the necessary information further to improve their own situation. As a consequence, peers of a stressed person may prefer to turn to even better-off others instead of investing time and effort in helping their troubled peer. From the perspective of equity theory, individuals under stress may actively avoid others in order not to find themselves in the uneven position of having to accept help without knowing when and how they will be able to restore equity. In turn, both lay people and professional helpers may find it difficult to maintain good relationships with individuals under stress because of the extreme or chronic one-sided nature of the interaction. One of the causes of burnout in human service professions is the lack of rewarding interactions experienced by caregivers in their relation with stressed clients (Van Yperen, Buunk, & Schaufeli, 1992). Evidence from the psychiatric literature suggests that psychiatric patients tend to maintain asymmetrical helping relationships, failing to reciprocate the support they receive from other (Gottlieb, 1985). As Gottlieb has noted, such an imbalance "...... makes interaction less satisfying for both parties, because the helper is drained and the recipient feels uncomfortably indebted, suffering also a decline in good feelings about him/herself" (p.430.)

Alternative models of perceived support have focused on personality processes (Lakey & Cassady, 1990; B.R. Sarason,
According to these models, perceived support represents a generalized perception of others as supportive, which is not necessarily linked to any particular supportive transaction or relationship. B.R. Sarason, Pierce, and Sarason hypothesized that perceived support reflects a generalized sense of acceptance that has its origins in early childhood attachment. From this attachment, persons develop working models of self and others that represent the world as benign and supportive and the self as worthy of love and respect. Lakey and Cassady (1990) took a social-cognitive approach and hypothesized that perceived support operates, in part, according to schematic processes. In this view, organized beliefs about supportiveness influence information processing by guiding interpretation, memory, attention, speed, and ease of information processing. Like B.R. Sarason, Pierce, and Sarason's model, this model views perceived support as more closely linked to cognition about the self than to the actual social environment.

After more than a decade of relatively uncritical acceptance, research linking social support to positive health outcomes has come under intense scrutiny. Although hundreds of social support studies have been published, most of which have found some association between support and mental or physical health, almost all have been correlational and are vulnerable to a number of alternative explanations for the obtained results. Social support was originally conceptualized as an environmental variable, a resource that resides outside the individual (e.g., Cassel, 1976). However, more recently the role of personality as a determinant of both appraisals of support and actual support received has attracted increasing attention (Repetti, 1987; I.G. Sarason, Sarason, & Shearin, 1986; Hobfoll, 1985; Rook, 1984). Some critics have implied that measures of social support assess nothing but aspects of the individual's personality.
It is important to distinguish between different effects that personality may have on perceived and actual social support. Personality may determine how people cognitively represent their experiences (i.e., response style, mood, appraisal processes) without affecting their actual social behaviour or that of members of their social network. Two individuals with objectively identical social support resources may describe these resources quite differently. By contrast, an individual's personality may affect his or her actual social environment. Individuals who are more socially extraverted may behave in a way that draws others to them and that motivates others to behave in a supportive manner. This support from others may serve to protect the individual against the deleterious effects of stressful life events. In this scenario, social support is a mediating factor between individual's personality and health outcomes. A final scenario that has been proposed is that a third variable such as good coping skills, leads directly to both adequate social support and positive health, with no causal link between social support and health. The association between social support and health is spurious, owing to their mutual association with this third factor.

At the most trivial level, personality may affect people's manner of responding to questionnaires. Although a few researchers conduct interview assessments of social support (e.g., Henderson, Duncan-Jones, Byrne, & Scott, 1980), most rely on self-report measures to assess both social support and health related outcome variables. Various response styles could produce associations between self-report measures of support and health. Nunnally (1978) defined response style as a systematic individual difference in responding that is an artifactual product of the measurement method, and which is at least partially independent of the trait that the scale is intended to measure. Examples of response styles that may affect scores on both social support and
health measures (and thus inflate the correlation between them) include expressed self-desirability, acquiescence, extreme response tendency, and deviant response tendency (Nunnally, 1978).

The process by which individuals appraise the quality or adequacy of social support may be influenced by a variety of personality characteristics, including self-esteem, need affiliation, extraversion, and locus of control (I.G. Sarason, Levine, Basham, & Sarason, 1983). The respondent's mood at the time of assessment may also affect results. For example, when people are depressed, they tend to evaluate themselves and others in a more negative manner than when they are not depressed (Alloy & Abramson, 1988; Beck, 1967). When depression is the outcome variable under investigation, the likelihood of a depressive bias's inflating the association between social support and mental health is especially problematic, leading many researchers to rely on prospective analyses in which initial depression can be statistically controlled in the prediction of subsequent symptoms. However, this technique may systematically underestimate the effects of social support on depression, as any variance that is shared between these two variables at the initial assessment is attributed to depression.

Beyond the effects of personality on people's subjective appraisals of social support, the actual quality and availability of support may be affected by the characteristics of the individual. At least three studies have shown an association between social support and various aspects of social competence. In one study, individuals high in social support were found to have higher levels of social skill, as reflected in self-ratings, observer ratings, and performance on a story-completion task of social competence (B.R. Sarason, Sarason, Hacker, & Basham, 1985). In a second study, people high in social support were judged by observers to be more competent leaders and problem solvers (I.G. Sarason et
al, 1986). Social competence, low social anxiety, and self-disclosure were all associated with social support in a sample of new college students (Cohen, Sherrod, & Clark, 1986). These results suggest that individuals who report high levels of social support are instrumental in attracting others and building an effective network of supporters. By contrast, individuals low in social competence may alienate others, or may not know how to communicate their needs (Hobfoll, 1985). Finally, personal characteristics such as negative beliefs about the utility or propriety of help-seeking may limit the utilization of support that is available from others (Eckenrode, 1983). As stated earlier, social support serves as a mediator between the individual's personality and health outcomes in this model. The individual's personality affects the extent to which social support resources are available, which in turn affects the individual's health outcomes.

Another view of apparent links between social support and positive health outcomes is that both are the result of some unmeasured third variable, such as low neuroticism, self-confidence, or good coping skills (Repetti, 1987; Rook, 1984; Henderson, Duncan-Jones, Byrne, & Scott, 1982). As expressed by Reis 1984, p. 26), "Good health and good relationships are more likely in competent people." In this view, no causal relation exists between social support and health. Their association is simply due to their mutual link to a third causal variable. Although further research is needed to evaluate the feasibility of this model, Cohen et al., (1986) found that among college students, the stress-buffering effect of social support was not eliminated when relevant personality characteristics (e.g., social competence) were statistically controlled. (Cutrona & Russell, 1987).

Studies investigating personality and perceived support have found that perceived support is (a) as stable over time as
traditional personality characteristics (I.G. Sarason et al., 1986), (b) associated with social competence and recollections of parental care (I.G. Sarason et al., 1986), (c) as highly correlated with measures of self-referent cognition as these latter measures are with each other (Lakey & Cassady, 1990), (d) associated with a positive bias in the evaluation of supportive behaviours and persons (Drew et al., 1995; Lakey et al, 1992; Pierce, Sarason, & Sarason, 1992; B.R. Sarason et al., 1991 Lakey & Cassady, 1990), and (e) predictive of better-memory for support-relevant behaviours (Drew et al., 1995; Lakey et al., 1992; Lakey, Cassady, 1990). In addition, the development of perceived support in new settings is strongly predicted by person variables such as negative affectivity and social competence (Lakey & Dickinson, 1994; Lakey, 1989). Although evidence has begun to accumulate that perceived support has some properties similar to individual-difference variables, there are problems with these models as well. For example, although several studies have found that persons with high perceived support tend to interpret the same supportive stimuli more favorably than do participants with low perceived support, these effects have accounted for only a minority of the variance.

**GENDER DIFFERENCES IN DEPRESSIVE SYMPTOMS**

Gender is a dauntingly complex variable because it covaries with so many other biological, psychological and social variables. Gilbert (1992) states, "Gender refers, not only to biological sex but also to the psychological, social and cultural features and characteristics that have been strongly associated with the biological categories of female and male".(p. 385)

Historically, researchers have dealt with it largely through neglect. It is only within the last 10 years that investigators have begun to consistently report the gender composition of their samples and to analyse their data for gender differences. Until quite recently, the authors have taken a gender - neutral approach to illnesses that

Discussion of gender differences of any kind often begin with the conclusions from *Maccoby & Jacklines (1974)* landmark review of sex differences in cognition, temperament, and social behaviour, *Maccoby and Jacklin* used the formerly popular narrative method of review: Studies were grouped by area, the significance or non-significance of each sex difference was noted by study, and conclusions were drawn subjectively from both the number and the consistency of significant gender difference. *Maccoby and Jacklin's* review of temperament gender differences which mixed studies that used personality inventories with studies that measured behaviour thought to reflect personality traits found males to be more assertive (dominant), more aggressive and less anxious than females. No sex difference was found for self-esteem.

Gender differences in locus of control were concluded to vary by age, with a gender difference (greater male internality) emerging only in the college years. *Henderson et al. (1981)* found that women in Canberra reported more depression, anxiety and irritability than men. *Mavreas and Bebbington (1988)* in their comparison of the syndrome profiles obtained in the two independent surveys of Camberwell and Athens showed that in both communities women tend to score higher in all syndromes and that the differences were especially marked in "depression", "general anxiety", situational anxiety" "tension" and "worrying" syndromes. In the context of depression community surveys are the best source for assessing gender differences in depressive disorder (*Meltzer et al., 1995; Wolk & Weissman, 1995; Bebbington, 1994; Kessler et al., 1993*). Community psychiatric surveys in adults almost invariably study subjects who have already passed through puberty. Studies of adults from several countries have emphatically documented that women have 1.5 to 3 times more current and lifetime unipolar depression than men (*Pakriev et al., 1998; Lowenthal et al., 1995; Blazer et al., 1994; Weissman et al.,
1993, 1996; Wilhelm & Parker, 1993; Kessler et al., 1993 1994; Wittchen et al., 1992; Wells et al., 1989; Hwu et al., 1989; Cheng, 1989; Bland et al., 1988a, b; Lee et al., 1987; Canino et al., 1987; Bebbington et al., 1981; Weissman & Klerman, 1977). The sex ratio is maintained in all western societies and in some non-western studies and recent cohort studies do not reveal much change (Wolk & Weissman, 1995). In recent studies the same phenomenon has been found in South America (Andrade et al. 1996; Posada & Torres, 1996) and in Turkey (Dogan et al. 1996). More recently Bebbington et al. (1998) has remarked: "one of the major unsolved problems in psychiatric epidemiology is the extremely consistent finding that women suffer from higher rates of depression than men" (p.9)

A review of literature reveals that for adults this ratio is constant whether depression is measured by diagnosis, or 'self-reported' symptoms, and whether participants are selected from a clinical setting or from the community. The sex difference emerges in early adolescence and continues until late middle age (Burke, Burke, Regler, & Rae, 1990). Cross-sectional evidence shows that prior to puberty, depressive symptoms and rates of depression generally tend to be higher in boys than girls (Nolen-Hoeksema et al., 1991; Costello et al., 1988; Pearce, 1978), even though exceptions to this have been noted (McGee et al., 1990; Flemming et al., 1889; Kashani et al., 1983). In adolescence, however, a trend emerges showing a preponderance for depression or depressive symptoms in girls (Angold & Rutter, 1992; McGee et al. 1990; Kashani et al., 1987; Offord et al., 1987; Rutter, 1986; Kandel & Davis, 1982; Albert & Beck, 1975). There is no evidence that it is the result of an artifact, such as women's greater willingness to seek treatment (Paykel, 1991; Weissman & Klerman, 1977). More precisely speaking, this difference is one of the most consistent and robust finding in adults depression (Bebbington et al. 1998; Bebbington, 1988; 1990; 1996)
Madianos & Stefains (1992) examined the regional prevalence of symptoms of depression and clinical (current) and major depressive episodes in Greece in the years 1978 and 1984. The purpose of the study was to answer the following questions:

- Were there any differences in the prevalence rates of symptoms of depression between 1979 and 1984?
- Were there any differences in the regional distribution of the prevalence rates of depressive symptomatology?
- What were the predictors of depressed mood?
- Were there any differences in the prevalence of major depressive episodes during the 6-year period (1978-1984) with respect to sex and regionalization?

The interviews in both surveys were conducted using structured questionnaire, aimed at obtaining data about physical and mental health, suicidal behavior and related, psychosocial issues (ie. help-seeking patterns, drug/alcohol use, and family medical history). Sociodemographic data were also obtained.

The prevalence of depressive symptomatology was assessed by the use of the CES-D scale developed by the Centre for Epidemiological Studies, National Institute of Mental Health (USA). A cut-off score of 16 and over provided the best estimates for sensitivity (81%) and specificity (78%) when the scale was tested against the DSM III - R criteria for current major depressive episodes (APA, 1987).

The consistent finding that prevalence rates of affected disorders are 2 or more times higher in women than in men (Murphy, 1986, Boyd & Weissman, 1981; Craig and Van Natta, 1979; Weissman & Klerman, 1977; Silverman, 1968; was confirmed. In both surveys women exhibited rates which were 2.4 times higher than men.

Upmanyu & Upmanyu (1993) examined depression in relation to sex role identity and hopelessness among male and female Indian adolescents. The subjects were 100 males, who ranged from 17 to 20 years of age, and 100 females, who ranged from 16 to 20 years of age. The subjects completed the Bem Sex-Role Inventory (Bem, 1974), the
Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) and the Hopelessness Scale (Beck, Weissman, Lester, & Trexler, 1974). The psychometric characteristics of these measures are well documented in India (Upmanyu & Reen, 1991).

The 2X2X2 (Gender X Hopelessness X Sex Role Orientation) factorial design satisfied the conditions for applying an analysis of variance (ANOVA). Main effects of gender, $F(1,184) = 10.34$, $p<0.001$, and hopelessness, $F(1,184) = 18.07$, $p<0.001$ were found. The analysis also yielded a Gender X Hopelessness interaction, $F(1,184) = 3.81$, $p<0.05$ and a Gender X Hopelessness X Sex Role Orientation interaction, $F(1.84) = 3.58$, $p<0.05$. The results corroborate previous findings indicating that females exhibit more depressive symptoms than males do.

The findings regarding the male Indian adolescents are very similar to the findings of previous studies of North American students but the findings of markedly severe depression in female adolescents with masculine identity and high hopelessness has not been previously reported.

Wilhelm, Parker, & Asghari (1998) conducted a study to examine sex differences in frequency, duration and severity of experience of depressed mood state in a non-clinical group and to consider how such findings contribute to the understanding of sex differences in depressive cohort of 156 subjects, assessed initially in 1978 in their last year of teacher training, was reassessed at 5 yearly intervals over 15 years. On each occasion, the subjects completed self-report ratings of experience of "normal depression" and measures of neuroticism, trait depression, self-esteem and sex role. The study found no sex differences in the number or duration of episodes. Women reported more symptoms per episode and some specific symptoms (including tearfulness, appetite and weight gain) more often. The number of symptoms was correlated with neuroticism, self-esteem and trait depression scores, and with gender but not sex role. The number of episodes was related to trait depression and self-
Esteem but not neuroticism. The results showed that there are links between female gender, neuroticism and number of symptoms experienced during depressed mood state episodes. These links are related more to female gender than to feminine sex role or premenstrual problems, and are reflected in the severity of affective change (and some specific symptoms) but not in the number of episodes.

However, a quantitative synthesis of published research (Jorm, 1987) established that the 'sex difference' is "age-specific" and that it varies as a function of the social situation. Thus, a female preponderance is rare in college and university students (Parker, 1979; Hammen & Padesky, 1977), while Jenkins (1985) failed to find sex differences in depressive symptoms when she controlled for age, education, occupation and marital status is selecting a sample of public servants in the British Home Office.

Theories attempting to explain it span several academic disciplines. Theories of gender differences are in the early stages of development and empirical research is still, insufficient (Chubb et al., 1997). It is not clear whether the determinants of this sex difference among adults are predominantly biological or social. Women clearly differ from men in both these respects, but it is only possible to construct refutable theories on the basis of variables that not only distinguish between men and women but also between certain categories within the sexes. It is particularly important not to ascribe explanatory value to variables that are merely proxies for sex. However, variables that change with age, even if in only one of the sexes, may be capable of explaining sex differences.

Although attractive, explanations in biological terms face a number of problems and difficulties (Bebbington et. al., 1998; Bebbington, 1996). If higher rates of depression in women were solely due to a biological vulnerability, the sex ratio ought to be unaffected by the sociodemographic status of the studied group. However, groups in which the social differences between men and women are
minimized often show a reduced sex difference \cite{wilhelm_parker, jenkins}. Marital status also affects the difference. Sex ratios typically differ in the single, the married and post-married. Thus, in one community psychiatric survey, single and divorced women had a lower prevalence of minor affective disorder than their male counterparts, while wives had over five times the prevalence of husbands \cite{bebby_miljoon}. However, this effect of marital status varies according to where the study is carried out. It seems to be much more pronounced in the industrial cities of Northern Europe than in Mediterranean cultures \cite{vazaquez-award, barquero, mavreas}.

Similar findings and anomalies have been reported for the involvement of women in child-care, which in some but not all locations is associated with a high prevalence of disorder \cite{roman, bebbington, brown}. This suggests not only that social variables are important in determining the sex ratio for depression, but that the association with relatively simple sociodemographic factors may itself be affected by more subtle socio cultural influences.

Further, it is claimed that clinical depressive disorders are rare in childhood and show no female excess, perhaps even the reverse \cite{angold, petersen}, although not all authors agree \cite{ruble}. However, prevalence appear to rise sharply in late adolescence and early adulthood, particularly in females \cite{lewisohn}. Puberty may thus be linked to the emergence of the sex difference \cite{patton, cohen, choquet}. But puberty is both a biological and a social transition, and is in any case a prolonged process that is difficult to date \cite{fombonne}.

A number of other explanations have also been offered in the literature. Women may be subject to more, or more upsetting, life events than men. Some researchers have found this \cite{bebby_miljoon, brown}, others have not \cite{perugi}.
Women may be exposed to more chronic problems than men (Pearlin & Johnson, 1977; Pearhn & Lieberman, 1977; Radloff, 1975). Bebbington and his colleagues (1991) found that, although recent adversity was indeed commoner in women, it could not account adequately for their excessive frequency of minor affective disorder.

Early hardships and misfortunes may be more serious candidates for explaining high female rates of depression. The direct effects of physical abuse are quite clear in childhood, and suggest a link with adult depressive disorder, since they lead to depression, low self-esteem, hopelessness, and an external locus of control (Allen & Tarnowski, 1989). Roesler & McKenzie (1994) state that abuse in childhood leads to adult depression, that sexual abuse is worse in this respect than physical abuse and that forced sexual abuse is the worst of the lot. Sexual abuse is commoner in females (Nuttau & Jackson, 1994) and might go a considerable way to explaining adult sex difference, in depressive disorders. Bifulco and her colleagues (1991) found major effects of sexual abuse on rates of depression in their working class London women. Kuyken & Brewin (1994) reported that, of 35 depressed women who had been abused in childhood 30 had experienced flashbacks of the abuse in the previous week. Abuse induces the sorts of cognitive changes that would be expected to mediate the link with adult depression (Brewin, 1996; Rose et al., 1994). This is an under-researched area as an explanation of sex differences in the experience of depression. It may be very important. It is also possible that women have a special susceptibility to life events (Cooke & Hole, 1983; Bebbington et al., 1981b), itself requiring explanation. Certain subgroups of women, for instance those caring for young children may be especially prone to depressive responses to life events (Bebbington et al., 1984; Brown & Harris, 1978).
Particular events may have more impact on women, specifically those affecting close emotional ties. Turner & Avison (1989) and Kessler & McLeod (1984) developed the 'cost of caring hypothesis': women care more for others and are more affected by events affecting others rather than themselves. Turner & Avison (1989) found that women were equally vulnerable to self-focused events, but more so than to events affecting others.

The importance for women of events affecting intimate relationships brings us to a final vulnerable group, people with low social support (Alloway & Bebbington, 1987). These appear to be at particular risk of developing depression, at least partly because they are more vulnerable to the experience of psychosocial adversity. Women might be at high risk of depression because they have less access to social support, or because they are more vulnerable to its absence. In fact, there is no evidence whatever that women have reduced social support, as is only to be expected in view of their afflictive style. Turner & Marino (1994) claim that the epidemiology of poor social support is very similar to that of depression, with the exception of sex. In other words, the high rates of depression in women cannot be blamed on poor social support.

Thus, women when depressed are likely to use more pro social coping strategies than men (Hobfall et al., 1994) but at the same time low social support is associated with greater tendency toward (maladaptive) rumination (Nolen-Hoeksema et al., 1994).

**AGE DIFFERENCES**

Developmental psychopathology is concerned with processes and mechanism pathways through childhood and into adult life, with an interest in discontinuities as well as continuities, different chain reactions explaining continuities, and transitions explaining discontinuities (Rutter, 1986). Special attention is given to the possibility that experiences or processes in one phase of development may modify an individual's set of responses at a later point - through
either "sensitizing" or "steeling" effects. Stress may make an individual vulnerable to further stresses, thus having a "sensitizing" effect. It is also possible, as shown for instance in Elder's works on the Impact of Economic Hardships on child rearing and child development (Elder, 1979) that under certain circumstances, stresses may also make a person resilient to later stresses, for instance by increasing competences or by helping the person to learn more effective coping strategies, i.e. a "steeling effect".

An increase in both depressive feelings and depressive disorders and a change in sex ratio for such disorders take place in adolescence (Brooks-Gunn & Petersen, 1991; Rutter, 1986); while most research has reported no clear sex difference in depression in childhood, and some studies a male excess, it is clear that there is a change in the sex ratio around puberty: from adolescence on, the rates for females in depression exceed those for males. The mechanism underlying these changes are of great interest in developmental research into depression.

The child and adolescent epidemiological literature generally agrees that rates of depression are similar in prepubertal boys and girls, and that rates of depressive disorders begin to rise in girls at some time between childhood and age 15 (Lewinsohn et al., 1994, 1995; Reinherz et al., 1993; Angold & Rutter, 1992; Nolen-Hoeksema et al., 1991; McGee et al., 1990; Fleming & Offord, 1990; Velez et al., 1989; Guyer et al., 1989; McGee & Williams, 1988; Bird et al., 1988; Kashani et al., 1987; Cohen & Brooks, 1987; Anderson et al., 1987; Rutter et al., 1976). But this age range covers a lot of developmental ground. Two longitudinal community studies suggested that female excess did not emerge until after age 13; the Dunedin Longitudinal study (McGee et al., 1992; Anderson et al., 1987), and the New-York Study (Cohen et al., 1993; Velez et al., 1989; Cohen & Brooks, 1987). On the other hand, Angold & Rutter (1992) study of a large clinical population
found that the preponderance of referred girls with depressive disorders began to emerge at around the age of 10.

Thus, there is a good evidence that depressive symptoms and disorders are more common in adolescence than in childhood, and it also seems to be the case that the preponderance of females, so typical of adult depressed groups only emerges at this time (Angold, 1988; Weissman et al., 1987a; Rutter, 1986).

Previous findings have also indicated that there were some (albeit small) differences in symptom profiles between early (before age 15) and later onset depressions (Weissman et al., 1987a), with the later group more often reporting weight loss and insomnia and less often reporting weight gain. Other workers have also reported age dependent changes in depressive symptomatology in clinical samples. For instance, McConville et al. (1973) have described three forms of depression characterized by "affectual symptoms", guilt, and low self-esteem, respectively. The first of these appeared to be more common in 6 to 8 years - olds, whereas the low self-esteem type became more frequent at later ages. The guilt type, which seemed to resemble adult psychotic depression in a number of ways, emerged principally after the age of 11. Inamdar et al. (1979) noted the absence of motor agitation or retardation, delusions of guilt, and hopelessness in their sample of 30 depressed adolescents. However, these symptoms have been reported by others who work with depressed adolescents (Friedman et al., 1983; Chambers et al., 1982; Kazdin & Petti, 1982; Strober et al., 1981).

Ryan et al. (1987) compared the symptomatology of 95 prepubertal children and 92 adolescents with major depressive disorder (MDD), as assessed by the Kiddie- Schedule for Affective Disorders and Schizophrenia for School aged Children (K-SADS) interview (Chambers et al., 1985). The prepubertal children had more somatic complaints, psychomotor agitation, separation anxiety, phobias, hallucinations, and a more depressed appearance, whereas the adolescents had greater anhedonia, hopelessness, hypersomnia,
weight change, use of illicit drugs, and lethality of suicide attempts (thought not more severe suicidal ideation or intent). There was no difference between the two groups in their overall levels of depression or the frequency of the endogenous subtype of depression (around 50% in both cases).

**Angold, Costello, & Worthman (1998)** addressed the following questions: (1) At what age does the female preponderance of depressions?; (2) Is pubertal status more strongly associated with the emergence of the female preponderance than age; (3) Does pubertal timing have a greater effect than pubertal stage?; (4) Does the amount of pubertal change over time have more effect on depression rates than the level of puberty reached by a certain age?

The data came from the Great Smoky Mountains Study (GSMS) of children and adolescents. A representative sample of 4500, 9, 11 and 13 year olds, recruited through the Student Information Management System (SIMS) of the public school systems of 11 countries in western North Carolina was selected using a household equal probability design. The age-specific rate curves were quite different for boys and girls. At or above age 13 girls had consistently higher rates of depression than boys, but this was not the case at earlier ages. A second notable point is that the boys showed a fall in depression rates after the age of 9, while the girls showed an increase after the age of 12. Depression was about twice as common in boys before puberty (Tanner Stage I) than in boys who were experiencing the physical changes of puberty (around 6% vs. around 3%). This difference was significant (P = 0.03), but this comparison was only made post hoc because the data indicated that this was where any significant comparison would lie.

Pubertal status better predicted the emergence of the expected sex ratio than did age. Only after a transition to mid-puberty (Tanner stage III and above) were girls more likely than boys to be depressed. The timing of this transition had no effect on depression rates. Before Tanner Stage III, boys had higher rates of depression than girls and
the prevalence of depression appeared to fall in boys at an earlier pubertal stage than that at which it began to rise in girls. In addition, recent transition to Tanner Stage III or higher had a transit effect in reducing the prevalence of depression in boys.

**Bebbington, Dunn, Jenkins, Lewis, Brugha, Farrell, & Meltzer, (1998)** studied the influence of age and sex on the prevalence of depressive conditions. Data from the National Survey of Psychiatric Morbidity were used to test the hypothesis that the excess disappeared in the Post-menopausal years and obvious social explanations for this were inadequate. Subjects (N = 9792) from a random sample of the British population provided data for the analysis. Psychiatric assessment was carried out by lay interviewers using CIS-R. Subjects with ICD-10 depressive episode or mixed anxiety depression were compared with remainder. Social variables that were likely to contribute to a Post-menopausal decline in depressive disorders were controlled in logistic regression analyses. There was a clear reversal of sex difference in prevalence of depression in those over age 55. This large and representative survey adds considerably to the increasingly held view that the sex difference in prevalence of depression is less apparent in later middle age.

**Angold, Psych, Weissman, John, Wickramaratne, & Prusoff (1991)** examined the effects of age and sex on depression ratings in children and adolescents. The self reports of depressive symptomatology of the 89 children and the parental reports of 62 parents whose children had such symptoms from a sample of 220 children, aged 6 to 23 years, in a family-genetic study of children at high and low risk of depression were examined for the effects of the age and sex of the child. The age of the child at interview proved to have a significant effect upon the dating of the onset of dysphoric episodes and the dating of the worst ever episode of dysphoria. The older girls reported about two more depressive symptoms on average than the younger girls. This finding was obscured unless account was taken of the age at which the subjects were interviewed. However,
these effects did not apply to a group of melancholia-related symptoms. There were no consistent effects of age at interview or age at episode on the symptom reports of the boys or in the reports from the parents about both their male and female children. Jolly, Wiesner, Wherry, Jolly, & Dkyman (1994) studied the influence of gender on the comparability of self and observer ratings of anxiety and depression in adolescents. Subjects were 75 inpatient adolescents who were administered structure interviews of the revised Hamilton Rating Scales for Depression (HRSD-R) and Anxiety (HARS-R) and read the Beck Depression Inventory (BDI) and Beck Anxiety Inventory (BAI). All measures demonstrated adequate internal consistency and validity. The correlation between the BDI and HRSD-R was significantly higher for females than males; of 11 symptoms that overlap on the BDI, and HRSD-R, observers significantly agreed with males and females in their perceptions of 5 and 11 depressive symptoms, respectively. The correlation between the BAI and HARS-R did not differ significantly for males and females. Results suggest that self-reports of anxiety symptoms are a valid, cost-effective alternative to anxiety observer ratings for boys and girls, while only girls self-reports of depression are comparable to depression ratings by observers. There is the need to collect self-report information from adolescent boys because they may not communicate subjective symptoms of depression, e.g., guilt, to observers.

DEPRESSION AND LOCUS OF CONTROL

Control is important to psychological functioning. Decades of research in sociology, psychology have demonstrated that a sense of control is a robust predictor of physical and mental well-being (Lachman & Burack, 1993; Fiske & Taylor, 1991; Thompson & Spacapan, 1991; Bandura, 1989; Strickland, 1989; Rodin, 1986; Baltes & Baltes, 1986; Gurin & Brim, 1984; Lefcourt, 1981, 1982, 1983) and perhaps even longevity (Langer & Rodin, 1976; Seligman, 1975). Both experimental and correlational studies have
shown that across the life span, from earliest infancy to oldest age, individual differences in perceived control are related to variety of positive outcomes, including health, achievement, optimism, persistence, motivation, coping, self-esteem, personal adjustment, and success and failure in a variety of life domains. Being of primary concern for human functioning the construct of control has a pervasive influence on psychological theorization and practice and has proved to be one of the most productive areas of research and application. Control has been used as key concept to predict diverse aspects of behaviour in normal populations, to explain deviant behaviours in marginal and abnormal people, and to formulate techniques to promote well being. It would not be exaggeration to say that psychologists have developed an obsession for this construct. It may be discerned that the notion of personal control involving freedom, choice, autonomy, influencibility as subjectively felt or perceived by a person is thoroughly individual centered and has been developed in western cultural milieu. It is firmly rooted in a world view which recognizes primacy of individual over the social consequences and enjoy a sense of personal competence. At a generic level control takes the form of perception, attitude or belief regarding some object or aspect of environment over which an individual has authority and power in terms of dictating terms and conditions of its operation. Thus, the use of the concept of control dichotomizes our existence and maintains a relationship of power and authority between self and other.

In research literature, the perception of control has generally been documented to yield immense positive effects on performance, interest and motivation across many spheres of life such as education, health, organizational performance, and sport. In contrast, any threat or loss to the feeling or experience of control proves to be harmful. However, the most remarkable contribution to this field was the notion of internal-external (I-E) control of reinforcement, popularly known as locus of control, by Rotter (1966). Within the framework of
social learning theory Rotter explicated the significant role of
generalized expectancies of reinforcement outcomes in relation to
factors within the person and external to him. The studies generally
show that internal control is healthy and positive while external
control is handicapping, dysfunctional and often limits one's success
in life. In this process locus of control was converted into more or less
a (stable) personality disposition and the original measure has been
adapted, adopted and many new measures have been developed to
assess control beliefs in a variety of specific life domains.

The study of control has also received attention in the field of
stress and health (cf. Syme, 1990; Peterson & Stunkard, 1989;
Rodin, Timko, & Harris, 1986). Originating in animal studies and
subsequently extended to human beings the notion of learned
helplessness (Abramson, Seligman, & Teasdale, 1978; Seligman,
1975) emphasized that the experience of a non-contingent
relationship between behaviour and outcome makes the organism
helpless. In essence helplessness reflects an uncontrollable or
inescapable condition in which reinforcement and responding are
independent. In the case of human beings attribution for negative
events to stable, global and internal causes has been found critical for
the feeling of helplessness. In contrast, mindful mastery has positive
recently, attention has been paid to the role of explanatory style in
determining health and illness (Peterson, Seligman, & Vaillant,
1988). The explanations may range from optimistic to pessimistic. The
pessimistic explanatory style is positively related to well being.
Interestingly the explanations are found quite consistent across time
periods for a given person. There are some studies on self control in
which patients have been helped to develop control over their
behaviour and cognition (Shapiro, 1984) and on the effects of impulse
control (Srivastava, 1984).

During the last 25 years, one of the most widely researched
personality variables has been locus of control, the generalized
expectancy of reinforcement as either internal or external to the self (Strickland, 1989).

Locus of control is defined as a generalized expectancy of internal or external control of reinforcement (Rotter, 1966). The internally controlled individual believes that reinforcement is attributable to his/her own ability or efforts. The externally controlled individual believes that reinforcement is attributed to fate, chance, or some powerful external force. In other words, internal locus of control is the expectation that reinforcement is the result of one's own effort, ability, characteristics, or behaviour, external locus of control is the expectation that reinforcement is the result of chance, fate, luck or powerful others. An individual does not have a clearly defined internal or external locus of control, since locus of control is a continuous variable, not a dichotomous one, and can vary situationally.

Most of the research on this construct has been correlational and much of it that was done prior to the 1980, has been summarized in three volumes edited by Lefcourt (Lefcourt, 1981, 1983, 1984). It is clear from the literature that numerous researchers have investigated the relationship between the perception of locus of control reinforcement and different aspects of personality, including perceived stress, motivation to attain goals, personal adjustment, hostility, and problem-solving strategies.

The past reviews (Carlisle-Frant, 1992; Dyal, 1984; Hui, 1982) indicate that people in western and industrialized countries on average are more internal than those in the far east and developing countries. Also, men are found to be more internal than women. Blacks have been shown to be more external than whites. This difference remains even after controlling the socio-economic differences. The differences across European countries and between them and U.S.A. are negligible. In contrast, Japanese are more external than their U.S.A. counterparts (cf. Misra, 1994, p.20).

Internal locus of control has also been correlated with many socially desirable variables, such as staying in high school (Ekstrom,
Goertz, Pollack, & Rock, 1986), taking responsibility for one's own actions, being more independent, and exhibiting greater self-control (Lefcourt, 1976), reduced anxiety (Nunn, 1988), the ability to defer lesser short-term rewards for long-term goals (Miller, 1978; Strickland, 1973), positive adjustment at home, school, and with peer relationships (Nunn, 1987; Nowiciki & Duke, 1983), and being raised in a home environment that is warm, protective, and nurturing (Crandall & Crandall, 1983; Nowicki, & Schneewind, 1982; Chandler, Wolf, Cook, & Dugovics, 1980 ; Lefcourt, 1976).

Some studies did not find a relationship between locus of control and the variables of interest. Locus of control was not found to be related to problem behaviour during adolescence (Jessor & Jessor, 1977) or social desirability (Nowicki & Strickland, 1973).

Greater externality has been related to higher levels of psychopathology in reviews by Lefcourt (1976) and Strickland (1978), the specific nature of the relationship between locus of control and depression, however, has remained obscure.

Significant relationships between greater externality and higher depression levels has been found in investigation of college students (Abramowitz, 1969), psychiatric outpatients (Becher & Lesiak, 1977), alcoholics (Donovan, Radford, Chaney, & O’Leary, 1977), army recruits (Naditch, Gargan, & Michael, 1975), and the aged (Hanes & Wild, 1977). There have, however, been several reports of negative findings between these variables (Evans & Dinning, 1978; Rosenbaum & Raz, 1977). Research by Evans & Dinning (1978) among male and female psychiatric inpatients showed I-E Scale scores were unrelated to Beck Depression Inventory responses. Further, Rotter (1975) has contended that both extreme external and internal scores on the I-E scale may be related to greater psychopathology on measures such as depression. Finally, among studies showing significant relationships between externality and greater depression, several researchers have reported stronger associations for male respondents (Fogg, Kohaut, & Gayton, 1977; Hanes & Wild, 1977).
Leggett & Archer (1979) examined the relationship between locus of control and two depression measures in a sample of 45 male and 38 female psychiatric inpatients. Correlation analysis showed significant relationship between greater externality and higher depression scores for both depression measures. Also significant sex differences were identified such that higher magnitude correlation coefficients were found for male patients. No significant relationships were found between locus of control orientation at admission and changes in depression as a function of treatment.

Benassi, Sweeney, & Dufour (1988) applied meta-analytic techniques to review studies of the relation between locus of control and depression. Contrary to what some authors have claimed, these authors found that locus of control orientation and degree of depression were significantly related, that the relation was moderately strong, and that it was consistent across studies. Greater externality was associated, with greater depression. Studies that included separate subscales for locus of control for positive and negative outcomes produced similar results. Seven potential mediators of the locus of control-depression relation were investigated, with only two producing significant results. Effect sizes varied as a function of the particular locus of control and depression scales used in studies.

More recently, Upmanyu & Reen (1991) found that the relationship between locus of control orientation and depression is influenced by the nature of self-report instruments of depression as well as sample characteristics. The authors found that the depressive measures derived from Beck Depression Inventory and MMPI-D Scale failed to correlate with locus of control, whereas the depressive measures derived from Zung's self-rating depressive scale correlated positively and significantly with locus of control in case of employed married women and negatively with locus of control in case of non-employed married women.

Literature suggest that the relation between depression and external control is not a simple one to one relation. It might help to
adopt the view that the multiple causes and types of depression may exist and to assess varying definitions and populations. It may well be that both general interpretations of depression, i.e., lack of internal locus of control and presence of internal locus of control with high standards of self-approval, are correct but for different groups of depressed people. Until additional research is carried out the relation between locus of control and depression will remain unclear, just as will the status of the differing theoretical interpretations of depression.

OVERVIEW (Gaps and Limitations)

1. Rado's Psychoanalytic theory of depression laid the framework for the view of vulnerable self-esteem, suggesting that premorbid depressives exhibit labile self-esteem. According to this view, depressive rely to an inordinate degree on the love and approval of significant others to maintain their self-esteem (Rado, 1928). When such external sources of self-worth are present, the future depressive will have a normal level of self-esteem. Only when these 'narcissistic objects' are lost do the depressive show abnormally low self-esteem. More generally, future depressives are seen as being their self-worth on fewer and less stable sources than non depressives do (Barnett & Gotlib, 1988; Oatley & Bolton, 1985). Studies have found that among clinically depressed adults relatively low self-esteem predicts a poor course of depression but very few prior studies have examined antecedents and development of adolescents' depressogenic attribution style.

It would be interesting to examine dispositional cognitive styles that are hypothesized to serve as a stable vulnerability for depression among mid-adolescents especially in the Indian context. This would aid in formulating implications for the investigation of emotional disturbances in childhood and adolescence in light of the negative patterns of thought or thought processes that could be involved in the development and/or signs and symptoms of depression.
2. Adolescence is assumed to be the developmental period in which these differences emerge and intensify, creating a pattern which continues with gender differences in depressive symptoms and disorder in adulthood (Leadbeater et al., 1995). Literature on adolescent depression is quite inconsistent regarding the gender differences. The rate of internalizing problems, most notably symptoms of depression, are higher among adolescent girls and boys (Nolen-Hoeksema & Girms, 1994). Most studies show higher rates of depression in boys in the preadolescent years, and by ages 13 to 14 years, prevalence estimates for girls emerge higher than those for boys (Afifi, 2006; Reinherz et al., 1993; Peterson et al., 1991). What is less clear, however, is the magnitude and pervasiveness of these differences during adolescence; that is, how large are the effects of gender on depressive symptoms in adolescence? Are gender differences characteristics of the general population, or are they limited to a sub group of youths, such as those who may be referred for or achieve mental health services.

Identification of the emergence of gender differences in depression may provide important clues for future etiologic research. As such, it is of particular importance for psychiatric research and practice to investigate age-related variations in the prevalence of depression across genders to identify the critical age during which gender gap in depression beings to manifest. It also identifies specific ages at which treatment and intervention strategies should be directed in an effort to prevent and minimize long-term mental health and related problems.

3. Results of past research have indicated that the distance between aspects of real and ideal selves is largest during mid-adolescence leading to lowered self evaluation (Strachen & Jones, 1982). The cognitions of depressed adolescents are marked by distortions in attributions, self evaluations, and information processing. Depressed youths are more likely to interpret positive events as occurring in response to external factors of which they have no control, and interpret negative events as entirely their own fault.
The depressed adolescent’s thoughts are dominated by a negative view of self as worthless, the world as bleak, and the future as hopeless (Events & Murphy, 1997). Through this negative view of the world, they distort experiences and display information processing errors such as overgeneralization, predictions of negative outcomes, catastrophising the consequences of negative events, and selectively attending to the negative features of the events (Evans & Murphy, 1997; Flannery-Schroeder, Henin & Kendall, 1996). Different theories posit that depression is triggered by negative life events interacting with the vulnerable self esteem predisposition. Thus, it is an important area for researchers to identify the processes by which cognitions in the presence of stressors produce such enduring emotional distress specially among mid adolescents.

4. Central to contemporary health psychology is the assumption that social support from significant others is of major importance in coping with important life events, and that social support can reduce or eliminate the adverse consequences of these events upon health or well being (Coyne & Downey, 1991; Sarason & Pierce, 1990). Social support has been defined as “those social interactions or relationships that provide individuals with actual assistance of that embed individuals within the social system believed to provide love, caring, or sense of attachment to a valued social group or dyad” (Hobfoll, 1988, p,121). However, there is growing evidence that the degree to which a person feel supported and cared for by others is not simply a function of the amount and quality of one’s supportive transactions with others but may also be influenced by features of the support recipient such as his or her personality, expectations, preferences, and needs (Pierce, Sarason, & Sarason, 1992). Moreover, perceived available support (the perception that one is loved and valued by others can be counted on to be available when needed appears to be a stronger correlate of health and well being with received support (the objective social resources that one actually receives; Washington & Kessler, 1986; Cohen & Syme, 1985).
The assumed beneficial effects of social support have often divided into two types; direct and buffer effects. Direct effects encompass the general positive influence of social support, regardless of whether someone experiences social stress or not. A buffer effect refers to the fact that a high level of social support protects that individual against the negative consequences of stressors once these have arisen (Cohen & Wills, 1985).

The moderating of buffering effects model proposes that support is related to well-being only (or primarily) for persons under stress. This is called the buffering model because it posits that the support “buffers” (protects person from the potentially pathogenic influence of stressful events). Brown & Harris (1978) suggests that social support bolsters self-esteem and a sense of environmental mastery. Each of these, in turn, can foster a position effect and thus reduce the disturbing psychological import of stress. The moderating or buffering effects has been supported by several researchers (Cohen, 1988; Cohen & Wills, 1985; Dean & Lin, 1977; Cassel, 1976; Cobb, 1976).

Keeping in view, what has been said in the preceding paragraphs, the present study intends to examine the intervening role of social support in the relationship of depression with negative automatic thoughts, stress and gender.

**Objectives of the Study:** The current study starts with the following objectives:

1. to examine the influence of gender on depressive severity.
2. to ascertain the effect of negative cognition on depressive severity.
3. to ascertain the influence of perceived stress on depressive severity.
4. to ascertain the intervening role of social support on the effect of negative cognition, stress and gender on depressive severity.
Hypothesis:-

In light of the review of related literature and the trends that emerged thereafter, the following hypotheses were generated keeping in view the rationale provided in the following paragraphs:-

1. Female adolescents would score higher on depression than male adolescents.

2. Adolescents higher on stress would score higher on depression than adolescents lower on stress.

3. Adolescents high on negative cognition would score higher on depression than adolescents low on negative cognition.

4. Depression would be high in case of adolescents with high negative cognition and high stress.

5. Relatively strong social support will moderate the role of negative cognition, stress and gender in depression.