A review of the literature helps us to understand the problem clearly. It also makes the predictions regarding the outcome of manipulation of different variables possible, thus, facilitating formulation of hypotheses. Therefore, literature from various sources was extensively reviewed and studied to have indepth knowledge and understanding into the field under investigation. The review of literature is presented under the following headings:

1. Relationship of Negative cognition with Adolescent depression
2. Relationship of Stress with Adolescent depression
3. Relationship of Gender with Adolescent depression
4. Relationship of Social support with Adolescent depression

1. RELATIONSHIP OF NEGATIVE COGNITION WITH ADOLESCENT DEPRESSION

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 preeminent 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, Girgus, & 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.

Nasby and Yando (1982) investigated the selective influences of experimentally induced mood states on children's encoding and retrieval of affectively valent information. Results revealed that a happy, compared to a neutral mood during encoding facilitated recall of positive information; conversely, a sad encoding mood disrupted recall of positive material. The negative mood of anger, like that of sadness, disrupted the encoding of positive information; unlike sadness, however, anger facilitated the encoding of negative material. Findings indicate that selective encoding and retrieval may contribute to children's cognitive ability to regulate mood states as well as other aspects of social learning and development.

Hammen and Zupan (1984) investigated the applicability of the self-as-schema model to children and examined the extent of negative self-schemas in relatively depressed children. Results supported the self-as-schema model as applied to children, even the youngest group, by indicating superior recall for words encoded under self-reference instructions, compared to semantic or structural orienting instructions. The content-specificity hypotheses were tested with relatively depressed and nondepressed children, and were supported only for the nondepressed children, who recalled mostly positive content words. The relatively depressed children did not demonstrate content specificity in their recall, showing a more “confused” pattern, and the results demonstrated a developmental model of acquisition of depression vulnerability requiring repeated depressive experiences over time.

Blumberg and Izard (1985) examined the affective and cognitive characteristics of depression in 10- and 11-year-old children. The results indicated that the depressed children were like depressed adults in that they reported
experiencing a pattern of emotions including sadness, anger, self-directed hostility, and shame, and they tended to explain negative events in terms of internal, stable, and global causes. The similarity between depressed children and depressed adults on these measures was greater for girls than for boys. The measures of emotion experiences accounted for 78.1% and 46.1% of the variance in girls’ and boys’ depression scores, respectively, after the variance accounted for by attribution style was partialled out.

Mullins et al. (1985) examined the relationship between a number of problem-solving and life event variables and depressive symptoms in a sample of non-referred grade school children. The results indicated that higher levels of depressive symptoms were associated with an external locus of control, increased levels of objective and subjective life stress, and lower performance levels on an impersonal problem-solving task. Level of depressive symptoms were found to be inversely related to socioeconomic status as measured by father’s occupation. Contrary to prediction, no consistent relationship was found between depression and interpersonal problem-solving ability.

Zupan et al. (1987) explored evidence of apparent self-schemas in samples of children with current or past histories of diagnosable depression. As predicted, clinically depressed children showed even stronger recall of negative self-descriptive adjectives than in previous research. However, extent of previous experiences with depression did not predict degree of negativity of current self-schema beyond that predicted by current mood. The results were compatible with a developmental model of self-schemas in which prior experience may affect accessibility of negative cognitions once the self-schema has been activated.

Deal and Williamson (1988) examined the possibility that cognitive distortions mediate between life stress and depression in an adolescent population in a sample of ninth- to twelfth-grade high school students. Results showed that measures of cognitive distortions were better predictors of depressive tendencies than measures of life stress. It was also seen that cognitive distortions affected the perceived stressfulness of life events. In addition, the three measures of cognitive distortion
were correlated and that the measure of immediate negative thinking was a better predictor of depressive tendencies than the measures of dysfunctional attitudes and irrational beliefs.

Hammen (1988) made a preliminary effort to integrate cognitive, life stress, and interpersonal approaches to vulnerability to depression, children's cognitions about themselves, their stressful life events, and the interaction of self-cognitions and life events were tested as predictors of depression. Stressors and the interaction of stressors and self-concept also predicted changes in diagnosis of nonaffective disorders. A self-schema measure of accessibility of negative self-cognitions, known to be mood-dependent, failed to add to the prediction of depression severity. The results are consistent with a model of depression vulnerability that emphasizes cognition about self-worth and self-efficacy as mediators of the impact of stressful events, and the authors speculated that such self-schemas are acquired in part in the context of parent-child relationships.

Asarnow and Bates (1988) examined cognitive and attributional patterns in depressed children, nondepressed children, and a subgroup of remitting depressives who had histories of depression but were not reporting depressive symptoms when evaluated during the first 2 weeks of hospitalization. When compared with nondepressed controls, depressed children reported significantly more hopelessness, more negative self-perceptions, and negative self-perceptions across a wider variety of domains, and they displayed more dysfunctional attributional styles. While 55% of depressed children displayed pervasive maladaptive cognitive patterns, the other 45% of depressed children scored more similarly to nondepressed children, suggesting that childhood depressive disorders may be heterogeneous with respect to cognitive patterns. Contrary to the notion of traitlike depressive cognitive and attributional patterns that persist after the remission of depressive episodes, children with remitting depressions scored similarly to nondepressed children.

Kashani et al. (1989) investigated hopelessness at 3 age levels (8-, 12-, and 17-year-olds) in children and adolescents from a community sample. The major findings of this study included (a) Hopelessness did not increase with age from
preadolescence through adolescence; (b) children with a high hopelessness score had a higher depressive symptom score; (c) children with a high hopelessness score reported significantly more school problems; (d) high scorers on the hopelessness had the greatest psychopathology.

**Meyer et al. (1989)** examined differences in cognitive appraisal and causal attributions in response to a task among school children reporting high and low depressive symptomatology in a sample of fifth- and sixth-grade students. Despite similar performance, the depressed group of children provided lower evaluations for themselves than for others on all three measures of self-appraisal, whereas the nondepressed group did not show this tendency. Further, the attribution results indicated that the two groups differed in their explanations for failure, with the depressed group emphasizing the importance of ability in failure and the nondepressed group emphasizing factors other than ability. The results provide support for the presence of negative cognitions and self-defeating attributional style among depressed relative to nondepressed children, as well as pointing to the importance of social comparison processes in depression.

**Bruder-Mattson and Hovanitz (1990)** examined how coping styles relate to attributional styles and how the two interact in relation to depression. Problem-focused coping correlated with stable and global attributions for positive events for men. Emotion-focused coping correlated with internal, stable, and global attributions for negative events for women and internal and global attributions for men. Correlations between depression and attributions as predicted by the reformulated model of hopelessness were significant only for women.

**Kendall et al. (1990)** conducted three studies to evaluate cognitive disturbance and depression in sixth-grade children. Results of study I revealed that depression was associated with a negative style of processing self-evaluative information, while being unrelated to a processing deficit. A second study was initiated to replicate the results of Study I and to extend them to third-, fourth-, fifth-, and sixth-grade children, half of whom were depressed and half of whom indicated a minimum of depressive symptomatology. Results were very similar to those found in
Study I. A third study was conducted to test whether the self-perceptions of depressed children were accurately negative or negatively distorted, as judged against their teacher's observation of them. Results supported the hypothesis that depressed children exhibit a distorted style of processing self-evaluative information.

**Curry and Craighead (1990)** tested the reformulated learned helplessness theory of depression with adolescent inpatients who were diagnosed by Diagnostic and Statistical Manual of Mental Disorders (DSM-III; American Psychiatric Association, 1980) criteria as depressed, or conduct disordered, or both. Adolescents with major depression diagnoses differed from nondepressed adolescents with significantly lower attributional style scores for positive events. Subjects who reported more severe depression had a significantly lower composite score for internal, stable, and global attributions for positive events. The composite of internal, stable, and global attributions for negative events was not significantly related to either diagnosed or self-reported depression.

**Thurber et al. (1990)** examined the relationship between cognitive distortions and depression in psychiatrically disturbed adolescent inpatients. Intercorrelations among measures of cognitive distortions and depression supported the downward extension of Beck's theorizing to adolescent inpatients. Inconsistencies between data sources (parent vs. child) suggest possible self-report contamination or the insensitivities of adult caregivers to the subjective elements of depression.

**Quiggle et al. (1992)** compared the social information processing patterns of children who were identified as being aggressive or depressed, to address the issue of specificity and to explore whether children who were comorbid show a unique processing style in children in third through sixth grade. Aggressive children showed a hostile attributional bias, were more likely to report that they would engage in aggressive behavior, and indicated that aggression would be easy for them. Depressed children similarly showed a hostile attributional bias, although they were more likely to attribute negative situations to internal, stable, and global causes. Depressed children also reported that they would be less likely to use assertive responses and that they expected that assertive behavior would lead to more negative and fewer positive
outcomes. Children who were comorbid generally showed patterns similar to both aggressive and depressed children.

Sanders et al. (1992) assessed the family interactions of depressed, conduct-disordered, mixed depressed-conduct-disordered, and nonclinic children. Although all clinic groups had lower levels of effective problem solving than did nonclinic children, their deficiencies were somewhat different. Depressed and conduct-disordered children had higher levels of self-referent negative cognitions than did mixed and comparison children, and depressed children also had higher other-referent negative cognitions than did all other groups. Mixed and depressed children displayed high levels of depressed affect and low levels of angry affect, whereas conduct-disordered children displayed both angry and depressed affect.

Pinto and Francis (1993) examined the relationship between self-reported depression and cognitive style in adolescent inpatients. Adolescents who reported depression also reported significantly more internal attributions for negative events and less internal attributions for positive events, evidenced a more external locus of control, and described themselves as significantly more hopeless than did the nondepressed adolescents. Hopelessness and internal attributions for negative events were the strongest predictors of depressive symptoms. In contrast to the findings of most studies using clinical populations of depressed children and adolescents, a maladaptive cognitive style and self-reported depression were highly, positively correlated.

Adams and Adams (1993) studied prospectively the associations among negative life events (NLEs), perceived problem-solving alternatives (PPSA), and depression in adolescents. The Dropped group who also selected Negative PPSAs increased in depression. No other group differences were found. Results indicated that experiencing a NLE is likely to lead to an increase in depressive symptomatology only for adolescents with primarily negative PPSAs, perhaps in interaction with prior depression, at least for the specific NLE.

Laurent and Stark (1993) tested the cognitive content-specificity hypothesis with anxious and depressed youngsters in youngsters in Grades 4 through 7 and
controls. Analysis revealed that the valence of depressive cognitions played an important role in distinguishing the anxious group from the depressed and mixed groups. Specifically, negatively worded items did not differentiate between groups as well as positively worded items. The anxious, depressed, and mixed depressed-anxious groups were not differentiated on the basis of their anxious cognitions. The results provide partial support for Beck’s cognitive content-specificity hypothesis and the broader positive-negative affectivity construct.

Cole and Turner (1993) assessed negative cognitive errors, attributional style, positive and negative events, peer-nominated competence, and self-reported depression in fourth, sixth, and eighth graders. Data supported theoretical models in which attributional style and cognitive errors mediated the relation of competence to depression. Data did not support models in which attributional style moderated the relation between either life events or competence and depression; however, weak support emerged for a moderational model involving negative life events and cognitive errors.

Garber et al. (1993) examined the generalizability of cognitive models of depression to adolescents and explored developmental differences with regard to depressotypic cognitions in adolescents in grades 7 through 12. Results showed that there was a strong association between negative thinking and depression in adolescents. There was no association between depressogenic thinking and age, nor did the strength of the association between negative cognitions and depression vary from early to middle adolescence. Finally, negative cognitions were associated with self-reported measures of both depressive and anxious symptoms.

Bagley and Mallick (1995) examined negative self-perception and components of stress in Canadian, British, and Hong Kong adolescents (aged 4- to 16-yr.-olds). Scores on subscales (Relationship Problems, Abuse at Home, Scholastic and Career Problems, and Loneliness and Social Isolation) were significantly correlated for both sexes with negative self-esteem scores in the three national groups. Differences in stress between cultures were explicable in terms of known cultural differences.
Ostrander et al. (1995) examined the unique and interactive relationships between age and indices of psychopathology (i.e., anxiety, aggression, and depression), with three types of maladaptive cognitions: hopelessness, negative cognitive errors, and attributional bias. Some negative cognitions were not unique to depression and were associated with broader psychopathology. Developmental considerations also influenced some negative cognitions or qualified the association between negative cognitions and depression.

Oliver et al. (1995) examined three factors that may influence cognitive vulnerability to depression and anxiety: (1) subject’s perceptions of their relationships with their parents and the climate in their family of origin (socialization); (2) self-focused attention (focusing attention inwardly, on the self); and (3) current symptoms of depression and anxiety. Perceptions of unfavorable socialization and public self-consciousness were related to dysfunctional attitudes. However, nearly all these relations disappeared when depression and anxiety were controlled statistically. These results suggest that memories of negative experiences in one’s family of origin, self-focused attention, depression and anxiety, and dysfunctional attitudes all may be indicators of latent negative schemas that have been activated, perhaps by recent stress.

Gladstone and Kaslow (1995) presented a meta-analytic review of the association between attributional styles and depressive symptoms in children and adolescents. Results showed that the correlations were consistent with those predicted by the reformulated learned helplessness model of depression. For negative outcomes, attributions along the internal, stable, and global dimensions were associated positively with depression. Conversely, higher levels of depressive symptoms were related to more external, unstable, and specific attributions for positive events. Additionally, overall composite maladaptive attributional patterns for positive and negative events were correlated with higher levels of depressive symptoms in youth.

Robinson et al. (1995) examined direct and stress-moderating effects of attributional style and global self-worth on depressive and externalizing symptoms in adolescents. They were assessed in the spring of 6th grade and after the transition to
7th grade. Stressors around the transition predicted both depressive and externalizing behaviors. Perceived self-worth predicted depressive symptoms, but not externalizing behaviors. Attributional style directly and in interaction with stressors predicted depressive symptoms and did not predict externalizing behavior. A 3-way interaction between stress, attributional style, and self-worth suggested that level of perceived self-worth may moderate the effects of attributional style in times of stress.

Hilsman and Garber (1995) tested the cognitive diathesis-stress model of depression in a sample of children in grades 5 and 6. Results revealed that the stressor level and negative cognitions predicted depressive symptoms the morning after the event, controlling for initial symptom levels. Depressive symptoms 5 days later were predicted by the interactions of negative cognitions with stressors, supporting a cognitive diathesis-stress model. Students who reported a negative explanatory style or lack of academic control and competence expressed more distress after receiving unacceptable grades than did students without such cognitions.

Stark et al. (1996) evaluated the relationship between children’s depressogenic thinking, children’s depressive symptoms, parent’s depressogenic thinking, and perceived parental messages about the self, world, and future. Results revealed that (1) children’s views of self, world, and future (cognitive triad) were related to severity of depression; (2) mother’s but not father’s cognitive triad were related to their children’s cognitive triad; (3) perceived parental messages to the children about the self, world, and future were predictive of the children’s cognitive triads and ratings of depression; and (4) the relationship between perceived parental messages and depression was completely mediated by children’s cognitive parental messages and depression was completely mediated by children’s cognitive triads. Analyses indicated that the obtained mediational relationship between children’s views of self, world, and future, perceived parental messages, and children’s depressive symptoms was specific to depressive versus anxious symptomatology.

Schlenker and Britt (1996) examined the relationship between depression and the explanation of events that happen to self, close others, and strangers. Depressive and nondepressive college students attributed causality for positive and
negative events that happened to either themselves, a close other, or a typical student. Depressives made less optimistic attributions than nondepressives when explaining events that happened to themselves. However, depressives and nondepressives generally made similar attributions about others; both groups were optimistic when explaining events that happened to their best friend or romantic partner and less optimistic when explaining events that happened to the typical student. The results indicate that depressives do not treat close others as extensions of the self, at least in terms of their attributional patterns.

Chan (1997) examined defensive styles and psychological symptoms among Chinese adolescents in Hong Kong. Commonly employed defenses included anticipation, sublimation, and reaction formation, indicating that adolescents tended to deal with stressors and emotional conflicts with relatively mature or adaptive defenses. Factor analysis revealed that a mature or adaptive defensive style could generally be distinguished from an immature or maladaptive defensive style, but a neurotic defensive style was not differentiable for this group of adolescents. Results also indicated that general and specific psychological symptoms were associated with the use of immature defenses characterized by somatization and externalizing emotional conflicts through acting out and misattribution.

Gladstone et al. (1997) examined attributional style, sex and depressive symptoms and diagnosis in high school students. The results revealed that (1) for females and males, higher levels of depressive symptoms correlated with a more depressive attributional style; (2) females and males who met diagnostic criteria for a current depressive disorder evidenced more depressogenic attributions than psychiatric controls, and never had past depressed adolescents; (3) although no sex differences in terms of attributional patterns for positive events, negative events, or for positive and negative events combined emerged, sex differences were revealed on a number of dimensional scores; (4) the relation between attributions and current self-reported depressive symptoms was stronger for females than males; and (5) no Sex x Diagnostic Group Status interaction effects emerged.
Kashani et al. (1997) identified critical factors from a set of psychiatric diagnoses, personality traits, and family and social support variables that relate to hopelessness in adolescents. Results indicated that sensitive adolescents and adolescents with less impulse control scored high on hopelessness. Forceful adolescents were less hopeless. Using the neural network models, the authors suggest that assertive training as well as group activities that increase cooperativeness may ameliorate hopelessness.

Rudolph et al. (1997) investigated the cognitive and interpersonal aspects of depressive symptoms in a community sample of children. Children with elevated levels of depressive symptoms displayed increased negativity in their beliefs about self, family, and peers, as well as distinct patterns of interpersonal information processing. Anxiety symptoms did not make a unique contribution beyond depression to negative representations of family and peers; in contrast, symptom-specific profiles of self-representations were found. Structural equation analysis supported a model linking negative interpersonal representations, peer rejection, and depressive symptoms.

Southall and Roberts (submitted) tested Metalsky, Joiner, Hardin, and Abramson’s (1993) integrated model of attributional style, self-esteem, and life stress in vulnerability to depressive symptoms among adolescents (N = 110) using a 14-week prospective design. This model posits that individuals with both a negative attributional style and low self-esteem were particularly sensitive to developing depression subsequent to life stress. Results were consistent with this hypothesis for initially asymptomatic participants, but not for those who were already experiencing higher levels of symptoms at the start of the study. Specifically, among initially asymptomatic participants, the triple interaction between attributional style, self-esteem, and life stress predicted changes in depressive symptoms, initially asymptomatic participants who had a negative attributional style, low self-esteem, and high life stress showed the greatest increase in depressive symptoms.

Roberts and Gamble (in press) investigated cognitive characteristics of previously depressed adolescents in a sample of rural high school students. First they
tested the hypothesis that previously depressed adolescents would report lower self-esteem, more dysfunctional attitudes, and a more negative attributional style compared to their never depressed counterparts. Second, they tested the mood-state hypothesis (Persons & Miranda 1992; Segal & Ingram 1994), which posits that depressogenic cognitions were more sensitive to the effects of current mood-state among previously depressed than among never depressed persons. Results indicated that previously depressed adolescents reported lower self-esteem and greater subclinical depressive symptoms than never depressed adolescents. However, previously depressed and never depressed adolescents did not significantly differ on any other cognitive variable, and when subclinical symptoms were controlled the self-esteem difference was rendered nonsignificant. The mood-state hypothesis only was supported in the case of attributional style for positive events. They proposed a developmental perspective on emotion regulation to help account for these findings.

Hankin et al. (1997) examined the relation between self-standards and particular forms of emotional distress during adolescence. Actual-ideal discrepancies and self-oriented perfectionism were found to be associated specifically with depressive symptoms after controlling for anxious symptoms whereas actual-ought discrepancies were associated specifically with anxious symptoms after controlling for depressive symptoms. In contrast, socially prescribed perfectionism was associated with general emotional distress. Compared with boys, girls reported more depressive, but not anxious symptoms. Actual-ideal discrepancies partially mediated gender differences in depressive symptoms.

Roberts and Kassel (1997) examined the relationship between labile self-esteem, stressful life events, and depressive symptoms in a prospective study testing a model of vulnerability. The interaction between labile self-esteem (SE) and life stress predicted increases in depressive symptoms across a 2-month prospective interval, particularly in subjects who were initially low in depression and who had more severe worst lifetime episodes of depressive symptomatology. Interactions between life stress and labile SE were stronger for life stress measures that were based on the subjective appraisal of stress than for those that were based on raw life event counts.
In contrast to predictions, depletions in self-esteem failed to mediate the synergistic effects of labile SE and life stress.

**Shirk et al. (1998)** addressed the hypothesis that interpersonal schemata sensitize dysphoric youngsters to negative social information and contribute to the amplification of depressive symptoms in samples of preadolescents and early adolescents. Results from 3 laboratory-based studies indicated that depressed and dysphoric youngsters evince relatively negative interpersonal schemata, and that these schemata were related to the 3 components of sensitization. A short-term prospective study examined the hypothesis that dysphoric interpersonal schemata moderate the emotional impact of a normative social stressor, the transition to high school. Results indicated that youngsters who entered the transition with relatively negative schema experienced the transition as more stressful than youngsters with relatively positive schema, and that negative interpersonal schema amplified the effects of stress on depressive symptoms.

**Johnson et al. (1998)** investigated whether attributions for positive life events predict decreases in hopelessness and depressive symptoms among clinically depressed adults. Results indicated that (a) internal, stable, global attributions for positive events mediated a significant association between attributional style for positive life events and decreased hopelessness; (b) decreases in hopelessness mediated a significant association between internal, stable, global attributions for recent positive events and decreases in depressive symptom levels; and (c) depressotypic cognitions were not associated with decreases in either hopelessness or depressive symptom levels.

**Dumont and Provost (1999)** examined resilience in adolescents and the protective role of social support, coping strategies, self-esteem, and social activities on experience of stress and depression. The analysis revealed that self-esteem, problem-solving coping strategies, and antisocial and illegal activities with peers helped to discriminate groups: Well-adjusted adolescents had higher self-esteem than adolescents in the 2 other groups; in addition, resilient adolescents had higher self-esteem than vulnerable adolescents. For the second significant discriminating
variables, antisocial and illegal activities with peers, both resilient and vulnerable adolescents had higher scores than well-adjusted adolescents. Finally, resilient adolescents had higher scores on problem-solving strategies than adolescents in the 2 other groups.

Taylor and Ingram (1999) compared the information processing of children of depressed mothers with that of children whose mothers were not depressed. Results indicate that when primed, at-risk children showed a less positive self-concept and more negative information processing than did the children in the other groups. This may offer potential clues into the mechanisms of cognitive vulnerability in at-risk children.

Mazur et al. (1999) examined whether children’s cognitive appraisal biases moderate the impact of stressful divorce-related events on psychological adjustment in children ages 9 to 12, whose families had experienced divorce within the past 2 years. Results indicated that endorsement of negative cognitive errors for hypothetical divorce events moderates the relations between stressful divorce events and self- and maternal reports of internalizing and externalizing symptoms, but only for older children. Positive illusions buffer the effects of stressful divorce events on child-reported depression and mother-reported externalizing problems.

Bolognini et al. (1999) conducted a longitudinal study to measure the influence self esteem and social support on mental health, more specifically on depression, in a community sample of early adolescents (mean age: 12.5 yrs) were followed during three years. Results show that there were globally no important changes in self-esteem between early and late adolescence. However, there is an interaction between self-esteem and depressed mood: subjects with a lower self esteem in time 3 compared to time 1 have a significant higher score on depressive mood in time 3. Social support appears to be a positive factor enhancing self esteem and preventing from the development of depressive mood. Finally, there were some important differences according to gender, changes in depressive mood and self esteem being, in their negative evolution, more important in girls compared to boys.
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 non-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 very high or very low on both dysfunctional attitudes and negative attributional 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 behavior and a negative attributional 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 attempt. 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 nonsymptomatic 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. Attributional 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 transactionally 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.

**Liu (2002)** examined the moderating effect of perceived social support on the association of dysfunctional attitudes with depression among Taiwanese adolescents. The results indicated that perceived social support from friends moderates the relationship between dysfunctional attitudes and depression, implying that as peer support increases, the positive relationship between dysfunctional attitudes and depression weakens.

**Mc Grath and Repetti (2002)** conducted a longitudinal study and examined how depressive symptoms relate to children’s self-perceptions and estimates of children’s cognitive distortions about the self in a nonclinical sample of children who were followed from 4th grade through 6th grade. Self-reported depressive symptoms predicted a change in children’s negative views of the self. Moreover, the self-
perceptions of children who exhibited more symptoms of depression appeared to reflect an underestimation of their actual competence. Children's negative self-perceptions and underestimations about the self were not associated with a subsequent change in depressive symptoms.

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. In 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 were 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.

2. 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 adaptational response by the child. The child and the event reciprocally influence each other. Sources of stress during childhood and adolescence have been outlined by Compas (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 and 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).
Mechanic (1983) focused on adolescence, a life-stage characterized by increased self-awareness and dramatic physical maturation. Increased introspectiveness is associated among many adolescents with more psychological pain and symptom reporting. It is hypothesized that discontinuities in family life and school and peer experiences, a major subclass of stressors, exacerbate self-awareness while stability and successful coping protect against painful self-perceptions.

Yarcheski and Mahon (1986) investigated the relationship between perceived stress and symptom patterns among seventh and eighth grade boys and girls. Affective-oriented coping and social support, two variables hypothesized as mediators of this relationship, were also examined. As predicted, the positive relationship between perceived stress and symptom patterns decreased when controlling for affective-oriented coping, while it increased when controlling for social support.

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 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
month 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.

Wilson et al. (2005) examined whether in the case of adolescents these
reported gender differences in physical and psychological health symptoms could
actually be the result of differences in coping styles. They found that gender
differences in physical and psychological health symptoms (e.g. anger, depression,
tension, negative moods), as well as in coping styles and that the relation between health symptoms and coping varied significantly by gender.

**BIOLOGICAL PERSPECTIVE OF STRESS AND GENETIC INFLUENCES IN THE CONTEXT OF ADOLESCENT DEPRESSION:**

Our understanding of how stress alters our physiology to produce a state that resembles clinical depression is germane to the evolving model of depression as an expression of multiple interactive risk factors. The concept of depression has moved from one where 'endogenous', or genetic, risk factors and 'reactive', or environmental, risk factors were thought to be unrelated and to define a particular clinical syndrome to one where these risk factors are seen as additive, and interacting with developmental risk factors (*Keane, 2000*).

Silberg *et al.* (1999) studied the possible causes of greater depression among adolescent girls and investigated by examining variation in the influence of genetic and environmental factors among pre-pubertal female, pre-pubertal male, pubertal female, and pubertal male twin. They found that the impact of life events on depression was particularly evident in the adolescent girls. The results indicated that increased heritability for depression in this group, and its long-term consistency was mediated primarily by latent genetic factors. Model fitting also showed that at least part of the liability to depression and to life events can be linked to a common set of genes in the adolescent girls, and there is a notable developmental increase in the genetic variance for life events. The greater heritability for depression in pubertal girls, its genetic mediation over time, and the increase in genetic variance for life events may be one possible explanation for the emergence of increased depression among pubertal girls and its persistence though adolescence.

Rudolph *et al.* (2000) evaluated the validity of a developmentally based life-stress model of depression in clinic-referred youngsters. The model focused on (a) the role of child-environment transactions, (b) the specificity of stress-psychopathology relations, and (c) the consideration of both episodic and chronic stress. As predicted, in the total sample child depression was associated with interpersonal episodic and chronic stress, whereas externalizing disorder was associated with non-interpersonal
episodic and chronic stress. However, the pattern of results differed somewhat in boys and girls. Youngsters with comorbid depression and externalizing disorder tended to experience the highest stress levels. Support was obtained for a stress-generation model of depression, wherein children precipitate stressful events and circumstances. In fact, stress that was in part dependent on children's contribution distinguished best among diagnostic groups, whereas independent stress had little discriminative power.

Birmaher et al. (2000) determined whether growth hormone (GH) secretion is similarly altered in children and adolescents who had never experienced depression but were at high risk of developing depression. Results showed that after stimulation with growth hormone-releasing hormone (GHRH), the high-risk subjects secreted significantly less GH compared with the low-risk healthy controls. In contrast, there were no between-group differences in the pre-GHRH and nocturnal GH secretion levels. Exposure to recent stressors was not associated with GH secretion. Taken together with previous evidence of decreased GH after GHRH infusion in acutely depressed and recovered children, these results indicate that the decreased GH response found in high-risk subjects may represent a trait marker for depression in children and adolescents.

Tennant (2002) reviewed recent empirical prospective studies on the relation between life event stressors and depression. The empirical findings for the most part support clinical impressions of the relation of stressors to depression but at the same time provide some clearer understanding in relation to differences of stressor impact on depression type and on index episode, relapse or recurrence. Twin studies now provide the strongest evidence of the relative magnitude of effect of environmental stressors and genetic factors: the former explains at least as much of the variance in depression as our genes.

Charmandari et al. (2003) examined pediatric stress in the context of hormonal mediators and human development. The development and severity of these conditions primarily depend on the genetic vulnerability of the individual, the exposure to adverse environmental factors and the timing of the stressful event(s), given that prenatal life, infancy, childhood and adolescence are critical periods.
characterized by increased vulnerability to stressors. Exposure of the developing brain to severe and/or prolonged stress may result in hyperactivity/hyperreactivity of the stress system, with resultant amygdala hyperfunction (fear reaction), decreased activity of the hippocampus (defective glucocorticoid-negative feedback, cognition), and the mesocorticolumbic dopaminergic system (dysthymia, novelty-seeking, addictive behaviors), hyperactivation of the HPA axis (hypercortisolism), suppression of reproductive, growth, thyroid and immune functions, and changes in pain.

Rice et al. (2003) examined whether this age-related increase in the relative importance of genetic factors is due to an increase in gene-environment correlation specifically involving negative life events. Results indicated that adolescence was associated with a greater number of behaviour-dependent life events. Genetic covariation of negative life events and depression was greater for adolescents than for children. Thus, bivariate model fitting was consistent with the greater heritability of depression seen in adolescence being due to an increase in gene-environment correlation involving negative life events.

Taylor et al. (2006) examined the relation of a stressful early family environment, recent adversity/stress, and the 5-HTTLPR to depressive symptomatology in a normal sample. Results revealed that a stressful early family environment was significantly related to depressive symptomatology. In addition, gene-by-environment (GxE) interactions were observed between the 5-HTTLPR and both early family environment and current adversity/stress. Individuals homozygous for the short allele had greater depressive symptomatology if they had experienced early or recent adversity but significantly less depressive symptomatology if they reported a supportive early environment or recent positive experiences, compared with participants with the s/l or l/l genotype.

PSYCHOSOCIAL RISK FACTORS AND STRESSFUL LIFE EVENTS CONTRIBUTE TO INCREASED VULNERABILITY TO DEVELOPMENT OF DEPRESSION IN ADOLESCENCE

Children at risk for behavioral, adjustment, and psychiatric problems represent a large portion of contemporary youth. Identifying the factors that might protect these
children against the deleterious effects of risk is of great practical importance (Luthar and Zigler, 1991; Rolf et al., 1990). The cumulative effects of multiple risks (including parental psychopathology, low socioeconomic status, minority status, large family size, many life events, father absence, maternal anxiety, and rigid parenting) have been demonstrated to have serious impact of cognitive and socio-emotional outcomes in children (Sameroff et al., 1987a; Werner and Smith, 1982).

One important choice when assessing children and adolescents is the source of information regarding behavioral adjustment (Seifer et al., 1992). There is growing literature that suggests a large degree of discrepancy among different informants (e.g., mothers, fathers, children, teachers, or observers), perhaps with some systematic bias associated with every category of informants, and with no source identified as providing the most accurate information (Achenbach et al., 1987).

RISK FACTORS

Garmezy (1983) has defined risk factors as those factors that, if present, increase the likelihood of a child developing an emotional or behavioral disorder in comparison with a randomly selected child from the general population. These factors can include biological and genetic attributes of the child, and family and community factors that influence child and family environment.

Variables that have been well documented as risk factors in the literature and probably have a genetic component include psychiatric illness in the parents (Anthony, 1974) and criminality of a parent (Hutchings and Mednick, 1974). Rutter (1979) points out that sex is an important genetic factor, it has been usually found that boys are more likely than girls to be damaged not only by physical but also by psychosocial stressors, the exceptions being the effects of long-term institutionalization (Wolkind, 1983) or when there is severe brain damage (Rutter, 1981). Biological factors that have been identified as risk factors include severe perinatal complications, developmental delays and chronic physical handicaps (Werner and Smith, 1982).
PROTECTIVE FACTORS

Another important feature of the lack of specificity is that not every individual with a risk condition will have a negative outcome. Garmezy (1985) has emphasized the study of factors that might protect individuals at risk from having a negative outcome. The investigation of protective factors involves two main components. First, is the unambiguous identification of individuals at risk. The second component is the identification of potential mediators above and beyond the simple absence of risk factors. Qualities are assumed to be protected if their presence is associated with better than expected outcomes in the risk population. Analogous to the dichotomy for risk factors, one may conceive of external protective factors and more constitutional stress-resistance or resiliency (Masten and Garmezy, 1985).

Rutter (1985) defined protective factors as “those factors that modify, ameliorate or alter a person’s response to some environmental hazard that predisposes to a maladaptive outcome.” Garmezy (1983) has summarized these “ameliorative or protective” factors as: (i) positive personal dispositions; (ii) a supportive family milieu; and (iii) an external societal agency that functions as a support system for strengthening and reinforcing the child’s coping efforts. Such factors might alternatively be considered under the headings of factors within the child (positive temperament, above average intelligence, social competence, high self-esteem, etc), the family (included supportive parents, family closeness, etc), and the community (the availability of extended family and friends as well as teachers, etc) (Grant et al., 1989).

INTERACTIONS OF RISK AND PROTECTIVE FACTORS

Several modes of interaction of risk and protective factors to determine child behavior outcome have been suggested (Grant et al., 1989). While adult models of stress and coping processes have been postulated (e.g., Lazarus & Folkman, 1984), there is a paucity of models for adolescents.

Werner and Smith (1982) suggest that the interaction of risk and protective factors is a balance between the power of the person and the power of his social and
physical environment. This balance is necessary throughout life, although different factors assume different degrees of importance at different developmental stages. These authors suggest that constitutional factors are most important during infancy and childhood, and interpersonal factors such as internal locus of control, sense of control over the future and a plan to attain realistic life goals, are most important in adolescence.

**Stiffman, Jung and Feldman (1986)** tested a multivariate model combining the interaction of the child’s coping skills with environmental stressors to predict behavior. In children of mentally ill parents, 40% of the variance in child behavior problems was found to be explained by the presence of two environmental stressors (the proportion of mentally ill family members and mother-child discord), two coping skills (competence in activities and school competence) and an interaction between the proportion of mentally ill family members and activity competence.

**Rowlison and Felner (1988)** examined the relationship between major life events, hassles, and adaptation in adolescence and potential sources of confounding in the conceptualization and measurement of life stress and adjustment was examined. It was found that both distal major life events and proximal daily stressors had important degrees of unique and shared variance with adaptive functioning, whereas the effects for social support were inconclusive.

**Brent et al. (1990)** examined suicidality in suicidal and nonsuicidal affectively ill adolescent psychiatric inpatients were compared with respect to clinical phenomenology and measures of cognitive distortion, social skills, and familial-environmental stress. The suicidal group had an earlier onset and longer duration of affective illness and greater self-rated depression. The suicidal group also evinced greater cognitive distortion, less assertiveness, a greater likelihood of both a history and exposure to familial suicidality, and more life stressors within the 12 months prior to hospitalization. Among those suicidal patients who presented with a suicide attempt, suicidal intent was related to "double depression," comorbidity with substance abuse or conduct disorder, lack of assertiveness, family conflict, and family history of suicidal behavior.
Luthar (1991) examined factors that allow children to maintain socially competent behaviors despite stress among ninth grade students. Results revealed that ego development was found to be compensatory against stress. Intimacy and social skills proved to be protective factors, while intelligence and positive events were involved in vulnerability processes. This study also revealed that children labeled as resilient were significantly more depressed and anxious than were competent children from low stress backgrounds.

Gore, Aseltine, and Colten (1993) surveyed male and female adolescents regarding feelings of distress and interpersonal caring. They found that there was indeed a gender difference in reported distress (girls were more distressed than boys) and that girls ‘high interpersonal caring and involvement in others’ problems accounted for 25% of the gender difference in distress. Girls who were involved in others problems or those having a strong interpersonal caring orientation (high empathy) had elevated depressed mood. Boys did not show this pattern of results.

Rice et al. (1993) presented a conceptual model for understanding the nature, timing, synchronicity and impact of developmental stressors and their implications for adolescent mental health trajectories. The model is derived, in part, from a longitudinal program of research investigating the development of adolescent mental health. Developments in the areas of life-span development, developmental psychopathology, and stress and coping also inform the model. In this model, stressors are viewed as challenges to the coping responses and resources of adolescents. Some challenges can be risks to adolescent mental health while others can be opportunities for further growth and development. Moderators of the association between challenge and mental health outcomes include internal/personal and external/interpersonal resources. This model has led to a psycho-educational program to enhance coping and reduce depression.

Adams et al. (1994) examined the types of stressful events that are related to adolescent suicidal behaviour. Compared to high school controls, adolescents who attempted suicide reported elevated levels of major negative events and exit events. Both chronic strains and discrete stressors were related to an increased severity of
depression and suicidal ideation. Also, sex differences may influence the relationship between life stress and suicidal feelings.

Gonzalez-Forteza and Andrade Palos (1994) aimed at identifying a relationship between some social daily stressors, depressive disturbance, and suicidal ideation among Mexican adolescents. Findings suggest that among male and female adolescents, conflicts with the best friend correlate strongly with a depressive mood also tending to somatizing discomfort: Besides enduring negative affect and somatization, females also tend to feel awkward in their interpersonal relationships, and also suffer from suicidal ideation.

Brown and Moran (1994) have examined the vulnerability (predisposing) factors for depressive disorder occurring before age 17 years as sexual abuse (physical sexual contact, excluding willing contact with non-related peers in teenage years), parental indifference (physical or emotional neglect; parental lack of interest or involvement in material care, school work, friends and so on), physical abuse (violence shown towards the subject by a household member; actual beatings, threats with knives and so on) and loss of parent (death or separation followed by inadequate parental care).

Wills et al. (1995) tested the relation of socioeconomic status (SES), indexed by parental education, to stress-coping variables and substance use in adolescents to develop a mediational model. Lower education was related to higher level of adolescent substance use, lower levels of protective factors, and higher levels of risk factors. Results indicated that the effect of education on adolescent substance use was mediated through relationships to parental support, academic competence, behavioral competence, negative life events, and friends' substance use. Analyses indicated that adolescents from lower education families were more vulnerable to risk factors but also derived more benefit from protective factors. Moderation was found to be attributable to larger paths in the lower education group for negative events and friends' use.

Windle and Windle (1996) studied interrelations among coping strategies, drinking motives, stressful life events (major, daily positive, and daily negative),
emotional and behavioral problems, and academic functioning in a sample of 733 middle adolescents. A main-effects (vs. stress-buffering) model was supported. Some predictors (e.g., task-oriented coping, major stressful events) were general in their predictive relations to the outcome variables, whereas others were highly specific (e.g., emotion-focused coping predicting depressed affect). Positive daily events predicted higher levels of alcohol use, alcohol problems, and delinquent activity; as well as higher academic performance and lower levels of depressed affect.

Corcos et al. (1996) examined adolescents hospitalized for a major depressive episode melancholic type or a manic episode during the course of a bipolar disorder (according to the DSM III-R Criteria) with particular emphasis on precipitating life events and family relationships. Psychosocial stressors in the year preceding onset of the affective disorder were found in a very high proportion of cases (about 80%). Stressors are most often severe. All of these stressors have to do with loss or threat of loss, particularly the most frequent one: the sentimental failure. Analyzing results showed that in the Major Depressive Disorder (MDD) sample the prevalence of two psychopathological index: maternal rejection, parental disharmony.

Trangkasombat and Likanapichitkul (1997) studied the prevalence, type, and psychosocial stressors associated with depression in children who came to the outpatient pediatric clinic. The results of the study showed that the prevalence of depression was 34.6 per cent. Types of depression were depressive symptoms only, 7.4 per cent; adjustment disorder with depressed mood, 17.3 per cent; dysthymia, 6.2 per cent; and major depression, 3.7 per cent. Females had more severe symptoms than males. Of the depressed group, 60.7 per cent had previous suicidal behavior compared with 20.6 per cent in the non-depressed group. The rates of all psychosocial stressors were higher in the depressed group. Those with statistical significance were parental psychiatric illness, unstable living condition and history of abuse. Depressed children also experienced twice the number of psychosocial stressors compared with the non-depressed group.

DiGirolamo et al. (1997) identified and assessed the ongoing stressors in adolescents with a chronic illness with an application of the behavior-analytic model.
Few relations were found between demographic variables (e.g., age and illness severity) and the number or difficulty of problematic situations. Both adolescents and parents mentioned the greatest number of problematic situations in the domains of School, Medications and Treatment, and Parent-Teen Relationship. In terms of difficulty, all three respondents (i.e., teens, parents, and health care professionals) rated problems with Clinic and Hospital Visits as very difficult. For the adolescent sample, problems in the Parent-Teen Relationship and Health Concerns were also highly difficult. Significant associations were found between the problematic situation and social and emotional functioning of adolescents. Adolescents who rated their problems as more difficult also endorsed more symptoms of depression and lower perceptions of social competence.

Woods et al. (1997) hypothesized that suicide attempt is associated with many other health risk behaviors and examined the relationships between ever attempting suicide and engaging in other health risk or problem behaviors. Results showed that out the students were distributed among the 9th to 12th grades; 50.7% were female, and the mean age was 16 ± 1.2 years. The ever attempting suicide was associated with physical fights in the past 12 months, regular cigarette use in the past 30 days, female gender, lack of seat belt use (1.3[1. 21-1.34]), gun carrying in the past 30 days, substance use before last sexual activity, Native American or other, and lifetime use of other drugs.

Lewinsohn et al. (1997) examined the specificity to depression of a wide range of psychosocial variables in 3 groups of adolescents: depressed cases, nonaffective disorder cases, and never mentally ill participants. The authors found that only the depressed participants exhibited more problematic functioning than did the never mentally ill controls. Three variables found to be specifically associated with depression: self-consciousness, self-esteem, and a reduction in activities because of physical illness or injury.

Lecomte and Fornes (1998) examined the socio-demographic, clinical characteristics, autopsy and toxicological findings in youth suicides in Paris. Two hundred and sixty victims (66%) were males. Fifteen percent of the victims were
below 20 years. Ninety-two percent of the subjects were single. Depression (70% of victims), schizophrenia, (10%), affective disorders, parent-child relational problems, partner relational problems, adolescent antisocial behavior, and borderline personality were found to be the most frequent diseases and stressors involved in the suicides. It was constantly preceded by situational distress, which led to suicidal ideas if the adolescent failed to cope with problems. In more than 40% of the cases, the victim's parents were divorced or separated.

Williamson et al. (1998) examined the significance of acute life events and ongoing difficulties in adolescents with a recent episode of major depressive disorder based on DSM-III-R and normal controls. Results indicated that traditionally defined severe events were more likely to occur in the year prior to onset among depressed adolescents (46%) than in a comparable period among normal controls (20%), but these differences did not reach statistical significance. Expanding the definition of severe events to include those events focused on others important to the adolescents having one or more refined “severe” events in the year prior to onset (62%) compared with normal controls (27%). It is interesting that one half of the depressed adolescents had two or more refined severe events occur during the year prior to onset compared with none of the normal controls. Further analyses showed that depressed adolescents were significantly more likely to have a major difficulty precede the onset of their depression (27%) compared with normal controls (0%).

Reuter et al. (1999) used prospective longitudinal data to examine the theory that, over time, stressful life events, such as parent-adolescent disagreements, influence the longitudinal course of adolescent’s internalizing symptoms, which in turn predict first onset of a depressive or anxiety disorder. Results indicated that year 1 parent-adolescent disagreements predicted year 1 adolescents’ internalizing symptoms, and changes in disagreements from year1 to year3 predicted changes in internalizing symptoms from year 1 to year 4. Both the year 1 level and changes in symptoms predicted internalizing disorder onset in years 4 through 7, and both the year 1 level and changes in disagreements indirectly predicted disorder onset. Among, adolescents, persistent or escalating stressful events, such as disagreements with parents, indirectly increase the risk for internalizing disorder onset through their direct
association with high or increasing symptom levels. Chronically high or increasing symptom levels directly increase risk for internalizing disorder.

Hammen et al. (1999) reviewed the empirical, methodological, and conceptual limitations of psychotherapy and pharmacotherapy for childhood and adolescent depression and to present descriptive data on key characteristics of a depressed sample to illustrate gaps in treatment. They found that depressed youngsters have high rates of recurrent depression and comorbid conditions, impaired academic and social functioning, exposure to high rates of parental psychopathology, parental assortative mating, severe marital dysfunction, and high rates of severe stressors.

Schraedley et al. (1999) aimed to determine (a) what demographic and psychosocial factors are associated with elevated levels of depressive symptoms in adolescence; (b) whether girls and boys show different profiles of correlates and probable risk factors for depressive symptoms; and (c) what the implications are of these results for future research directions and policy decisions. Results indicated that depressive symptoms were found to differ by gender, age, socioeconomic status, and ethnicity. In addition, life stress, social support, and coping were associated with depressive symptoms. Importantly, stress and social support appear to be particularly salient aspects of depression among girls. Both physical and sexual abuse were strongly linked with depression for both boys and girls, with sexual abuse having a stronger impact among boys. Finally, high levels of depressive symptoms were associated with increased use of both mental and physical health care resources among boys and girls.

Printz et al. (1999) investigated a theoretical model of adolescent stress and coping, with social support and social problem solving proposed as moderators, in an attempt to uncover those factors that buffer the impact of stressful negative experiences on adolescent adjustment using path analysis. It was found that a recursive loop leading from stress outcomes back to negative stressors did not allow for a successful solution to the model. However, the effects of stressful events on adjustment were mediated by coping resources, which included a combination of problem-solving abilities and social support.
Stewart et al. (1999) examined the relationship between a broad range of stressors and depressed mood in a community sample of Hong Kong adolescents. Results revealed that Hong Kong adolescents reported higher levels of depressive symptoms than a comparison group of Western teenagers. Girls showed more symptoms than boys. Similar influences on depressed mood in Western and Hong Kong teenagers was indicated. Perceptions of a lack of parental understanding and peer acceptance appeared as the strongest variables in predicting depressed mood.

Liu et al. (2000) examined associations of life events and locus of control with behavioral problems among Chinese adolescents. Results indicated that the overall prevalence of behavioral and emotional problems was 10.7%. Analyses showed that a total of 13 negative life events mainly coming from academic domain and interpersonal relationships, high life-stress score, and high external locus score significantly increased the risk for behavioral problems. Life stress and locus of control significantly interacted with behavioral problems.

Fergusson et al. (2000) examined associations between childhood circumstances, adolescent mental health and life events, and the development of suicidal behavior in young people aged between 15 and 21 years. The childhood profile of those at greatest risk of suicidal behavior was that of a young person reared in a family environment characterized by socio-economic adversity, marital disruption, poor parent-child attachment and exposure to sexual abuse, and who as a young adolescent showed high rates of neuroticism and novelty seeking. Mental health problems including depression, anxiety disorders, substance abuse disorder, and to some extent conduct disorder, in addition to exposure to adverse life events, were significantly associated with the onset of suicidal behavior.

D'Imperio et al. (2000) investigated resilient and stress-affected 185 seventh- and eighth-grade adolescents in an urban setting who were categorized as low and high in exposure to stressors (stressful events or neighborhood disadvantage) and externally exhibited competence (self-, teacher, and school reports). Results showed that there were direct effects for stressor level on several protective resources; however, the hypothesized protective resources did not discriminate resilient from
stress-affected youth. Both resilient and stress-affected youth experienced equivalent levels of internalizing symptoms, and these groups' scores were higher than those of low-stress participants. These results are possibly reflective of the effects of chronic stressors.

Wade and Cairney (2000) examined how an extensive set of covariates identified in previous research—sociodemographics, social stressors, health status and psychosocial resources—influence the age-depression relationship. The relationship between age and both outcomes was linear and negative after controlling for sociodemographics. Controlling for social stress reduced levels of depression among younger cohorts while controlling for poor health status reduced levels of depression among the elderly.

Duggal et al. (2001) explored the antecedents of depressive symptomatology in childhood and adolescence in a prospective longitudinal study of at-risk youth from families of lower socioeconomic status. Results suggest the possibility of etiological differences between depressive symptoms in childhood and in adolescence. Depressive symptomatology in childhood was predicted by the overall family context. Cumulative effects of maternal depressive symptomatology, early care lacking in emotional supportiveness, abuse, and family stressors were observed. Depressive symptomatology in adolescence, on the other hand, was specifically associated with maternal depression and early care lacking in emotional supportiveness. Moreover, an intriguing sex difference emerged: maternal depressive symptomatology was strongly associated with depressive symptomatology in adolescence for females, but for males supportive early care appeared more relevant.

Nummer and Seiffge-Krenke (2001) in a four-year longitudinal study explored the different contribution of low self-esteem, different types of stressors, conflict in close relationships and avoidant coping to the explanation of depressive symptomatology in adolescents. Results revealed a higher stress level, more conflicts with mothers and more avoidant coping in females as compared to males at the age of 14 years. Males showed fewer depressive symptoms and higher positive self-esteem at all times. Analyses revealed that stress and avoidant coping in early and mid-
adolescence explained a significant proportion of depressive symptoms among females in late adolescence. Among males, only the level of conflicts with friends in early adolescence contributed to their level of depressive outcome in late adolescence.

Csorba et al. (2001) aimed to identify recent and past life stresses as having a significant differential risk of childhood depression versus other childhood psychiatric illnesses; and to establish if life stresses shared with other family members had a greater impact on the depression of the child than events of only personal relevance. Of past stressors, physical punishment of the child by teachers, serious financial problems of the family and mental health problems of family members were found to be significant predictors of depression. From the series of recent stresses, moving to a new school, somatic illness, death of relatives and mental health disorders of family members were proved to be independent risk factors of depression for the children.

Donald et al. (2001) provided prevalence data on adverse life events, depression and suicidal thoughts and behavior among a community sample of young people. Results showed that difficulties with interpersonal relationships are common causes of distress for young people, in particular problems with parents, problems with friends and relationship break-ups. Depressive symptomatology is common among young people with approximately one in eight males and one in four females reporting current depressive symptomatology.

Takakura and Sakihara (2001) determined the psychosocial factors associated with the presence and persistence of depressive symptoms among 3202 students from public senior high schools in Japan. After controlling for the effects of demographic and other psychosocial variables, presence of depressive symptoms was positively associated with life stressors in the domains of friends, family, and teachers. Similarly, persistence of depressive symptoms was also positively associated with life stressors in the domains of friends and teachers. Presence and persistence of depressive symptoms were negatively associated with positive health practices, more social support, high self-esteem, and internal locus of control.

Pine et al. (2002) examined the adolescent life events as predictors of adult depression. Results revealed that adolescent life events predicted an increased risk for
major depression diagnosis in adulthood. When analyzed continuously, an association emerged with symptoms of major depression as well as with symptoms of generalized anxiety disorder.

Meyerson et al. (2002) aimed to study the contributions of sexual abuse, physical abuse, family cohesion, and conflict in predicting the psychological functioning adolescents, aged 16 to 18 years, receiving services at a residential vocational training program. Findings indicate that in addition to child sexual abuse and physical abuse, family conflict and cohesion are risk factors for the development of psychological distress and depression in adolescence. Physically abused adolescent females perceived their family environment as more conflictual and less cohesive than females without physical abuse, and sexually abused perceived their family environments as more conflictual and less cohesive than females without sexual abuse. Physically abused adolescent males reported more conflict than males without physical abuse, but did not differ with regard to cohesion and family dimensions. Analyses revealed that both conflict and cohesion, in addition to a history of sexual and physical abuse, predicted depression and distress.

Lutenbacher (2002) investigated the relationships of abuse (childhood and/or partner), everyday stressors, self-esteem, depressive symptoms, and anger with abusive parenting attitudes. Results revealed a high prevalence of abuse, depressive symptoms, and abusive parenting attitudes. Abuse (partner and childhood physical) predicted higher everyday stressors which in turn predicted lower self-esteem. Childhood abuse and lower self-esteem predicted more depressive symptoms. More depressive symptoms were related to higher levels of state anger. More everyday stressors and more depressive symptoms predicted higher levels of trait anger. Higher levels of anger expression were associated with higher everyday stressors and lower self-esteem.

Votta and Manion (2003) in a cross-sectional study explored differences in and the association of self-reported coping style, negative life events, self-esteem, and perceived social support with the psychological adjustment of homeless and nonhomeless adolescent males. Results revealed that homeless youths reported a
higher prevalence of family dysfunction, school difficulties, suicide attempts, legal problems, and substance use than nonhomeless youths. Homeless youths differed from nonhomeless youths for each outcome measure, reporting a greater use of the disengagement coping style, higher negative life events index, less perceived parental support, and higher levels of depressive symptoms and internalizing and externalizing behavior problems. Analyses indicated that disengagement coping and self-worth accounted for significant amounts of variance in depressive symptomatology, and both internalizing and externalizing behavior problems in homeless youths.

Repetto and Calatayud (2003) conducted a descriptive, cross-sectional study among 2,178 teenagers (age range: 12 – 16) and investigated the presence of warning signs among teenagers in view of eating, depressive, learning disorders and violent behavior and related them to the social and family environment and living habits. Results revealed that warning signs of eating disorders and depressive disorders, both related to the female gender were found respectively among 4.3% and 10.2% of the teenagers. The signs investigated were spread homogeneously, increasing with age and are significantly related to a higher degree of smoking, drinking and illegal drugs, episodes of drunkenness and a certain use of free time on the part of the teenagers, with a higher degree of consumption of addictive substances among friends and family members.

Sund et al. (2003) aimed to examine the relationships between various psychosocial factors and depressive symptoms in early adolescence. Depressive symptoms were more strongly correlated with school-related stress among boys than girls, whereas the correlation between daily hassles and depressive symptoms was higher for girls than boys. The results showed significantly higher mean total Moods and Feelings Questionnaire (MFQ) scores among adolescents not living with both natural parents, those who had moved more than twice and those with more than 3 siblings or having fewer than 2 close friends. Further, adolescents from Third World societies and adopted adolescents, those from lower SES groups, having unemployed parents or living in coastal areas had higher mean depressive symptoms scores. The results of multiple regression analyses yielded the following six significant predictors
of total MFQ scores in order of importance: Sum of daily hassles and sum of stressful life events, gender, number of friends, ethnicity and mother’s employment status.

Takakura et al. (2003) aimed to examine regional differences in relationships between depressive symptoms and psychosocial factors among high school students. The findings showed that there is similar pattern of associations between depressive symptoms and psychosocial factors among high school students in Okinawa and Saga, except for participation in community events. Life stress, self-esteem, and social support may be common factors associated with depressive symptoms among high school students regardless of region.

Liu et al. (2003) investigated psychosocial factors underlying the mental health problems of single-child high school students in an urban city of China. Results revealed that in the single-child and in non single-child groups, the percentage suffering neurotic tendencies were 73% and 39%, and the values for a tendency to depression were 63% and 25%, respectively. In the single-child group, anxiety, interpersonal dependence, and perceived stressors were significantly higher while the perceived self-esteem and emotional support from family members were significantly lower than in the non single-child group. Among the variables, having siblings was highly correlated with all the measured factors influencing mental health. The results indicated that a poor emotional support network could cause low self-esteem, high anxiety trait, strong interpersonal dependence, and increased sensitivity to stressors and worsening of mental health.

Haavisto et al. (2004) aimed to study associative and predictive factors for self-reported depressive symptoms among 18-year-old boys. Results revealed that poor adaptive functioning within family and in education, having fewer than two close friends, somatic health problems, and using illicit drugs were all independently associated with a high level of depressive symptoms in the cross-sectional data at age 18. Self reported depressive symptoms at age 8 independently predicted an increased number of depressive symptoms 10 years later.

O’Sullivan (2004) in a cross sectional study compared depressive risk factors within and between two Western community cohorts. He found that the onset of
depressive symptoms was positively associated with unfavorable childhood events, poorly perceived social supports, recent stressful life events, a vulnerable personality style, and previous depressive illness.

Stewart et al. (2004) examined the data from the 1999 National Population Health Survey. The highest rates of depression are seen among women of reproductive age. Predictive factors for depression include previous depression, feeling out of control or overwhelmed, chronic health problems, traumatic events in childhood or young adulthood, lack of emotional support, lone parenthood, and low sense of mastery.

Ybarra (2004) examined the cross-sectional relationship between depressive symptomatology and Internet harassment, as well as underlying factors that may help explain the observed association among youth between the ages of 10 and 17 (N = 1,501). The odds of reporting an Internet harassment experience in the previous year were more than three times higher for youth who reported major depressive symptomatology compared to mild/absent symptomatology. When female and male respondents were assessed separately, the adjusted odds of reporting Internet harassment for males who also reported DSM IV symptoms of major depression were more than three times greater than for males who indicated mild or no symptoms of depression. No significant association was observed among otherwise similar females.

Denny et al. (2004) examined risk and protective factors for depression within the social environment in a sample of 268 alternative education students from New Zealand. Twenty-eight (35.4%) of the girls and 31 (21.1%) of the boys had cut-off scores that indicated a high likelihood of significant psychopathology from depression. Multivariate analysis demonstrated that family and peer connections were protective against depression. High levels of poverty, witnessing violence at home, and experiencing bullying at school were significant risk factors for depression.

Osvath et al. (2004) examined the incidence of negative life events and associated these events with psychological scales (depression, hopelessness, self-esteem and state-trait anger) in a group of suicide attempters. Certain negative life events (especially relationship problems and physical/mental abuse in childhood)
turned out to be the main indicators of severe mental problems in the family of the attempters (e.g. addiction, self-destructive behavior or psychiatric hospitalization). Significant positive correlations were found between the number of events and some psychopathological symptoms like depression, hopelessness, anger and lack of self-esteem.

**Cuffe et al. (2005)** studied the association of family and social risk factors with psychopathology in a longitudinal study of 3,419 seventh through ninth graders. In multivariate logistic regression analyses controlling for race, gender, and socioeconomic status, baseline undesirable life events and low family cohesion are associated with any disorder and affective disorder at baseline. Not living with both biological parents at baseline increases the odds ratio for affective disorder at and follow-up. At baseline and follow-up, anxiety and affective disorders are associated with being white and anxiety disorder with being female.

**Phillips et al. (2005)** carried out a prospective exploration of the specificity of early childhood adversities as predictors of anxiety and depressive disorders in adolescence. Analyses controlled for gender and maternal depression and anxiety disorders. Results indicated that adolescents with anxiety disorders were more likely than depressed youth to have been exposed to various early stressors, such as maternal prenatal stress, multiple maternal partner changes, and more total adversities, whereas few early childhood variables predicted depressive disorders. Even when current family stressors at age 15 were controlled, early adversity variables again significantly predicted anxiety disorders. Results suggest that anxiety disorders may be more strongly related to early stress exposure, while depressive disorders may be related to more proximal stressors or to early stressors.

**Hampel et al. (2005)** conducted a one-year longitudinal study to investigate gender and developmental effects on perceived stress related to interpersonal stressors, coping strategies, somatic symptoms and psychological disorders in a sample of 169 Austrian children and adolescents (ages 10 to 13 years) who participated in this self-report study. Results revealed that compared to male children and adolescents, female counterparts scored higher on perceived stress related to
interpersonal stressors and on social support but evaluated a lower amount of
distraction. Moreover, girls reported higher levels of somatic symptoms and
anxiety/depression. Boys showed a developmental increase in anger control problems
and both genders showed developmental increases in antisocial behavior. Low levels
of the emotion-focused coping strategies distraction and minimization were related
longitudinally to emotional and behavioral disorders.

Adewuya and Ologun (2006) evaluated the factors associated with depressive
symptoms among adolescents (aged 13-18-year-old). The factors significantly
associated with adolescents' depressive symptoms include parental depressive
symptoms, adolescents' perception of family functioning as poor, adolescents'
problems with peers, adolescents' low self-esteem, adolescents' drinking, female
gender, and large family size.

Chandra and Batada (2006) carried out the Shifting the Lens study to
explore perceptions of stress, sources of social support, and use of coping strategies
among urban African American ninth graders. Results revealed that in contrast with
existing literature that emphasizes the influence of violence and neighborhood factors
on stress among teens, teens prioritized other sources of stress, particularly from
school, friends, and family. For support, they relied on different individuals,
depending on the source of the stress—friends for romantic relationship stress and
family for job, school, and family stress. Sex differences in the coping styles of the
participating teens were found. Girls reported more frequent use of support-seeking
and active coping strategies than boys.

According to Keller and Nesse (2006), although much depression may be
dysfunctional, the capacity to experience normal depressive symptoms in response to
certain adverse situations appears to have been shaped by natural selection. If this is
ture, then different kinds of situations may evoke different patterns of depressive
symptoms that are well suited to solving the adaptive challenges specific to each
situation. They called this the situation-symptom congruence hypothesis and tested
this hypothesis to identify depressive symptoms that followed a recent adverse
situation. Guilt, rumination, fatigue, and pessimism were prominent following failed
efforts; crying, sadness, and desire for social support were prominent following social losses.

a) ROLE OF FAMILY STRESSORS, PARENT RELATIONSHIPS & FAMILIAL FACTORS:

The role of the family in adolescent functioning has received increasing attention in recent years. Traditionally, adolescence has been viewed as a time when family becomes less important and peers become more important. However, Csikszentmihalyi and Larson (1984), among others, have noted that the family continues to serve an important role during adolescence (i.e., safe environment for rest and rejuvenation). Meeus (1989) and Meeus and Dekovic (1995) have indicated that the influence of peers is limited to certain areas, especially leisure, while parents are more important in terms of personal relations and school (with regard to occupational identity development, school performance, and social support in adolescence, Meeus, 1993b). The influence of parental social support on the well-being of adolescents is greater than that of peer support. It may be that the support of parents has functions that cannot be replaced by peer support (Meeus, 1993a).

Forehand et al. (1991) suggested that boys and girls do not react differently to family stressors. Findings reported by Simmons et al. (1987) suggested that boys are more sensitive to stressors than girls during the preadolescent years; whereas, the pattern reverses in the adolescent years. It was noted that gender differences in response to divorce are more likely to occur in the preadolescent than adolescent years (Hetherington, 1990). It may well be that early adolescence is a transition point in which boys and girls are equally susceptible to stressors.

Cohen and Wills (1985) have proposed that social support may operate as a main effect model, producing a positive effect regardless of stress level, or as an interactive or buffering model, producing a positive effect only under high levels of stress. Clinically, moderators could be identified that would reduce the impact of parental divorce, conflict, and depression on adolescents. A good parent-adolescent relationship has been viewed as a protective factor against family stressors. By focusing on the parent-adolescent relationship within a therapeutic context, the stress
of family difficulties may be reduced for the adolescent and her/his functioning may not deteriorate or may improve. Among family variables, parenting practices, especially parental acceptance and responsiveness, have been consistently identified as important factors that play critical roles in the development of adaptive and maladaptive functioning. For example, it has been reported that parents of depressed children are less warm and nurturant and more hostile than parents of children who are not depressed (Goodyer, Germany, Gowrusankur, & Altham, 1991; Puig-Antich et al., 1985). Hess and Camara (1979) and Wierson et al. (1989) found that a good parent-adolescent relation reduced the negative impact of divorce on children and adolescent. In a study from southern Stockholm, 12-year old children of divorced parents say that they have problems in the form of introversion, worry / depression, physical ailments, social insecurity, obsessive thoughts, and attention disorders (Lindberg et al., 1997).

The variables identified as potential correlates of child depression by Chen et al. (1995) included: (a) maternal acceptance and rejection, (b) marital conflict, and (c) family income. Parental warmth and acceptance may have cross-culturally universal influences on children's adaptive and maladaptive development (MacDonald, 1992). Familial risk for depression may be associated with other characteristics, including alcohol use, smoking, and body mass index (BMI), and with environmental risks such as social problems, life events, and educational level, all of which may be associated with depression in offspring.

In addition, to their "main effects", family social and ecological conditions, particularly parental behavior, and school performance may interact with each other in predicting depression. For example, positive parenting and a desirable family environment may protect, or "buffer", the child who experiences social and academic difficulties in the school from the maladaptive development (Cohen & Wills, 1985). In other words, children who experience stress but receive warmth and nurturance in the family may be less likely to develop depressive symptoms than children who experience stress but do not have such resources in the home.
Forehand et al. (1991) found that in contrast to the support noted for the main effect model, some support also was found for the interactive or stress-buffering model, as an adolescent perception of a better father-adolescent relation moderated the negative influence of family stressors on teacher-reported internalizing problems of adolescents. Previous research (Montemayor and Hanson, 1985) suggests that the mother-adolescent interaction is more conflictual than the father-adolescent interaction. Consequently, in a time of family stress, an adolescent may rely more on her/his relationship with the father than mother for reassurance and security, which offsets internalizing problems.

Tisher et al. (1994) investigated the relationship between depression and stressors and the relationship between depression in children and depression in their parents. The findings showed that children and mothers in the depressed group reported more stressors than other children and other mothers while fathers of children in the depressed group did not report more stressors. The findings also showed that mothers of depressed children were more depressed than mothers of normal children while there were no differences between the scores of fathers in the three groups.

Chen et al. (1995) found that maternal acceptance and a lack of marital conflict at Time 1 had direct and buffering effects on child depression, the concurrent relations between the family variables and child depression were statistically nonsignificant. Two explanations may be offered for these results. First, family influences on children’s depressed mood may be mediated by a series of cognitive and affective processes such as perception, interpretation, affective reaction, and behavioral manifestation: thus the effects of familial stress and resources might be somewhat delayed. Second, older children might be less vulnerable to the influences of the stress in the family because of their greater capability to cope with stress and to seek external support from peers and others.

Nilzon and Palmerus (1997) investigated the influence of familial factors on childhood depression and anxiety, with special reference to middle school and early adolescence. Results showed significant differences between the groups on several
familial characteristics, including frequency of major family problems, life events, parent symptoms, patterns of overprotection, family cohesion, and lack of happiness.

Farmer et al. (2000) examined the familiality of life events and depression and whether there may be a common familial factor influencing vulnerability to depression and the experiencing of life events (The Cardiff Depression Study). Results showed a higher lifetime relative risk of depressive disorder in the siblings of depressed subjects as compared with siblings of controls, although these groups did not differ in the life events measures. Several categories of events showed significant sibling correlations, but this was due to the same event affecting both members of the pair. Although depressive disorder was strongly familial, the familial effects on life events were largely explained by shared experiences.

Davies and Windle (2001) in a prospective study of 360 adolescent-mother dyads examined whether associations between marital discord and trajectories of adolescent depressive symptoms and delinquency varied as a function of three intrapersonal attributes: temperament, childhood behavior problems, and perceived family support. Difficult temperament (i.e., dysrhythmicity, poor task orientation) potentiated the effects of marital discord on adolescent trajectories of adjustment, whereas heightened perceptions of family support protected adolescents from the adverse effects of marital discord. Adolescents with behavior problem histories were initially less vulnerable to marital discord; however, the high levels of depressive symptoms exhibited by adolescents with childhood behavior problems persisted over time only when they were exposed to elevated marital discord. The effects of the moderators differed in terms of duration and course.

Sund and Wichstrom (2002) investigated whether insecure attachment is a predictor of subsequent depressive symptoms among young adolescents (aged 12-14 years) were assessed at two time points 1 year apart and when controlled for depressive levels the preceding year, various demographic and psychosocial factors, and stressful life events. Results revealed that the proportions of high scores on depression increased threefold from T1 (Time1) to T2 (Time 2). Analyses showed that the following variables at T1 were predictive of depressive symptoms at T2:
severe depressive, gender, attachment to parents, and stressful life events. Thus, insecure attachments to parents may contribute to the development of severe depressive symptoms among young adolescents.

**Tschann et al. (2002)** used a cognitive-emotional model to examine the relations between multiple dimensions of interparental conflict and health risk behaviors among young adolescents. Results revealed that more frequent conflict, more conflict about the adolescent, more adolescent involvement in the conflict, and poor conflict resolutions were related to greater emotional distress. More conflict about the adolescent, mothers being more demanding / dominating during conflict, and more adolescent involvement in the conflict were related to greater risk behaviors. Adolescents’ cognitions mediated the link between two dimensions of parental conflict, frequency and resolution, and emotional distress. Adolescents’ emotional distress mediated the association between adolescent involvement in parental conflict and adolescents’ risk behaviors.

**Newport et al. (2002)** reviewed the findings in preclinical research on the adverse impact of parental depression on the development of offspring, with emphasis on the relevance of this research for the psychiatric care of depressed parents. Animal studies indicated that disrupted parenting produces a persistent, deleterious biobehavioral impact on offspring. Stressors, including maternal separation, variable foraging, and a variety of prenatal maternal challenges, produce offspring behaviors reminiscent of the cardinal features of anxiety and affective disorders. The stress paradigms also uniformly produce persistent hyperresponsivity in hypothalamic-pituitary-adrenal axis activity secondary to hypersecretion of corticotropin-releasing hormone. These findings bear striking similarities to findings for stress-related illnesses in humans, including major depression.

**Langrock et al. (2002)** examined children's coping and involuntary responses to the stress of living with a depressed parent in relation to their symptoms of anxiety/depression and aggression. Based on parent report, children of depressed parents had high rates of symptoms of anxiety/depression and aggression, were exposed to moderate levels of parental stressors (parental intrusiveness, parental
withdrawal), and responded to the stress of living with a depressed parent in ways that were associated with symptoms of psychopathology. The involuntary engagement responses (e.g., rumination, intrusive thoughts) were associated with more anxiety/depression and aggression symptoms.

**Garber et al. (2002)** investigated the developmental trajectories of their depressive symptoms in a sample of 240 adolescents assessed annually in Grades 6 through 11 and was examined using latent factor growth modeling. Growth in mother-reported adolescent depressive symptoms was quadratic; growth in adolescent-reported symptoms was linear. 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.

**Bifulco et al. (2002)** conducted an investigation of intergenerational factors associated with psychiatric disorder in late adolescence/early adulthood was undertaken to differentiate influences from maternal disorder, maternal poor psychosocial functioning and poor parenting, on offspring. Results indicated that offspring of vulnerable mothers had a fourfold higher rate of yearly disorder than those in the comparison series. They were twice as likely as those in the comparison series to have experienced childhood adversity comprising either severe neglect, physical or sexual abuse before age 17. Physical abuse, in particular, perpetrated either by mother or father/surrogate father was significantly raised in the vulnerable group. Analysis of the combined series showed that maternal vulnerability and neglect/abuse of offspring provided the best model for offspring disorder.

**Hoffman et al. (2003)** examined the association between parental affective disorders and psychoactive substance use disorders and the onset of major depressive
disorder (MDD) among adolescents and young adults and to determine whether this association is affected by stressful life events, family cohesion, self-esteem, or gender. Results revealed that of the correlates examined, only parental affective disorders, low self-esteem, and gender were significantly related to the onset of MDD. Females were twice as likely as males to experience MDD. The direct association between parental affective disorders and MDD onset was not affected by family cohesion, self-esteem, or stressful life events.

Hammen et al. (2003) examined the interpersonal impairment and the prediction of depressive symptoms in a community sample of 812 fifteen-year-old children of depressed and nondepressed. Results showed that depressive states in children of depressed mothers were more associated with chronic interpersonal difficulties than were the depressions of children of nondepressed women, and the latter group had greater increases in depression level associated with episodic stressors than did children of depressed women.

Ellenbogen and Hodgins (2004) hypothesized that high neuroticism among parents affects the family environment and parenting practices and thereby increases the risk of psychosocial problems among offspring. Parents with high neuroticism scores were characterized by low psychosocial functioning, poor parenting, more dependent stressful life events, and the use of more emotion-focused and less task-oriented coping skills. High neuroticism in parents was associated with internalizing and externalizing problems among the children, as assessed by parent and teacher ratings and clinician ratings.

Eley et al. (2004) examined the links between (1) parental familial vulnerability to depression and (2) the role of associated parental characteristics on severe adolescent depressive symptoms (3) explored the influence of family environment variables (4) interactions between parental familial vulnerability and family environment. Results showed that the odds of severe adolescent depressive symptoms increased by a factor of 1.5 per standard deviation increase in parental familial vulnerability to depression. A significant interaction such that those with
high parental familial vulnerability, whose parents also had no qualifications, had a threelfold risk of severe depressive symptoms.

Sallinen et al. (2004) examines whether the relationship between parental work and adolescents' well-being would be mediated through parenting behavior. Results showed that the relationships between parents' negative work experiences and adolescents' depression (all perceived by adolescents) were partially mediated by adolescents' experience of lessened autonomy granting in parenting and increased conflicts between parents and adolescents. In addition, the relations between fathers' negative work experiences and adolescents' negative attitude regarding school (all reported by adolescents) were mediated by adolescents' perceptions of increased conflicts between fathers and adolescents.

Akse et al. (2004) conducted a cross-sectional study to study the association between parental rejection, depression, aggression and personality, in a sample of 1142 early and middle adolescents. Results showed that perceived parental rejection was associated with depression and aggression in most of the combined personality type and gender groups. Personality type and gender moderated the associations between perceived parental rejection, depression and aggression. Several clear differences between the combined personality type and gender groups were found on these associations.

Hale et al. (2005) studied the association of perceived parental rejection to adolescent depression and aggression in Dutch junior high and high school students. Results revealed that perceived parental rejection, mediated through adolescent depression, explains aggressive behaviors of adolescents, as tested by a mediational model. Further analysis demonstrated that these effects are also somewhat dependent on the gender and the age of the adolescents.

b) ROLE OF PEER INFLUENCE / ROMANTIC RELATIONSHIPS

Among adolescents especially, early adolescents, social relationships with your peer group are an important element so that new, mature social relationships can be established, with your best friends (peers) competing with your family. Fuligni
and Eccles (1993) have stated that “seeking advice from friends can be an attempt to compensate for unsatisfactory relationships with parents”. Berndt (1979) has noted that in adverse or stressful situations, poor attachment to parents may be offset by strong attachment to peers. Although adults appear to be the main source of support for children, it has been shown that other children can provide support and help buffer stress (Belle, 1988).

Monroe et al. (1999) conducted a large epidemiological study in a sample of older adolescents assessed at 2 time points, the risk conferred by a recent romantic break-up was examined as a predictor of 1st onset versus recurrence of MDD. Results indicated a heightened likelihood of 1st onset of MDD during adolescence if a recent break-up had been reported; in contrast, a recent break-up did not predict recurrence of depression. These results held for both genders and remained significant after controlling for gender.

Prinstein et al. (2001) examined the models of risk for adolescent health-risk behavior, including family dysfunction, social acceptance, and depression as factors that may compound or mitigate the associations between adolescents' and peers' risk behavior in adolescents in grades 9-12. Results showed that adolescents' substance use, violence, and suicidal behavior were related to their friends' substance use, deviance, and suicidal behaviors, respectively. Friends' prosocial behavior was negatively associated with adolescent violence and substance use. Family dysfunction, social acceptance, and depression altered the magnitude of association between peers' and adolescents' risk behavior. In cumulative risk factor models, rates of adolescent health-risk behavior increased twofold with each added risk factor.

Lam et al. (2004) studied the relationships between same-sex attraction, gender dissatisfaction, pubertal timing, early experience with sexual intercourse, and depressive symptoms and the quality of family and peer relationships and self-perceived attractiveness among adolescents, age 14-18 years who provided information through self assessments. They found that depressive symptoms were higher in youths reporting same-sex attraction, gender dissatisfaction, early pubertal maturation, and early sexual intercourse. Family relationships were less satisfactory
for those who reported same-sex attraction, gender dissatisfaction and early sexual intercourse, and peer relationships were also worse for those who reported gender dissatisfaction. In multivariate analyses, same-sex attraction, early sexual intercourse, and early pubertal maturation were unique and direct contributors to depressive symptoms; however, gender dissatisfaction’s association with depressive symptoms was largely accounted for by shared correlations with negative family and peer relationships.

De Los Reyes and Prinstein (2004) examined whether adolescents’ depressive symptoms and aggressive behavior were associated with discrepancies between self- and peer-reports of peer victimization experiences in a sample of 203, 10th grade adolescents. Findings showed that adolescents’ aggressive behavior was associated with underestimation of peer victimization on self-reported measures, as compared to peer-reports, whereas depressive symptoms were associated with overestimation of peer victimization on self-report, as compared to peer-reports. It suggests that adolescents with high levels of depressive symptoms may be vulnerable to misperceptions of their social experiences among peers.

c) ROLE OF SCHOOL RELATED DIFFICULTIES:

School is an institution with huge possibilities to foster a child’s psychological development. The school’s task is to give all children an equally worthy preparation for adult life- but school also takes part in the differentiation, which occurs when children grow up. School contributes, therefore, even in the stratification of mental health. School’s primary possibility therefore lies in offering an environment in which all children, regardless of social background, are able to learn and to develop, thereby securing their mental health (Andersson, 1995).

Peer acceptance and rejection, leadership, receipt of honorship, and academic achievement were significant correlated with depression. Furthermore, peer rejection, low social status and poor achievement at age 8 were found to be associated with depressed affect at age 10. Consistently, analyses concerning the depressed group revealed that these children were less popular and had lower social status and more academic problems than their nondepressed counterparts both contemporaneously and
2 years earlier (Cole & Carpentiere, 1990; Fauber et al., 1987; Kellam et al., 1983).

Metzke and Steinhausen (1999) studied the effect of various learning environments on the degree and course of internalizing and externalizing disorders and the changes in these learning environments were studied. The longitudinal analysis revealed that the attributes of the learning environment changed in interaction with the school clusters: there was a positive trend for the unfavorable learning environments and a negative trend for the favorable learning environments. The indicators of mental state also changed in interaction with the school clusters and gender. The manifestation of internalizing and externalizing disorders in a cluster with a negative trend increased more in girls than in boys. In relation to their mental state, the boys profited more than girls from a positive trend of development in a school cluster.

Liivamagi et al. (1999) aimed to investigate the risk factors of mental disorders in adolescent age. Results showed that 23% of pupils had borderline or clinical psychosyndromes. The exogenous risk factors of mental disorders appeared as follows: high work-load at school (30-50% of pupils), parent’s (especially of father’s) alcohol abuse (18%), conflicts in family (14%), difficult economical conditions of family (14%), disturbed relationships with peers (18%), or teachers (8%). Endogenous unfavorable factors were: complicated course of pregnancy; choleric (p<0.05, more related with conduct disorders) or fourth type of melancholic (p<0.01, more related with anxiety and depression) temperament.

Rudolph et al. (2001) examined the role of maladaptive self-regulatory beliefs as vulnerability factors for academic and emotional difficulties during the transition to middle school. Consistent with the proposed model of self-regulation, maladaptive self-regulatory beliefs (i.e., decreased perceptions of academic control and importance) predicted individual differences in perceived school-related stress and depressive symptoms over the course of the middle school transition, but were not associated with academic and emotional difficulties in adolescents who remained in a stable school environment. Moreover, a self-regulatory sequence was identified.
proceeding from maladaptive self-regulatory beliefs, to academic disengagement, to enhanced perceptions of school-related stress, to depressive symptoms.

Undheim and Sund (2005) examined correlates of self-reported depressive symptoms within the school area, and possible predictors of change in depressive symptom levels over a 1-year period in a large representative sample of 12 to 15-year-old adolescents in central Norway. Results revealed that in the cross-sectional multivariate analyses of the whole sample, at time-point one (T1), all four school factors were independently associated with depressive symptom levels at small to moderate levels. In the longitudinal multivariate analyses of the whole sample, self-reported depressive symptom levels at time-point two (T2) were predicted by depressive symptom levels at T1, gender and teacher support. For girls, three of the school variables significantly predicted depressive symptom levels at T2, while this was not the case for boys.

d) OUTCOME AND BEHAVIORAL MANIFESTATIONS OF STRESSFUL LIFE EVENTS IN ADOLESCENTS

Adolescence, more than any other developmental period, entails experimentation, exploration and risk taking. There is wide agreement that psychological problems in adolescents should be studied from a developmental perspective. The majority of adolescents engage, at one time or another, in one or more problematic behaviors. Various studies suggest that older teenagers report engaging in more delinquent behaviors than younger teenagers (Lahey et al., 2000). In addition, gender differences in behavior problems, such as aggressive behavior and antisocial behavior, are also evident during childhood and adolescence, with boys showing higher rates of these problems than girls (e.g. Kelley, Bates, Dodge, & Pettit, 2000; Lahey et al., 2000). However, extended participation in risky behaviors may be predictive of more serious psychosocial problems. Consequently, a sound understanding of the factors that increase the psychological vulnerability of adolescents is important for endeavors aimed at reducing the incidence of mental disorders in this age group.
Windle and Davies (1999) conducted a study of adolescents focusing on common and distinctive correlates of four subgroups—no problem, depressed only, heavy drinking only, and mixed (depressed and heavy drinking). The mixed subgroup reported the most pervasive, low levels of functioning, with the highest levels of family social support, and high levels of delinquency and substance abuse. The depressed-only subgroup reported a more internalized pattern characterized by childhood avoidance problems, a difficult temperament (e.g., inflexibility, withdrawal, low task orientation), interpersonal stressors, and poor coping strategies.

Weisner (2003) in a longitudinal study examined the reciprocal relations between depressive symptoms and delinquent behavior among adolescents (mean age, 15.51 years at Time 1). Analyses revealed a relatively small unidirectional effect of delinquency on depression for boys (at 1 of 3 time points), and bi-directional effects of comparable size of girls.

Blore et al. (2004) aimed to investigate the phenomena of adolescent depressive symptomatology, substance abuse and their relationship in adolescents. It was determined that adolescents become progressively unhappier from 13 to 17 years of age. This research also revealed that adolescent depressive symptomatology is significantly and positively correlated with earlier onset of substance abuse as well as frequency of usage. There appear to be no gender differences in substance abuse but teenagers from different ethnic and language groups differ in their use of substances. Risk factors for depression and substance included a conflict relationship with parents, the experience of major stressful events, dissatisfaction with school grades and friends’ use of substances.

3. RELATIONSHIP OF GENDER WITH ADOLESCENT DEPRESSION

Gender is an important variable in studies of psychological well being. Gender roles are the sets of behaviors, concerns, and personality characteristics into which males and females are socialized. Several researchers have suggested that gender differences in emotional experience and expressiveness stem from the emotional roles
men and women are expected to fill (Brody and Hall, 1993; Grossman and Wood, 1993; Eagly and Wood, 1991). The female gender role involves being emotionally expressive, concerned with emotional feelings, and emotionally unstable (Ruble, 1983). The construct of self-silencing was proposed to account for women's greater vulnerability to developing depression. The male gender role involves being in inexpressive and emotionally stable.

The incidence of behavioural problems and psychological disorders increases during adolescence, and striking sex difference become apparent in the pattern of disorder (Rutter & Garmezy, 1983). Using retrospective data, some of these have pointed to adolescence as the time when this gender difference first appears. The child and adolescent epidemiological literature generally agrees that rates of depression are similar in pre pubertal boys and girls, and that rates of depressive disorders begin to rise in girls at sometime between childhood and age 15 (Lewinsohn et al., 1995; Reinherz et al., 1993; Angold & Rutter, 1992; Nolen-Hoeksema et al., 1991; Fleming & Offord 1990; Mc Gee et al., 1990; Kashani et al., 1989; Guyer et al., 1989; Bird et al., 1988; Anderson et al., 1987; Rutter et al., 1976). The Epidemiological Catchment Area (ECA) studies (Burke et al., 1990) suggested that unipolar depression onset rates were equal in males and females until age 15-19, while the National Co-morbidity Survey (NCS) (Kessler et al., 1993) provided evidence for the emergence of an onset differential by age 10-14.

Several theories have been proffered to explain the adolescent emergence of the gender difference in depression. Changes in circulating gonadal hormones during puberty are often implicated as exerting direct or potentiating effects on the central nervous system that relates to disturbance in mood (Susman et al., 1987). Some have argued that pubertal change in female morphology (e.g., breast development and increase body fat) may be experienced negatively by some adolescent girls, particularly if the timing of these changes occurs before that their peer group (Statting & Magnusson, 1990). Two recent studies, however, indicate that pubertal status has a greater influence on female depression rates than either age (Angold et al., 1998; Patton et al.,1997) or timing of puberty (Angold et al., 1998).
Previous studies of menarche or morphological development (secondary sex characteristics) -usually measured by Tanner stages (Tanner, 1962) have suggested that levels of these pubertal status markers per se may not be significantly related to mood or other disturbances (Ge et al., 1996; Angold & Rutter, 1992; Brooks – Gunn & Warren, 1989; Susman et al., 1987 b), but that their timing may be. Early puberty has been associated with problem behaviors in girls, but with good adjustment in boys (Statton & Magnusson, 1990). The negative effects of early development in girls were generated by the impact of early maturity on girls social lives and these effects had largely disappeared by the time the girls were in mid adolescence, whereas the female excess of depressive disorders continues throughout adulthood (Statton & Magnusson, 1990; Weissman & Klerman, 1977). Though, in the Carolina Longitudinal study, Cairns & Cairns (1994) did not find any effect of early puberty on behavioural deviance.

The timing of the change in sex ratios has important implications for theories about the relationship between depression and puberty. If such a change actually begins by age 10, it may be that adrenarche (which is in progress by middle childhood) is more relevant than puberty (Brooks – Gunn and Warren, 1992). One large clinical study (Angold & Rutter 1992), found that age continued to predict the presence of depression over and above effects of pubertal status. Only one of the studies considered so far involved any measures of pubertal status per se, rather than using age as a marker of developmental status.

Studies with direct hormonal measures lend further weight to the idea that puberty is ‘bad’ for girls but ‘good’ for boys as far as depression is concerned, but these studies have mainly focused on hormone concentrations rather than on the timing of changes in hormonal concentrations. The NIMH study of puberty and psychopathology (Nottelmann et al., 1987 a, b; Susman et al., 1987 a, b) found negative associations between testosterone and negative emotional tone in boys. These workers also reported an association of early maturation (adrenal androgen concentrations) with reduced negative emotional tone in boys but more negative emotional tone in girls. A 1-year follow up of 72 girls (Paikoff et al., 1991) found a significant linear relationship between oestradiol level at time 1 and depression 1 year
later according to one depression scale, but not such effect in relation to two other depression scales.

Associations of depression with concentration of gonadal hormones and gonadotrophins have been reported in both adults and adolescents, but it remains unclear whether such associations arise from central organizational changes that initiate and drive puberty, from activational effects of concomitant changes in endocrine milieu, or from psychological and social effects of the visible manifestations of puberty (Young & Korszun, 1998).

One possible mechanism involves specific CNS actions by these hormones; indeed, the observed dissociation of the peripheral (Tanner stage) from the central (depression) action of oestradiol fits current understandings of steroid hormone action. High co-localization of oestrogen receptor beta with CRF-bearing cells in the paraventricular nucleus (Laflamme et al., 1998) provides support for the stress diathesis model of depression (Plotsky et al., 1998; Heim et al., 1997). Tanner stage had a much larger effect on rates of depression than did age, suggesting that changes in rates of depression in adolescence were specifically related to the physical changes of puberty, rather than simply indexing a ‘time of life’ when the prevalence of depression rises in girls (Angold et al., 1998).

A number of studies to investigate how gender roles are socialized provide evidence for the early emergence of gender–role consistent behavior and suggest some ways in which such behaviors may be “passed on” from parents (Adams et al., 1995; Kuebli, Butler and Fivush, 1995). The results indicated that mothers talked for a longer amount of time about sadness, and more often emphasized the causes of sadness, with daughters than with sons. It may be gender roles and stereotypes lead women into internalizing problems because internalizing problems are expected and reinforced for women while externalizing problems are not.

In recent studies using measures to tap “feeling too responsible for relationships” or “unmitigated communion”, adolescent girls have scored higher on such measures than adolescent boys (Blatt et al., 1993; Luthar and Blatt, 1993; Aube, Fichman, Saltaris, and Koestner in press). In addition, Aube et al. (in
press) found that gender differences in “feeling too responsible” were not present in seventh and eight graders, but significant in ninth, tenth and eleventh graders, in support of an emergence of this difficulty in girls in adolescence. In turn, both girls and boys who score high on these measures of over-responsibility and interpersonal concern are more likely to have depressive symptoms (Saragovi et al., 1997).

### Developmental Course of MDD

![Diagram of Developmental Course of MDD]


**Figure 3.1: Developmental course of Major Depressive Disorder**

Kandel and Davies (1982) conducted an empirical study to investigate the epidemiology and correlates of depressive mood were measured in a representative sample of public high school students in New York State and a subsample matched to their parents. In the general adolescent sample, sex differences in depressive mood paralleled those previously reported for adults, with girls scoring higher than boys. Adolescents reported higher depressive mood than their parents, with the differences greater in daughter-mother than in son-father pairs. If judged by mood differences, adolescence was a stressful period in the life cycle. Lowest levels of adolescent
depressive mood correlated with high levels of attachment both to parents and to peers.

Weissman et al. (1984) aimed to study the epidemiology of depression and give an update on sex differences in rates. Data from the New Haven, CT, Standard Metropolitan Statistical Area, site of the NIMH Epidemiologic Catchment Area (ECA) study, a multi-site collaborative community survey of psychiatric disorders was presented. The 6-month prevalence rates and the DSM-III found that major depression was more frequent in women than men (2.4:1). The sex ratios for major depression were fairly consistent at different time periods retrospectively assessed. There appeared to be a birth cohort effect with cohort's born after 1936 having an earlier age of onset and higher rates of major depression but not a change in sex ratios.

In a study by Wilson & Cairns (1988), the authors studied 16 years old pupils and found that females had a significantly higher rate of depressive symptoms, showing that the sex difference was present in the sample of adolescents and that the androgynous and masculine groups, with high masculinity, had fewer symptoms than the feminine and undifferentiated groups, with low masculinity. The data thus show that relatively high masculinity, either by itself or embedded in the androgynous typology, is the crucial protective factor for mental health. They also found that a sex difference in the instrumental attributes of the masculinity construct arises before adolescence and is involved in the development of perceived competence and self worth; these variables in turn, are related to the development of depression, with percepts of low competence giving rise to an increased incidence of depression. It follows that females, who have lower levels of instrumental attributes than males, may experience relatively more symptoms of depression.

Eric Ostrov et al. (1989) in his study, which was a part of a large ongoing research project concerning both the epidemiology of psychiatric illness among adolescents (16 and 18 year olds) and adolescent's mental health help seeking behavior. Among teenagers who are disturbed, symptom expression, results indicate, is greatly influenced by gender. The findings showed that adolescent girls reported
significantly poorer functioning and greater psychological disturbance than did adolescent boys with respect to Emotional Tone, Body Image, and Psychopathology. The girls expressed more conservative sexual attitudes than did the boys. Also, adolescent girls reported more number of symptoms endorsed and greater severity of distress than adolescent boys. Boys are more likely to describe behavioral disorders and to have poorer vocational and educational goals. With respect to Emotional Tone, about a third of the girls, while only about one fifth of the boys, attested to frequently feeling sad. The apparent proclivity toward inwardly experienced symptoms in girls and boys’ apparent greater proclivity towards acting out are consistent with finding obtained by studies of gender differences among.

Brooks – Gunn and Warren (1989) argued that the ‘turning on’ of the endocrine system as females progress from pre puberty to post puberty might explain gender linked increases in negative affect. Accordingly, they found that self-reported negative affect increased in 10-to-14 years old females during pubertal estrogen levels rise. However, estrogen levels accounted for only 4% of the variance in negative affect, whereas negative life events and the interaction of negative life events and estrogen change accounted for 17% of the variance in depressive affect.

Goldberg (1989) examined the relationship between self-reported depression and affective and cognitive correlates and developmental levels of psychological functioning in 8 – 16 years old girls. Results indicated that girls reporting more depression had significantly earlier developmental levels of object relations and cognition than girls reporting less depression, regardless of chronological ages.

Allgood-Merten et al. (1990) investigated the role of certain psychosocial variables--sex, age, body image/self-esteem, self-consciousness, stressful life events, and the degree to which an individual identifies with the cultural stereotype of masculinity--as correlates and antecedents to depression in adolescents and explores possible intra-individual mediators of the stress-depression relationship in adolescents. Female adolescents reported more depressive symptoms, self-consciousness, stressful recent events, feminine attributes, and negative body image and self-esteem; no age effects were obtained. Results suggest a model of adolescent
depression in which body/self-esteem and stressful recent events are significant contributors.

Forehand et al. (1991) provided substantial support for the hypothesis that there is a differential change from pre-adolescence to mid-adolescence in functioning of boys and girls. The result was consistent across the different reporters of behavior (teacher, parent, adolescent). They found that girl's reports of depressive symptoms doubled from pre-adolescence to early adolescence and the increase was maintained into mid adolescence. In contrast, boy's depressive symptoms did not change over the three developmental age groups examined i.e. preadolescence, early adolescence and mid adolescence. With internalizing problems, in both of these two areas of functioning, when assessed by both parent and teacher report, boys demonstrated more difficulties at pre-adolescence whereas, based on teacher report, girls had more difficulties at mid-adolescence. For cognitive competence, girls decreased across developmental periods, whereas for conduct problems boys decreased and girls increased across periods. They proposed that girls may manifest an increase in difficulties in adolescence as compared to boys because of being more sensitive or vulnerable to disruptive peer relations.

Makaremi (1992) investigated sex differences on a depression scale for Iranian adolescents in a sample of high school students (N = 200), selected randomly from four high schools in Shiraz, completed the Zung Self-rating Depression Scale. Analysis showed no significant differences on the five subscales of Zung's depression scale for boys and for girls. Also, there were no sex differences on the total score for depression. However, in comparison to Byrne's groups of British boys and girls indicated differences for Iranian boys and girls on 2 individual items reached significance, whereas for the British groups differences were significant for 11 of the 20 items.

Ruble et al. (1993) examined gender socialization processes during childhood that may contribute to a higher incidence of depression or depressive symptoms in females than in males. It is argued that because of the actions of socialization agents and the impact of gender stereotypes on a child's construction of gender identity, girls
may exhibit higher levels of self-evaluative concerns that increase vulnerability to depression. Indeed, a review of the literature on sex differences in self-evaluation suggests that girls may be more susceptible than boys to self-evaluative concerns, particularly as reflected in lower expectations for future success, more maladaptive causal attributions for success or failure outcomes, and negative behavioral and evaluative reactions to failure.

Goodyer et al. (1993) examined temperament and major depression in adolescents who were 11 to 16 year olds and screened for major depression in the community. Sex differences in the structure of temperament were noted from both parent and teacher reports. High (negative) emotionality alone was associated with major depression, particularly (but not exclusively) in girls.

Veijola et al. (1998) examined sex differences in the association between adult depression and childhood experience as a part of Finnish UKKI Study. Results revealed that 12% of men and 21% of women had suffered from depression during the 16-year follow-up period. A disturbed mother-child relationship and neurotic symptoms in childhood were associated with depression in women but not in men in the logistic model that included gender interaction. In separate analyses by gender several childhood factors showed statistically significant associations with depression in women but only a few in men. The finding suggests that childhood experiences are more highly predisposing factors to depression in women than in men.

Koenig and Gladstone (1998) examined the impact of simultaneous changes in biological and social context on the mental health of adolescents and tested the hypothesis that normative development transitions can be associated with increased dysphoria if they occur in close temporal proximity. Girls experiencing physical changes associated with middle or later stage pubertal development during the initial high school or college year were predicted to experience more dysphoria than those experiencing these changes during non-transitional times, with negative pubertal attitudes exacerbating the relation. Results revealed that among females experiencing pubertal changes, dysphoria was indeed highest for the 15 and 19 years olds, and lower for the 16, 17 and 18 year olds with females viewing menstrual onset
as negative experienced depressive symptoms of moderate clinical severity. This pattern did not emerge for males, or females not experiencing pubertal changes. In contrast, the hypothesis was not supported when transition time was operationalized using grade level.

Angold et al. (1999) findings indicate that pubertal increases in testosterone and oestrogen levels cause those hormones to surpass a threshold which women are rendered more susceptible to depression, but there is ample evidence that in most cases, other exogenous (such as life events or daily hassles) or endogenous (such as cognitive style) factors are required to explain the development of individual episodes of disorder.

According to Kearney-Cooke (1999), the onset of adolescence—the period of transition between childhood and adulthood—is usually accompanied by dramatic and often difficult changes in the life of a young person. Biological, cognitive, social, and environmental factors all contribute to influence an adolescent's personal development and self-esteem. Studies have shown that adolescent girls tend to have lower self-esteem and more negative assessments of their physical characteristics and intellectual abilities than boys have. These findings may explain the substantially higher incidence of suicide attempts, depression, and eating disorders in girls.

Duarte and Thompson (1999) explored possible explanations for the empirical finding that men self-silence to the same or greater extent than women among students. Analysis showed that men reported more self-silencing than women. Depression and self-silencing scores were correlated positively for both men and women. The results showed that depressive symptomatology accounted for a significant percentage of the variance in self-silencing but that social desirability did not account for a significant increment in the variance accounted for in silencing the self.

Jacobson and Rowe (1999) investigated (a) genetic and environmental contributions to the relationship between family and school environment and depressed mood and (b) potential sex differences in genetic and environmental contributions to both variation in and covariation between family connectedness,
school connectedness, and adolescent depressed mood. Genetic contributions to variation in all 3 variables were greater among female adolescents than male adolescents, especially for depressed mood. Genetic factors also contributed to the correlations between family and school environment and adolescent depressed mood, although, again, these factors were stronger for female than for male adolescents.

Joiner et al. (1999) conducted a preliminary examination of sex differences in depressive symptoms among adolescent psychiatric inpatients and the role of anxious symptoms and generalized negative affect in a sample of sixty-three adolescent psychiatric inpatients (aged 12 to 16). Results demonstrated, as predicted, that depressive and anxious symptoms were more highly associated in adolescent girls than boys. Furthermore, girls with depressive symptoms were more likely to have comorbid anxious symptoms than boys with depressive symptoms. Sex differences were not found for adolescents with specific depressive symptoms and specific anxious symptoms (i.e., the absence of comorbidity). Findings supported the possibility that sex differences in pure forms of depression are overestimated and that comorbid internalizing conditions may be more prevalent in adolescent girls than boys.

Silverstein (1999) reported that female subjects exhibited a higher prevalence that male subjects of somatic depression but not a higher prevalence of pure depression. Somatic depression was associated with a high prevalence of anxiety disorder and, among female subjects, with body aches and onset of depression during early adolescence. In three categories of somatic symptoms, i.e. sleep disturbance, fatigue and appetite disturbance, female subjects exhibited twice the prevalence of somatic depression as male subjects (7.6% vs 3.6%) but a prevalence of pure depression very similar to that of male subjects (3.0% vs 2.3%).

Angold et al. (1999) examined the relationships of testosterone (which, in adolescent girls, is predominantly produced by the adrenal cortex), FSH and LH (from the pituitary) and oestradiol (predominantly from the ovaries) with rates of depression over multiple observations in a relatively large representative general population sample of 9 to 15 years old girls assessed with a psychiatric diagnostic interview. The
findings revealed no effect on depression rates related to central regulatory neuroendocrine changes (as indexed by FSH and LH levels) early or late in puberty and contradict the hypothesis that increased depression in adolescent girls is linked to indirect psychosocial effects of body morphology. Their data imply that morphological status is not the 'active ingredient' in the effects of puberty on depression in girls and suggested that more direct effects of rising levels of testosterone and oestrogen during mid-to-late puberty potentiate risk for increase in depression in girls are involved.

Galal et al. (2001) identified self-reported health problems among adolescents, in a multistage, stratified random sample of adolescents (age range: 12-18 years) from preparatory and secondary schools in Cairo and Qaliubia, Egypt. The study showed that more boys than girls perceived their health as very healthy whereas more girls considered their health to be average. Significantly, more adolescent females reported weekly occurrence of abdominal pain, headache, dizziness, backache, morning tiredness, sleep disturbance and nervousness.

Mc Cabe et al. (2001) examined the impact of strategies to both decrease weight and increase muscle tone on negative (depression, anxiety) and positive affect among adolescents enrolled in grades 7 and 9. The results demonstrated that for both boys and girls, there was a strong association between body change strategies and negative affect. For boys, body dissatisfaction did not predict negative affect, although this was a strong predictor for girls. Body change strategies did not strongly predict positive affect for either boys or girls although body image satisfaction was a strong predictor for both genders.

Nummer and Seiffge-Krenke (2001) conducted a four-year longitudinal study and explored the different contribution of low self-esteem, different types of stressors, conflict in close relationships and avoidant coping to the explanation of depressive symptomatology in adolescents. Results revealed a higher stress level, more conflicts with mothers and more avoidant coping in females as compared to males at the age of 14 years. Males showed fewer depressive symptoms and higher positive self-esteem at all times. Also, stress and avoidant coping in early and mid-
adolescence explained a significant proportion of depressive symptoms among females in late adolescence. Among males, only the level of conflicts with friends in early adolescence contributed to their level of depressive outcome in late adolescence.

Ge et al. (2001) examined the role of both pubertal and social transitions in the emergence of gender differences in depressive symptoms during adolescence. This study generated the following findings:

a) Gender differences in depressive symptoms emerged during 8th grade and remained significant through 12th grade.

b) Pubertal status in 7th grade was related to adolescent depressive symptoms over time.

c) Early-maturing girls represented the group with the highest rate of depressive symptoms.

d) Depressive symptoms measured in 7th grade predicted subsequent symptom levels throughout the secondary school years.

e) Recent stressful life events were associated with increased depressive symptoms.

f) Early-maturing girls with higher levels of initial symptoms and more recent stressful life events were most likely to be depressed subsequently. The findings demonstrate the importance of the interaction between the pubertal transition and psychosocial factors in increasing adolescent vulnerability to depressive experiences.

Facio and Batistuta (2001) provided a cross-cultural contribution to the study of gender differences in adolescent mood studied longitudinally by means of a survey at 13-14, 15-16 and 17-18 years old. The gender difference, larger than that of many first-world samples, was significant at 15-16 and the gap increased at 17-18. Girls reporting high family warmth, high self-esteem, low anxiety and who do not choose a friend as the most admired person at 13-14 have a better mood on average through adolescence while high self-esteem and weight satisfaction at 13-14 exerts this kind of
effect in boys. A buffering effect of self-esteem on levels of girls' dysphoria was also demonstrated.

Kovacs (2001) determined whether there are gender differences among psychiatrically referred young patients in the presenting features and subsequent course of major depressive disorder (MDD) through adolescence. Results showed that salient features of MDD did not differ for girls versus boys, including age at MDD onset, recovery from the index episode, risk of a new episode, and rates of various comorbid disorders in the index and recurrent episodes. Rates of selected symptoms and severity of the depressive syndrome also were comparable for boys and girls throughout their development.

Allison et al. (2001) examined the risk relationship between depressive symptomatology and suicidal ideation for young adolescent males and females in a large cohort of students in their first year of high school. Results revealed that suicidal ideation was more frequently reported by females compared with males which was partly explained by females having higher mean depression scores. At moderate levels of depression females also had a significantly higher risk of suicidal ideation compared with males and this increased risk contributed to the overall higher levels of female ideation.

Benjet and Hernandez-Guzman (2001) examined gender differences in the effects of menarche in females and voice change in males, specifically with regard to depression, self-esteem, body image, and externalizing problems (i.e., behavioral disturbances). In addition, possible modifying variables (relationship with parents, social-emotional adjustment, level of parental education, and menstrual attitudes) were assessed. Analyses indicated that there were no gender differences among prepubertal youths in depression, body image, or self-esteem, but prepubertal males had more externalizing problems than did premenarcheal females. Females increased in depression, externalizing problems, and negative body image postmenarche, while males showed no change in depression, a trend toward fewer externalizing problems, and felt better about their bodies following voice change. Relationship with parents,
social-emotional adjustment, parental education, and menstrual attitudes did not modify the relation between menarche and body image or depression.

Nieder and Seiffge-Krenke (2001) conducted a longitudinal study over four years, to analyse the link between psychosocial factors of the social network and depressive symptomatology among adolescents. Separate regression analysis for each gender revealed different factors contributing to female and male depression in late adolescence. While females' psychological well-being seems to depend on psychosocial characteristics of their social world, which may serve as protective factors, male depression is primarily determined by former depression, whereas social factors serve as stressors.

Born et al. (2002) reported that before adolescence, the rates of depression are similar in girls and boys (or are slightly higher in boys). Yet with the onset of puberty, the gender proportion of depression dramatically shifts to a two girls to one boy ratio. Vulnerability to depression may be rooted in an intricate meld of genetic traits, normal female hormonal maturational processes, and gender socialization.

Canals et al. (2002) prospectively examined the predicting factors and depressive antecedents of depression in early adulthood and determined by sex in a sample of 199 adolescents aged 11-12 from the general community and were followed up annually and reassessed at 18 years of age. Of the cases of major depression (MDD) at eighteen, 30% had been diagnosed as MDD between 12 and 14 years of age. Of the cases of MDD at eighteen, 80% had had depressive symptomatology between the ages of 11 and 14. Gender differences were found in the risk pattern; depressive symptoms were more significant in girls than in boys. In boys, early anxious symptomatology was a significant predictor. This study reported cross-cultural data that supported a continuity of depression from adolescence to young adulthood.

Latimer et al. (2002) examined gender differences in rates of comorbid psychiatric disorders among adolescents with 1 or more psychoactive substance use disorders. Baseline diagnostic data were obtained from adolescents (aged 12 to 19) and their parents-guardians, who participated in a study to develop and efficacy test
Integrated Family and Cognitive-Behavioral Therapy. Drug-abusing female adolescents exhibited a higher rate of major depression compared with drug-abusing male adolescents. However, rates of dysthymia, double depression (i.e., major depression and dysthymia), and bipolar disorder were equivalent between genders.

Angold et al. (2002) examined the depression scale scores and investigated the effects of age and gender in two large, longitudinal samples of twins and singletons aged 8 to 17-year-old. Results showed that there were no differences between twins and singletons in their scores on a 13-item self-report depression scale. The depression scores for boys fell over this age-range, while those for girls fell from age 9 to age 11 and then increased from age 12 to age 17. The mean scores of girls under 12 and those 12 and over differed by only around one-fifth of a standard deviation. However, given the non-normal distribution of the scores, a cut point that selected the upper 6% of scores created the expected female: male ratio of 2:1.

Stroud et al. (2002) hypothesized that men and women would show different adrenocortical responses to different stressors. Results showed that there were no sex differences in mood ratings following the stressors; however, cortisol responses showed the predicted gender by condition by time interaction. Men showed significantly greater cortisol responses to the achievement challenges, but women showed greater cortisol responses to the social rejection challenges. Thus, women appear more physiologically reactive to social rejection challenges, but men react more to achievement challenges. Women's greater reactivity to rejection stress may contribute to the increased rates of affective disorders in women.

Wade et al. (2002) presented a cross-national examination of the emergence of the gender gap in depression during adolescence using national longitudinal panel data from Canada, Great Britain, and the United States. Results revealed that females have significantly higher rates of depression for each sample overall. When samples are decomposed by age, the gender gap in depression consistently emerges by age 14 across all three national samples, irrespective of the measure used or whether categorical cutoffs or untransformed scale scores are used to assess depressive.
symptomatology. There is a consistent pattern in the onset of the gender gap in depression at age 14 across all three countries and measures.

**Ge et al. (2003)** examined the effects of early physical maturation and accelerated pubertal changes on symptoms of major depression in a sample of 639 African American children using 2 waves of data. The pubertal effect operates differently according to children's gender and age. For girls, early maturation was consistently associated with elevated levels of depressive symptoms. For boys, early maturers manifested elevated levels of depression only at age 11, but these symptoms subsided by age 13. Boys who experienced accelerated pubertal growth over time displayed elevated symptom levels. Results support the early timing hypothesis for girls and the stressful change hypothesis for boys.

**Kuehner (2003)** gave an update on epidemiological findings on sex differences in the prevalence of unipolar depression and putative risk factors in a systematic review of the literature. Results showed that recent epidemiological research yields additional evidence for a female preponderance in unipolar depression, holding true across different cultural settings. Current explanations include artefacts, genetic, hormonal, psychological and psychosocial risk factors. Rather consistently, intrapsychic and psychosocial gender role related risk factors have been identified which may contribute to the higher depression risk in women. Gender role aspects are also reflected in endocrine stress reactions and possibly influence associated neuropsychological processes.

**Kistner (2003)** examined ethnic and sex differences in depressive symptoms, along with hypothesized mediators of those differences (academic achievement, peer acceptance), for a sample of African American and Euro-American children in Grades 3 to 5. Group comparisons revealed a significant Ethnicity x Sex interaction in depressive symptoms. African American boys reported more depressive symptoms than Euro-American boys, whereas African American and Euro-American girls reported comparable levels of depressive symptoms. Sex differences in depressive symptoms differed by ethnicity: Boys were more depressed than girls in the African American group whereas girls were more depressed than boys in the Euro-American
group. The Ethnicity x Sex interaction was mediated by academic achievement, but not peer acceptance. These findings have implications for understanding the mechanisms underlying depressive symptoms in preadolescence.

Kovacs et al. (2003) reported sex differences in the developmental phenomenology of depression in a clinical sample. Longitudinal analyses were used to examine changes in the risk of depression, patterns of comorbid diagnoses, and depressive symptoms from ages 8-13 years up to young adulthood (age 21) among 87 patients. Results indicated that girls and boys were at similar risk for recurrent depression during follow-up. As girls got older, they had higher rates of comorbid eating disorders and lower rates of externalizing and substance use disorders than did boys; high risk periods for comorbid conditions also differed by sex. Comorbid disorders were usually contemporaneous with depression among girls but not among boys, and comorbidity patterns were influenced by age at depression onset. Girls with earlier (compared to later) onset depression were at lower risk for nonaffective disorders; boys evidenced the opposite pattern and were at particularly high risk for substance use disorders. There also were sex differences in developmental symptom patterns.

Sweeting and West (2003) tested the hypothesis of an emerging or increasing female excess in general ill-health and physical symptoms, as well as psychological distress, during early to mid-adolescence. Self-reported data on general health, recent symptom and depressive mood were obtained from a large, Scottish, school-based cohort at ages 11, 13 and 15. Results revealed that generally high levels of health problems at age 11 tended to increase with age, these increases being greater for females than males, not only in respect of depression and 'malaise' symptoms, but also limiting illness, 'poor' self-rated health, headaches, stomach problems and dizziness. The consequence, by age 15, is the emergence of a female excess in general ill-health and depressive mood, and a substantial strengthening of the small excess in both 'physical' and 'malaise' symptoms already apparent at 11 years.

Kirkcaldy et al. (2003) examined two groups of non-and “quasi-depressives” – the latter corresponding to high depression scorers – German adolescents, to
determine the effect of gender and depression in predicting physical ailments, self image and attitudes towards parents. Quasi-depressive adolescents displayed higher frequencies of physical complaints across all five subscales of the physical complaints inventory compared to the non-depressive counterparts. Females generally reported more ailments (exhaustion, gastrointestinal, circulatory, and colds) than males. In contrast to males who showed scarce difference between depressives and non-depressives, female depressives exhibited substantially higher gastrointestinal ailments than non-depressive females. Depressives emerged as displaying inferior self – images, lower paternal acceptance, and somewhat higher maternal rejection, compared to non-depressives. Female adolescents displayed lower self–image, lower paternal acceptance/but not maternal rejection/acceptance, lower mathematical competency, and higher linguistic competency, when compared to male adolescents.

**Bomba et al. (2003)** assessed the impact of adolescent depression on the development of mental disorders, substance dependency and social pathology in adulthood and difference of the risk between depression in early and middle adolescence in a 15 year prospective follow up study (1984-2000). A statistically significant relation was observed between adolescent depression and worse general health condition and cigarette smoking. Mid – adolescent depression in men was related with a lack of significant partnership, while in women with motherhood and disrupted marriage. Early adolescent depression in women was related with less extended extra-familiar social relations. Women depressive in mid adolescence, on the contrary, declared more relations of this kind.

**Maharajh, Neuro and Ali (2004)** investigated the prevalence of depressive symptomatology, major depression and dysthymia in Tobagonian adolescents (aged 14 to18 years). Females were more likely to have depressive symptomatology and major depression than males. There were no gender differences in dysthymia. Findings showed that 10.1% the sample had depressive symptomatology and 10.1% suffered from a depressive disorder of which 6.06% were rated as dysthymia and 4.04% as major depression. The rate of adolescent depression in Tobago was 10.1 percent and the lower range similar to international data of developed countries.
Stroud et al. (2004) proposed that sex differences in HPA regulation may emerge during puberty and help to explain sex differences in depression in a sample comprising of 7-16 years old, physically healthy, and with no personal or family history of psychiatric disorder. Girls showed increasing total cortisol responses to CRH across Tanner stages, explained by slower recovery from peak cortisol levels, while boys showed similar total responses across Tanner stages. Results show subtle sex differences in the influence of puberty on HPA regulation at the pituitary level, which may represent one factor underlying the emergence of girls' greater rates of depression during this time.

Dwairy (2004) tested the relationship between three parenting styles (authoritarian, permissive, and authoritative) and the mental health of Arab adolescents. Sex comparison revealed that the parenting style with regard to girls tends to be more authoritative and less authoritarian than with regard to boys. Girls scored higher than boys on identity disorder, anxiety disorder, and depression scales, whereas boys scored higher than girls on the behavior disorder scale. Among boys, the permissive parenting style was associated with negative attitudes towards parents, lower self-esteem and increased identity, anxiety, phobia, depressive, and conduct disorders.

Forbes et al. (2004) examined adolescent depression as a model for unusual emotion regulation and considered the influence of gender, pubertal development, and cortisol on self-reported mood. Children and adolescents with major depressive disorder were compared with psychiatrically healthy children and adolescents. Depressed participants experienced less positive affect and more negative affect than did controls. Diagnostic group, gender, and pubertal status interacted to predict negative affect, with depressed adolescent girls experiencing especially high levels of negative affect. Cortisol was generally unrelated to depression and mood.

Sen (2004) investigated the adolescent propensity for depressed mood and help seeking in the context of race and gender differences. Results revealed that adolescent females are significantly more likely than adolescent males to suffer from depressed mood but adolescent males are less likely to ask for help than females.
Blacks and Asians are especially prone not to ask for help, with the problem being particularly acute in case of black males and Asian males.

Jacques and Mash (2004) investigated the applicability of the tripartite model of emotion, which distinguishes the shared aspect of depression and anxiety, negative affect (NA), from their respective specific components of low positive affect (PA) and physiological hyperarousal (PH), in elementary and high school students across four subgroups based on age and gender. Results revealed that high school girls reported more depression, anxiety, NA, and PH than the other groups, and lower PA. Among the subgroups, the best fit was found for high school girls.

Carrillo et al. (2004) explored the role of sex differences and personality in vulnerability to depression in a group of adult participants. The results indicate that a series of personality variables cause women to be more vulnerable to depression than men and that these variables could be explained by a negative emotion main factor.

Repetto et al. (2004) examined the trajectories of depressive symptoms and the psychosocial factors associated with these trajectories in African – American adolescents who were at risk of dropping out of school and were interviewed annually starting from ninth grade for 4 years. Results showed that four different trajectories of depressive symptoms were found that represented the changes in depressive symptoms among the participants [consistently high (15.9%), consistently low (21.1%), decreasing (41.8%), and increasing (21.2%) depressive symptoms]. The results from the comparisons of the trajectories indicated that adolescents who presented consistently high levels of depressive symptoms were more likely, to be female, reported more anxiety symptoms, lower self-esteem, higher stress, and lower grade point average (GPA) compared with adolescents members of the other trajectories.

Kutcher et al. (2004) conducted a longitudinal prospective 8-year study to assess the potential predictors of major depressive disorder (MDD) in a cohort of healthy adolescents females at high familial risk for MDD. Results indicated that females at high familial risk for the onset of depression have significant differences in pubertal development, but not in demographics, depressive symptoms, social
supports, or dysphoric cognitive style, when compared to females at usual risk for depression. High risk and usual risk group demonstrated no significant differences in demographic variables such as age, body mass index, and grade. Significantly more youth in the high risk group had started menstruation, compared to youth in the usual risk group.

van der Ende and Verhulst (2005) determined gender and age differences and agreement among the reports of adolescent problem behaviour by parents, teachers, and adolescents themselves in a sample of 11- to 18-year-olds. Adolescents reported higher levels of problems than parents and teachers for all types of behaviour. Parents reported higher levels of problem behaviour than teachers. Gender differences among informants were dependent on type of problem behaviour. With increasing age, scores of adolescents, parents, and teachers diverged for most types of problems, with larger differences for older adolescents than for younger adolescents.

Gorenstein et al. (2005) aimed to detect the prevalence of depressive symptomatology and its expression in a nonclinical Brazilian adolescent student sample from private and public schools (aged 13 to 17 years). The point prevalence of depression was 7.6% (BDI cut-off of 20). Girls had higher scores than boys in several items and scores increased with age. Students from public schools had higher scores than did private school students. Factor analysis showed 2 common factors for the total sample and for each sex: the cognitive affective dimension and the somatic nonspecific dimension. In the adolescents showing clinical depression, items related to self-depreciation, sense of failure, guilty feelings, self-dislike, suicidal wishes, and distortion of body image were common.

Poulin et al. (2005) explored gender differences in the association between substance use and elevated depressive symptoms in the general adolescent population. The prevalence of very elevated depressive symptoms was 8.6% in females and 2.6% in males. Alcohol use and cigarette smoking were found to be independent predictors of elevated depressive symptoms in females, but not males; Cannabis use was found to be an independent predictor of elevated depressive symptoms in both males and females. Age was found to have a curvilinear relationship with elevated depressive
symptoms in females but not in males. The adolescent's academic performance and province of residence were found to be independent risk factors of elevated depressive symptoms among both males and females.

Bennett et al. (2005) examined whether such gender differences in depressive symptoms are present during adolescence at an outpatient clinic. Results indicated that depressed girls and boys had similar symptom prevalence and severity ratings for most depressive symptoms. However, depressed girls had more guilt, body image dissatisfaction, self-blame, self-disappointment, feelings of failure, concentration problems, difficulty working, sadness/depressed mood, sleep problems, fatigue, and health worries than depressed boys on some comparisons. In contrast, depressed boys had higher clinician ratings of anhedonia, depressed morning mood, and morning fatigue.

Hallfors et al. (2005) tested whether gender-specific patterns of substance use and sexual behavior precede and predict depression or vice versa in youth from the National Longitudinal Study of Adolescent Health and were interviewed in 1995 and again 1 year later. Overall results indicated that sex and drug behavior predicted an increased likelihood of depression, but depression did not predict behavior. Among girls, both experimental and high-risk behavior patterns predicted depression. Among boys, only high-risk behavior patterns increased the odds of later depression. Depression did not predict behavior in boys, or experimental behavior in girls; but it decreased the odds of high-risk behavior among abstaining girls and increased the odds of high-risk behavior among girls already experimenting with substance use.

Burt et al. (2005) analyzed data from a prospective, longitudinal study of at-risk youth to test the hypothesis that parenting and family environmental factors mediate the association between maternal depressive symptoms and offspring psychopathology in late adolescence. Results revealed that analyses using a single informant and time point showed evidence for substantial mediation; however, in analyses spanning independent informants and multiple time points mediating effects were markedly reduced. Sex differences were found, in that parenting and family
environmental factors related to psychopathology for males, whereas maternal depression was more directly related to psychopathology for females.

**Rudolph and Conley (2005)** conducted a short-term longitudinal study to investigate the hypothesis that girls' heightened concerns about social evaluation contribute to sex differences in depression and interpersonal competence during early adolescence. As anticipated, girls demonstrated higher levels of social-evaluative concerns, depressive symptoms, and interpersonal competence than did boys. Moreover, path analysis confirmed that heightened social-evaluative concerns were associated both concurrently and over time with higher levels of depression, as well as with higher levels of interpersonal competence.

**Gau et al. (2005)** conducted a 3-year panel study to investigate the prevalence and changing trends of mental disorders and the effects of gender and urbanization among adolescents in Taiwan. The weighted 3-month prevalence rates across the 3 consecutive years for overall psychiatric disorders were 20.3%, 22.7%, and 14.8%, respectively. During the 3 years, the rates for ADHD, specific phobia, and social phobia decreased, and the rates for major depression and substance use disorders, conversely, increased. Although conduct disorder, ADHD, and substance use disorders were more prevalent among boys, the rates for major depression, social phobia, specific phobia, and adjustment disorder were higher among girls.

**Wilson et al. (2005)** examined whether in the case of adolescents the gender differences in physical and psychological health symptoms could actually be the result of differences in coping styles. Gender differences in physical and psychological health symptoms (e.g. anger, depression, tension, negative moods), as well as in coping styles were found. Also, the relation between health symptoms and coping varied significantly by gender.

**Kim and Kim (2005)** examined gender differences in the rate, type, and relevant variables underlying delinquent behavior among South Korean adolescents. Results revealed that female delinquent adolescents had a greater tendency toward depression than male delinquent adolescents. No gender differences were found in the association between family dynamics and delinquent behaviors. The rate of
Delinquent behavior was found to be much lower among female than among male adolescents and female adolescents were much less involved in antisocial, aggressive, and psychopathic delinquent behavior compared to male adolescents. Moreover, compared to female delinquent adolescents, male delinquent adolescents were found to have greater tendencies towards antisocial personality, sociability, being sexually abused, and alcohol and drug use.

Calvete and Cardenoso (2005) assessed gender differences in cognitive variables as an explanation for gender differences in depression and behavior problems in a sample of adolescents. Results showed that female adolescents' lower levels of positive thinking and higher scores on negative problem orientation, need for approval and success, and self-focused negative cognitions partially mediated gender differences in depressive symptoms. Males' higher scores on justification of violence beliefs and the impulsivity/carelessness style of problem solving partially accounted for differences in delinquent behavior. The influence of need for approval and success on depressive symptoms was higher among adolescents at ages 14-15 than among older adolescents.

Hampel et al. (2005) conducted a one-year longitudinal study to investigate gender and developmental effects on perceived stress related to interpersonal stressors, coping strategies, somatic symptoms and psychological disorders in Austrian children and adolescents (ages 10 to 13 years). Compared to male children and adolescents, female counterparts scored higher on perceived stress related to interpersonal stressors and on social support but evaluated a lower amount of distraction. Moreover, girls reported higher levels of somatic symptoms and anxiety/depression. Boys showed a developmental increase in anger control problems and both genders showed developmental increases in antisocial behavior. Low levels of the emotion-focused coping strategies distraction and minimization were related longitudinally to emotional and behavioral disorders.

Lyons et al. (2006) tested whether one component of a model by Nolen-Hoeksema and Girgus, who proposed that risk factors for adolescent depression are more common in girls than in boys during childhood. Endorsing two of three
predicted risk factors, girls reported slightly poorer body image and identified more strongly with a feminine gender role. Boys, however, reported a more negative attributional style. Feminine gender role was not associated with body image or negative attributional style.

Ruchkin et al. (2006) aimed to compare cross-cultural trends of comorbid internalizing and externalizing psychopathology, prosocial beliefs, and perceptions of risk in adolescents with and without clinical levels of self-reported depressive symptoms. Results revealed that in all three countries, girls reported higher levels of depressive symptoms than boys. The findings also demonstrate that in both genders, depressive symptoms were associated with increased levels of internalizing and externalizing problems, as well as lower levels of prosocial beliefs and low perceptions of harm from risk-taking behavior. Depressed boys had relatively higher levels of externalizing problems than depressed girls. Greater levels of internalizing problems observed in depressed youth, as compared with their nondepressed counterparts, were not gender-specific.

Afridi et al. (2006) determine the clinical manifestations of depressive disorder among cases below 18 years in Pakistan over a period of 3 years (October 2001 to 2004). The diagnostic criteria of ICD-10 (International classification of diseases in its tenth revision) of WHO was used. Results revealed that 25% of them were found to be suffering from depressive disorder. Among them, 54 were girls and 46 boys, giving a male to female ratio of 1:1.32 and statistically insignificant gender difference.

4. RELATIONSHIP OF SOCIAL SUPPORT WITH ADOLESCENT DEPRESSION

The potential content of the concept of social support has been influenced by many strands of thought, which include Durkheim's development of the idea of anomie, Cooley's concept of the primary group and Bowlby's idea on attachment. The term social support network can be defined as a specific set of relationships of a particular individual. On the other hand, it can be seen as a by-product of the
interaction taking place in a social network. Social support may also be viewed as perceptions of the recipient, i.e., how far the individual believes his needs for aid and comfort are being fulfilled. This concept has been labeled as perceived social support.

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, Sarason & Pierce, 1990; Cohen & Wills, 1985). During this time, much has been learned about (a) the social network factors that are associated with greater perceptions of support (e.g., Cutrona, 1986; Vaux & Harrison, 1985); (b) the links between social support and measures of physical health (e.g., Kennedy, Kiecolt-Glaser, 1990; Cohen, Teresi, & Holmes, 1985) and emotional well-being (e.g., Barnett & Gotlib, 1988; Hoffman, Ushpiz, & Levy-Shiff, 1988); (c) the possibility that support might buffer the effects of life stressors on the individual (Vaux, 1988; Cohen & Wills, 1985); and (d) in recent years, some of the cognitive processes that may mediate the effect of support on well-being (e.g., Lakey, Moineau, & Drew, 1992; Lakey & Cassady, 1990).

SOCIAL SUPPORT AND PHYSICAL / MENTAL HEALTH

In recent years, the relationship between social support and mental health has been the focus of attention for many researchers. Comprehensive reviews of the literature found that social support contributes to mental health both through the positive feelings that are engendered by having close attachments with others and because help is mobilized in times of need (Schwarzer and Leppin, 1989; Cohen and Wills, 1985). Research has also examined social support’s positive impact on physical health in terms of its contribution to better clinical health outcomes (i.e., less disease) (House et al., 1988) and more positive stress responding on a physiological level that is subclinical (Uchino et al., 1996).

Research on social support is of potential importance for understanding the etiology of psychological maladjustment. Although investigators have inferred that a reduction in social support leads to psychological distress, alternative interpretations
are plausible. Many studies have analyzed the relationship between social support and psychiatric disorders (Wade & Kendler, 2000a, b; Grainge et al., 2000; Kessler et al., 1992; Brugha et al., 1990; Brown et al., 1986; Sarason et al., 1986; Cohen & Wills, 1985). Besides specificity of the content areas of social support, there is need for a great deal to learn about the various functions of support and how they work to lower or raise levels of distress and to facilitate or impair mental health. One hypothesis proposes that, in the presence of adversity, social support acts as a prominent protective factor (‘buffer’) against mental illness. Another theory proposes that social support may act as a main effect to reduce risk for illness, independent of adversity (Henderson, 1998).

ROLE OF SOCIAL SUPPORT AND DEPRESSION IN ADOLESCENCE:

The environment of the individual helps shape the intrapsychic resources for coping and provides social resources for acting on the problem situation that creates stress. Health professionals have generally concluded that social support is important to both the individuals health and his survival, but social support as a working concept did not come to the forefront until studies of the family had not become popular. The family plays a major role in the formation of the personality of the individual by providing emotional support. Tensions and conflicts within the interpersonal relationships may intensify or lessen anxiety and some form of illness may be retarded or precipitated by the quality of family relationships. Thus, family becomes the most important component of the individual’s social orbit, as the personality structure of the individual, while a central factor in his mental health functioning, is not the only deciding factor.

Early adolescence is a time when children are undergoing many new social, academic, physical, and family changes and challenges (Savin-Williams, 1990). Moreover, many early adolescents also are self-conscious and have a heightened concern about other’s opinions about them (Elkind, 1978). Therefore, the experience and/or perception of rejection from others is likely to contribute to bad feelings about the self, which is known to be a vulnerability to depression (Harter, 1999; Abramson, Metalsky, & Alloy, 1989; Beck, 1967). Thus, a sense of rejection during
this time of increasing normative demands could contribute to the increases in depressive symptoms observed during adolescence (e.g., Hankin et al., 1998). Some researchers have suggested that interpersonal rejection leads to depression (e.g., Panak & Garber, 1992; Lefkowitz & Tesiny, 1984), others have proposed that depression increases the likelihood of being rejected (Hokanson & Butler, 1992), and still others have postulated an interpersonal vicious cycle between rejection and depression (Coyne, 1976b).

Research on adolescents has focused on the role of support from parents as a protective factor, with attention to dimensions such as emotional and instrumental support. Parental support has been indexed through measures of closeness and confiding in the parent-child relationship or of adolescents’ perceived support from parents for helping them to deal with problems. Such measures of functional support from parents are related to better mental health outcomes and to lower likelihood of substance use (e.g., Barrera, Chassin, & Rogosch, 1993; Wills, Vaccaro, & McNamara, 1992). In addition, several studies have demonstrated stress-buffering effects. The relationship between negative life events and adverse outcomes is reduced for adolescents with a higher level of emotional support from parents (Wills et al., 1992).

Although peer relationships clearly are particularly important during early adolescence (e.g., Henrich, Kupermine, Sack, Blatt, & Leadbeater, 2000), such relationships do not prelude the importance of other interpersonal connections. Further, studies have suggested that family relationships directly impact peer relationships; specifically, problems in family relationships may increase the relative importance of peer relationships (Shulman, Seiffge-Krenke, Levy-Shiff, & Fabian, 1995). In addition, adolescent relationships with teachers also are important, although their importance seems to decrease as adolescence progresses (Goodenow, 1993).

Adolescents who report an insecure attachment style tend to display lower levels of self esteem, greater symptoms of psychological distress, greater use of dysfunctional emotion regulation strategies, and lower levels of perceived social support, as compared with their securely attached counterparts (Cooper et al., 1998).
More specifically, perceived attachment to parents functions to buffer the negative effects of transitional stressors (Dekovic & Meeus, 1997; Nada Raja et al., 1992).

It has become increasingly evident that depressive symptomatology in adolescents is related to the quality of their family relationships. Identifying family variables associated with depression is an important step, a significant methodological and conceptual concern can be raised regarding the cross-sectional design and unidirectional framework that has characterized the majority of work to date. The most widely reported finding in this regard is that depression is inversely related to the level of support, attachment, and approval adolescents experience in the family environment. This finding has been replicated in both community (e.g., McFarlane, Bellissimo, Norman, & Lange, 1994) and clinical samples (e.g., Barrera & Garrison-Jones, 1992). Similarly, depression has also been found to be associated with parent and adolescent reports of conflictual family interactions in both affectively ill (Fendrich, Warner, & Weissman, 1990) and community samples (Cole & McPherson, 1993).

The associations between family environment and depressive symptomatology may vary as a function of adolescent gender (Kavanagh & Hops, 1994). Though adolescence is a time of heightened interest in peers and increasing separation from family, girls gain independence from their families more slowly. Girls have both more disclosing (Noller, 1994) and more conflictual relationships with their parents and receive close monitoring of their activities (Huston & Alvarez, 1990). Thus, predicts girls’ greater sensitivity to the quality of family relationships and the greater centrality of interpersonal concerns may increase adolescent girls’ vulnerability to depression (Leadbeater, Blatt, & Quinlan, 1995). In fact, several investigators have found that inverse association between depressive symptomatology and presence of cohesive and supportive family relationships is stronger for girls than boys (Rubin et al., 1992; Windle, 1992).

Initial longitudinal studies suggest that negative family interactions may be relatively stable over time and render children and adolescents more vulnerable to depression. For example, Hops et al. (1990) reported that teenagers’ negative...
perceptions of their family environments were a stable characteristic of those prone to higher levels of depressive symptomatology. Similarly, Windle (1992) reported that low family support was a prospective predictor of depressive symptomatology in adolescent girls. Finally, there is data to suggest that aspects of the parent-child relationship, such as response to maternal discipline, quality of relationship with father, and levels of emotional expressiveness (Sanford et al., 1995; Asarnow, Goldstein, Thompson, & Guthrie, 1993), may predict the course of depressive episodes in clinically depressed children.

Slavin and Rainer (1990) investigated components of perceived emotional support, including support from family members, nonfamily adults, and peers, as predictors of depressive symptoms in high school students (age 14-18) using a prospective design. Analyses suggest there were significant gender differences both in the quality of perceived support reported by adolescents and in the importance of support variables as predictors of depressive symptoms. Although there were no gender differences in the magnitude of perceived support from family members, girls reported higher emotional support from both nonfamily adults and peers than boys. Simple correlations between family support and depression were significantly stronger for girls than for boys. Results revealed that controlling for initial level of symptoms, revealed that whereas both non-family adult and friend components of perceived support were significant predictors of changes in symptoms for girls, none of these variables significantly predicted changes in symptoms for boys in this sample. In addition, initial symptoms predicted changes in family support for girls but not for boys.

Jacobson (1991) conducted a correlational study and tested the hypothesis that there will be an inverse correlation between perceived social support and depression in a non-clinical, adolescent sample. This hypothesis is consistent with the theoretical literature. The results suggest that perceived social support is associated with depression in adolescents.

Eaton et al. (1991) examined gender differences in the development of relationships during late adolescence. In support of Erikson's theory, need for social
comparison declined with age for both sexes. However, in support of Gilligan's theory, not only were females more attached to their partners, but these gender differences were most pronounced for the 18-year-olds. Finally, Dunphy's (1972) assumption that adolescents' need for stimulation peaks around age 18 or 19 and then declines, and Newman and Newman's (1976) position that need for emotional support declines in later adolescence, held true—but only for females.

*Forehand et al. (1991)* examined the association between cumulative family stressors (divorce, interparental conflict, maternal depression) and adolescent functioning as well as the protective role of the parent-adolescent relationship as perceived by the adolescent when family stressors are present. Two hundred and thirty-one adolescents, their mothers, and their social studies teachers served as the subjects. Results indicated that, as family stressors increased, adolescent functioning deteriorated. Furthermore, a positive parent-adolescent relationship as perceived by the adolescent was associated with less deterioration in all areas of functioning. The role of the relationship in protecting the adolescent supported both a stress buffering model and a main effect model.

*Buunk and Hoorens (1992)* presented four different conceptualizations of social support: social integration, satisfying relationships, perceived helpfulness and enacted support. Then, classic and contemporary social comparison theory and social exchange theory were analyzed as they are two theoretical perspectives that are particularly useful in understanding social support. These perspectives were employed to explain three seemingly paradoxical phenomena in the domain of social support: (1) the fact that support sometimes had negative effects; (2) the fact that the occurrence of stress itself can sometimes decrease the availability of support resources; and (3) the phenomenon that people believe that they give more support than they receive, and that there is more support available for them than for others.

*Jou and Fukada (1994)* examined the effects on adjustment of three dimensions of support (needed, perceived, or actual) and the gaps between those dimensions. Results indicated that the relation between needed support and adjustment was strongly negative and the relation between actual support and
adjustment was positive but that there was no association of perceived support and adjustment. Perceived support had a positive effect on adjustment for students who had a high need for support but not for students with a low need for support (a buffering effect), and actual support had a positive effect on adjustment for all students (a direct effect). All of the support gaps were negatively related to adjustment, indicating that insufficient support was linked to poorer adjustment.

Aseltine et al. (1994) examined the interrelations of personal and social factors in fostering longitudinal patterns of depressive symptoms among high school students. Previously depressed and nondepressed youths differed markedly in their emotional responsiveness to family and friend relations. Chronically depressed youths were unresponsive to family problems, but were highly reactive to peer relations. Among previously asymptomatic youths, family relations exerted greater effects on depressed mood than relations with peers.

Mahon et al. (1994) examined differences in both perceived social support and loneliness according to the three stages of adolescent development (early, middle, and late), as determined by chronological age and gender. Results indicated that there were no statistically significant differences in perceived social support or loneliness across the three stages of adolescence. Findings also indicated that girls reported statistically significantly higher levels of perceived social support than boys; however, there were no statistically significant gender differences in loneliness.

Powell et al. (1995) investigated a group of adolescents and their mothers to examine the combined relationship between gender, locus of control, and perceived mutuality in the mother/adolescent dyad and self-rated adolescent depression. High mutuality and internal locus of control were significantly related to low levels of depression for both female and male adolescents.

Lasko et al. (1996) determined the relationship between adolescent depressed mood and parental unhappiness. Adolescents with depressed mood were found to be less intimate with both parents, felt less social support, and had lower self-esteem than their peers. Adolescents who perceived their mother or father as unhappy also reported less intimacy with both parents and less social support.
Barnet et al. (1996) assessed prospectively the incidence and course of depressive symptoms among pregnant and postpartum adolescents and explored the roles of stress and social support as influencing factors. Results indicate that depressive symptoms are common among pregnant teenagers and postpartum adolescents. Stress and social support appear to be important mediators. Receiving social support from the adolescent's mother or the infant's father, especially in the postpartum period, was significantly associated with lower rates of depression. Reporting conflict with the infant's father was strongly associated with increased rates of depressive symptoms.

Sheeber et al. (1997) conducted a longitudinal study and examined the relations between family support, family conflict, and adolescent depressive. Results revealed that less supportive and more conflictual family environments were associated with greater depressive symptomatology both concurrently and prospectively over a 1-year period. Conversely, adolescent depressive symptomatology and, to a greater extent, family characteristics showed high levels of stability over the 1-year period. On the contrary, the relations between family variable and depressive symptomatology were similar for boys and girls.

Shirk et al. (1997) examined the processing of supportive interactions by dysphoric and nondysphoric preteens and early adolescents. The results indicated that dysphoric youngsters evaluated both the supportiveness and helpfulness of interactions less positively than nondysphoric agemates. Group differences in support evaluations were most pronounced in the self-referenced condition. The level of depicted support did not affect processing differences. Dysphoric subjects reported lower levels of emotional support in prior relationships and a greater tendency to view supportive behavior as ingenuine than nondysphoric peers. Variation in prior support experiences accounted for group differences in the evaluation of the supportiveness of new interactions.

Valery et al. (1997) aimed to determine if adolescents receive instrumental and emotional support as requested from each parent, and if the support they receive
is perceived as helpful. Results indicated that adolescents received support almost 
every time it was requested, although few requests were made. Gender differences 
were present for the type of support received, where females received significantly 
more emotional than instrumental support from both mothers and fathers. 
Additionally, a positive correlation was found between perceived and received 
instrumental and emotional support from mothers and fathers for females only.

Patten et al. (1997) examined the relationship between family structure, 
parental social support, and depressive symptoms among California adolescents. 
Results showed that girls reported significantly higher rates of depressive symptoms 
than boys. Although adolescents in single-parent households tended to show slightly 
higher rates of depressive symptoms, these rates did not differ significantly across the 
four types of family structures for either sex. Significantly higher rates of depressive 
symptoms were found among both boys and girls who resided with parent(s) not 
named as supportive than those who lived with supportive parent(s). Girls appeared 
particularly vulnerable if they lived in a nonsupportive, single-father household. Thus, 
lack of perceived parental social support is highly related to depressive symptoms in 
adolescents.

Kashani et al. (1997) examined the individual and family characteristics of 
children and adolescents with high levels of hopelessness in a sample consisting of 
100 inpatient youngsters. The results indicated that youngsters with high hopelessness 
scores tended to perceive their families and peers as providing little support, to 
express their anger overtly and aggressively, and to demonstrate more negative 
emotions than youngsters with low hopelessness scores.

Ystgaard (1997) examined psychological distress in high-school students in 
relation to negative life events, long-lasting adversities and perceived social support 
from the family, friends and the school class. Academic problems increased the 
symptom levels of psychological distress, and social support from family and social 
support from friends reduced the symptoms among males and females. For females, 
social support from school class-mates and problems with parents and friends also had 
direct independent effects on symptom levels. An effect of the total number of long-
lasting adversities was significantly stronger for females than males. The buffer hypothesis was supported: both an increase in social support from parents and social support from peers reduced the effect of negative life events.

Sheeber and Sorensen (1998) conducted a multimethod assessment consisting of behavioral observations as well as mother- and adolescent-report measures to compare the family environments of depressed adolescents to those of healthy, nondistressed adolescents. Results indicated that depressed adolescents and their mothers described their families as being less supportive and more conflictual than did their counterparts in comparison families. Depressed adolescents also demonstrated less problem-solving behavior, and both they and their mothers demonstrated less facilitative and more depressive behavior during observed problem-solving interactions.

Cheng (1998) adopted a prospective design to explore relationships among various types of social support and depression. Four types of social support, namely network support, instrumental enacted support, socio-emotional enacted support, and perceived support, were assessed in a sample of Chinese adolescents. Results revealed that perceived support was related to a reduction of subsequent depression for both male and female adolescents. In addition, instrumental enacted support was a significant predictor of subsequent depression for male adolescents, whereas socioemotional enacted support was a significant predictor of subsequent depression for female adolescents. Functional differences in the types of social support for Chinese male and female adolescents were reported.

McBride-Chang and Chang (1998) conducted a 4-phase study of Hong Kong Chinese adolescent-parent relationships (906 adolescents and 1,091 parents) revealed the following: (a) Adolescents and their parents differ in their perceptions of parenting style. (b) Autonomy is negatively associated with parents' perceived authoritative parenting style and school achievement. (c) Neither parenting style nor measures of parents' beliefs in training their children are associated with self-reports of school achievement. However, (d) parents of students from the highest academically oriented schools in Hong Kong rated themselves as higher in
authoritativeness and lower in authoritarianism than parents of adolescents from the lowest academically oriented schools.

Shek (1998) in a longitudinal study, investigated the relationships between Hong Kong Chinese adolescents' and parents' discrepancies in their perceptions of family functioning and adolescents' psychological well-being, via adolescents' and parents' reports of family functioning. Results showed that discrepancies in perceptions of family functioning between adolescents and parents were related to adolescents' feelings of hopelessness, life satisfaction, self-esteem, purpose in life, and general psychiatric morbidity at Time 1 and Time 2. Longitudinal and prospective analyses suggested that the relationship between discrepancies in perceptions of family functioning and adolescents' psychological well-being are bi-directional. Adolescent-father and adolescent-mother discrepancies had similar effects on adolescents' psychological well-being. The negative impact of discrepancies among family members in perceptions of family functioning on adolescents' psychological well-being was greater for adolescent girls than for adolescent boys.

Colomba et al. (1999) identified coping strategies and evaluated the relationship between coping and depression in adolescents. Results indicated that the most frequently used coping strategy was developing positive perceptions about life situations. Significant differences were observed according to the severity of depressive symptoms. Investing in family relationships and developing positive perceptions about life situations seemed to reduce depression. Furthermore, the strategies of investing in family relationships and relieving tension through diversion were the variables with more predictive value for depression.

Finch et al. (1999) examined a comparison of the influence of conflictual and supportive social interactions on psychological distress. Results revealed the unique effects of negative social exchange and perceived support satisfaction on depression revealed both variables to predict this outcome, over and above the contribution of personality and coping variables. In addition to the direct effects of the Big Five personality dimensions on depression, indirect effects of the Big Five via negative social exchange, support satisfaction, and avoidant coping also were observed.
Printz et al. (1999) aimed to uncover those factors that buffer the impact of stressful negative experiences on adolescent adjustment, a theoretical model of adolescent stress and coping, with social support and social problem solving proposed as moderators, using path analysis. It was found that a recursive loop leading from stress outcomes back to negative stressors did not allow for a successful solution to the model. However, the effects of stressful events on adjustment were mediated by coping resources, which included a combination of problem-solving abilities and social support.

Hawkins et al. (1999) investigated six categories of social support, which were associated with depressive symptomatology. Results revealed that the following categories of social support were significantly associated with depressive symptomatology: reassurance of worth (for male and female respondents) and attachment (for females only).

Peek and Lin (1999) aimed to understand age differences in the effects of social networks on mental health and examined specifically how two aspects of social support networks (kin composition and convoy dimensions) influence psychological distress for older and younger samples. Using data from a three-wave panel health study, results indicate that a greater proportion of kin in the perceived support network and the presence of family members in the inner circle of the convoy significantly reduce distress, primarily for the younger sample.

Ystgaard et al. (1999) conducted a longitudinal study to examine life stress, social support and psychological distress in late adolescence. Results showed that negative life events, changed from baseline level of on-going adversities and social support all contributed significantly to subsequent symptom scores, although negative life events only reached borderline significance among boys. There was evidence in favour of the buffer hypothesis for boys: negative life events had a significantly stronger effect when social support from peers was low, and long-lasting adversities had a significantly stronger effect when social support from parents was low. Both these two-way interaction effects among boys were significantly different from the corresponding trends among girls.
Tomori and Rus-Makovec (2000) reported that a higher percentage of girls than boys reported feeling emotionally hurt by conflicts with parents and by parental disputes. Girls more frequently than boys reported family conflicts, and they more often reacted with emotional distress to disputes with their parents and to parental conflicts. On the one hand, this indicates that they are more sensitive to family matters, while on the other hand it points to the likelihood that, for girls family relations are more important for their emotional state than they are for boys. In terms of school, they found that a greater percentage of girls felt overburdened. In regard to social life, a greater percentage of girls felt dissatisfied with their friends but a lower percentage experienced peer violence as compared to boys as boys were slightly more truant.

Murphy et al. (2000) investigated the effects of life events, social support, and coping on anxiety and depression among human immunodeficiency virus (HIV)-infected adolescents. Results showed that life events with high impact were associated with higher levels of depression and anxiety. Contrary to expectations, the buffering hypotheses of social support and adaptive coping were not supported. Satisfaction with social support and adaptive coping methods were both associated directly with lower levels of depression, but no association was detected between these two measures and anxiety. Although life event distress was directly associated with psychological distress, neither social support nor adaptive coping seemed to moderate this association.

Wade and Kendler (2000) examined the absence of interactions between social support (SS) and stressful life events (SLE) in the prediction of major depression (MD) and depressive symptomatology in women. In the presence of a significant effect of a SLE on MD, they found evidence for seven interactions out of a possible 93, of which none involved buffering effects. Similarly, examination of depressive symptomatology detected a total of two interactions (both buffering) out of possible 28. Thus, there is little evidence to suggest the presence of the buffering effect of social support in the face of adverse life events for women.
Shek (2000) assessed Chinese adolescents' perceptions of differences between mothers and fathers in parenting styles, parent-adolescent communication (frequency and related feelings), and quality of the parent-adolescent relationship, via questionnaires and individual interviews. Fathers, as compared with mothers, were perceived to be less responsive, less demanding, to demonstrate less concern, but to be more harsh, and paternal parenting was less liked. There was less communication with fathers, and adolescents reported more negative feelings when communicating with fathers than with mothers. They evaluated the father-adolescent relationship more negatively than they did the mother-adolescent relationship. Adolescent females, as compared with males, perceived their parents to be more demanding but less harsh. Parenting characteristics were rated less favorably across time.

Greenberger et al. (2000) examined the correlates of symptoms of depressed mood among adolescents in 2 dramatically different cultures (China & Los Angeles). Gender, stressful life events, perceived parental warmth, and conflict with parents were associated in the expected direction with depressive symptoms in each cultural setting. As predicted, the quality of family relationships and grades in school had significantly stronger associations with depressive symptoms among Chinese youths than among U.S. youths, whereas gender differences in depressive symptoms were greater among the U.S. youths. Peer warmth moderated the effects of particular risk factors for depressive symptoms in each cultural setting.

Shulman et al. (2000) examined the social relationships of adolescents with severe disorders. Results showed non-hospitalized adolescents described a close relationship with their parents, as well as with their close friends. Hospitalized adolescents described a less close relationship with their parents, whereas they were close to and valued their relationships with their friends and other significant adults. Though both groups described similar levels of emotional closeness, hospitalized adolescents tended more to exert control or to evince a penchant for similarity to the other in their friendships.

Bullers (2000) examined gender differences in the receipt and efficacy of four types of social ties and explored the role of perceived control as a mediator in the
relationship between social ties and depressive symptoms. Results suggested that demanding social ties have the strongest association with depressive symptoms, and that this relationship was much stronger for women than for men. Emotional support was strongly associated with depressive symptoms for men and women, whereas instrumental support and number of close ties have negligible effects on depressive symptoms. Perceived control most strongly mediated (rather than moderates) those relationships with the strongest associations: demanding ties and depressive symptoms, and emotional support and depressive symptoms. Substantial direct associations between social ties and depressive symptoms remain after removing the effects mediated by perceived control.

Chou (2000) examined the association between emotional autonomy and depressive symptomatology among Chinese youth in a cross-sectional study. The author found that depressive symptomatology was associated with two aspects of emotional autonomy: individuation and deidealization of parents. Results indicate that the relationships between depressive symptomatology and these three aspects of emotional autonomy are similar in both individualistic and collectivistic societies.

Osborne and Rhodes (2001) examined associations among sexual victimization and the psychosocial functioning of African American and Latina pregnant and parenting adolescents. The victimized adolescents reported higher levels of depression, anxiety, and life stress, and, although the two groups reported no differences in their levels of social support, support was found to be differentially related to depression and anxiety in the two groups. In particular, victims derived benefits from social support at low levels of stress, but social support provided no protection against depression and anxiety at average or high levels of stress. For nonvictims, social support provided no benefits at low levels of stress, but protected against depression and anxiety at moderate levels of stress and against depression at high levels of stress.

Kaltiala-Heino et al. (2001) studied sociodemographic determinants of depression among 14-16 years old girls and boys, and the role of perceived social support in mediating the effects of the background variables. Results revealed that
depression was associated with family structure in both sexes. Among girls, having moved recently and low parental education increased the risk for depression, among boys, unemployment in the family. Accumulating number of discontinuities in life course increased the proportion of the depressed among both girls and boys. Perceived lack of social support had the same effect. Lack of support did not explain the effect on depression of the discontinuities in life course.

**Kliewer et al. (2001)** examined associations between exposure to serious violence against a family member and internalizing symptoms, and the protective effects of support from family versus friends in adolescents. After accounting for the effects of age, gender, and family life events other than violence, support from family buffered the relations between exposure to violence and adjustment; this relation was strongest for girls and younger adolescents. Disclosure to friends appeared to be protective for younger adolescents but harmful for older adolescents, and this relation was only observed for hopelessness.

**Davies and Windle (2001)** conducted a prospective study of 360 adolescent-mother dyads and examined whether associations between marital discord and trajectories of adolescent depressive symptoms and delinquency varied as a function of three intrapersonal attributes: temperament, childhood behavior problems, and perceived family support. Difficult temperament (i.e., dysrhythmicity, poor task orientation) potentiated the effects of marital discord on adolescent trajectories of adjustment, whereas heightened perceptions of family support protected adolescents from the adverse effects of marital discord. Adolescents with behavior problem histories were initially less vulnerable to marital discord; however, the high levels of depressive symptoms exhibited by adolescents with childhood behavior problems persisted over time only when they were exposed to elevated marital discord. The effects of the moderators differed in terms of duration and course.

**Liu (2002)** examined the moderating effect of perceived social support on the association of dysfunctional attitudes with depression among Taiwanese adolescents. The results indicated that perceived social support from friends moderates the relationship between dysfunctional attitudes and depression, implying that as peer
support increases, the positive relationship between dysfunctional attitudes and depression weakens.

Shek (2002) assessed 3,649 Chinese adolescents' perceptions of how well their families function. He found that boys perceived their families to function worse than did girls and that younger adolescents perceived their families to function better than did older adolescents. Perceived family functioning was negatively related to grade level; students attending schools with higher academic standards perceived their families to function better than did students attending schools with lower academic standards; and students attending government and aided schools had higher levels of family functioning than did students attending private schools. Family types (intact vs. non-intact families) and the duration of parents' stay in Hong Kong were also related to the adolescents' perceptions of family functioning. Findings for the personal, school-related, and family correlates of perceived family functioning were statistically significant and stable across different measures of family functioning.

Caldwell et al. (2002) investigated the role of racial identity and maternal support in reducing psychological distress among African American adolescents. Results provided little support for a direct association between racial identity or maternal support and depressive symptoms and anxiety within a multivariate context. Rather, the influences of racial identity attitudes and maternal support on these mental health outcomes were mediated by perceived stress. Further, the two racial identity attitudes were associated with perceived stress in different ways.

Elgar and Arlett (2002) examined stability in, and the relationship between, perceived social inadequacy and depressed mood in a sample of community adolescents. Results indicated that perceived social inadequacy in adolescents is stable over time-independent of its association with depressed mood.

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 SES and depression.
Kenny et al. (2002) examined the relationships between parental attachment, academic achievement, and psychological distress among a multiethnic sample of academically successful inner-city high school students. The results suggest that the affective quality of maternal attachment is positively associated with grade point average, and the affective quality of paternal attachment is negatively associated with depressive symptoms. In Study 2, case examples provide an examination of sources of support, life stress, and patterns of resilience.

Reddy et al. (2003) examined the influence of perceived teacher support on trajectories of depression and self-esteem in middle school, using multigroup latent growth cross-domain models. Students' perceptions of teacher support and general self-esteem declined and depressive symptoms increased over the course of middle school. The authors found that, for both boys and girls, changes in perceptions of teachers' support reliably predicted changes in both self-esteem and depression. In particular, those students perceiving increasing teacher support showed corresponding decreases in depressive symptoms and increases in self-esteem. Gender differences were found for the initial levels of both perceptions of teacher support and general self-esteem. A competing model was also tested, which gave additional support for pathways of influence from perceptions of teacher support to depression and self-esteem, rather than the reverse.

Votta and Manion (2003) conducted a cross-sectional study and explored differences in and the association of self-reported coping style, negative life events, self-esteem, and perceived social support with the psychological adjustment (i.e., depressive symptoms, internalizing and externalizing behavior problems) of homeless and nonhomeless adolescent males. Results indicated that homeless youths reported a higher prevalence of family dysfunction, school difficulties, suicide attempts, legal problems, and substance use than nonhomeless youths. Homeless youths differed from nonhomeless youths for each outcome measure, reporting a greater use of the disengagement coping style, higher negative life events index, less perceived parental support, and higher levels of depressive symptoms and internalizing and externalizing behavior problems. Analyses indicated that disengagement coping and self-worth
accounted for significant amounts of variance in depressive symptomatology, and both internalizing and externalizing behavior problems in homeless youths.

Torsheim et al. (2003) conducted a three-wave prospective study to investigate the reciprocal relationships among school-related stress, school-related social support, and distress in secondary school students. Each of the three factors at baseline predicted change in one or two of the other factors at subsequent measurements, indicating a complex pattern of reciprocal relationships among stress, support, and distress across time. A high level of distress at baseline predicted a lower level of support and a higher level of stress six months later. High levels of stress at baseline predicted a higher level of distress and a lower level of support 12 months later.

Kiesner et al. (2003) examined peer relations across 2 contexts i.e., individual-network homophily and network inclusion. The primary research questions investigated were (a) whether peer networks from different contexts uniquely contribute to explaining variance in individual behavior (b) whether measures of peer preference and peer network inclusion across contexts uniquely contribute to explaining individual depressive symptoms. Results showed that both the in-school and the after-school peer networks uniquely contributed to explaining variance in 2 types of individual problem behavior (in-school problem behavior, after-school delinquency), and that similarity with the 2 peer networks varied according to behaviors specific to each context and across gender. Finally, both in-school and after-school peer network inclusion contributed to explaining variance in depressive symptoms, after controlling for classroom peer preference.

Geckova et al. (2003) explored the influence of social support on health among gender and socio-economic groups among Slovak adolescents. Results showed that there were significant gender differences in social support, which were unfavourable for males. On the other hand, there were significant gender differences in health, unfavourable for females. Low social support was significantly related to worse health and there were significant socio-economic differences in both health and social support, which were unfavourable for lower socio-economic groups. Three
groups, females, adolescents from lower socio-economic groups, and also adolescents reported low social support, less frequently consider their health as excellent or very good. Females suffered from more health complaints, reported worse psychological health, vitality and mental health in comparison to males, to adolescents from higher socio-economic groups, and to adolescents reporting high social support. Males and adolescents from lower socio-economic groups more frequently reported low social support in comparison to females and adolescents from higher socio-economic groups. No significant differences in the influence of social support on health among gender and socio-economic groups of adolescents were confirmed.

**Hishinuma et al. (2004)** investigated the relation between demographic, social and adjustment measures based on a large-scale investigation of Asian/Pacific-Islander youths. Results showed that three social variables (number of relatives frequently seen, family support and friends' support) exhibited statistically significant but low correlations. Family support had the highest negative association with the four psychiatric symptoms (depression, anxiety, aggression, substance use). Friends' support was inconsistently associated with the adjustment measures, and the number of relatives frequently seen resulted in negligible effects.

**Burton et al. (2004)** investigated a prospective test of the stress-buffering model of depression in adolescent girls. Deficits in peer support predicted increases in depressive symptoms, and negative life events predicted onset of depressive pathology. However, none of the past studies i.e., the 14 prospective tests provided support for the stress-buffering model despite sufficient power.

**Hammack et al. (2004)** longitudinally assessed community violence exposure, social support factors, and depressive and anxiety symptoms among inner-city African American adolescents. Several social support factors emerged as protective-stabilizing forces for witnesses of violence both cross-sectionally and longitudinally, including maternal closeness, time spent with family, social support, and daily support (ESM). Contrary to hypotheses, several social support factors demonstrated a promotive-reactive effect such that, in conditions of high victimization, they failed to protect youth from developing symptoms. Effects did not
differ by outcome or sex, though sex differences in findings emerged. Protective-stabilizing effects occurred more for witnessing violence, whereas promotive-reactive patterns occurred more for victimization

**Yarcheski et al. (2004)** aimed to identify predictors of positive health practices. Fourteen predictors of positive health practices were identified in 37 studies published since 1983 and results indicated eight predictors (loneliness, social support, perceived health status, self-efficacy, future time perspective, self-esteem, hope, and depression) had moderate effect sizes, and six (stress, education, marital status, age, income, and sex) had small effect sizes.

**Denny et al. (2004)** examined risk and protective factors for depression within the social environment. Analyses demonstrated that family and peer connections were protective against depression. High levels of poverty, witnessing violence at home, and experiencing bullying at school were significant risk factors for depression.

**Paxton et al. (2004)** examined exposure to community violence, depressive and post-traumatic stress disorder (PTSD) symptoms and social support within a non-random sample of low-income African-American adolescent males. Results revealed that exposure to violence was significantly associated with both depressive and PTSD symptoms. However, social support was not found to moderate the relationship between exposure to community violence and psychological distress.

**Kutcher et al. (2004)** conducted a longitudinal 8-year study to assess the potential predictors of major depressive disorder (MDD) in a cohort of healthy adolescent females at high familial risk for MDD. Results revealed that high risk and usual risk group demonstrated no significant differences on measures of dysphoric cognitive style, perceived overall number of social supports, or satisfaction with social support. Females at high familial risk for the onset of depression have significant differences in pubertal development, but not in demographics, depressive symptoms, social supports, or dysphoric cognitive style, when compared to females at usual risk for depression.
Stice et al. (2004) tested whether deficits in perceived social support predicted subsequent increases in depression and whether depression predicted subsequent decreases in social support with longitudinal data from adolescent girls. Deficits in parental support but not peer support predicted future increases in depressive symptoms and onset of major depression. In contrast, initial depressive symptoms and major depression predicted future decreases in peer support but not parental support. Results are consistent with the theory that support decreases the risk for depression but suggest that this effect may be specific to parental support during early adolescence. Results are also consonant with the claim that depression promotes support erosion but imply that this effect may only occur with peer support during this period.

Landman-Peeters et al. (2005) examined gender differences in the relation between social support, problems in parent-offspring communication, and depression and anxiety among adolescents and young-adult children of parents with a depression, panic disorder and/or obsessive-compulsive disorder. Results indicate that the daughters benefit more from social support than the sons when problems in parent-offspring communication are high, but that this effect holds only for depression symptoms and particularly in relation to problems in father-offspring communication. Social support does not seem to play a role in the development of anxiety.

DuBois and Silverthorn (2005) used nationally representative data to examine the impact of natural (or informal) mentoring relationships on health-related outcomes among older adolescents and young adults. Results revealed that respondents who reported a mentoring relationship were more likely to exhibit favorable outcomes relating to education/work (completing high school, college attendance, working $\geq 10$ hours a week), reduced problem behavior (gang membership, hurting others in physical fights, risk taking), psychological well-being (heightened self-esteem, life satisfaction), and health (physical activity level, birth control use). However, effects of exposure to individual and environmental risk factors generally were larger in magnitude than protective effects associated with mentoring.
Prinstein et al. (2005) longitudinally examined adolescent girls' interpersonal vulnerability to depressive symptoms in terms of reassurance-seeking and peer relationships. After controlling for age and pubertal development, significant but small prospective effects offered mixed support for hypotheses: (a) depressive symptoms and negative peer relations predicted increasing levels of girls' reassurance-seeking; (b) initial levels of reassurance-seeking and depressive symptoms predicted deteriorating friendship quality among girls and low friendship stability, respectively; and (c) reassurance-seeking combined with poor peer experiences predicted increases in girls' depressive symptoms.

Measelle et al. (2006) tested whether dimensions of negative affect—specifically, trait levels of negative emotionality and state levels of depressive symptoms—increased risk for substance abuse onset and whether perceived social support moderated this relation among school-recruited adolescent girls. Initial negative emotionality, but not depressive symptoms, and deficits in parental, but not peer, support predicted future substance abuse onset in a multivariate hazard model. Tests of the interaction between negative affect dimensions and social support suggested that support did not moderate the relation of negative affect to risk for substance abuse onset.

In a 14-year longitudinal study, Heponiemi et al. (2006) examined the independent association between perceived social support and the 5-year progression of depressive tendencies while taking into account the potential effects of childhood/adolescent anger and later hostility. Results showed that higher levels of perceived social support were associated with the decrease of depressive tendencies after 5 years and lower levels of depressive tendencies prospectively and after 5 years. This association persisted after adjusting for childhood/adolescent anger and later hostility. Social support may therefore be a long-term protective factor from depression irrespective of personality characteristics, such as hostility and anger.

Moreno Ruiz et al. (2007) found that a greater perception of support by the father and by the mother leads to lesser incidences of depression. The perception of greater paternal support is also connected to lesser consumption of both alcohol and
cannabis. However the perception of greater support by one's steady boy/girlfriend is associated with a higher degree of alcoholic consumption during adolescence.

Gass et al. (2007) reported that sibling affection moderated the relationship between stressful life events and internalizing symptomatology but not the relationship between stressful life events and externalizing symptomatology. Notably, the protective effect of sibling affection was evident regardless of mother-child relationship quality.

RATIONAL OF THE STUDY

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:

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

Some studies indicated that persons pre-disposed to depression are thought to experience chronically low trait self-esteem and self esteem is measured at one point in time in predicting depression and is thus treated as a relatively stable trait (Miller et al., 1989; Hammen et al., 1985). Teasdale's (1983, 1988) differential activation theory suggests that persons vulnerable to depression harbor negative views of themselves that lie dormant until "primed" by depressed mood. Persons are thought to vary in the extent to which low self-esteem is activated by negative mood. This variability is believed to account for whether the negative mood spirals down into a clinical depression or simply fades away.

Like trait self-esteem, differential activation of low self esteem could be measured at a single point in time. However, self esteem would be informative only in subjects primed by depressed mood (i.e., there is an self esteem effect only when subjects have already become somewhat depressed). There are two growing bodies of support for differential activation: first, studies that demonstrate that negative self cognition predicts persistence of an already existing depressive disorders (Williams et
al., 1990; Dent & Teasdale, 1988) and second, studies that examine the relationship between cognition and mood in formally depressed persons (Miranda et al., 1990; Teasdale & Dent, 1987).

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, depressives 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 depressives will have a normal level of self esteem. Only when these “narcissistic objects” are lost do the depressives show abnormally low self esteem. More generally, future depressive are seen as basing their self-worth on fewer and less stable sources than non depressives do (Barnett & Gotlib, 1988; Oatley & Bolton, 1985). Several 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 attributional 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 depressions

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

The role of psychosocial risk factors in depression onset and recurrence is well-established in the adult literature, with considerable evidence to suggest that negative life events and chronic psychosocial difficulties place individuals in general, and women in particular, at risk for major depressive episodes. (Brown & Harris, 1978; Paykel et al., 1969). Chronically aversive life circumstances (e.g., abuse, poverty, parental discord) or major traumatic life events (e.g., parental death, physical assault) are especially likely to affect individuals’ sense of themselves, their world,
and their future (Janoff-Bulman, 1992; Rose & Abramson, 1992) particularly if these experiences are pervasive and severe.

Paykel and Mayer (1969) had said ‘depression has a definite relation to stressful life events’. Depressed persons experience significantly more negative life change events prior to the onset and treatment of their disorders than do non-depressed controls (Tennant et al., 1981). The vulnerability hypothesis (Brown & Harris, 1978) proposes that the occurrence of depression requires the presence of two types of factors – provoking agents such as life events or difficulties, and vulnerability factors. Brown and Harris found a link between their hypothesis and Beck’s cognitive theory, as well as the concept of learned helplessness suggesting an additive model (Bebbington, 1985). Other authors have suggested variants of the same model such as the ‘independent causes’ hypothesis (Tennant, 1985), which posits factors can provoke episodes of depression on their own. The ‘mutual potentiation’ hypothesis (Tennant and Bebbington, 1978) suggests that life events and additional variables such as social support mutually potentiate each other’s effect suggesting a multiplicative model. Johnson reviewed the literature and concluded, “Negative life events do seem to be related to certain health and adjustment problems of childhood, but we are not sure to what extent or in what way” (p.124). Some cross-sectional studies using both clinical and community samples of depressed children and pre-adolescents have also found a modest but significant relationship between stressful life events and depression (e.g., Williamson et al., 1995a; Garber and Hilsman, 1992). But despite the salience given to psychosocial parameters and negative life events in clinical practice, there is paucity of studies examining these parameters in relation to the affective disorders specifically among mid-adolescents in the Indian context.

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

One of the most robust findings in psychiatric epidemiology concerns the gender gap in depression. Across various studies, women are twice as likely to be depressed compared to men (Nolen-Hoeksema, 1987; Weissman and Klerman,
1977). 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 (Blazer et al., 1994; Kessler et al., 1993, 1994; Weissman et al., 1993, 1996; Wittchen et al., 1992; Cheng, 1989; Hwu et al., 1989; Wells et al., 1989; Bland et al., 1988 a,b; Canino et al., 1987; Lee et al., 1987; Bebbington et al., 1981; Weissman & Klerman, 1977).

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 rates of internalizing problems, most notably symptoms of depression, are higher among adolescent girls than boys (Nolen-Hoeksema & Girgus, 1994). Most studies show evidence that higher rates of depression in boys in the preadolescent years and by ages 13 to 14, 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 in adolescence? Are gender differences characteristic of the general population, or are they limited to a subgroup of youths, such as those who may be referred for or receive mental health services?

Identification of the emergence of gender differences in depression may provide important clues for further 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 the gender gap in depression begins 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.
IV. Depression would be high in case of adolescents with high negative cognition and high stress.

Cognitive theories of depression assert that when important stressful life events occur, individuals with negative beliefs about themselves, their future, and the causes of events are more likely to become depressed than are individuals who do not have these cognitive tendencies (Abramson, Metalsky, & Alloy, 1989; Beck, 1976). Depression has been associated with low self-esteem, high self-criticism, significant cognitive distortions, and a feeling of lack of control over negative events (Beck, 1987). The “cognitive –diathesis” model proposes that individuals who are exposed to stressful life events and who have negative styles of interpreting and coping with stress are at high risk of developing depressive symptoms (Garber and Hilsman, 1992). Cognitive vulnerability-stress models, such as the reformulated learned helplessness/hopelessness model, (Abramson et al., 1989) suggest that the tendency to attribute negative life events to internal, global, and stable causes is predictive of the onset, maintenance, and relapse of depressive symptoms (Hankin et al., 2001; Robinson et al., 1995), particularly when this attributional style is combined with the experience of a life stressor. Aversive events that result in multiple and severe bad outcomes are likely to lead to cognitions of universal helplessness and hopelessness (Abramson et al., 1989); individuals who believe they were responsible for the negative events are more likely to develop cognitions of personal helplessness and low self-esteem (Abramson, Seligman, & Teasdale, 1978).

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-evaluations (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 hopelessness (the cognitive triad; Evans & Murphy, 1997). Through this negative view of the world, they distort experiences and display information processing errors such as
overgeneralizing 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 a 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 especially among mid-adolescents.

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

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, Sarason & Pierce, 1990). 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). However, there is growing evidence that the degree to which a person feels 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 than received support (the objective social resources that one actually receives; Wethington & 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 special stress or not. A buffer effect refers to the fact that a high level of social support protects the
individual against the negative consequences of stressors once these have arisen (Cohen & Wills, 1985).

The moderating or 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 support 'buffers' (protects persons from the potentially pathogenic influence of stressful events. Brown and Harris (1978) suggest social support bolsters self-esteem and a sense of environmental mastery. Each of these, in turn, can foster a positive effect and thus reduce the disturbing psychological impacts 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). Moderating effects are at times the most misunderstood of the effects models. Antonovsky (1979) suggested that resources such as social support could increase a person’s resistance to stress. A moderating effect is achieved when a “third variable affects the zero-order correlation between two other variables” (Hurley-Wilson, 1993). Moderators are antecedent conditions that interact with a stressor to affect the outcome. Preston (1995) found that social support measured as the number of confidants had a buffering effect on health for married elderly men. However, no such protective effect was found for women. Protective effects of social support among adults have been found both for structural measures such as total network size and for functional measures such as availability of emotional and instrumental support (Wills, 1991; Cohen & Wills, 1985). Protective effects also have been noted for adolescents (Wills, Mariani, & Filer, 1996; Sandler, Miller, Short, & Wolchik, 1989).

Stress coping theory posits that social support has beneficial effects because the availability of supportive functions from other persons help an individual to deal better with problems (e.g., Wills & Filer, 1996; Thoits, 1986; Wills, 1985b). In the context of adolescence, it is posited that emotional or instrumental support from parents may help adolescents to cope with problems from school, home, or family domains and may help them deal with emotional states such as anxiety, depression or anger (Wills, Mariani, & Filer, 1996; Sandler et al., 1989). Models of resiliency effects also posits that parental support assists children to achieve good adaptation in
difficult life circumstances because it contributes to the development of better competence in academic and social domains (e.g., Wills, Blechman, & McNamara, 1996).

There is evidence that depressives tend to report the lack of availability of supportive others (Winefield, 1979). Brown and his colleagues (1975) in looking for a factor that would increase vulnerability to developing depression in the face of adversity identified the lack of close, confiding relationship as one such attributes. In another study, Miller and Ingham (1976) reported a relationship between the number of acquaintances a person had and a number of psychological and physical symptom scores. It is clear that the proposed effect of social support is not specific as inconsistency in the results of Miller and Ingham (1976) are reflected through differences in the quantity and quality of social support which suggest that number of social contacts does not necessarily reflect the number of supportive relationship.

A current and contentious issue in the literature considering the psychological health of adolescents is the extent of influence of the parental relationship and other interpersonal relationships. Since bulk of the available literature till date has primarily focused on adults, it would be interesting to investigate the moderating effect of social support in reduce the disturbing psychological impacts of stress on depression in light of cognitive distortions and its differential influence on both males as well as female mid-adolescents in terms of both number of supportive relationships as well as quality of social support.

NEED OF THE STUDY

Although the mechanisms by which children and adolescents develop negative cognitive styles are not yet established, studies have suggested that certain factors, such as modeling significant others, perfectionistic standards, criticism, rejection, and experiences with uncontrollable stressful life events, may play a role (Garber and Hilsman, 1992). Stress can have a significant effect on an adolescent's long-term physical and mental well-being. An understanding of the role of unmanaged stress and maladaptive and dysfunctional thoughts during middle adolescence are critical for the prevention of chronic diseases such as depression.
The present investigation focused on mid-adolescents because there is less evidence to suggest that the cognitive-stress interaction model is generalizable to individuals younger than college students. Although there is some consensus in the literature that the clinical manifestation of depressive symptoms is essentially similar for children, adolescents, and adults, it is still not known whether the same etiological correlates and processes characterize the syndrome across development. Evidence supporting the cognitive-stress model in mid-adolescents would provide further validation of both the cognitive theory of depression as well as the construct of depression in adolescents.

A large body of psychological literature demonstrated the beneficial effects has typically examined social support in terms of specific transactions involving the seeking and receiving of help in the context of coping with specific stressors. Similarly, a large body of sociological literature has examined social support using structural measures that assess the number of social relationships and roles in which an individual is involved and the structure of the interconnections among those relations.

Besides specificity of the content areas of social support, there is need for a great deal to learn about the various functions of support and how they work to lower or raise levels of distress and to facilitate or impair mental health. Social support whether received or perceived can further be assessed in terms of quantitative-descriptive and/or qualitative-evaluative aspects, i.e, one can ask people whether they perceive themselves as potentially supported or have been the recipients of certain beneficial actions by others in the past and/or whether they are satisfied with the status quo of their social support. The moderating effect of social support can be best tested through an analysis of variance (ANOVA). In this model, social support is thought to protect the individual from the potentially harmful effects of exposure to a stressor. It might be fruitful to study whether having a strong support network would act as a moderator by producing a healthier environment, by decreasing events appraised as threatening or harmful or both.
Gender differences in automatic thoughts constitute a relatively unexplored issue, especially among children and adolescents. A few studies conducted on adult samples have found that females score higher than men on cognitions related to anxiety and depression (e.g., Jolly, Dyck, Kramer & Wherry, 1994), whereas other studies have not found gender differences (Fitchen, Amsel, Robillard, & Tagalakis, 1991; Prins & Hanewald, 1997). The trends that have emerged after the review of literature in this area suggest that most of the work till date on negative automatic thoughts has predominantly focused either on children or adults. The lacunae in research are the examination of the role of negative cognitions in predisposing adolescents towards depression especially in the Indian context. Also, gender differences in the buffer-effect of social support in the relation between stressful circumstances and the development of depression are widely assumed, but few studies address this interaction between gender and support systems available in affective disorders in children and adolescents. Moreover there is paucity of literature regarding the moderating role of social support on the interaction among negative thinking style, stress and gender and there exists lack of research in this area especially among mid-adolescents in the Indian context.

This prompted to attempt the simultaneous examination of the multiple vulnerability and protective factors which could help to gain a more accurate and thorough account of patterns of depressive reactions in terms of the perceived stress levels in response to negative events and the assessment of the negative automatic thoughts in comparison to examining only one vulnerability factor at a time. Since a given vulnerability factor may lead to different patterns of depressive reactions following a negative event depending on the presence or absence of other vulnerability or protective factor.

Keeping in view, the rationale provided in the preceding paragraphs the present investigation aims to examine the influence of negative cognition, stress and gender on depression at different levels of social support in a non-clinical sample of adolescents (aged 15 to 17 years; period of mid-adolescence).