SUMMARY

Depression is a disorder and disturbance of mood that has been described from ancient times with continued efforts to clarify the nature of this aspect of the human condition. Although we no longer ascribe the etiology of depression, or melancholia, to the function of bodily humors such as black bile or "perturbations of the soul" (Jackson, 1986), there are many commonalities between ancient and contemporary descriptions of the phenomenology of depression. The word 'depression' in everyday parlance covers a wide range of emotional states that range in severity from transient moods of sadness to major psychotic episodes accompanied by increased risk of suicide.

The World Health Organization, in collaboration with the World Bank and Harvard University, mounted an ambitious research effort in the mid-1990s to determine the "burden of disability associated with the whole range of diseases and health conditions suffered by people throughout the world. Mental disorders are the second leading cause of disability and premature mortality and collectively account for more than 15 percent of the overall burden of disease from all causes and slightly more than the burden associated with all forms of cancer. Disability-adjusted life years (DALY) stated that depression will become a leading cause of disability in the coming decades, second only to ischemic heart disease by the year 2020 (Holsboer, 2001). The World Health Organization Global Burden of Disease Study recently depression as the single most burdensome disease in the world in terms of total disability-adjusted life years among people in the middle years of life (Murray and Lopez, 1996). A substantial proportion of affective disorders follow a chronic and recurrent course causing immense personal distress and suffering to individuals and their families. Affective disorders also contribute to premature mortality through suicide, adding to the community burden due to these conditions (Bhugra et al., 2005).
Depression in the form of a brief sad mood is a universal experience; it is a normal part of living that accompanies the losses, frustrations, failures, and disappointments that all of us face. Clinical depression in contrast, is a syndrome, or constellation of co-occurring psychiatric symptoms that affects about 20 percent of the population. Major Depressive Disorder, the psychiatric label for clinically significant depression, is characterized by at least a two-week period of persistent sad mood or a loss of interest or pleasure in daily activities, and four or more additional symptoms, such as marked changes in weight or appetite, sleep disturbance, psychomotor retardation, fatigue, feelings of guilt or worthlessness, and concentration difficulties (Gotlib & Rottenberg, 2001).

A national survey conducted in the United States of America has shown that the average 12-month prevalence in the general population is 10.3% with a 1-month prevalence ranging between 1.5% and 2.5% amounting to a lifetime prevalence of 17% (Kessler et al., 1994). The available data from South Asia, especially WHO-sponsored studies in the region, point to a similar incidence and prevalence of affective disorders as in western populations i.e., median prevalence of 3.1% point, 6.5% within 6 months to 1 year and 16.1% lifetime prevalence of major depression (Wittchen et al., 1996). Depressive syndromes that do not meet diagnostic criteria are even more common (Judd et al., 1997; Olfson et al., 1996). Furthermore, there is no point of rarity in the distribution that can differentiate pathologic from nonpathologic depression (Kendler & Gardner, 1998), and subjects move frequently between syndromal and subthreshold depression over time (Akiskal et al., 1997; Angst et al., 1997; Whybrow et al., 1984). Also, the incidence of depression is highest at the ages where reproductive value peaks, a pattern characteristic of few diseases.

Depressive disorders represent serious forms of psychopathology of childhood and adolescence, given that some depressive episodes may lead to potentially life-threatening or negative outcomes. Depression may be one of the most overlooked and under-treated psychological disorders of adolescence. Previous notions of "adolescent turmoil" or the perspective of the adolescent who is "just going through a moody stage" are no longer viable conceptualizations (Offer & Schonert-Reichl, 1992). This is amply evident when one considers the large numbers of depressed and suicidal
youth, a significant number of whom do not survive to adulthood or do so with significantly reduced psychosocial competence or functioning. Internalizing disorders such as depression are often undetected due to the more covert nature of their symptoms. The difficult task of the diagnostician is to distinguish between normal behavior of adolescents and more pathological states. Therefore, he or she must look beyond the mere presence of symptoms and rely more heavily upon duration, severity, and clustering of symptoms than one might at other points in development.

The existence of major depressive disorder in puberty has been a controversial issue. Though the literature on the subject goes back to the 1960s, no child psychiatry textbook mentioned the existence of pre-adolescent depression until Rutter and Hersov's in 1977 (Hersov, 1977). The study of depression can be dated back to the time of Hippocrates, but the burgeoning of interest in the study of childhood depression is of relatively recent origin. To appreciate the infancy of this area, one needs only to look at a classic encyclopedic text, Child Psychiatry (Kanner, 1957; 770-777) and fail to find the term "childhood depression" listed in the index. Another view held that depressive symptoms are not directly expressed by children but must be inferred from other behaviors that mask the underlying depression i.e., the manifestation of these feelings is indirect (Glaser, 1968; Toolan, 1962). This commonly held theory gave rise to the concepts of 'masked' depression, and depressive 'equivalents'. Some of the behaviors which have been identified as masking the underlying depression or that are depressive equivalents are hyperactivity, aggressiveness, temper tantrums (Toolan, 1962), somatic complaints such as headaches, stomachaches, enuresis, encopresis (Cytryn and McKnew, 1974; Sperling, 1973) and school problems such as poor academic performance, truancy, and school phobia (Glaser, 1968) and under-achievement (Kovacs & Beck, 1977). The underlying depression is used to account for the above behaviors even in the absence of dysphoric mood. Masked depression has given way to a more generally accepted standard that adolescent depression is essentially the same phenomena as adult depression but with some developmental-specific modifications.

A developmental perspective on adolescent depression is essential to determine whether the expression of depressive symptoms varies with development.
Developmental variables are likely to influence both the reporting and manifestations of depression. As compared with adults, adolescents with depression demonstrate a more variable course, exhibit more interpersonal difficulties, are more likely to over-eat and under-sleep, and are more apt to demonstrate suicidal ideation. Biological bases of depressive disorders have been extensively examined have been extensively examined in adults and to a limited extent children and adolescents. A great deal of adult research has focused the hypothalamic - pituitary - adrenocortical (HPA) axis and other biological factors, such as prolactin, growth hormone, melatonin metabolism, sleep, and neurotransmitter activity have been linked as of potential etiological relevance to depression. Both cortisol and dehydroepiandrosterone hypersecretion precede and predict the subsequent onset of major depression in high-risk children. These early findings suggest that altered serotonergic regulation may precede first-episode early-onset depression in some cases. The associations between the genetic, social cognitive, and neurobiological factors prior to onset, during an episode, or following recovery are unknown. There have been few studies of brain structures and functioning in depressed children and adolescents, but the few reports available are compatible with adult research indicating areas of the brain appear to be most important for mood recognition and control are the prefrontal cortex and related areas of the striatum, and the thalamus, and the amygdale. The psychological perspective focuses on problems or deficits in cognitive appraisal, maladaptive behavioral response to reinforcement, dysfunctional cognitions, and erroneous attributional style whereas the social perspective includes influences of the stressful events, including major negative life events as well as daily hassles and chronic strains; parental influences, social support; peer and interpersonal relationships; and a host of social and environmental influences such as exposure to violence, victimization, maltreatment, social disadvantage, peer and social pressures, and school and work stress among others. The biopsychosocial perspective considered reciprocal pathways in the pathogenesis, maintenance, or exacerbation of depression or depressive disorders may vary as function of developmental level, individual strengths and deficits within each domain, nature of the reciprocal interactions, and the nature of the depressive outcome.
Based on diagnostic and epidemiological surveys of children and adolescents it is evident that depression is a significant problem among youngsters (Reynolds & Johnston, 1994). Major depression affects 3 to 5 percent of children and adolescents (Bhatia and Bhatia, 2007) and the prevalence rate of depressive symptoms varied from 20-21% among Thai adolescents (Charoensuk, 2007). Population studies of children and adolescents have reported prevalence rates of depression in children and ranging between 0.4% and 2.55 in children and between 0.4% and 8.3% in adolescents (Anderson and McGee, 1994; Lewinsohn et al., 1993a, 1994). Major depression was prevalent in 5.8% of adolescents aged 16 to 17-year-olds and during lifetime in 11.45, 4 girls for every boy. Dysthymia without major depressive episodes was diagnosed in 1.1%, two girls for every boy (Olsson, 1998). These data, and the general undertreatment of depression in children and adolescents (Keller, Lavori, Beardslee, Wunder, & Ryan, 1991) point to the critical need for study, identification, and treatment of depression in young people.

In the Indian context, major depression is prevalent in 0.5% - 1% of school-aged (aged 5-13 years) children over a six-month period and increases to 3% in adolescents. The prevalence rate continues to rise for boys up to adolescence (Malhotra et al., 2005). Nair et al. (2004) reported a prevalence rate of severe and extreme depression in Indian adolescents as 9.5% and 1.7% among school dropout girls, 2.6% and 0.2% among school going girls and 1.4% and 0.2% among school going boys. Khurana et al. (2004) found 20.7% of children being high on hopelessness and 8% had depression. Among children with high hopelessness, 3.2% had ever attempted suicide and 8.3% gave history of suicidal attempts. Eighteen percent of youth (aged 11, 13 and 15) reported symptoms of depression. A higher proportion of females (25%) reported depressive symptoms than males (10%) (Saluja et al., 2004). Depression in children and adolescents is also associated with an increased risk of suicidal behaviors, homicidal ideation, tobacco use, and abuse of alcohol and other substances during later adolescence.

Depression in children and adolescents, within the scope of current nomenclature and systems of classification, is considered to be a mood disorder similar in many respects to this disorder in adults. In fact, the adolescent may exhibit
difficulties with academics, concentration, and peers; somatic complaints (e.g.,
headaches and stomachaches); nervousness; and substance abuse, rather than
depressed mood. Although this may characterize a great many adolescents, the depth
and quality of these characteristics in depressed adolescents, and in particular, their
lack of positive response to previously reinforcing events or activities generally
distinguishes depression in adolescents from more normative trials and tribulations
associated with the normative course of adolescence. Thus, this internalizing disorder
affects multiple areas of personal functioning, including the behavioral, emotional,
somatic, and cognitive domains. One of the most serious outcomes or manifestations
of adolescent depression and also among the leading causes of death is suicide. Some
other outcomes include withdrawal from peers, lack of social developmental skills,
poor school performance, substance abuse, reinforced poor self-concept, low self-
esteeem, and relationship difficulties. Clinical as well as epidemiological investigations
have shown that 40% to 70% of depressed children and adolescents have comorbid
psychiatric disorders, and the most frequent comorbid diagnoses are double
depression, eating disorders, anxiety disorders, disruptive disorders, personality
disorders and substance abuse.

The use of self-report questionnaires for the assessment of depressive
symptomatology in young people has witnessed a rapid growth in research and
clinical applications. The manner in which we assess depression in youngsters guides
how we organize our perspective of depressive phenomena. Structured clinical
interviews are typically formulated to evaluate all symptoms, their duration, and
potential exclusion criteria as specified by a formal set of diagnostic criteria. there are
several characteristics of depression that support the use of self-report assessment
procedures, given linguistic and metacognitive competence in the child. Depression as
an internalizing disorder includes primary symptoms that are internal to the younger
and are not easily observable. Cognitive symptoms of guilt, self-deprecation, suicidal
ideation, hopelessness, and feelings of worthlessness are depressive symptoms that
are subjective to the child. Some vegetative symptoms such as insomnia, appetite loss,
and other problems are sometimes difficult for others to observe and may go
undetected by parents and significant others (Reynolds, 1998).
Middle adolescence is a stressful period of time along the journey of maturity. But this period has always remained as a neglected area of study, with most studies concentrating on the bewitching early childhood years or the baffling late adolescents. The middle adolescent period involves a number of stresses and consequent problems of adjustment because of the tremendous amount of development taking place in all the emotional, social, cognitive and physical spheres. Thus, the understanding of the psychological and adjustment problems of an adolescent is to be made from a developmental framework. The school and peer group experience, sex roles, academic performance, relationship with parents and the development of morality all become crucial during this stage, and maladjustment leads to feelings of inferiority, inadequacy, hopelessness and powerlessness. 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.

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). 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). The trends that have emerged after the review of literature in this area suggest that most of the work till date has largely focused either on children or adults. 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.

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. 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. 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. There has been a considerable amount of research showing that support from family, friends, and community networks is related to better physical health and
lower levels of psychological symptomatology (e.g., King, Reis, Porter, & Norsen, 1993; House, Landis, & Umberson, 1988; Cohen & Syme, 1985). 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). 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. Two essential constructs of social support are perceived and received social support which are weakly inter-related (Sarason et al., 1987, 1992). 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. Over the years, research has proclaimed the superiority of perceived social support over received support, because it more consistently promotes psychological health and protects it in times of stress (Cassel, 1976; Cobb, 1976). 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. 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).

**STATEMENT OF THE PROBLEM**

To study the influence of Negative Cognition, Stress and Gender on Depression at different levels of Social Support

**OBJECTIVES**

1. It was a cross-sectional and factorial design and the main objectives were to examine the main effects and interaction effects of negative cognition, stress and gender at different levels of social support on the criterion variable of depression.

2. To investigate the group differences for all the independent variables i.e., social support (Satisfaction with available support: qualitative) and social support (perceived availability of number of supportive persons: quantitative), gender and dependent variable i.e., depression. P 50 was used for classifying subjects into two groups and the median value was employed for the purpose of segregating the independent variable i.e., high vs low score groups.

**HYPOTHESES**

The following hypotheses were generated in keeping with the review of literature:

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

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

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

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

SAMPLE

The present investigation comprised of a non-clinical sample of 400 adolescents (200 male adolescents and 200 female adolescents) in the age range of 15 to 17 years (period of mid-adolescence). They were recruited from the Secondary and Senior secondary public schools in and around Chandigarh (Ambala, Chandigarh and Mohali) and most of them were from middle or upper middle class income groups.

The demographic characteristics of age, marital status, educational status, socioeconomic background, employment and place of residence were controlled in the sense that adolescents were in the age range of 15 – 17 years (period of mid-adolescence), unmarried, from grades 10th through 12th, middle or upper middle class income groups, unemployed and belonged to urban area. It is significant to emphasize that in addition to the advantage of homogeneity, which resulted from this type of control, there is also an increased danger of bias. The sample was limited to subjects who were available to participate in this study, thus limiting the assumption of randomization. However, this type of control is appropriate from the viewpoint of the focal theme of the present study undertaken.

In relation to the induction of participants in the study the following exclusion criteria were considered:

1. Presence of any chronic medical illness, organic brain syndrome or surgery.
2. Any self-reported or medically diagnosable visual or auditory impairment.
3. No evidence of any substance abuse i.e., drug addiction or alcoholism.
4. Any case seeking treatment for any diagnosable psychiatric disorder.

For this purpose information was obtained from their teachers, classmates and parents.

**TOOLS**

Keeping in view the variables to be measured, the aims of the study, and the nature of the sample, appropriate instruments with satisfactory psychometric properties were selected.

(a) Zung's Self-Rating Depression Scale (ZSRS; Zung, 1965)
(b) Social Support Questionnaire (SSQ; Sarason, Levine, Basham, & Sarason, 1983)
(c) Automatic Thought Questionnaire (ATQ; Hollon & Kendall, 1980)
(d) Perceived Stress Scale (PSS-10; Cohen & Williamson, 1988)

**STATISTICAL ANALYSIS**

The data were analyzed using SPSS (version 11.00) package with the help of following statistical techniques:

1. Frequency distributions, means, standard deviations, skewness and kurtosis to ascertain the nature of distribution (normality).
2. P$_{50}$ was used for classifying subjects into two groups and the median value was employed for the purpose of segregating the independent variables into two different groups (high vs low score groups) [except for the depressed vs non-depressed groups, which were divided at the cut off point of 50 on ZSRS (Carroll, Fielding, & Blashki, 1973; Fountoulakis et al., 2001)]
3. t-test and Chi-square were used to specifically locate the significant mean group differences.
4. Analysis of variance (2x2) to test the main effects and second-order interactional effects among the independent variables (for low and high social support groups separately).
5. Analysis of variance (2x2x2) to test the main effects, second-order and third-order interactional effects among the independent variables (for low and high social support groups separately).

**SUMMARY OF THE RESULTS**

1. The prevalence rate of depression reported by the present cohort of mid-adolescents was 17.8%.

2. Though there has been a considerable amount of previous research showing that support from family, friends, and community networks is related to better physical health and lower levels of psychological symptomatology, the most significant and unexpected finding in this study documented the detrimental effects of social support.

3. The results revealed that social support failed to moderate the relationship between negative cognition, stress and gender towards developing depression, indicating that in some cases social support does appear to exacerbate the impact that stress has on well-being instead of reducing that effect.

4. However, it is interesting to note that negative cognition, stress and gender interacted significantly to influence depression among mid-adolescents.

5. The independent role of gender could not contribute as a risk factor for adolescent depression and seemed to have been confounded by the influence of stress as a moderator.

6. The interaction between stress and gender to predispose the mid-adolescents towards depression was moderated by the influence of negative cognition which seems to have emerged as a crucial variable for developing depression.

7. Mid-adolescents manifesting high negative automatic thoughts in comparison to adolescents low on negative automatic thoughts scored higher on depression.

8. Mid-adolescents found to be high on stress in comparison to subjects low on stress scored higher on depression.
9. Mid-adolescents with high stress and high negative cognition reported higher scores on depression as compared with those low on stress as well as negative cognition.

10. The present study reported no gender differences among mid-adolescents on measures of depression.

11. Female adolescents with high stress scored significantly higher on depression than male adolescents with high stress.

12. Female adolescents high on negative automatic thoughts scored significantly higher on depression than male adolescents high on negative automatic thoughts.

13. A statistically significant gender difference was found for both the domains of social support i.e., social support (satisfaction with available support: qualitative) as well social support (perceived availability of the number of supportive persons: quantitative).

14. Female mid-adolescents reported higher score on social support (satisfaction with available support: qualitative) as compared to their male counterparts.

15. Also, on the measure of social support (perceived availability of the number of supportive persons: quantitative) it was found that female mid-adolescents reported higher score as compared to male mid-adolescents.

16. Additionally, no gender differences were found among mid-adolescents on measures of negative cognition.

17. It was found that there was no gender difference among the study sample of mid-adolescents on measures of stress.

18. The depressed and non-depressed groups of mid-adolescents differed significantly on variables of negative cognition, stress and social support (satisfaction with available support: qualitative).

19. Females with high stress and high negative cognition were found to have the highest mean score on depression despite high social support i.e., satisfaction with available support (qualitative) as well as in terms of perceived availability of number of supportive persons (quantitative).