CHAPTER SIX

OVERVIEW AND CONCLUSIONS
6.1 Overview of the study:
Adolescents constitute a significant part of our population. Different studies indicate that total prevalence rate of mental health problems in this group ranges from 0.48% to 29.40% (Bhola & Kapur, 2000). Mental problems of adolescents can be divided broadly into two categories, internalizing disorders and externalizing disorders.

Mental health problems of children and adolescents can be caused by biology, environment or mix of both. Personality of adolescents is also an important factor for development of psychopathology. Eysenck (1975) proposed that both in adulthood and in childhood, personality and psychopathology are linked, though the links are yet to be discerned. Though it is well accepted that personality develops through adolescence, Eysenck has viewed personality from a different perspective and he emphasized on heritability of personality dimensions (Psychoticism or P, Extraversion or E and Neuroticism or N) have strong genetic components with about 3/4th of the variance of all three factors accounted for by heredity and 1/4th by environmental factors.

In Eysenck view, human beings are bio-social creatures. That is, people are born with certain innate predispositions to respond in particular way to the environment. Different study reports support for those genetic hypotheses, the same three types emerge from the analysis of cultural variations –or variations in age or sex, for that matter (Rachman, 1969, Eysenck, 1990). Numerous longitudinal studies have shown that these types are stable from childhood to adulthood. According to Eysenck, individuals learn through conditioning by different socialization standards and his/her nature of conditioning depends absolutely upon his/her personality predispositions (Eysenck & Eysenck, 1985).
Different personality dimensions in different combinations lead to perception of similar situations from different perspectives. Hence, it is the individual’s ways of perception through conditioning of social situations, which determine his/her adjustment patterns. Psychopathology is also determined depending upon this interaction between personality and social situations (Eysenck & Eysenck, 1985). Though Eysenck (1997) suggested that link between personality, social situations and psychopathology should be thoroughly explored in childhood and adolescence, till date, it has been minimally explored. Hence, in the present study, the interaction among personality and perception of two important social situations in an adolescent’s life, i.e., Home and School were studied.

The family is the first to affect the individual. Family relationship may influence adolescent either directly or indirectly. Family also plays a crucial role in the development of psychopathology in children and adolescents. Like the home environment, school environment too begins to exert an influence on the adolescents’ social, emotional and behavioural development. This influence comes largely from the social relationships with teachers and classmates. Studies concerning perceptions of home environment and/or school environment and their relationships to psychopathology in adolescents are minimal. Perceptions of home environment and school environment and their relationship to behavioural and conduct problems have been reported in Western context (Resnick et al., 1997). Das & Basu (2003/2006) showed the perception of home environment and school environment differ significantly between different clinical groups and normals. Personality factors of adolescents were not considered in any of these studies. Very few studies have been conducted, especially in Indian context, on relating adolescents’ personality and psychopathology (Florence, 1983; Daniel, 1989; Uma, 1988).

A major group of disorders are subsumed under the heading of internalizing and externalizing syndromes (Achenbach & Edelbrock, 1978). Internalizing disorders are characterized by subjective distress in the child. Disorders of emotion are characterized by feelings of inferiority, self-consciousness, social withdrawal, shyness, anxiety, crying, hypersensitivity, depression and sadness (Quay, 1979). Behaviours included under the externalizing syndromes are conduct disorders, juvenile delinquency, hyperactivity and those
problems which are primarily reflected in conflict with the environment. Problems, which are commonly listed under these categories, are aggressiveness, temper tantrums, lying, stealing, truancy and other problems, which are distressing to those around.

The present study attempts to investigate different dimension of personality (P, E, N, L) perceived home environment (Control, Protectiveness, Punishment, Conformity, Social isolation, Reward, Deprivation of privileges, Nurturance, Rejection and Permissiveness), and school environment (Creative stimulation, Cognitive encouragement, Permissiveness, Acceptance, Rejection and Control) among two clinical groups (internalizing disorder and externalizing disorders) and normals. At the same time, the study attempts to discern the relative contribution of personality dimensions, adolescents' perception of home environment and school environment on the development of psychopathology (as assessed by different problem scales like Emotional symptoms, Conduct problems, Hyperactivity-inattention, Peer problems and Total Difficulty Score) in internalizing and externalizing disorders.

The study also attempts to determine the relative contribution of different personality dimensions, perceived home environment and perceived school environment on the development of prosocial behaviour in different clinical groups and normals.

The sample consists of one group of normal subject and two groups of clinical subjects. The normal group consists of 100 adolescents including 50 boys and 50 girls. They were screened by Child Behaviour Checklist or CBQ (Performa –B). All the subjects of normal group were selected from different schools in Kolkata and on the basis of certain inclusion and exclusion criteria.

One clinical group was consisted of 60 adolescents with Internalizing disorders and another group was consisted of 60 adolescents with Externalizing disorders. Each group consisted of equal number of males and females. Diagnoses were confirmed by two mental health professionals. All the subjects of clinical group were selected from different Child and Adolescent Guidance clinics of Kolkata.
Each of the subjects was individually administered Personal Information Schedule, English version of Junior Eysenck's Personality Questionnaire or JEPQ (Eysenck, 1975), Home Environment Inventory or HEI (Misra, 1981), School Environment Inventory or SEI (Misra, 2002) and Strength and Difficulties Questionnaire or SDQ (Godman, 1997).

Two-way analysis of variances (ANOVA) (Guilford and Fruchter, 1981) were done to determine whether different dimensions of personality, different dimensions of home environment and different dimensions of school environment differ among normals and 2 clinical groups, between sex and by interaction of sex and groups. In the cases, where difference were found to be significant, t tests were done to find out whether significant differences exist between the 2 groups.

Further Stepwise Multiple Regression Analyses were done to find out relative importance of different dimensions of personality, different dimensions of home environment and different dimensions of school environment on the different indices of psychopathology (as assessed by different problem scales like, Emotional, Conduct, Hyperactivity and Peer problem), Total Difficulty Score (TDS) and Prosocial Behaviours in different clinical groups, viz., internalizing disorders and externalizing disorders.

Results showed significant differences in all dimensions of personality, perceived home environment and perceived school environment among different clinical groups (Internalizing disorders and externalizing disorders) and normals.

6.2 Conclusions:
Keeping in mind the objectives (stated in chapter I) the conclusions of the study are presented.

1. Different dimensions of personality [Psychoticism (P), Extraversion (E), Neuroticism (N) & Lie (L)] differ significantly among normals and 2 clinical groups, viz., internalizing disorders and externalizing disorders.
2. Different dimensions of personality (P, E, N, L) do not differ significantly between the sexes.

3. Different dimensions of personality (P, E, N, L) do not differ significantly as a function of interaction of type of group and sex.

4. Different dimensions of home environment (Control, Protectiveness, Punishment, Conformity, Social isolation, Reward, Deprivation of privileges, Nurturance, Rejection, Permissiveness) differ significantly among normals and 2 clinical groups, viz., internalizing disorders and externalizing disorders.

5. Different dimensions of home environment do not differ significantly between the sexes except ‘Permissiveness’.

6. Different dimensions of home environment do not differ significantly as a function of interaction of type of group and sex except ‘Reward’ and ‘Permissiveness’.

7. Different dimensions of school environment (Creative stimulation, Cognitive encouragement, Permissiveness, Acceptance, Rejection, Control) differ significantly among normals and 2 clinical groups, viz., internalizing disorders and externalizing disorders.

8. Different dimensions of school environment do not differ significantly between the sexes.

9. Different dimensions of school environment do not differ significantly as a function of interaction of type of group and sex except ‘Acceptance’.

10. Different problem scales (Emotional, Conduct, Hyperactivity-inattention, Peer problems), Total difficulty score and Prosocial behaviour differ significantly among normals and 2 clinical groups, viz., internalizing disorders and externalizing disorders.

11. Different problem scales (Emotional, Conduct, Hyperactivity-inattention, Peer problems), Total difficulty score and Prosocial behaviour do not differ significantly between the sexes.
12 Different problem scales (Emotional, Conduct, Hyperactivity-inattention, Peer problems), Total difficulty score and Prosocial behaviour do not differ significantly as a function of interaction of type of group and sex.

13 ‘Neuroticism’ in personality dimension contributes positively to the ‘Emotional symptoms’ in internalizing disorder.

14. No predictor variables were found to be contributing to the ‘Conduct problems’.

15. ‘Protectiveness’ in home environment contributes negatively to the ‘Hyperactivity-inattention’ in internalizing disorders.

16. ‘Rejection’ in school environment contributes positively to the ‘Peer problems’ in internalizing disorders.

17. ‘Rejection’ in school environment and ‘Neuroticism’ in personality dimension contribute positively while ‘Protectiveness’ and ‘Social isolation’ in home environment contribute negatively to the ‘Total difficulty score’ in internalizing disorders.

18. ‘Punishment’ in home environment contributes positively to development of ‘Prosocial behaviour’ in internalizing disorders.

19. ‘Neuroticism’ in personality dimension and ‘Acceptance’ in school environment contribute positively to the ‘Emotional symptoms’ in externalizing disorder.

20. ‘Conformity’ in home environment contributes positively while ‘Lie’ in personality dimension contributes negatively to the ‘Conduct problems’ in externalizing disorders.

21. ‘Neuroticism’ in home environment contributes positively to the ‘Hyperactivity-inattention’ in externalizing disorders.

22. No predictor variables were found to be contributing to the ‘Peer problems’ in externalizing disorders.
23. 'Neuroticism' and 'Psychoticism' in personality dimensions contribute positively to the 'Total difficulty score' in externalizing disorders.

24. 'Psychoticism' in personality dimension contributes negatively while 'Rejection' in home environment contributes positively to development of 'Prosocial behaviour' in externalizing disorders.

25. In clinical groups altogether 'Neuroticism' and 'Lie' in personality dimension, 'Protectiveness' in home environment and 'Acceptance' in school environment contribute positively while 'Extraversion' in personality dimension and 'Punishment' in home environment contribute negatively to the 'Emotional symptoms'.

26. 'Extraversion' and 'Psychoticism' in personality dimensions and 'Rejection' in school environment contribute positively to the 'Conduct problems' in clinical groups altogether.

27. 'Protectiveness' in home environment contribute negatively while 'Deprivation of privileges' in home environment contribute positively to the 'Hyperactivity - inattention' in clinical group altogether.

28. No predictor variables were found to be contributing to the 'Peer problems' in clinical groups altogether.

29. 'Neuroticism' and 'Psychoticism' in personality dimension and 'Rejection' in school environment contribute positively to the 'Total difficulty score' in clinical groups altogether.

30. 'Psychoticism' in personality dimension contributes negatively while 'Rejection' in home environment contributes positively to development of 'Prosocial behaviour' in clinical groups altogether.

31. Neuroticism' in personality dimensions, contributes positively while 'Extraversion' in personality dimension contributes negatively to the 'Emotional symptoms' in normal group.
32. 'Lie' in personality dimension contributes negatively while 'Neuroticism' in personality dimensions contributes positively to the 'Conduct problems' in normals group.

33. 'Neuroticism' in personality dimension, 'Rejection' in both home and school environment, 'Punishment' in home environment contribute positively while 'Social isolation' and 'Deprivation of privileges' in home environment contribute negatively to the 'Hyperactivity- inattention' in normal group.

34. 'Extraversion' in personality dimension, 'Cognitive encouragement' in school environment, 'Permissiveness' in home environment contribute negatively while 'Neuroticism' in personality dimension and 'Creative stimulation' in school environment contribute positively to the 'Peer problems' in normal group.

35. 'Neuroticism' in personality dimension and 'Rejection' in home environment contribute positively while 'Cognitive encouragement' in home environment and 'Extraversion' in personality dimension contribute negatively to the 'Total difficulty score' in normal group.

36. 'Rejection' in school environment contributes negatively to development of 'Prosocial behaviour' in normal group.

6.3 **Limitations:**

1. Available literature suggests relationship between parental psychopathology and adolescents internalizing and externalizing disorders. However, parents' psychopathology was not considered in this study.

2. For assessing psychopathology, only self-rating questionnaire was used. Parents' or teachers' ratings were not included in this study. Use of parents' and teachers' ratings along with self-rating scale would have been more reliable than using only self-rating scales.
3. No co morbid diagnoses were included in this study. Findings might be different if others co morbid or mixed disorders (such as, Mixed disorder of conduct and emotion) were included.

4. The sample size was not very large.

6.4 Implications:

1. Psychodiagnostic:

The findings of this study might be helpful in psychodiagnostic, especially for adolescent population. Particularly the profiles of personality dimension (JEPQ) are helpful in predicting/diagnosing different internalizing and externalizing disorders. Standardized tools for assessing adolescents’ psychopathology are very scanty. The results in this study can be use for diagnostic purpose and reference for further studies. It might be helpful in case of the diagnostic confusion in adolescent psychiatry.

2. Clinical implication: Parental training/ Family intervention.

Evidences indicate found that the structured parent education programs can be effective in producing positive change in both parental perceptions and objective measures of children’s behaviour and these changes are maintained over time. Association between problems in parenting style and adolescents’ psychopathology is well known. Parental training and family intervention are considered as important components of treatment programme of adolescents’ mental health.

The results of this study may have implication for intervention in children/adolescents with internalizing /externalizing disorders. The findings might be used for preventive purpose as they suggests that adolescents are at high risk where their parents, teachers are perceived
as rejecting, depriving, less warm and accepting. Therapeutic or preventive interventions that focus on these parenting and teacher’s qualities should be beneficial for disturbed adolescents in clinical set up as well as in the community.

3. **Developing therapeutic strategies:**

The findings of the present study could be used in formulating psychotherapy for particular disorders. Therapeutic strategy might be different for different disorders. The findings of this study can give us some direction as to what sort of approach will be effective with what sort of problems. For example adolescents with more conduct problems or externalizing disorders needs more sensitization about their surroundings and social values/norms as they are found to be less sensitive and less conformist regarding the societal norms. The reverse may be true in adolescents with emotional symptoms or internalizing disorders. How they perceived different dimensions of home and school environment also gives us important clues as to what areas should be priorities/focused during therapy.

4. **Teacher training programme:-**

The symptomatic early and middle adolescent is far more likely to be found in school than in psychiatric clinics. School based programs that focus directly on adolescents have improved prosocial competence and reduced risk behaviour (Linthoi, 2000). In order to prevent the problems from further escalation, it is important to address the problems encountered by the adolescents. There is a mismatch between the need for and availability of mental health services in India that calls for the attention of secondary prevention. It is also important to sensitize /train the teachers about different mental health problems of adolescents and importance of healthy teacher-student interaction. The findings can be used for such teacher training programme.
5. Theoretical implications:-

The present findings support earlier findings by Eysenck (1967, 1971, 1976) and his theoretical propositions about roles of personality dimensions and their interaction with environmental factors in the development of psychopathology.

Finally one has to understand and accept the adolescent’s personality, their families, friends, teachers, neighbors as well as their thinking and interaction both at interpersonal as well as cognitive levels. The current study gives us some understanding about adolescents’ personality and how they perceive their families and schools. A correct appraisal of these may help one to make a right management plan and to make them grow-up to face real challenges of life.

6.5 Further Scope of the Study:

1. This study includes two major clinical groups, internalizing and externalizing disorders. The broad band diagnoses of emotional and behavioral diagnosis were used. Different disorders (like anxiety disorder, obsessive compulsive disorder, depression in internalizing disorders and conduct disorder, oppositional defiant disorder and attention deficit hyperactivity disorder in externalizing disorders) can be studied separately and in depth. Some internalizing disorders like somatization, conversion disorders were not included in this study. Further study may include these categories.

2. In the present study personality dimensions, home environment and school environment are treated equally as predictor variables. Further study can be designed to see whether personality dimensions moderate the effect of perceived home and school environment.
3. **Psychotherapy research**; - Studies can be conducted on therapists’ approach in psychotherapy in particular clinical group (e.g. to sensitize the adolescents about the societal norms in externalizing disorders/ conduct disorders, as they are less sensitive and less conformist than others). This would be helpful in psychotherapy process research which shows concomitant change in psychopathology.

5. Future research may include few more variables like parents’ personality, psychopathology, adolescents’ life events, academic stress and their effects on development of psychopathology as well as on prosocial behaviour.