CHAPTER II

REVIEW OF LITERATURE

2.0 INTRODUCTION

The present chapter gives a brief review of some significant studies in the field of conduct disorders. Literature during nineteenth century in both psychiatry and special education is richer and enlightened regarding the behaviour disorders of students even though intervention was not given much importance (Despert, 1965; Kanner, 1962; Rubenstein, 1948). Similarly much discussion was conducted in the twentieth century also even though issues were present regarding definition, identification and placement of students with behaviour disorders. This is indicated by the prevalence of students with behaviour disorders. It is high and came up to 16% to 40% (Spivack, Swift and Premitt, 1971). But studies related to conduct disorders was less in the initial years of twentieth century. This is because of the confusion aroused in the labeling of students with behaviour disorders. This problem remained unsolved until Quay (1979) reported that the two broad dimensions under behaviour disorders is conduct disorders and personal problem and enumerated the characteristics. Compared to the enormous studies in personality problem like anxiety, depression, somatic complaints, etc. Studies related to conduct disorders is less and that too very less in Indian context. A brief review related to different studies of conduct disorders are given below. This section is divided into seven subsections. It includes:
2.1 Studies related to identification and assessment of conduct disorders.

2.2 Studies related to the factors affecting conduct disorders.

2.3 Studies related to associated characteristics of conduct disorders.

2.4 Studies related to the incidence of conduct disorders.

2.5 Studies related to the specific areas of problems of conduct disorders.

2.6 Studies related to interventions of students with conduct disorders.

2.7 Studies related to conduct disorders in India.

Review of literature relating to identification includes tools, criteria for identification, comprehensive assessment, etc. Studies related to factors include neurobiological factors, child factors, family factors, school factors and sociocultural factors. Associated characteristics of conduct disorders are reviewed in terms of verbal deficits, learning problems, peer problems and substance abuse. Studies related to the incidence of conduct disorder include the incidence rates at various places including India. Studies related to specific problem areas of conduct disorders include studies related to aggressiveness, self concept deficits, social skill deficits and problem solving deficits. The details are discussed in the succeeding sections.

2.1 STUDIES RELATED TO THE IDENTIFICATION AND ASSESSMENT OF CONDUCT DISORDERS

Attempts were made to identify students with conduct disorders and different assessment methods were used.

(a) Emphasis on Comprehensive Assessment

Waddel and others (1999) suggested that as conduct disorder is a complex mental health problem affecting multiple domains of functioning. Suspicion of conduct disorders in a student requires a comprehensive assessment that encompasses
the student, family, school, peers and community using interviews, checklists and rating scales.

Benton-Hardy and Steiner (1997) supports the view of Waddell and suggested that different sources of information like student, parents, schools, peers, other family members, social welfare and other relevant persons related to the student should be considered during assessment.

The effectiveness of comprehensive assessment is again emphasized by McConaughy and Ritter (2002). According to their study on 60 subjects with conduct disorders using various source of information they found out that students’s behaviour often varies from setting to setting and so information should be obtained from a variety of sources like family members, teachers and other school personnel, social service workers, community treatment providers, school records, medical records or other relevant records.

(b) Stress on direct and indirect methods of assessment

Identification of students with conduct disorders can be done using either direct or indirect methods. Knoster and McCurdy (2002) studied on a sample of 150 students of age 10-15 years reported that for the identification, direct methods like behaviour observation, standardised self reports from a student, curriculum based assessment and analysis of work samples should be used. They also advocated the use of functional behaviour assessment procedures to gather information about the child’s behaviour in relationship to the instructional and social environment.

Quay and Peterson (1987) suggested after conducting a study on various student population using behaviour problem checklist and other tools that, in addition
to direct methods, indirect methods like behaviour checklists, structured interviews, rating scales and other assessment techniques should also be used for the proper identification of students with conduct disorders. They also emphasised that assessments that are specific to one emotional or behavioural dimension should not be used in isolation, but should be part of a more comprehensive assessment of multiple emotional and behavioural domains.

According to Frick (1998) the goal of assessment in conduct disorders is to get a better view of the student and adolescent’s psychosocial strengths and needs. He studied on the effectiveness of various assessment techniques for students with conduct disorders. He advocated the use of behaviour rating scale which assess child’s emotional and behavioural functioning as well as the continual factor that contributes to conduct disorders, along with the clinical interviews to assess the duration, age of onset and degree of impairment with regard to students with conduct disorders. This is assisted with behavioural observations through which student’s behaviour can be observed within the environmental context without having to filter it through the informant’s perception.

Above studies revealed some of the methods or techniques for identifying student with conduct disorders.

McConaughy and Ritter (2002) and Merrell and Walker (2002) opined that whatever method we use, the results of the assessment should provide working hypotheses about a child’s behavioural and emotional functioning, developmental history, areas of significant impairment in school (academic achievement, adaptive
behaviour, social skills and interpersonal relationships) and impairment outside the school (vocational skills and function within the community).

(c) Criteria for assessment

Researches by Nelson (1971) and Glavin (1972) conducted a study on students with conduct disorders have shown that identification of conduct disorders is not alone sufficient for the proper categorisation of students with conduct disorders as it determine whether the student has conduct disorders and type of conduct disorders. However appropriate diagnosis of the specific areas of conduct disorder is also required. For the diagnosis, the criteria mentioned under DSM-IV, TR (APA, 2000) should be used. A diagnosis of conduct disorders is made when DSM-IV-TR (APA, 2000) target symptoms are present and other disorders have been eliminated. Also DSM-IV-TR does not consider one specific criterion alone for diagnosis but a combination of three or more criteria, i.e. conduct disorders is a polythetic diagnosis category. It distinguishes between childhood onset and adolescent-onset conduct disorders and conduct problems as mild, moderate and severe (Students’s Mental Health, Ontario, May 31, 2001). Ramaa and Gowramma (2002) used DSM-IV criteria for diagnosis, but categorisation of conduct disorder and conduct problems were not done.

Research done by Algozzine and Sherry (1981) gives evidence for the notion that traditional assessments were done using psychological tests and interviews. Later it is found out, one-time measures are not sufficient for planning intervention as it do not assess how the student typically acts over a period of time. So Kauffman (1977) from his comparative study of 96 adolescents having conduct disorders and normal
peers suggests to use direct and continuous measurement of behaviour of students with conduct disorders which gives more reliable data.

Gerry (1984) revealed certain criteria for assessing the students with conduct disorders. They are:

1. the determination that there is presence of a condition described as conduct disorder.
2. that the said condition has an adverse effect on education.
3. that special education and related services are needed.

So, it is evident that identification and assessment should be given more importance to the modern approach of identification of students with conduct disorders, so as to develop appropriate interventions for them (Radolph and Epstein, 2000).

(d) Studies related to identification of students with conduct disorders in India

In the Indian context, the students with conduct disorders are rarely identified in schools. Teachers are ignorant of the existence of such students in the normal classrooms. Even though they observe the rule violating behaviour or continuous physical aggressions, teachers are not ready to consider those students with some disorder in behaviour. The researchers identified students with conduct disorders in normal schools, keeping in mind the possible reasons for conduct disorders, with the help of criteria mentioned in Diagnostic Statistical Manual-IV (American Psychiatric Association, 1994), using student behaviour checklists (CBCL), Rutter’s Students’s Behaviour Questionnaire for teachers, Reporting Questionnaire for Students, Teacher Report Form and Youth Self Report by Achenbach and coworkers and Goldberg
Health Questionnaire (Kapur, 1997). Using these tools, Kapur (1997) studied on 110 students with conduct disorders identified behaviours and categorized under externalized and internalised disorder without giving emphasis to the term conduct disorders. However, Ramaa S. and Gowramma I.P. (2002) used student behaviour checklist for teachers and development psychopathology checklist for students during the phenomenological study of conduct disorders in elementary school students in Mysore district for identifying students with conduct disorder.

2.2 STUDIES RELATED TO FACTORS AFFECTING CONDUCT DISORDERS

Evidence from research into factors affecting conduct disorders, indicates that several factors may contribute to the development of conduct disorder.

Neurobiological factors

Bostow and Bailey (1969) from their study of juvenile offenders reported that little studies have been conducted to find out the influence of neurobiological factors on conduct disorder. Researches conducted in the field of ADHD have shown that, it often coexists with conduct disorder. It was observed that in some students with conduct disorders, a low level of plasma dopamine β-hydroxylase, an enzyme that converts dopamine to norepinephrine has been found. This finding supports a theory of decreased noradrenergic functioning in conduct disorder. Few studies have shown that some conduct disordered juvenile offenders have increased blood serotonin. Evidence indicates that blood serotonin level correlates negatively with levels of 5-HT metabolite 5-hydroxyindoleuretic acid in the cerebrospinal fluid. Therefore
increased blood serotonin results in low cerebrospinal fluid 5-HIAA which results in aggression and violence.

**CHILD FACTORS**

1. **Temperament**

Child temperamental attributes appear linked to the development of behavioural problems. (Thomas and Chess, 1977; Thomas, Birch and Chess, 1968) Three distinct groups were identified on the basis of the study conducted by Thomas and Chess (1977) on a group of 130 students with behaviour problems using behaviour problem checklists direct observation and teacher rating. They are easy, difficult and slow to warm up children. Herbert (1978) noticed that each temperamental group exhibits a particular behavioural style which interacts with the surrounding environment. A conflict or mismatch between parent’s temperament with that of a child’s can lead to continued discord and tension. On the other hand, recent study conducted by Maziade et al. (1989) on 63 students with conduct disorders have shown that with favourable family conditions, extreme difficult infant temperament is not likely to increase the risk of serious behaviour problems. Generally, the findings on temperament concur with Thomas and Chess (1977) when they argue that no one temperamental pattern guarantees that a behaviour disorder will not develop.

2. **Cognitive and Social Skill Deficits**

Studies have shown that student with conduct disorders is more often than not attempting to resolve a problem through poor behaviour, though methods or techniques may be crude and the perception of problem faulty. Milich and Dodge (1984) analysed the factors affecting conduct disorders by studying a group of 150
students with conduct disorders suggested that this is because social cues during peer interactions are perceived incorrectly and hostile intent attributed to innocuous situations.

Studies that supports this view that students with conduct disorders have cognitive and social skill deficit is discussed.

Dodge and Newman (1981) observed a group of students with behaviour problems using checklists noticed that students displaying aggressive behaviour problems seek fewer clues when making sense of a person’s behaviour instead they focus on and respond more to aggressive triggers (Goutz, 1981), leading to inappropriate violent response. Asamow and Callan (1985) studied the problem solving skill of students with conduct disorders suggested that another reason for poor peer interaction is deficits on problem solving skills. According to them due to this deficit, problems may be defined in a hostile fashion, enough information will not be gathered to generate effective solutions and the full consequences of aggression are not taken into consideration (Slaby and Gherra, 1988; Richard and Dodge, 1982; Webster-Stratton and Dabl, 1995). In addition Feshbach (1989) studied the social values of students with conduct disorders found out that there is a lack of empathy with the other person’s views and feelings. But it is still unclear though whether this poor filtering or processing of social information is more attributable to negative interactions with parents, carers, peers or teachers, rather than organic factors.

3. Academic Difficulties

Kazdin (1987) studied the academic achievement of students with conduct disorders using an achievement test, teacher reference and school records found out
that students with conduct disorders exhibit low academic achievement throughout their school career, in particular reading difficulties (Sturge, 1982). Rutter et al. (1976) found a 28 month delay among 82 students with conduct disorders in reading skills. The relationship between poor academic performance and conduct disorders is complicated as it appears to be bi-directional. Hence it is not clear whether disruptive behaviour problems precede or follow the academic difficulties, language delay or neuro-psychological deficits. But few researchers like Schonfield et al. (1988) suggested that cognitive and linguistic problems may precede conduct problems on the basis of the study conducted by them on the cognitive abilities and linguistic abilities of students with conduct disorders.

4. Heredity Versus Social Environment

Longitudinal studies by Kazdin (1987) indicate a link between conduct disorders and different generations and there is some evidence to suggest a genetic contribution. Kazdin (1987) noted from historic studies that twins have demonstrated a greater concordance of antisocial behaviour among monozygotic than among dizygotic twins. Adoption research has shown that a student separated from parents who exhibit deviant behaviour is at greater risk of developing similar behaviour patterns (Kazdin, 1987). However genetic factors alone do not provide an adequate explanation for the onset of conduct disorder. Rather the study conducted by Cadoret and Cain (1981) in a clinical setting reinforces the view that it is interplay between genetic and environmental factors, which include negative home condition, poor family problem solving and ineffectual coping strategies (Cadoret and Cain, 1981).
5. Gender Differences

Rutter (1975) studied the development of conduct disorders with respect to sex by analysing 144 samples, 72 boys and equal number of girls noticed that gender differences and the development and persistence of student conduct disorder appears significant. Patterson (1975) suggested that boys were more likely than girls to develop aggressive behaviours, problems and unchecked they were likely to become more serious. Another study by Greham et al. (1982) on a group of 400 students revealed that 73% of preschool boys with behaviour problems had similar difficulties at age 8 compared to only 47% of girls. Yet Zoccolillo and Rogers (1991) studied the students with conduct disorders among adolescent boys and girls pointed out that adolescent girls also exhibited conduct disorder along with boys like dropping out of school, threatening in the family, etc.

SCHOOL FACTORS

1. Student Interactions

Students with conduct disorders experience different type of interactions in schools, which further shape and reinforce difficulties. Research done by Ladd (1990) analysing the characteristic of students with conduct disorders on a sample of 72 students with conduct disorders indicated that aggression and other disruptive behaviours leads to rejection by peers, sometimes lasting for a student’s school career. It will be more serious when peers becomes increasingly mistrustful and respond in such a way as to greater the possibility of an aggressive response (Dodge and Somberg, 1987). Dodge (1987) studied a group of 180 students with conduct disorders in the school context through direct observation clearly identified that
students with conduct disorders receives less positive attention, encouragement and support, but more disciplinary action in schools as he is labeled as ‘trouble maker’ in schools because of the behaviour problem.

2. Interaction between Home and School

Brofenbrenner (1979) analysed the relationship between teachers and parents of students with conduct disorders in normal schools found out that historical relationship between a family and school has an impact on learning experiences. Researches give evidence for the notion that student’s bonding to both family and school as well as family’s bonding to student and school can act as critical factors in the prevention of deviant behaviour. Studies conducted by Frick (1991) on the parents of students with conduct disorders noticed that the experiences, parents of students with conduct disorders have with their student’s teachers is mostly aversive. Such encounters reinforce an already existing parental helplessness which mitigates against effective problem solving further driving a wedge between home and education. Thus researchers like Klein and Mannuzza (1981) in their study to find out the interaction between parents and teachers of students with conduct disorders and their effect on students with conduct disorders came to the conclusion that a spiraling pattern of poor behaviour, parent demoralisation and withdrawal and teacher reactivity can ultimately lead to total lack of coordination in the joint socialisation of the student.

Recent researches by Coie et al. on 25 teachers of students of conduct disorders proved that teachers reported that parents of students with conduct disorders showed less interest in getting to know them. Thus positive long-standing bond leads
to flourishing of the students as they feel that parents are more involved and supportive (Hawkins and Weiss, 1985).

**FAMILY FACTORS**

**1. Parenting Skill Deficits**

Study conducted by Patterson (1982) on the parenting skill deficits of students with conduct disorders have made it clear that parenting style and the effectiveness of learned student management skills plays a vital role in what a student learns. Researchers found that lack of parenting skills lead to lack of self confidence and self efficacy, which makes them to lose their temper and resort more readily to physical punishment, erratic and inconsistent, to have difficulties tracking and monitoring students’s behaviour and more likely to reinforce poor behaviour (Sansbury and Wahler, 1992; Webster-Stratton, 1985, 1992; Patterson and Stouthamer-Loeber, 1984).

Gardmir (1987) studied 56 students with conduct disorders of pre-schools found that pre-schoolers with conduct problems spent less time in cooperative, joint activities and in conversation with their mothers.

Research conducted by Gambrill (1983) among 44 non-complaint students with conduct disorders supports the above view, that parents of such students give vague, frequent and negative commands. They are delivered in a threatening, angry, humiliating and nagging manner and interrupt in between when the student takes time to comply (Patterson, 1982; Forehand et al., 1979; Delfini, Bernal and Rosen, 1976).

Minuchin (1974) from his study related to the relationship of parents of students with conduct disorders by collecting data from 120 parents of students with conduct
disorders noticed that interparental conflicts set an example i.e. students try to imitate the behaviour of parents thus resulting in conduct disorder.

2. Interparental Relations

Family characteristics appear to have an impact on the development and maintenance of conduct disorders. Kazdin (1987) in his study to find out the family related factors of conduct disorders through interviews and study in family histories observed that conflict between parents prior to and surrounding a divorce is associated with but not a strong predictor of student behaviour problems.

Similarly research by O’Leary and Emery (1982) studied 82 families having students with conduct disorders has indicated that it is not divorce, but the level and intensity of parental conflict and violence that vitally determines the students’s behaviour. Also if aggression is not present in marital conflict, there is less likelihood of conduct problems developing (Jouriles, Murphy and O’Leary, 1989). In addition, Stonemen, Brody and Burhe (1988) studied 110 families containing students with conduct disorders noticed that the marital conflict has been seemed to be associated with negative perceptions of a student’s adjustment, inconsistent handling, an increase in punitiveness, decreased reasoning and fewer rewards being used.

Frick et al. (1989) in his study of finding the relationship between parents of students with conduct disorders suggested that looking at the association between marital distress and student conduct disorders found that the quality of psychological adjustment and marital satisfaction, significantly impacted on the quality of parent-student interaction.
Sociocultural Factors

Research studies by Walker and Severson (1990) on the effect of socio-economic status on students with conduct disorders it is seen that students from socioeconomically deprived families are at higher risk for the development of conduct disorder. Unemployment among parents, lack of supportive social network, and lack of positive participation in community activities seem to predict conduct disorder. Researchers made it clear that substance use at increased rates in urban areas lead to conduct disorders.

2.3 STUDIES RELATED TO ASSOCIATED CHARACTERISTICS OF CONDUCT DISORDERS

Studies conducted by Kazdin (1977) to study the factors contributing to conduct disorders suggested that before planning and implementing an intervention programme, the implementer should be thorough with the factors contributing to a particular disorder. In addition to the common said factors, there are other associated characteristics which also should be taken into consideration while planning for remediation. This section gives an idea about the associated characteristics of conduct disorder, that co-occur with conduct problems, that increase the likelihood of conduct problems and still others are the result of conduct problems.

Hogan (1999), Moffitt and Silva (1988) studied the IQ of 100 students with conduct disorders using Weschler’s Intelligence Scale noticed that although most students with conduct problems have normal intelligence, they score many points lower than their peers on IQ tests. This IQ deficit may be even greater for students
with early-onset conduct disorders and cannot be accounted for solely by socio-economic disadvantage or race (Lynam, Moffitt and Stouthamer-Loeber, 1993).

Toupin, Pery, Pauze, Mercier and Fortin (2000) in their study which attempted to find out the deficits in students with conduct disorders using clinical interviews and consultation with parents and teachers found out that students with conduct disorders fail to inhibit their impulsive behaviour, keep social values or future rewards in mind or adapt their actions to changing circumstances. This pattern suggests deficits in cognitive functions.

**Verbal Deficits**

Findings of Spettz, Deklyen, Calderon, Greenberg and Fisher (1999) from the study of 156 students with conduct disorders on both verbal and performance IQ tests found out that verbal IQ is consistently lower than performance IQ in students with conduct disorders suggests a specific and pervasive deficit in language. This deficit may affect the student’s receptive listening and reading, expressive speech and writing, problem solving and memory for verbal material.

The relationship between conduct disorders and verbal deficit is bi-directional. So reverse is also true. (Caspi and Moffitt, 1995; Hastings et al. (2000) noticed in group of students with conduct disorders that verbal and language deficits may contribute to antisocial behaviour by interfering with the development of self control or the labelling of emotions in others which may lead to a lack of empathy.

This is supported by Moffitt (1990) who studied 286 sample of students of conduct disorders in both school and family contexts using direct observation reported that students with both verbal impairments and family adversity display four
times as much aggressive behaviour as those with only one factor or the other. Thus verbal deficits may increase student’s vulnerability to the effects of hostile family environment.

Research conducted by Spetz (1999) on the study of 156 students with conduct disorders found that student’s deficits in verbal ability may make it more difficult for parents to understand their student’s needs, leading to parent’s frustration, fewer positive interactions, more punishment and greater difficulties in teaching social skills.

**Learning Problems/Academic Achievement**

Hinshaw and Anderson (1996) noted that in their study of 310 youngsters with conduct disorder, using teacher reference they display high rates of academic underachievement, grade retention, school dropout, suspension and expulsion. They also found that the strong link between learning problems and antisocial behaviour has led to the suggestion that reading-related school failure might be the cause of antisocial behaviour.

This is supported by the research conducted by Maughan, Pickles, Hagell, Rutter and Yule (1996) who studied on a group of 346 school going students by analysing school records found that increased risks of juvenile offending among boys referred for reading difficulties appear to be related to poor school attendance rather than to their reading difficulties alone.

But Maughan, Gray and Rutter (1985) observed in their study that although the frustration and demoralisation associated with school failure can lead to antisocial
behaviour, there is little evidence that academic failure is the primary cause of antisocial behaviour.

Moffitt (1993) in his study of reading and writing of 96 students with conduct disorders, using standardised achievement tests, reading comprehension tests noted that students with conduct disorders are especially likely to experience academic underachievement in language and reading.

Frick et al. (1991) and Hinsbaw (1992) studied to find any other associated causes of students with conduct disorders on a sample of 160 students using achievement tests and behaviour problem checklist found out some mediating factor in between conduct disorder and academic achievement. According to them when ADHD is not present, students with conduct disorder are no more likely to underachieve than other students. Thus conduct disorder is related to academic underachievement and ADHD is a crucial mediating factor.

Thus youngsters with poor academic skills are increasingly, likely to lose interest in school and so they try to associate with delinquent peers. By adolescence, the relationship between antisocial behaviour and underachievement is firmly established.

Peer Problems

Miller and Olson (2000) studied a sample of 210 students using behaviour rating scale and teacher rating scale noticed that young students with conduct problems display verbal and physical aggression towards other students and exhibits poor social skills. As they grow older, most are rejected by their peers, although some
may be quite popular (Rodkin, Farmer, Van Acher and Van Acher, 2000). This is because as soon as they enter the school, they try to bully or tease others.

But studies conducted by Dodge (1985) on different categories of students of conduct disorders reported that students with conduct problems do make friends especially among their gang. Unfortunately their friendships are often based on a mutual attraction of like minded antisocial individuals (Poulin, Dishion and Haas, 1999; Vitaro, Brendgen and Tremblay, 2000). Moffitt, 1993; Patterson and Dishion, (1985) observed in their study of students of conduct disorders in a continuous fashion that combination of early antisocial behaviour and associating with deviant peers is the single most powerful predictor of conduct problems during adolescence.

Patterson (1996) form his study of characterization of students with conduct disorders adds to the above view suggesting that involvement with antisocial peers becomes increasingly stable during childhood and supports the transition to adolescent criminal acts such as stealing, truancy or substance abuse. Involvement with deviant peers also predicts accelerated autonomy and early sexual activity in adolescence (Dishion, Haas and Poulin, 1997).

**Substance Abuse**

Gilvarry (2000) in a research in the field of substance abuse among adolescents have revealed a fact that illicit drug use among 12 to 17 years old more than doubled from 1992 to 1995 in the US and Europe with substantial increase in the use of LSD and other hallucinogens, cigarettes and alcohol. Adolescent substance abuse is related to a number of immediate dangers such as accidents, violence, school dropout, family difficulties and risky sexual behaviour (Gilvarry, 2000). But
Weinberg et al. (1998) in his study of 71 delinquents using structured interviews of questionnaires proved that drug use is also related to delinquency and early sexual behaviour. This is supported by O’Malley et al. (1999) in their study on adolescent multiple drug users noticed that they commit more than half of all assaults, thefts and offenses.

2.4 STUDIES RELATED TO THE INCIDENCE OF CONDUCT DISORDERS

Atkinson and Hornby (2002) reported the following on their epidemiological studies. Conduct disorder is the most frequently occurring of mental disorders affecting students and adolescents.

The incidence of conduct disorder ranges from 6 to 16 percent in boys and from 2 to 9 percent in girls (American Psychiatric Association, 1994).

But Hinshaw and Anderson (1996) and Kazdin (1995) observed that early persistent and severe patterns of antisocial conduct only occur in about 20 students out of 100 students studied by using checklists and rating scales.

Earls (1994) by studying a group of students and adolescents through a longitudinal approach proposed that in childhood, conduct disorder is three or four times more common in boys, although this difference decreases by adolescence.

A survey conducted by Richards, Berk and Forster (1979) on sixth grade students in a middle class suburb revealed that 26 percent out of 115 sample had committed minor shoplifting, 22 percent had defaced property and 45 percent had fought with another student.

Offord, Boyle et al. (1987) reported that in a population based study of more than 2500 students in Ontario, Canada, it was found that 8 per cent of boys and about
three percent of girls aged four to sixteen met the DSM-IV criteria for conduct disorder.

A representative survey by Brener, Simon, Krug and Lowry (1999) of US high school students from 30 schools of different status using teacher rating scale found out that 36 percent reported being in a physical fight in the past year and 26 percent reported carrying a weapon in the last month.

Counell, Irvine and Rodney (1982) reported 6.7 percent conduct disorders in 10 to 11 years old among 230 students.

Crowther, Bond and Rolf (1981) reported that 18 percent had moderate and only 7 percent had aggression of high severity and marked aggressiveness in childhood among 350 students of normal school and is found to be reasonably overtime and is related to later delinquency.

In the Indian context John (1980) and Parvathavardhini (1983) reported that prevalence of conduct disorder is increasing in certain age groups five to ten years old. Studies by Kapur (1985), Rozario (1988) and Daniel (1989) for eight to sixteen years old showed peaking of disturbance at certain points. John (1980) reported rate of conduct disturbance as 3.06 percent among 300 samples whereas Parvathavardhini (1983) found a prevalence rate of 10.6 for psychiatric disturbance and 30.3 percent being conduct disorder from urban areas.
2.5 STUDIES RELATED TO SPECIFIC AREAS OF PROBLEMS OF CONDUCT DISORDERS

Studies Related to Aggressiveness

DSM-IV criteria by American Psychiatric Association (1994) indicates that students or adolescents with conduct disorder often initiate aggressive behaviour towards other people and animals or react aggressively to others (Atkinson and Hornby, 2002).

Sommers Flanagan and Sommers-Flanagan (1998) in their study of 150 students with conduct disorders to find out the characteristics of them observed that students with conduct disorder are rejected by the peers as they exhibit problem behaviours such as bullying, threatening, initiating physical fights due to aggression.

Richman, Stevenson and Graham (1982) studied on a group of 60 samples of age 7 to 16 years on a continuous approach found that students who displayed externalising problem at younger ages were still aggressive when they grows. This indicates that aggression is relatively stable over time.

A number of researches indicate that aggressiveness is prime component of conduct disorder, which results in violence and other physical fights (Grosenick, George and Lewis, 1991; Kaufman, Lloyd, Baher and Reidel, 1995).

Dodge and Feldman (1990) studied about the social interaction and behaviour of students with conduct disorders at school and outside, found out that students with conduct disorders are aggressive as they are deficient in their ability to read social cues in their environment.
External influence on aggression of students with conduct disorders were thoroughly studied by Liebert and Sprafkin (1988). Their study through the direct observation of students with conduct disorders at various contexts clearly indicate that viewing aggressive models on TV or film increase the aggressive behaviour. Students with conduct disorders tend to act more aggressive in their behaviour and choose aggressive solutions to social problems, immediately after watching violent shows on TV. This was supported by teacher ratings also.

A group of researchers Rosenberg, Wilson, Maheady, Sindelar, Misra and Misra (2004) studied about the symptoms of conduct disorder by analysing a sample of 110 students with conduct disorders using direct and indirect methods of assessment identified that the high incidence behaviours in a student with conduct disorders are aggressiveness, rule breaking, delinquent acts, antagonistic attitudes towards authority, etc. among which the most common behaviour is aggressiveness.

Research conducted by Cullinan and Epstein (1982) studied a group of students with conduct disorders of 7 to 12 years of age in both school and family context using teacher ratings, direct observation and interviews have pointed out that students with conduct disorders who illustrates highly aggressive behaviour are likely to portray a poor academic performance and drop out of the school more frequently.

Thus most of the studies related to the externalised disorders especially conduct disorders indicate that one of the most vital symptom exhibited by students with conduct disorder is aggressiveness.
Studies Related to Social Skill Deficits

Fausset (2003) reported that a study conducted by Rubin Coplan, Fox and Calkins (1995) on the deficits of students with conduct disorders observed that a student with externalised disorders interact with others in a negative manner, thus losing the chance of becoming socialised, learning socially accepted behaviour and being accepted by others. This reflects the social skill deficits of students with conduct disorders.

This is further supported by Johnson and Kirk (1950), Heber (1956), Baldwin (1958) who suggested that students with conduct disorders, in need of educational assistance would fail in the social arena of schooling because of their inability to interact in an acceptable manner. Usually their social behaviour often leads those with whom they interact socially to respond initially with discomfort, anger or avoidance and eventually with rejection (Shores and Wehby, 1999). Ongoing peer rejection may lead to adverse social, academic and mental health consequences short term outcomes of unsatisfying peer relationships include increased aggression, antisocial behaviour, truancy, low academic achievement and dropping out of school (Kupersmidt et al., 1995; Walker et al., 1995). Possible longer term outcomes include depression, unsatisfactory employment experiences, criminality and poor marital success. In general those with poor relationship skills are more likely to have less satisfactory, less independent, less successful and unhappier lives (Blackorby and Wagner, 1996).

Miller Johnson et al. in their study of 115 students with conduct disorders has an adverse impact on their development of friendships. They make friends initially, but often lack the skills needed to keep them. Lack of satisfying friendship
experiences not only leads to a decreased frequency of positive social interactions, but also to lower levels of academic task completion (Newcomb and Bagwell, 1995). Lack of opportunities to engage in ongoing friendship behaviours also has implications for student’s sociomoral development (Schonert-Reichl, 1993). The social difficulties faced by students with conduct disorders is due to the deficits in their social information processing awareness or interpretation of social cues – they over estimate their own social competence and misattribute hostile intent to others (Webster-Stratton and Lindsay, 2000).

All the above studies give a clear social picture of a student with conduct disorders, who is characterised by lack of cooperative behaviour and hence exhibits aggression and domination. This social ineptitude can contribute to various other kinds of serious disorders. So in the light of these findings, one recognises the urgent need of including social skills training to the intervention package for students with conduct disorders.

Studies Related to Deficits in Self Concept

Gregory (1994) reported that Carl Rogers established the self concept theory defining self concept as “a result of an individual’s interaction with his/her environment . . . incorporating values of others . . . striving for consistency . . . a result of maturation and learning. If all the above conditions are negative it may lead to negative self concept characterised by feelings of inferiority, difficulty in forming meaningful relationships, eagerly conforming to social pressures and expectations and possessing pessimistic views of abilities and behaviours (Coopersmith, 1967).
Gregory (1994) studied the self concept of 192 students with conduct disorders and found that they are significantly lower than non-disabled peers. This view is supported by Baumeister, Smart and Boden (1996) who studied the self concept of 80 students with conduct disorders and their peers pointed out that if students with conduct disorders perceives any threat to their biased view of self, it may lead to violence, which provides a way to avoid a lowering of self concept.

But some of the researchers noticed that although students with conduct disorders may have low self concept, there is little support for the view that low self concept is the primary cause for antisocial behaviour. Rather antisocial behaviour leads lowering of self concept (Baumeister, Bushman and Campbell, 2000).

Poor self concept of the students with conduct disorders may be attributed to rejection by peers (Gregory, 1994) which further lead to poor academic performance and ultimately ends in drop out.

**Studies Related to Problem Solving Deficits**

Students with conduct disorders are more likely than normal children to anticipate rejection and attribute hostile intentions to others (Dodge, Bates and Pettit, 1990). This may be due to deficits in social problem solving skills, by which they can generate only fewer alternate solutions to social problems, seek less information, see problems as having a hostile basis and anticipate fewer consequences than students who do not have conduct disorders (Webster-Stratton and Dahl, 1995).

This study is supported by Webster-Stratton and Lindsay (2000) who studied on 190 students with conduct disorders pointed out that students with conduct
problems had significantly fewer positive problem solving strategies and positive social skills, but more negative conflict management strategies than the normal peers.

So Craighead et al. (1978), Spivack and Shure (1974) suggested that training in social problem solving has been effective in reducing conduct problems and aggression and helps in increasing social interactions. Mastery of problem solving strategies requires students to become aware of their cognitive processes and abilities. Once that is accomplished, they can learn when and how to employ social problem solving strategies (D’Zurilla and Goldfried, 1971).

2.6 STUDIES RELATED TO INTERVENTIONS OF STUDENTS WITH CONDUCT DISORDERS

Intervention of students with conduct disorders is challenging as number of problems involved and underlying causes are many (Frick, 1998). Recent studies concluded that there is no simple short term cure for conduct disorder, but some interventions provided are quite valuable (Kazdin, 1995; Henggeler, Melton and Smith, 1992). Which interventions are effective and what changes they produce depend on a multitude of factors including the age and severity of the disorder. Last few years has advocated the use of several interventions in the area of conduct disorders. Various interventions to solve the problems of students with conduct disorders are discussed.

Rueda, Rutherford and Howell (1980) explicated the essential steps of self-regulation a part of cognitive behavioural intervention for students with behaviour disorders. It was successfully used for a group of 150 adolescents with disruptive
behaviours, where they were taught self-monitoring, self-evaluation and self-reinforcement in classroom settings.

This is supported by Wilson (1984) who proposed that self control procedures when taught to a group of aggressive children, successfully helped them to manage their aggressive behaviours. But he found out that self reinforcement did appear to be effective for managing aggressive behaviours.

Polsgrove (1979) applied different self regulating behaviours to students with behaviour disorders and found that self regulation will become effective only when students are motivated to change their behaviour. So before self regulation they will be convinced about the consequences of undesirable behaviour. The study of Polsgrove (1979) is supported by O’Leary and Dubey (1979). Their study on self control procedures revealed the fact that, they are as effective as externally controlled procedures on students with conduct disorders.

The major problem faced by students with conduct disorders is their difficulty to deal with social and interpersonal events (Dodge, 1979). Greenspan (1979) proposed the importance of social cognitive interventions for helping students with conduct disorders to deal with such situations. Meichenbaum and Goodman (1971) tried to study the effect of self instruction on student with conduct disorders. In the sessions while dealing with the students, they used self instructional training procedures, which involve a private speech which can be used as a mediator of overt behaviour. A growing number of studies supports the above study by revealing the effectiveness of self instruction to improve the social behaviours (Karoly, 1977; Kendall, 1977; Lloyd, 1980). Camp, Blom, Hebert and Van Doorninck (1977)
successfully used self instructional training procedure to modify disruptive behaviour in aggressive boys.

A recent effort in intervening with students with conduct disorders is focusing on problem solving skills training (Spivack, Platt and Shure, 1976). Gesten, Flores-de-Apodaca, Rains, Weissberg and Cowen (1978) used a seven stage method for a problem solving training for students with conduct disorders which involves problem definition, goal statement, impulse delay, generation of alternatives, consideration of consequences, implementation and recycling. Several innovative programs on problem solving show promising application for students with conduct disorders. Spivack and Shure (1974) have brought forward detailed programs with scripts and daily activities to teach pre-school children to generate and evaluate their own alternative solutions to interpersonal conflicts.

Additional promising programs which use cognitive training to teach problem solving have been developed for use with young aggressive boys (Camp Blom, Hebert and Van Doorninck, 1977).

Fagin, Long and Stevens (1975) developed a self control curriculum base don psychoeducational perspective which provides activities to instruct children in problem solving skills as sequencing and ordering, anticipating consequences and inhibiting impulsive responding.

Robin, Schneider and Dolnick (1976) have combined modeling, self instruction and problem solving in training students with conduct disorders to reduce their aggressive behaviours in the classroom.
Apart from the cognitive strategies Cullinan, kauffman and LaFleur (1975) modeling and observational learning has powerful effects on acquiring new behaviours and reducing undesirable behaviours in students with conduct disorders.

Bandura (1969) advanced the concept of modeling or imitation as a phenomenon going beyond superficial mimicry to encompass integrated cognitive and affective processes of attention, discrimination, memory and motivation. Research by Bandura on modeling demonstrates that it has been effectively used to reduce aggressive behaviours of elementary school children (Csapo, 1972).

Apart from all these strategies, Stephens (1978) adopted a social skills training approach for students with conduct disorders. Students should be actively and directly taught the social skills through modeling, rehearsal and shaping.

Thus it is clearly evident that a number of interventions have been identified which are useful in reducing the prevalence and incidence of conduct disorders. All the above mentioned strategies are strategies directly applicable to the student with conduct disorders. But there are strategies like parent management training, multisystemic therapies, etc. which are prepared for the parents of students with conduct disorders. The review related to such strategies are not mentioned in this section as the present study is intended to make the student with conduct disorders to make changes according to environmental factors by remedying their deficits in specific skill areas, rather than making changes among the environmental factors.

2.7 STUDIES RELATED TO CONDUCT DISORDERS IN INDIA

Studies related to conduct disorders in India can be discussed in terms of prevalence, causes of conduct disorders and related characteristics.
Trends of increased prevalence in certain age groups have been noted in some Indian studies. Parvathavardhini (1983) studied 309 rural children in the age range of 5 to 12 years, found that 30.3% of students have conduct disorders. Similarly, John (1980) in a study of school children in a slum catchment area reported a prevalence rate of 21.43% with conduct disorders. This was further confirmed by Shenoy (1992) in groups of boys and girls in the age range of 5 to 8 years, where 7 and 8 years old differed significantly from younger children. Studies by Kapur (1985), Rozario (1988) and Dalal (1989) for 8 to 16 years old showed similar peaking of disturbance at certain points.

Studies conducted to find out the causes of conduct disorders in India were less. Arulmani (1991) found that disturbed families contribute to conduct disorders. This is supported by Gowrie Devi (1983) who studied regarding the effect on family on conduct disorders noticed that a significant positive relationship characterised by indifferent or antagonistic attitudes at home, and over-protectiveness by mothers with conduct disorders. Along with these studies, Hoch (1967), Chacko (1964), Bapna and Ramanujan (1964), Baldev, Jain and Manichanda (1972) have highlighted the lack as well as inconsistent disciplining patterns in families of students with conduct disorders. Daniel in his study on parents of students with conduct disorders found that those parents are significantly more hostile, rejecting, controlling and authoritarian than normal controls.

Indian studies try to find out the effect of school factors on conduct disorders. Study of Daniel (1989) pointed out that students with conduct disorders experienced troubles in relation with teachers and other authorities, but peer relationship was
intact. In India, it is essential to focus on the role of stressors at home, neighbourhood and school in initiating and maintaining conduct disorders.

Regarding the characteristics exhibited by students with conduct disorders, Rao, Srinath and Sharma (1986) found that fire setting, trouble with the law and sexual promiscuity were not found in India, but fighting, hitting, temper tantrums, being demanding and disobedient in the family context were frequently reported.

Studies are almost adequate in the field of prevalence and factors. But the problem arises in the field of intervention. So far very few attempts were taken to provide appropriate intervention for students with conduct disorders eventhough some individual therapies are provided in some of the institutes of India. No attempts were taken to provide group intervention in the normal school setting which the present study attempted.

2.8 REVIEW OF STUDIES AS A BASIS FOR FORMULATING OBJECTIVES AND HYPOTHESES

As it is discussed in Chapter I and also as seen in Section 2.1 of this chapter, students with conduct disorders are best identified by direct and indirect methods, criteria for assessment which result in a comprehensive assessment. It is also noted that some criterion referenced tests is required for proper diagnosis of conduct disorders.

Research studies have evidenced that the prevalence students with conduct disorders is increasing in alarming rates, in all countries in India also. Some of the researches have shown a marked difference in conduct disorders with respect to sex and grade. This led the investigator to frame the objective to find out the prevalence
rate of conduct disorders in Kerala state and to find out whether the number of students with conduct disorders varied with respect to grade and sex.

Review of studies related to various factors is discussed. As the investigator is intended to plan a intervention programme for students with conduct disorders knowledge regarding the factors affecting it was necessary. Researchers also suggested that before planning and implementing an intervention programme, the implementer also should consider the associated characteristics like verbal deficits, academic achievement, peer problems, substance abuse, etc. So to plan the present intervention programme, related literature of factors and associated characteristics were reviewed.

Frick (1998) suggested that to plan an effective intervention programme the specific problem areas and skill deficits should be taken into consideration. Researches have shown that the major areas of problem among students with conduct disorders are aggressiveness, poor self concept, social skills deficits and problem solving deficits. A brief survey of literature related to these problems is also done. This led the investigator to formulate a hypothesis to diagnose the specific problem areas and skill deficits in students with conduct disorders.

In majority of the studies intervention programme aimed at improving the environmental factors like parental training, teacher training, etc. were given importance. Those studies that referred to intervention programmes intended to improve the deficits of the child have mainly given emphasise on individual programmes and also in clinical settings. But the present intervention programme aimed to improve the behaviours of child, reduce the deficits, improves the levels of
certain attributes in school settings. The effectiveness of intervention programme for students with conduct disorders was quite encouraging in the areas of problem solving, social skills, assertive skills, etc. In the present study, as the intervention programme was based on those principles which are tested and recommended, a positive hypothesis has been formulated with regard to the effectiveness of the remedial programme for students with conduct disorders.