PSYCHO-SOCIAL CORRELATES OF CONDUCT DISORDER AND EFFICACY OF AN INTERVENTION PROGRAMME

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SHABANA M.S.

DEPARTMENT OF PSYCHOLOGY
UNIVERSITY OF CALICUT
KERALA, INDIA

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DECLARATION

I, **SHABANA M.S.**, do hereby declare that this work reported in the thesis entitled "**PSYCHO-SOCIAL CORRELATES OF CONDUCT DISORDER AND EFFICACY OF AN INTERVENTION PROGRAMME**" is original and carried out by me in the Department of Psychology, University of Calicut, under the guidance and supervision of **Prof. (Dr.) C.B. Asha.** I further declare that this thesis or any part of this has not been submitted for any degree, diploma, recognition or title in this or any other University or Institution.

C.U. Campus
11.08.2008 **SHABANA M.S.**

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As I submit my doctoral thesis, I bow before the Almighty God in submission.

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In The Name Of Allah The Most Beneficent The Most Merciful

INTRODUCTION

Conduct disorder is a clinical term referring to the clustering of persistent antisocial acts of children and adolescents. The condition is thought to be due to underlying psychopathology leading to significant impairment in one or more domains of functioning. Children are termed as conduct disordered when they exhibit an enduring pattern of antisocial acts, where there is significant impairment in everyday interactions at home and/or school, or when the child's behaviour is deemed unmanageable by parents or teachers. The antisocial behaviour is of an intense nature and includes lying, cheating, stealing, aggression, temper tantrums, non-compliance, destructiveness and oppositional behaviour.

The definition of child conduct disorders is rather vague and imprecise and is relative to what is construed as "normal" and "abnormal" behaviour. The social and cultural context of conduct disorders is important in making sense of the way children and parents experience labelling and negative perceptions of their abilities.

These behaviours are not necessarily "abnormal" as most children at one time or another lie, defy their parents, or have a temper tantrum when they cannot have their own way. The distinguishing factor is severity and extent. For instance it is the level of the tantrum and disruption, the fact it

occurs frequently and in more than one setting and is persistent over time. Hence the quality of the behaviour is different.

Identifying the signs

Conduct disorder is used to refer to a specific psychiatric disorder that presupposes the presence of a set of fairly well defined behavioural symptoms and that can usually be made only if certain criteria are met. (e.g. age and duration of symptoms)

Some children manifest conduct disorder in terms of overt aggressive and hostile acts towards others (e.g. setting fire, destroying property),while others show a pattern of covert, deceitful acts (eg. stealing, lying) without accompanying interpersonal aggression, and still others show a combination of these two patterns of antisocial behavior. These externalizing behaviour problems are characterized by high rates of hyperactivity, aggression, impulsivity, defiance, and noncompliance.

They are physically and verbally aggressive beyond what is seen among their peers. Usually, teenagers with serious conduct disorders engage in a number of unacceptable activities. Almost invariably, they seem to have little or no remorse, awareness or concern that what they are doing is wrong.

For example, children and adolescents with conduct disorders might bully, threaten and intimidate others. Typically, they initiate physical fights, sometimes using weapons such as bats, bricks, broken bottles, knives and guns. These are the children and later, the adolescents and adults who get

involved in muggings, purse snatching, armed robbery, sexual assault, animal torture and rape. Some children deliberately set fires, vandalize, and destroy others' property.

Teenagers with conduct disorders might break into other people's homes, buildings or cars. They might systematically lie to obtain goods and favors or to avoid obligations. They might con others, shoplift or get involved in forgery. They repeatedly violate rules, break curfew, run away from home or become truant. The severity of these negative or problem behaviours vary from youngster to youngster.

DIAGNOASTIC FEATURES

The DSM-IV (1994) categorizes conduct disorder behaviors into four main groupings: (a) aggressive conduct that causes or threatens physical harm to other people or animals, (b) non- aggressive conduct that causes property loss or damage, (c) deceitfulness or theft and (d) serious violations of rules. It defines conduct disorder as repetitive and persistent pattern of behaviours in which the basic rights of others or major age-appropriate norms or rules of society are violated. Subtyping is allowed based on the age of onset of symptoms. Severity can be specified as mild, moderate, or severe. The category is currently conceived of as a polythetic diagnosis in that no one specific criterion is necessary for and any combination of criteria will suffice to establish the diagnosis. There is no formal provision for evaluating the context in which these antisocial clusters occur. Both these features contribute to the fact that the category is inherently heterogenous. The current criteria

require that at least three of a list of the following fifteen antisocial behaviours be present over a period of 12 months and one of them has to be present in the past 6 months.

Aggression to people and animals

- often bullies, threatens, or intimidates others
- often initiates physical fights
- has used a weapon that can cause serious physical harm to others (e.g., a bat, brick, broken bottle, knife, gun)
- has been physically cruel to people
- has been physically cruel to animals
- has stolen while confronting a victim (e.g., mugging, purse snatching, extortion, armed robbery)
- has forced someone into sexual activity

Destruction of property

- has deliberately engaged in fire setting with the intention of causing serious damage
- has deliberately destroyed others' property (other than by fire setting)

Deceitfulness or theft

- has broken into someone else's house, building or car

- often lies to obtain goods or to avoid obligations (i.e., "cons" others)
- has stolen items of nontrivial value without confronting a victim (e.g., shoplifting, but without breaking and entering; forgery)

Serious violations of rules

- often stays out at night despite parental prohibitions, beginning before age 13 years
- has run away from home overnight at least twice while living in parental or parental surrogate home (or once without returning for a lengthy period)
- is often truant from school, beginning before age 13 years

EPIDEMIOLOGY

According to research cited in Phelps & McClintock (1994a) 6% of children in the United States may have conduct disorder. The incidence of the disorder is thought to vary demographically, with some areas being worse than others. Since prevalence estimates are based primarily upon referral rates and since many children and adolescents are never referred for mental health, the number of teenagers affected by this disorder in India is unclear. Estimates vary by country, socio-economic status, and geographical locales. Large scale epidemiological studies conducted in several western countries indicate that conduct problems in general have a prevalence rate that ranges from 8% to 12% and that conduct disorder accounts for about 50% of that, with a prevalence rate of approximately 5%. Kazdins (1995) literature review estimates the prevalence of conduct disorder as from 2 to 6%. The DSM 1V(1994) reports that the incidence of conduct disorder is as high as 6 to 16% in males under 18 and 2 to 9% in females. The onset of conduct disorder may occur as early as age 5 or 6 but more usually occurs in late childhood or early adolescence; boys outnumber girls in the prepubertal age range after which the two genders are more equal. The male-female ratio has been found to range between 5:1 and 3:1, depending on the age range studied, but at all ages boys predominate over girls. It is only in adolescence that the gap between the sexes begins to close because of the increase of the disorder in girls. Onset after the age of 16 years is rare according to the American Psychiatric Association (1994).

Age

Symptoms of the disorder vary with age as the individual develops increased physical strength cognitive abilities and sexual maturity. Less severe behaviours (e.g. lying, shoplifting, physical fighting) tend to emerge first, whereas others (e.g. rape, theft while confronting a victim) tend to emerge last. However, there are wide differences among individuals with some engaging in the more damaging behaviours at an early age.

Gender

Gender differences are also found in specific types of conduct problems in males with a diagnosis of conduct disorder frequently exhibit fighting, stealing, vandalism, and school discipline problems. Females with a diagnosis of conduct disorder are more likely to exhibit lying, truancy, running away, substance use and prostitution. Whereas confrontational aggression is more often displayed by males, females tend to use more non confrontational behaviours. Gender differences and the development and persistence of child conduct disorders appear significant (Rutter, 1977). Patterson *et al's* (1975) work with aggressive children show that boys are much more likely than girls to develop aggressive behaviour problems and unchecked, they are likely to become more serious. Another study reveals that 73% of pre-school boys with behaviour problems has similar difficulties at age 8 compared to only 47% of girls (Richman *et al*., 1982).

The findings from most studies point towards a higher prevalence of conduct disorder among boys and girls. But alternate models proposed for girls' antisocial behaviour suggest that girls are more likely to express their aggression in relational terms than in physical terms, or harming others through purposeful manipulation or damage to their peer relationships, such as by spreading rumors (Crick & Grotpeter, 1995).

COURSE OF CONDUCT DISORDER

The early onset conduct disorder begins formally with the emergence of aggressive and oppositional tendencies in the early preschool period, progresses to aggressive (fighting) and non aggressive (e.g. lying and stealing) symptoms of conduct disorder in middle childhood and then develops into the most serious symptoms by adolescence, including interpersonal violence and property violation.

Although few younger children meet the criteria for conduct disorder, most are in late childhood or early adolescence and few have an onset after age sixteen. The behaviours that ultimately result in a diagnosis of this disorder can be traced back to earliest childhood. In the youngest age group of three to six years old, parents report argumentations, stubbornness, and temper tantrums. As the child enters school, more oppositional behaviours are noted and fire setting and stealing may begin. Some girls have a late onset of conduct disorder that is usually associated with promiscuity and alcohol and substance use in the early teens.

In middle childhood, the child may seem more alienated from social situations especially school with significantly more conflict with teachers which can be associated to poor parent teacher relationships. The child may experience low social competence and tend to be rejected by peers which results in fewer friends and identification with deviant peer groups. The child has social cognitive distortions, which manifest as difficulty in reading emotions and over perceive hostile intent in other. Social problem solving difficulties are evident from the more punitive as well as aggressive responses and fewer competent responses. The child has increased likelihood of variety of language and learning difficulties which affects his academic performance. During those childhood years of 8 to 13, children begin to bond with certain friends. When children find themselves not in a social group, they feel rejected, hurt, and angry. Social outcasts tend to reach out to other social outcasts who typically display the characteristics of social disobedience, criminal activity, and violence. Children and adolescents who do not have bonds with socially acceptable kids feel they must act out for attention. Criminal activity, violence, and other socially unacceptable behaviours make children feel somewhat accepted with the attention that they receive.

Adolescent years are marked with commitment to deviant peer groups, delinquent acts including truancy and school drop out, substance abuse especially at 10-13 years and early sexual activities with continued alienation. Adolescents diagnosed with conduct disorder are always psychologically and/ or psychiatrically evaluated, because family trauma and being socially outcast

seem to be the top factors in determining the cause of conduct disorder. By the time adolescents reach the age of 13 without treatment, treatment becomes unusable. Once this age hits, children think nothing is wrong with them and that the outside world simply does not understand them. At this point, the stage change from conduct disorder to antisocial personality disorder begins.

Long-term research indicates that many adults with antisocial personality disorder have a history of conduct disorder as children and the likelihood of an adult diagnosis with antisocial personality disorder (APD) increases if attention-deficit hyperactivity disorder (ADHD) is present in association with conduct disorder. The types of behaviours exhibited by an adult with APD such as irresponsible behaviour at work, within family situations and friendships are similar to those that manifest in a child with conduct disorder. Thus the more juvenile equivalents of the adult behaviour such as recurrent truancy, shoplifting and running away from home are typical of conduct disorder. One of the major differences between the two age-specific disorders is that in antisocial personality disorder there is a noted absence of remorse which is usually present in children with conduct disorder.

CONDUCT DISORDER AND JUVENILE DELINQUENCY

The term Conduct Disorder and juvenile delinquency are often used interchangeably. But they are not the same though there is much similarity and considerable overlap. Conduct Disorder is a diagnostic term while Juvenile Delinquency is a legal term. Not all youth who are delinquent have

conduct disorder and not all youth who have conduct disorder are juvenile delinquent. Some youth who do not meet the criteria for conduct disorder may be incarcerated for such violations as marketing controlled substances or failing to meet the conditions of their parole. These individuals are classified as juvenile delinquents but would not necessarily receive a diagnosis of conduct disorder. Youth who have committed isolated but serious acts of misconduct could be deemed delinquent without receiving a diagnosis of Conduct Disorder. This may be because as Wassermann *et al.* (2002) has observed that incarcerated youth may not be able to indulge in misconduct because of the limited opportunity to do so as they are under observation.

ETIOLOGY

Conduct disorder can best be described as a final common pathway for several initially divergent developmental trajectories.

Many children who have been diagnosed with conduct disorder typically experience some type of trauma or imbalance before actually developing these characteristics. The behaviours exhibited by the child with conduct disorder makes one wonder what makes a child become so outwardly violent and corrupt.

Researchers have come to the conclusion that many factors contribute to the development of conduct disorder. Most commonly, stressful family situations seem to be a link to conduct disorder. The death of a family member, divorce and the remarriage of parents are stressful and confusing to

children. During the time of divorce and remarriage, children typically think it is due to their fault that the situation occured in the first place. Many begin to think of the things they could have done to make their parents remain together. However, children also think parents get divorced because they do not love them anymore. During the years of 8 to 13 years of age, many children also mimic the characteristics of their parents. If they see their father or mother yelling, they think that this is an acceptable behaviour. When children do not understand the reasons for the situation, they desperately seek attention, even if it means acting out in an unacceptable manner. Children, thus, could begin shoplifting, bullying, being disobedient and even starting physical fights at school just for getting attention.

Other factors taken into consideration for the cause of conduct disorder are being biologically imbalanced and socially outcast within peer groups. Researchers have conducted many experiments trying to figure out if there is actually a biological or chemical imbalance within the brain that causes the characteristics of conduct disorder to develop. It has been shown that certain chemicals within the brain become imbalanced causing a decrease in decision-making and right/wrong perception. Certain types of medication have been prescribed to change the imbalance. A biological base, however, does not solely cause conduct disorder. In fact, peer groups are another link to the characteristics and diagnosis of conduct disorder.

Brain damage, child abuse, genetic vulnerability, school failure, and traumatic life experiences are some of the other factors that contribute to a child developing conduct disorder.

THEORIES OF ETIOLOGY OF CONDUCT DISORDER.

Several theories are proposed regarding the causes of conduct disorder. These theories include genetic predispositions, physiological influences, learning experiences, social, familial and environmental influences, and individual characteristics. Research suggests that these factors tend to exist in combination rather than isolation. In addition, the prevalence of these factors may increase or decrease the likelihood of this disorder.

Comings (1997) explores the notion that conduct disorder may be genetically related. He provides empirical support to show that this childhood behaviour as well as other disruptive disorders have a strong genetic component, are inherited by both parents, and share a number of genes in common that affect certain levels of dopamine in the brain.

Dodge (2000) describes some risk factors for the onset of conduct disorder. These include biological factors, socio-cultural contexts and life experiences. Other researchers hold that family dysfunction contributes to the formation of conduct disorders in children.

Frick (1993) explores three types of family dysfunction as well as implications for studying models that depict family causal relationships with conduct disorder. Parental adjustment, marital situation and socialization processes were found to be influential. Parental adjustment is examined over three domains: depression, substance abuse and antisocial behaviour. Although not directly related, Frick suggests that parental depression may contribute to adjustment problems in children which may lead to behaviour difficulties. Substance abuse in isolation does not place the child at risk for conduct problems. However, when determining the relationship of substance abuse, it is important to recognize the broader implications of subsequent parent behaviours and interactions with children. Unlike depression and substance abuse, research has shown a direct relationship between parental antisocial behaviour and the manifestation of similar behaviour practices in children.

The relationship of family dysfunction can be viewed from a three causal type relationships: mediational, bi-directional and third-variable where the family may directly influence the development of a conduct disorder. The child's antisocial behaviour may be attributed to the family's dysfunction or an unrelated variable may negatively affect the family and child. These models reflect the notion that parent/family effects on childhood conduct disorders are corelational and not directly casual.

Clarizo (1997) describes the individual and environmental factors that may influence the initial development, severity and chronicity of conduct disorders during childhood and adolescence.

Dodge (2000) notes that the socio-cultural environment in which the child is born must be explored. There are many ecological (e.g. low SES) conditions that can dispose the child toward manifesting conduct problems. These conditions display their effects at different points in the child's development. Life experiences such as parenting styles, peers, and schooling can also affect a development toward conduct disorder. Dodge continues to emphasize that a single factor alone cannot account for the development of conduct disorder. Rather, it is crucial to examine how these factors cooperate with each other to provide the risk for the onset of conduct disorder. As a result of this view, the interactive model is presented where the belief is that certain distal factors function only in the presence or the absence of another risk factor.

Phelps and McClintock (1994b) take the biosocial approach to conduct disorder. The biosocial approach states that neither social nor biological factors alone can explain the complexity of such behaviours as manifested by conduct disorder. Rather, it is the interaction between the social and the biological factors that can shed light on this disorder. As a result, these factors must be examined both independently as well as in interaction with one another. In their article, they address the issue of inappropriate research design that often results in faulty conclusions about the etiology of conduct

disorder. Phelps and McClintock believe that the biosocial approach is helpful in identifying important interactive variables that place children and adolescents at risk.

The developmental approach involves a variety of influences that affect the prevalence and onset of a particular behaviour. Specific to conduct disorders, a multi-dimensional approach must be taken in assessing the etiology of this behaviour. This approach includes such factors as sociological, environmental and physiological aspects, which tend to influence the development of behaviours among children and adolescents. These factors tend to be interrelated in nature and may manifest themselves at different points in the child's development. This view can further be explored by adopting the transactional developmental model. This model holds that we need to acknowledge the ways that distal risk factors correlate with each other and may even cause one another across time (Dodge, 2000). Understanding the nature of conduct disorders from a multi-dimensional approach will help to determine the normalcy of the antisocial behavior. Moreover understanding the various dimensions involved with this disorder aids in implementing appropriate interventions.

Patterson (1982) has developed a coercion hypothesis to account for the development and maintenance of behaviour leading to conduct disorders. According to Patterson, infants have a repertoire of coercive behaviours that are highly adaptive in shaping parental responses (e.g.,crying when hungry or uncomfortable to get parent’s attention). As infants grow older, he majority

learn other ways to get their needs met. However, if parents fail to reinforce appropriate social behaviours and/or continue to respond to coercive demands ,then a pattern of coercive behaviour and responses may be set into motion. For example, mother asks the child to put away his toys; the child whines and refuses; the mother then gives up and does it herself rather than listen to the whining, thus reinforcing the coercive behavior of the child. In a different scenario, if the mother escalates her demand by yelling and becoming aggressive rather than giving up, she may eventually get the child to comply; thus she is reinforced for her aggressive behaviour, and a pattern of negative coercion is created. Over time, these interactions can establish a pattern of escalating coercion between parent and child that eventually determines the way the child will interact with others.

Wahler (1980) believes that positive reinforcement can also play a role in the development of conduct disordered behaviour. According to this hypothesis, the child's disruptive behaviour elicits either verbal or physical attention from the parent, thus inadvertently reinforcing the behaviour. In the previous example, the mother might approach the child and quietly try to talk to him to put up his toys by reasoning with him; the positive attention afforded by his refusal would then serve to reinforce the refusal.

These models focus on parent child interactions. Although much less has been written about conduct disordered behaviours in the school setting, these principles can operate in teacher–child interactions in the class room (Atkeson and Forehand,1984).

CAUSES OF CONDUCT DISORDER AND INTERPLAY OF RISK FACTORS.

On the basis of the majority of epidemiological studies from the industrialized West, it can be stated that between 5% and 10% of children in the age range 8±16 have significant persistent oppositional, disruptive or aggressive behaviour problems. The high prevalence and the severity of the problems arising from disruptive and aggressive behaviours in young children mean that they constitute a major health challenge. The conduct disorders are distinctive in conferring considerable risk to the individual and at the same time being embedded in his or her social context. The symptoms of the disorders also has an impact on family, peer, educational and wider social relationships. The origins, maintenance and cessation of the difficulties can not be understood independently of these contexts.

Merely enumerating risk factors is misleading without conveying some of the complexities in how they operate. These complexities have divert implications for interpreting the findings for understanding the disorder and for identifying at risk children for preventive interventions first risk factors to come in “package”. Thus at a given point of time several factors may be present such as low income, large family size, over crowding poor housing, poor parental supervision, parent criminality and marital discard (Kazdin 1995). Second overtime several risk factors become interrelated, became the presence of one risk factor can augment the accumulation of other risk factors for example early academic dysfunction can lead to truancy and dropping out

of school which further increase risk for conduct disorder. Third, risk factors may interact with (be moderated or influenced by) each other and with other variables (Boyce and offord (1990 cited by Kazdin, 1997). As an example, large family size has repeatedly been shown to be a risk factor for conduct disorder. However, the importance of family size as a predictor is moderated by income if family income and living accommodation are adequate family size is less likely to be a risk factor.

The existence of biological influences does not preclude the role of the environment and other studies show that this disorder is most apt to revert among children whose parents are “maladjusted inconsistent, arbitrary and prone to explosive expression of anger Baum (1989, cited by Kazdin 1997). Their mothers are more likely to be depressed or anxious than women in general. Their fathers show a variety of problems as well including criminality, alcoholism, desertion and sexual promiscuity. The direction of causality is not clear in these correlations. Researchers are of the opinion that mutual influences among all these factors, with their effects, over time should be expected (Patterson, DeBeryshe Ramsay, 1989).

Although there is currently no agreement about a uniform model applying to all forms of conduct disorder, one possible model for the combination of causal factors is that of genetic liability triggered by an environmental adversity, mediated by other factors such as poor coping. Although there is some debate on the relative importance of the factors that

have been implicated, there is general support for the developmental nature of the disorder.

Though the exact cause of conduct disorder is not known, a variety of possible pathways, taken together, leads to development of conduct disorder. A genetic vulnerability, biological influences compounded by an abusive and neglectful upbringing with few models for coping with stresses other than through violence and substance abuse, combined with a psychological unwillingness to manage these stresses in other ways, converge in the person with conduct disorder.

Many children who have been diagnosed with conduct disorder typically experience some type of trauma or imbalance before actually developing these characteristics. The behaviour exhibited by the child with conduct disorder makes one wonder what makes a child become so outwardly violent and corrupt.

How these factors contribute to the development of conduct disorder is examined in detail in this section.

1. Genetic Vulnerability.

Many children and teens with conduct disorder have close family members with mental illnesses including mood disorders, anxiety disorders, substance use disorders and personality disorders. This suggests that vulnerability to conduct disorder may be inherited. Children with conduct disorder may inherit decreased baseline autonomic nervous system activity, requiring greater stimulation to achieve optimal arousal. This hereditary factor may account for the high level of sensation-seeking activity associated with conduct disorder. Estimates from twin and adoption studies show that conduct disorder has both genetic and environment components. The risk for conduct disorder is increased in children with a biological or adoptive parent with antisocial personality disorder or a sibling with conduct disorder. The disorder also appears to be more common in children of biological parents with Alcohol dependence, Mood disorder and Schizophrenia or biological parents who have a history of Attention-deficit/hyperactivity disorder or conduct disorder. Longitudinal studies indicate a link between conduct disorders and different generations and there is some evidence to suggest a genetic contribution. For example, twin studies have demonstrated a greater concordance of anti-social behaviour among monozygotic than among dizygotic twins (Kazdin, 1987). Adoption research has shown that a child separated from parents who exhibit deviant behaviour is at greater risk of developing similar behaviour patterns (Kazdin, 1987).

However as indicated by studies, genetic factors alone do not provide an adequate explanation for the onset of conduct disorders. Rather, these studies reinforce the view that it is an interplay between genetic and environmental factors which include negative home conditions (e.g. marital conflict, psychiatric dysfunction), poor family problem-solving and ineffectual coping strategies (Cadoret and Cain, 1981). It is likely that biochemical underpinnings and genetic vulnerabilities interact with environmental forces and individual characteristics to cause conduct disorder.

2. Neurological Dysregulation

Studies have found that neurological abnormalities are inconsistently correlated with conduct disorder (Kazdin, 1987). While there has been interest in the implication of the frontal lobe limbic system partnership in the deficits of aggressive children, these problems may be the consequence of the increased likelihood for children with conduct disorder to experience abuse and subsequent head injuries (Webster-Stratton & Dahl, 1995).

Some studies suggest that defects or injuries to certain areas of the brain can lead to behaviour disorders. In addition, conduct disorder has been linked to special chemicals in the brain called neurotransmitters. Neurotransmitters help nerve cells in the brain to communicate with each other. If these chemicals are out of balance or are not working properly, messages may not make it through the brain correctly, leading to symptoms. Further, many children and teens with conduct disorder also have other mental illnesses such as attention-deficit hyperactivity disorder (ADHD),

learning disorders, depression, substance abuse or an anxiety disorder, which may contribute to conduct disorder.

Children with conduct disorder are found, in some studies, to show the same autonomic under arousal that characterizes adults with antisocial personality disorder. This indicates that children with conduct disorder do not experience the same degree of anxiety and fear as do other children and this may be the raw material from which their disruptive activities result West (1982 cited by Kazdin, 1997).

Raine *et al.* (2000) found that prefrontal cortex volume was significantly smaller in violent, antisocial men than men in control group. The study indicates the prefrontal cortex—that region of the brain above the eyes and behind the forehead involved in judgment, planning, and decision making is not working right in criminals and potential criminals.

Bauer and Hesselbrock (2006) concluded that "the neurophysiologic substrate underlying conduct-problem behaviours is bilaterally represented within the prefrontal cortex."

3. Psychological and social factors.

Conduct disorder is more likely to be paired with diverse and complex disturbances in psychological domains. The origin of these disturbances is not clear, but their presence implies that many risks for conduct disorder are retained and internalized and is independent of specific environments.

Academic underachievement, learning disabilities, and problems with attention span and hyperactivity are all associated with conduct disorder. Hyperactivity, especially in the presence of poor parental functioning, is a risk; it seems to facilitate rapid development of conduct disorder. Neuropsychological deficits have been documented implicating frontal and temporal lobe dysfunctions. Laterality and language performance are disturbed. Higher personality functions are also affected. In complex social situations, children with conduct disorder have been shown to perceive fewer appropriate responses, lack the skills to negotiate conflict and lose their ability to restrain themselves when emotionally stressed.

(a) Temperament

Considerable research has been carried out into the role of child temperament, the tendency to respond in predictable ways to events, as a predictor of conduct problems. Aspects of the personality such as activity levels displayed by a child, emotional responsiveness, quality of mood and social adaptability are part of his or her temperament. Longitudinal studies have found that although there is a relationship between early patterns of temperament and adjustment during adulthood, the longer the time span the weaker this relationship becomes.

A more important determinant of whether or not temperamental qualities persist has been shown to be the manner in which parents respond to their children. "Difficult" infants have been shown to be likely to display behaviour problems later in life if their parents are impatient, inconsistent

and demanding. On the other hand "difficult" infants, whose parents give them time to adjust to new experiences, learn to master new situations effectively. In a favourable family context a "difficult" infant is not at risk of displaying disruptive behaviour disorder at the age of 4 (Thomas and Chess, 1977; Thomas, Birch and Chess, 1968; Herbert, 1978).

Cognitions may also influence the development of conduct disorder. Children with conduct disorder have been found to misinterpret or distort social cues during interactions with peers. For example, a neutral situation may be construed as having hostile intent. Further, children who are aggressive have been shown to seek fewer cues or facts when interpreting the intent of others. Children with conduct disorder experience deficits in social problem solving skills. As a result they generate fewer alternate solutions to social problems, seek less information, see problems as having a hostile basis and anticipate fewer consequences than children who do not have a conduct disorder (Webster-Stratton and Dahl 1985)

(b) Cognitive and Social Skills Deficits

The conduct disordered child is more often than not attempting to resolve a problem through poor behaviour, though methods or techniques may be crude and the perception of the problem faulty. Social cues during peer interactions are perceived incorrectly (Milich and Dodge, 1984) and hostile intent is attributed to innocuous situations.

Children displaying aggressive behaviour problems seek fewer clues when making sense of a person's behaviour (Dodge and Newman, 1981) and instead focus in on, and respond more to aggressive triggers (Goutze, 1981 cited by Goutze 1987), leading to an inappropriate violent response. Deficits in social problem-solving skills lead to poor peer interactions (Asarnow and Callan, 1985). Problems may be defined in a hostile fashion, not enough information is gathered to generate effective solutions and the full consequences of aggression are not taken into consideration (Slaby and Guerra, 1988; Richard and Dodge, 1982). In addition there is a lack of empathy with the other person's views and feelings (Feshbach, 1989). It is 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. If removed from their homes, youth with Conduct Disorder may have difficulty in staying in an adoptive or foster family or group home, and this may further complicate their development

c. School-Related Factors

Academic Difficulties

The behaviour interferes with performance at school or work, so that individuals with conduct disorder rarely perform at the level predicted by their IQ or age. Their relationships with peers and adults are often poor. They have higher injury rates and are prone to school expulsion and problems with the law.

Low academic achievement is characteristic of conduct disordered children throughout their school career (Kazdin, 1987), in particular reading difficulties (Sturge, 1982). Rutter *et al.* (1976) found a 28 month delay in reading skills. The relationship between poor academic performance and conduct disorders is complicated as it appears that it is not only uni-directional but also bi-directional. Hence it is not clear whether disruptive behaviour problems precede or follow the academic difficulties, language delay or neuro-psychological deficits. Though there is some evidence which suggest that cognitive and linguistic problems may precede disruptive behaviour problems (Schonfeld *et al.*, 1988)

In addition, delinquency rates and academic performance have been shown to be related to characteristics of the school setting itself. Such factors as physical attributes of the school, teacher availability, teacher use of praise, the amount of emphasis placed on individual responsibility, emphasis on academic work and the student -teacher ratio have been implicated (Webster-Stratton andDahl, 1995).

Child Interactions

On starting school, the conduct disordered child can experience interactions which further shape and reinforce difficulties. Aggression and disruptive behaviour leads to rejection by peers (Ladd, 1990), sometimes lasting for a child's school career. Peers become increasingly mistrustful and respond in such a way as to hasten the possibility of an aggressive response (Dodge and Samberg, 1987). Behavioural problems lead to poor relations

with teachers as the child becomes labelled as a "troublemaker" and hence receives less positive attention, encouragement and support and more disciplinary action (Campbell and Ewing, 1980; Rutter *et al.*, 1976; Walker and Buckley, 1973). Again an interactional vicious circle is created, the end result potentially being expulsion. Webster-Stratton’s (1994) work with conduct disordered children (3-7 seven year old) revealed that in excess of 50% had been asked to leave two or more schools.

School and Home Interaction

Interactionally the historical relationship between a family and school, has an impact on learning experiences (Bronfenbrenner, 1979). The child's "bonding" to social institutions (both family and school) as well as the family's bonding to the child and school can act as critical factors in the prevention of deviant behaviour. For instance, many parents of behaviourally difficult children have had aversive experiences with their child's teachers. Such encounters reinforce an already existing parental helplessness, which mitigates against effective problem-solving, further driving a wedge between home and education. Hence a spiralling pattern of poor behaviour, parent demoralisation and withdrawal, and teacher reactivity can ultimately lead to total lack of co-ordination in the joint socialisation of the child.

In recent research, teachers reported that parents of children exhibiting significant behavioural problems showed less interest in getting to know them, had different goals for their children and placed less importance on education than parents with well adjusted children Coie *et al.* (in press cited by Gill,1998). In essence where there is a positive long-standing bond, it is more likely that the child will flourish as parents feel more involved and are more supportive of their child achieving (Hawkins and Weiss,1985). Reciprocally the school enables and encourages such a process by good communication, involving the parent and importantly by recognising the child's accomplishments.

4. Parent and Family characteristics.

Poor family functioning, familial aggregation of drug and alcohol abuse, psychiatric problems, marital discord and especially poor parenting are all associated with conduct disorder. Abusive, neglectful parenting and child maltreatment are highly specific risk factors for the development of conduct disorder. The specific parenting patterns that contribute to the development of conduct disorder have been described as training in noncompliance by inconsistent responses to coercive behaviour of the child and by capitulating to demands in response to the child's coercion. There is fairly substantial evidence that viewing televised or other media violence and violence in the child's community contributes to the development of conduct disorder problems, especially in children who are at high risk for other reasons. Socio-economic disadvantage as manifested in poor housing, crowding and poverty exerts consistently negative influences.

Several characteristics of the parent and families of conduct disorder children are relevant to conceptualization of the dysfunctions. Among the salient characteristics are parent psychopathology and maladjustment, criminal behaviour and alcoholism. Parent disciplinary practices and attitudes also are associated with conduct disorder. Parents are likely to show harsh, erratic and inconsistent discipline practices. Dysfunctional relations are also evident as reflected in less acceptance of their children and in less warmth, affection, emotional support and attachment compared with parents of nonrefered youths. At the level of family relations, less supportive and more defensive communications among family members, less participation in

activities as a family and more clear dominance of one family member are also evident. In addition, unhappy marital relations, interpersonal conflict and aggression characterize the parental relations of antisocial children. These characteristics are correlated with and often antecedent to conduct problems, but do not if course necessary cause or inevitably lead to these problems. Webster-Stratton (1985) noted that half of all those children referred to the clinic with conduct problems were from families with a history of marital spouse abuse and violence.

a) Parent Psychopathological Factors

It is known that a child's risk of developing conduct disorder is increased in the event of parent psychopathology. Maternal depression, paternal alcoholism and/or criminalism and antisocial behaviour in either parent have been specifically linked to the disorder.

Mothers experiencing depression increases the risk of child conduct problems (Hall, 1991; Fendrich, 1990, cited by Gill 1998). In a recent community study by Williams *et al.* (1990 cited by Gill 1998), maternal depression when the child was aged 5 was found to be linked to parents' and teachers' reports of behavioural problems at the age of seven.

Depression also impacts on parenting behaviour directed at the child. For instance studies have shown that mothers increase the frequency of commands and in response the child non-complies at a higher rate (McMahon and Forehand, 1988; Webster-Stratton and Hammond, 1988). Depressed

mothers are highly critical of their children, find it difficult to set limits and emotionally are often unavailable. Importantly negative attention is focused in on poor behaviour resulting in it being reinforced (Webster-Stratton and Herbert, 1994).

There are two views as to why maternal depression leads to child conduct disorders. The first considers that mothers who are depressed misperceive their child's behaviour as maladjusted or inappropriate. The second considers the influence depression can have on the way a parent reacts toward misbehaviour. Depressed mothers have been shown to direct a higher number of commands and criticisms towards their children, who in turn respond with increased noncompliance and deviant child behaviour. Webster-Stratton and Dahl (1995) suggested that depressed and irritable mothers indirectly cause behaviour problems in their children through inconsistent limit setting, emotional unavailability, and reinforcement of inappropriate behaviours through negative attention .

Research into paternal factors and their contribution to the development of child conduct disorders is limited, hence great caution should be taken not to blame mothers solely for child behaviour problems.

Deviant behaviour in either parent appears connected to child conduct problems. Criminal behaviour and alcoholism in the father in particular places the child at greater risk (Frick *et al.*, 1991). Children with parents who have antisocial personality disorder are likely to develop deviant behaviour. Also grandparents who exhibit anti-social behaviour are more likely to have

conduct disordered grandchildren. Again the nature versus nurture debate is relevant here in that it is unclear how much poor behaviour is shaped and modelled from parents and how much linked to a set of genetic predispositions (Webster-Stratton and Herbert, 1994).

b) Familial Contributions- Interparental Relations, Divorce, Marital Distress, and Violence

Conduct disorder is associated with several causative and maintaining factors, with family functioning being an important one. This is especially true in the Indian context, where a lot of the problem behaviours manifested by adolescents with conduct disorders are in the family context. Marital relationship of the parents is a key aspect of family functioning, affecting a number of other dimensions of family functioning, including adolescent adjustment.

Family characteristics appear to have an impact on the development and maintenance of conduct disorders. Conflict between parents prior to and surrounding a divorce is associated with (child behaviour problems) but not a strong predictor of child behaviour problems (Kazdin, 1987). Boys show a significant deterioration in behaviour following divorce. Though there is a considerable variation in how lone parents and their children do after separation or when the marriage legally ends. One hypothesis for the poor outcome for some children is that the stress of divorce triggers off a process for the lone parent characterised initially by an increase in depression and irritability, leading on to a loss of friends and social support, which heightens

the risk of greater annoyance, ineffectual discipline and poor problem-solving, which in turn adds to depression and stress levels, completing the vicious circle (Forgatch, 1989).

The inter-parental conflicts surrounding divorce have been associated with the development of conduct disorder. However, it has been noted that although some single parents and their children become chronically depressed and report increased stress levels after separation, others do relatively well. Forgatch (1989) suggested that for some single parents, the events surrounding separation and divorce set off a period of increased depression and irritability which leads to loss of support and friendship, setting in place the risk of more irritability, ineffective discipline and poor problem solving outcomes. The ineffective problem solving can result in more depression, while the increase in irritable behaviour may simultaneously lead the child to become antisocial.

More detailed studies into the effects of parental separation and divorce on child behaviour have revealed that the intensity of conflict and discord between the parents, rather than divorce itself, is a significant factor. Children of divorced parents whose homes are free from conflict have been found to be less likely to have problems than children whose parents remained together but engaged in a great deal of conflict, or those who continued to have conflict after divorce. Webster noted that half of all those children referred to their clinic with conduct problems were from families with a history of marital spouse abuse and violence.

Marriages characterised by conflict and aggression, observed by children, appear to be linked to the development of conduct disorders. This behaviour being shaped up and modelled by parents as an "appropriate" way of dealing with problems and then copied by the child. 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 such conflict has been shown to be associated with negative perceptions of a child's adjustment, inconsistent handling, an increase in punitiveness, decreased reasoning and fewer rewards being used (Stonemen, Brody and Burke, 1988).

Frick *et al*. (1989), looking at the association between marital distress and child conduct disorders, found that the quality of psychological adjustment and marital satisfaction, (has a significant impact) significantly impacted on the quality of parent-child interaction. But no association was found with environmental factors such as poverty and low economic status. Similarly Simons *et al.* (1994) concluded that the level of support between parents had a significant impact on parenting abilities and thereby on the development of conduct disorders.

c) Family interaction, parent–child relation, family adversity and insularity

Life stressors such as poverty, unemployment, overcrowding and ill health are known to have an adverse effect on parenting and to be therefore related to the development of conduct disorder. The presence of major life

stressors in the lives of families with conduct disordered children has been found to be two to four times greater than in other families.

Research has suggested that parents of children with conduct disorder frequently lack several important parenting skills. Parents have been reported to be more violent and critical in their use of discipline, more inconsistent, erratic, permissive, less likely to monitor their children, as well as more likely to punish pro-social behaviours and to reinforce negative behaviours. A coercive process is set in motion during which a child escapes or avoids being criticised by his or her parents through producing an increased number of negative behaviours. These behaviours lead to increasingly aversive parental reactions which serve to reinforce the negative behaviours.

d) Parenting Skill Deficits

Parenting style and the effectiveness of learned child management skills play a vital role in what a child learns. Parents who have not acquired effective parenting skills have a greater tendency to lack confidence and self-efficacy, to be more critical and punitive, to lose their temper and resort more readily to physical punishment, to be more permissive, erratic and inconsistent, to have difficulties tracking and monitoring children's behaviour, and to be more likely to reinforce poor behaviour whilst ignoring or punishing pro-social behaviour (Sansbury and Wahler, 1992; Webster-Stratton, 1992, 1985; Patterson and Stouthamer-Loeber, 1984; Patterson, 1982).

One of the most common conduct problems is non-compliance. Research indicates that parents of such children give commands that are vague, negative and frequent. They are delivered in a threatening, angry, humiliating and nagging manner. They are unrealistic and the child is interrupted before there is time to comply (Gambrill, 1983; Patterson, 1982; Forehand *et al.*, 1979)

Coercion Hypothesis

Parent-child interaction does not occur in a vacuum. It occurs within different social and environmental contexts which it influences and is influenced by. Hence such interrelationships are systemic and include the child, parents, siblings, extended family, school, community, society etc. Such social systems are living forces which continually shape and influence behaviour. Patterson's (1982) coercion hypothesis or process illustrates how family members get trapped into continually playing certain roles within conflictual situations, to such an extent it becomes a vicious circle. Each member has a part to play in an unfolding family drama which is run time and time again (often reciprocally reinforced).

Thus, when looking at conduct problems, one has to look well beyond the child to realise the full impact, and within the family the negative consequences are often huge. For instance, high rates of aversive child behaviour can often be linked to reduced family interaction, an increase in isolation, fewer shared recreational activities, loss of self esteem and increased negative attributions towards other family members (Gambrill, 1983).

Learned Helplessness

Seligman's (1975) theory of learned helplessness is valid when looking at parenting behaviour, attributions, beliefs and the interrelationship between them. For instance a parent with a long-standing child conduct disorder can

experience constant "defeat" in effectively managing behavioural problems. The parent cognitively makes sense of this by believing that whatever they do the child will remain the same, hence rationalising inaction or doing nothing. As the parent feels increasingly powerless so more control is given to the child, whose behaviour deteriorates, which then feeds or provides evidence for the negative attributions. The child or "little devil" becomes distant, less attractive and pleasurable to be with, leading to a higher risk of physical punishment and abuse. The parent then feels "trapped", "useless" and believes that the child is behaving maliciously in order to "get back at them" and so the cycle continues (Webster-Stratton and Herbert, 1994; Webster-Stratton and Hammond, 1988). Also such poor self esteem is linked to low parental satisfaction, further impacting on the child (Johnston and Mash, 1989).

As evidenced in the above the learned helplessness hypothesis is that those who experience events which they feel they have no control over, develop motivational, cognitive and emotional deficits (Abramson, Seligman and Teasdale, 1978; Maier and Seligman, 1976; Seligman, 1975). Abramson, Seligman and Teasdale (1978) made a distinction between universal and personal helplessness. In universal helplessness the person believes that no-one can solve the presenting problem, whilst in personal helplessness the person believes the problem is solvable but not by them (low self-efficacy expectations). Research suggests that personal helplessness is often characteristic of parents with children who suffer from a conduct disorder. For example, such parents will often compare their children to others who they

believe are better behaved as their parents are more capable of dealing with behaviour problems. Such attributions are further reinforced by other family members, friends and professionals etc. who also attribute the behaviour problems to poor parenting skills (Webster-Stratton and Herbert, 1994).

5. Environmental stress and other social factors

Low socio-economic status and not being accepted by their peers appear to be risk factors for the development of conduct disorder. Social theorists have suggested that poverty, abuse, neglect and poor parenting all contribute to the development of conduct disorders. Conduct disordered youths are likely to live in conditions of overcrowding, poor housing and high crime neighbourhoods and to attend schools that are in disadvantaged neighbourhoods. Many of the untoword conditions in which families live place stress on the parent or diminish the threshold for coping with everyday stressors. The net effect can be evident in adverse parent-child interaction in which parents inadvertently engage in patterns that sustain or accelerate antisocial and aggressive interactions (Patterson *et al.*, 1992). Also contextual factors (e.g. poor living conditions) are associated with other influences (eg: deviant and aggressive poor group, poor supervision of the child) that can further affect the child.

Overall research indicates that major life stressors such as poverty, unemployment, cramped living conditions and illness have a negative impact on parenting and are related to many childhood problems including conduct disorders (Kazdin, 1986; Rutter and Giller, 1983). Families experiencing

behavioural problems report an incident rate two to four times higher than non-clinic families (Webster-Stratton, 1990). More daily life "hassles" and life crises lead to aversive and coercive parent-child interactions, potentially resulting in inappropriate and ineffectual practices such as a sudden loss of temper leading to physical punishment (Whipple & Webster-Stratton 1991; Webster-Stratton 1990; Corse, 1990; Forgatch, Patterson and Skinner, 1988). In addition, isolated, multi-stressed mothers have a tendency not to involve family and friends in problem-solving discussions and when this is attempted it is not reinforced (Wahler and Hann, 1984)

There does not appear to be a direct link just between social class and child conduct disorders, unless certain risk factors are included in the definition. Hence, when these factors are excluded by controls, the relationship is not significant (Kazdin, 1987).

6. Correlates and associated features

Individuals with conduct disorder may have little empathy and little concern for the feelings, wishes and well being of others. Especially in ambiguous situations, aggressive individuals with this disorder frequently misperceive the intentions of others as more hostile and threatening than is the case and respond with aggression that they then feel is reasonable and justified. They may be callous and lack appropriate feelings of guilt and **r**emorse. It can be difficult to evaluate whether displayed remorse is genuine because these individuals learn that expressing guilt may reduce or prevent

punishment. Individuals with this disorder may readily inform on their companions and try to blame others for their own misdeeds.

Some of the most violent youngsters are likely to be those who have been the most severely abused themselves. Their way of dealing with the abuse is to dissociate their feelings from action. They thus appear to be cold, detached and lacking in empathy. Yet, because it is the most deeply disturbed teenagers who tenaciously maintain their bravado, boast of their offenses, and threaten others with further violence. They are often passed over to the justice system without effective psychiatric evaluation and intervention. Self-esteem is usually low, although the person may project an image of “toughness”, Poor frustration tolerance, irritability, temper outbursts and recklessness frequent associate features. Accident rates appear to be higher in individuals with conduct disorder than in those without it.

Conduct disorder is often associated with an early onset of sexual behaviour drinking, smoking, use of illegal substances and reckless and risk-taking acts. Recently, there seems to be a significant increase in such nonagressive aspects of conduct disorders as running away, truancy and substance abuse. It is common for troubled teenagers to use drugs and alcohol. The teenager may use drugs and alcohol in an attempt to self-medicate for symptoms of anxiety, depression, thought disorders and hyperactivity. They may wish to blot out memories of abuse or treat insomnia. Some think they need drugs or alcohol just to be able to face another day in a

violent, abusive household. Illegal drug use may increase the risk that conduct disorder will persist

Conduct disorder behaviours may lead to school suspension or expulsion problem in work adjustment, legal difficulties, sexually transmitted diseases, unplanned pregnancy and physical injury from accidents on fights. These problems may preclude attendance in ordinary schools or living in a parental or foster home. Suicidal ideation, suicide attempts and completed suicide occur at a higher rate than expected. Conduct disorder may be associated with lower than average intelligence academic achievement, particularly in reading and other **v**erbal skills is often below the level expected on the basis of age and intelligence and may justify the additional diagnosis of a learning or communication disorder.

Individuals diagnosed with conduct disorder exhibit neuropsychological deficits. These deficits affect verbal comprehension skills and IQ levels (Moffitt, 1993). These verbal skill deficits include impaired social judgment, weak language processing, and poor auditory memory (Moffitt, 1994). Conduct disorder often develops into antisocial personality disorder, so it is not surprising that antisocial persons share the same verbal skill deficits. The deficit in verbal understanding may well be cause for what seems to be impulsivity because the children are more likely to act on their own will when they do not understand what is going on. Delinquent children are shown to consistently score lower on IQ tests than children who are not delinquent.

In many instances, unrecognized and untreated learning disabilities and cognitive deficits create deep frustration for a child. Thus the entire school experience gets filtered through defeat and humiliation. A child may then stop attending school or skip challenging classes. Once he leaves the structure of school which might have been a major opportunity he had for experiencing positive success, he my engage in delinquent behavior. For some children, delinquent behaviour, however unlawful or unacceptable, provides them with both the status among their peers and the opportunity for some reinforcement that they are unable to find at school.

More and more, child psychiatrists and other mental health professionals are recognizing the role played by prior physical, sexual and emotional abuse in the genesis of certain kinds of aggressive and inappropriate sexual behaviours. Substance abuse or mental illness in parents such as psychosis, severe depression or manic depressive disorders (affective disorders) can have a grave impact on the children in the family. Birth order and size of the family have both been implicated in the development of conduct disorder. Middle children and male children from large families have been found to be at an increased risk of delinquency and antisocial behaviours.

7. Conduct Disorder and Anti Social Personality Disorder

Long-term research indicates that many adults with antisocial personality disorder have a history of conduct disorder as children and the likelihood of an adult diagnosis with APD increases if ADHD is present in

association with conduct disorder. The types of behaviours exhibited by an adult with APD such as irresponsible behaviour at work, within family situations and friendships are similar to those that manifest in a child with conduct disorder. Thus the more juvenile equivalents of the adult behaviour, such as recurrent truancy, shoplifting and running away from home are typical of conduct disorder. One of the major differences between the two age-specific disorders is that in antisocial personality disorder there is a noted absence of remorse which is usually still present in children with conduct disorder.

MANAGEMENT OF CHILDREN WITH CONDUCT DISORDER

There is only modest evidence that treatment of conduct disorder is effective. Several recent reviews of the literature and a meta-analysis of over 500 studies show that a wide variety of treatments have been tried and on the average only show modest effect sizes. There is consensus among experts that early intervention is better; prevention is more effective than treatment, (although the evidence for effective prevention programs is also incomplete); and extensive approaches in naturalistic settings are preferable to those who work intensively in special settings, which bear little or no resemblance to the patient's daily environment. Dramatic interventions such as shock, incarceration or boot camps are not supported by the evidence and may even have negative outcomes. Realistic programs should be multimodal, addressing deficiencies in the multiple domains of functioning. Finally, treatment packages should reflect the developmental needs of the child because there is no one intervention that is effective across all ages.

Conduct disorder is seen as one of the most common forms of psychopathology and also one of the most costly in terms of personal loss to patients, families and society. As the disorder is complex and pervasive, it also is one of the most difficult conditions to treat. The lack of resources in the families and communities in which CD develops adds to the complexity of the treatment and also by the tendency of the juvenile justice and school systems delaying in bringing children with CD to the attention of therapists or concerned professionals.

Treatments for conduct disorder have focused on psychosocial interventions and parent training and in some cases the use of medication. They typically focus on helping young people understand the effect their behaviour has on others and developing skills for behavioural change. Treatment is rarely brief since establishing new attitudes and behaviour patterns takes time. However, early intervention that targets risks in multiple areas offers a child a better opportunity for reducing and eliminating symptoms. Several effective psychosocial treatments have been identified for CD. Among the available psychosocial interventions, Parent Management Training (PMT) (Patterson, 1982) has been demonstrated to be especially promising. PMT has focused on altering coercive parent-child interactions that foster aggressive child behaviour in the home and that distinguish families with antisocial children.

A promising treatment is cognitive behavioral Problem-Solving Skills Training (PSST) (Kendall and Braswell, 1985), which focuses on the cognitive processes and deficits that are considered to mediate maladaptive interpersonal behaviors.

Another effective psychosocial treatment is Videotape Modeling Parent Training (Webster-Stratton, 1984), which includes a videotape series of parent-training lessons and is based on the principles of parent training originally described by Hanf (1969). Henggeler *et al.* (1986) developed Multi Systemic Therapy (MST) which utilizes therapeutic interventions that are based on a family-ecological systems approach to delinquency and adolescent

psychopathology. This treatment simultaneously considers the multiple systems of which an adolescent is a part (i.e., family, peers, and extra familial systems). The findings indicated that the use of a family-ecological treatment decreased conduct problems, anxious-withdrawn behaviours, immaturity and association with delinquent peers significantly. Family-ecological treatment differs from traditional family therapy approaches through the emphasis placed on the utilization of theory and research findings within the field of developmental psychology and child-clinical psychology. The primary goal of family-ecological treatment is the reduction of an adolescent's behavioral problems, but additional benefits occur. For example, mother-adolescent and marital relations in families are evidenced to be warmer and the adolescent typically becomes more involved in family interactions.

No medications have been demonstrated to be consistently effective in treating conduct disorder, although four drugs have been Lithium and methylphenidate have been found (one double-blind placebo trial each) to reduce aggressiveness effectively in children with conduct disorder (Campbell *et al.*, 1995; Klein *et al.*, 1997b), but in two subsequent studies with the same design, the positive findings for lithium could not be replicated (Rifkin *et al.*, 1989; Klein, 1991). In one of the latter studies, methylphenidate was superior to lithium and placebo. A third drug, carbamazepine, was found in a pilot study to be effective, but multiple side effects were also reported (Kafantaris *et al.*, 1992). The fourth drug, clonidine, was explored in an open trial, in which 15 of 17 patients showed a significant decrease in aggressive

behavior, but there were also significant side effects that would require monitoring of cardiovascular and blood pressure parameters (Kemph *et al.*, 1993). The Blueprints for Violence Prevention Initiative is a comprehensive effort to provide communities with a set of programs whose effectiveness has been scientifically demonstrated. With the Office of Juvenile Justice and Delinquency Prevention support, the Initiative also provides the information necessary for communities to begin replicating programs locally. The Initiative identified 11 prevention and intervention programs that meet a strict scientific standard of programmes effectiveness and have been proven to be effective in reducing adolescent violent crime, aggression, delinquency, substance abuse, predelinquent childhood aggression and conduct disorders. By outlining high standards of programmes effectiveness, reviewing outcome evaluation results for numerous programmes and identifying successful programmes, the Blueprints Initiative has helped answer some of the questions about what does and does not work in violence prevention (OJJDP Blueprints for Violence Prevention, 2001). In a recent review of prevention efforts in this arena, Wasserman and Miller (1998) conclude that identifying developmental precursors is key to in the prevention of violent behaviours. Successful interventions and prevention programs are those that are able to attend to correlated risks in the family, community, peer and individual domains. Such multi-modal programs have been found successful at various developmental levels.

Based on studies in western countries and in India, certain risk and protective factors have been identified. These would enable the clinicians to focus on therapeutic efforts to alleviate 'the problem caused by risk factors and draw strength from the protective factors and plan an individually tailored package to suit a particular child. A broad frame work for such a multimodel therapy should equally emphasize psychodynamic and behavioural approaches.

In India treatment packages need to be different for those who are in remand homes, those in psychiatric clinics, those identified in school or through community surveys and those who are at–risk population such as children in slums, working children and street children. Stumphauser's (1976 cited by Kapur, 1995) observation about western correctional institutions that the remand homes and orphanages rather than being a place where youth are rehabilitated provide an environment where youth learn new anti-social behaviour is even more applicable to Indian correctional facilities and other institutions where destitute children are taken care of. Researches carried out on these have pointed to the pessimistic future for the children staying there.

Longitudinal studies on the conduct disordered in the schools and community have not been reported in the Indian setting. Child behaviour therapists have tired to modify these troublesome and antisocial behaviour in many setting including the youth's own home, community based group homes and more restrictive residential settings. Interventions generally employed are cognitive behavioral treatments using conceptual model of aggression,

contigency management includes token economy, timeout and seclusion, instruction and commands. Child skills training including general social and conversational skills, problem solving skills, self control and combined social cognitive skills is also used. Parent, marital and family skills training has also found to have a positive outcome. A psycho educational evaluation may uncover intellectual and learning problems that could cause academic and behavioural problems that, in turn, put the adolescent at risk for truancy and disruptive behaviour.

The goal of treatment for conduct disorder is to help the child learn to regulate his or her own behaviour. This is accomplished through behaviour therapy and psychotherapy, which help the child develop better self-esteem and learn how to control and express anger appropriately. For treatment to be successful, it must include the child, the family, and the school. If the child's home environment has contributed to the development of a conduct disorder, he or she may need to be removed from that environment and placed somewhere more supportive. Children with additional conditions such as attention deficit hyperactivity disorder, depression or those displaying extreme aggression may also be treated with medication. Often, treating ADHD and depression will help improve a conduct disorder.

The earlier a conduct disorder is treated, the better a child's chance of functioning in society as he or she gets older. Children who live in a home where they feel loved and valued, and where boundaries for behavior are clearly established, are less likely to develop conduct disorders. Pay attention

to whether your child is having difficulty in school, academically or socially, or is showing signs of depression. Treating these types of problems before they affect the child's self-esteem can go a long way in preventing future problems.

Intervention

a) Parent Management Training

Many times, treatment for conduct disorders is family-focused. Parent management training has been used with considerable success with aggressive youngsters, especially when parents themselves are not significantly unstable or disorganized. The degree of alienation that the teenager has experienced in the family is an important variable in family-based treatment. When they can participate fully, this method helps parents recognize and encourage appropriate behaviours in their teenager and discipline the teen more effectively. In order to interact with their teenager in new ways parents learn to use positive reinforcement. They learn to link misbehaviour to appropriate consequences and develop better ways of negotiating with their teenager. Once the parent-child relationship improves, many youngsters are better able to navigate their social and academic worlds without getting as upset and disruptive. Often, however, teenagers are resistant to this kind of treatment and feel that adults are ganging up on them.

Many variations of parent training exist, but most are focused on breaking the cycle of coercive interactions between parent and child. In

accordance parents are encouraged to support prosocial behaviours rather than coercive ones by learning and implementing such skills as using positive reinforcement, negotiating compromises and using only mild form of punishment. In this treatment parents are the clients and no direct intervention with the child is attempted**.**

b) Family Therapy

Functional family therapy, a promising treatment approach, involves the entire family in therapy which is based on a family systems approach that presupposes that the problem behaviour of the child is serving a function in the family, a maladaptive one. The goal is to get family members to understand these dynamics in their day –to-day interactions and to alter them to more adaptive ways of communicating with one another. More specific goals are i) to increase positive reinforcement and reciprocity among family members and ii) to help them negotiate constructively and learn to identify alternative solutions to conflicts that arise. These goals are actively identified and worked on by family members during sessions with the help of the therapist**.**

When teenagers are willing to work with their parents in therapy, this approach can help family members learn less defensive ways of communicating with each other. It can foster mutual support, positive reinforcement, direct communication, and more effective problem-solving and conflict resolution within the family.

c) Social Skills Training

Social skills training focuses on teenagers in an effort to enhance their problem-solving abilities. Through such programs, a youngster can learn to identify problems, recognize causes, appreciate consequences, learn to verbalize feelings and consider alternate ways of handling difficult situations. Because most teenagers with conduct disorder feel alone and alienated from the adults in their lives, efforts are made to diminish mistrust of others, especially adults. This type of training helps the youngster seek and become receptive to support and encouragement.

d) School-Based Treatment Programs

These are in wide use throughout the country, in the west, whether in special residential treatment environments, designated community-based schools or specific programmes in mainstream schools. These programs can reintegrate the student into regular classes as the youngster's behavior allows. Successful school-based programmes often assess the teenager's strengths, interests and potential and provide special programmes to help the youth achieve skill in a particular area.

e) Cognitive-Behavioural Therapy

Behavioural therapy may help adolescents control their aggression and modulate their social behaviour. Teenagers are rewarded and encouraged for proper behaviour. Cognitive therapy can teach defiant teens self-control, self-guidance and more thoughtful and efficient problem-solving strategies,

especially as they pertain to relationships with their peers, parents and other adults in authority.

d) Medication

Since conduct problems tend to arise from a tangle of biological, emotional and social stresses, there is no single class of medication that has been found especially useful. Even when another psychiatric problem has been defined (such as ADHD, depression, manic-depressive illness or schizophrenia), medication is seldom sufficient to alter significantly the conduct disorder symptoms. If the teenager has underlying ADHD, the use of stimulants may help reduce negative behaviours and impulsiveness. Lithium, a mood stabilizer, has also been shown in some studies to reduce aggression. In some cases, anticonvulsant medications such as carbamazepine (Tegretol) have significantly curbed aggressive outbursts. Used judiciously to address specific clinical findings in each individual case, appropriate medication can enhance the success of other treatment modalities.

Given the rather dramatic and disturbing quality of the conduct disorder symptoms, it is important to keep in mind that not all behaviourally disturbed teenagers go on to become antisocial or criminal adults. On the other hand, more often than not, ongoing, adequate medical, emotional, educational and social supports are required for many years if teenagers with severely disturbed behaviour are to go on to lead meaningful lives and become productive members of society.

Operational definition of key terms.

Conduct Disorder

DSM 1V defines Conduct Disorder as repetitive and persistent pattern of behaviours in which the basic rights of others or major age-appropriate norms or rules of society are violated.

Adolescence

The term adolescence comes from the Latin verb ‘adolescere’ meaning to grow in maturity. In this sense adolescence is a process rather than a period, a process of achieving the attitudes and beliefs needed for effective participation in society (Rogers 1972). Early adolescence extends roughly from 13 to 16-17 yrs and late adolescence covers the period from then until 18 (Hurlock, 1983). In girls it appears earlier than boys.

Conduct disordered children.

In the present study children who met the criteria for conduct disorder as per the Developmental Psychopathology Check-List for children were referred as conduct disordered children.

Normal Children.

Children who did not meet the criteria for conduct disorder and did not have any psychotic or neurotic features and developmental delays as per Developmental Psychopathology Check-List for children were referred as normal children in the present study.

Psychosocial factors

According to Chaplin (1973 cited by Nicholas 2000), Psychosocial factors are defined as factors pertaining to a social relation which involves psychological factors.

In the present study the psychosocial variables intended for assessment are alienation experienced by conduct disordered adolescents, relationship with parents as perceived by the child, parental attitude, personality disorder traits in parents of conduct disorder children, family environment and factors such as gender, ordinal position, parental education and economic status .

Alienation

Alienation is a deep-seated sense of dissatisfaction with one's personal existence, an estrangement from one's social group (e.g., family, workplace, community, or bureaucratic institution such as government agency, school or religious groups). According to Schacht (1971 cited by Nicholas 2000) a person alienated is to claim that his relation to something else has certain features which results in avoidable discontent or a loss of satisfaction.

Parent-child relationship

Relationship between adolescents and their parents involve the expectation the children have about their parents and the expectations that parents have about their children.

Attitude

Attitude is an enduring, learned predisposition to behave in a consistent way toward a given class of persons, objects, situations etc. It is positive or negative. It possesses both cognitive and emotional components.

Family environment and interaction

Family environment denotes the socio environmental characteristics of the family and **f**amily interaction is seen as an opportunity to maintain, establish and promote parent-child relationships. In addition, family interaction is an opportunity for parents to evaluate their own parenting capacities and gain knowledge of new practices and views about parenting.

Relevance of the present study.

Conduct disorder is one of the most difficult conditions to treat, because the disorder is complex and pervasive. It is also one of the most common forms of psychopathology in the west and the most costly in terms of personal loss to patients, families and society.

The incidents of school violence in India and the increased rate of criminality in adults in India points out to the urgency in studying Conduct

Disorder and to come out with an intervention strategy to arrest the progress of the symptoms in to the next level. Besides, several studies have shown the link between anti social personality in adults and the presence of conduct disorder traits in these adults during their childhood or adolescent years. Conduct disorder if unchecked can cause serious harm to the healthy development of the next generation, mental health of spouses and families there by affecting the society.

The scope of the problem, together with the knowledge that it is highly stable and chronic in nature and that available treatments are often limited, provide strong argument for the development of preventive approaches .The challenge is great, but effective preventive interventions must be found if one is to reduce the scope and severity of conduct disorder to a level that will be significant and noticeable for society as a whole. Conduct disorder increases the risk of several public health problems, including violence, weapon use, teenage pregnancy, substance abuse and dropping out of school. The stability of antisocial behaviour overtime leads to the conclusion that early intervention in budding conduct disorders may be essential. Young children displaying oppositional defiant and other antisocial characteristics should be identified and worked with as early as possible, even in the preschool years. The child who has been thrown out of school more than one time because of his aggression and who appears to be shaping his parents behaviour rather than vice versa is a good candidate for early intervention. The argument has

been made that if antisocial behaviour has not come under control by the time a person is eight years old it should be viewed as a chronic condition.

The life long pattern of conduct disorder and the transmission of the problem within families from one generation to the next underscore the importance of a developmental and life span perspective. It will be important to identify the course and various paths and to examine developmentally opportune points of intervention. Over the course of development, influences vary in their contribution to conduct disorder. For example during adolescence, the influence of peers on the appearance of conduct problem behaviour is marked. Identifying how such influences operate and precursors to such influences has obviously important implications for intervening. A broad range of social interventions is required to have an impact on such conduct problems. According to Kazdin (1987) conduct disorder cannot be cured but its symptoms can be managed and controlled with careful intervention

Conduct disorder has proven to be a very complex type of disorder in children and adolescents in terms of diagnosis, treatment and assessment. One primary reason for this is that there is a great deal of comorbidity with other dysfunctions such as ADHD. In addition, many factors need to be considered when diagnosing and treating a youth with conduct disorder. Some of these primary factors to consider include personal characteristics, cognitive development, the family system, peers, school environment, ecological elements (such as SES) and so forth. As a result of these factors, it

is then crucial to focus on the child's developmental level and the developmental progression of conduct disorder. The child or adolescent's dysfunction and problem behaviours cannot be taken in isolation of these factors. Rather, several of these elements need to be considered in combination with one another in order to attain a comprehensive view of the child's/adolescent's strengths and degree of impairment. The degree of impairment is an important piece to attend to as it provides information about the areas of difficulty and how such difficulties have come about which in turn can provide vital information for the appropriate treatment techniques to use with the youth.

In conclusion, information about the epidemiology and etiology of conduct disorder provides much needed knowledge regarding the appropriate assessments to be used with the individuals and in turn allowing for effective treatment plans and outcomes. It is important to note again that no single factor contributes to conduct disorder and that there is no one type of assessment or treatment that is best to use with all children. Rather, a combination of factors must be analyzed in combination and in isolation of one another in order to achieve knowledge about this very commonly diagnosed dysfunction and to treat it.

The study of psychosocial correlates and management has serious implications for developing a treatment module for adolescents thereby preventing its progress to serious conditions like antisocial disorders in adulthood. The present study has its significance at this point of time in India,

as there is a dearth of studies related to this topic in India. And the psychosocial variables studied can help to understand more about conduct disorder and can lead to constructive packages of intervention needed to reduce the severity of conduct disorder and its progression to the next level.

In view of the above mentioned, the present investigation attempts to examine the role of some psychological and social factors in conduct disorder among adolescents and to assess the efficacy of psychological intervention.

REVIEW OF LITERATURE

The present chapter is an attempt to review the literature in the area of psychological and social factors in relation to conduct disorders and management of conduct disorders. A survey of literature shows much of the research on conduct disorder and its management as reported from western countries. However, in spite of the dearth of research reported in Indian settings, an effort is made to search for, evaluate and systematically summarize whatever works are available in published forms.

The current review is arranged as follows:

- Parent-child relationship and conduct disorder
- Alienation in conduct disordered children
- Personality disorder in parents and conduct disorder in children
- Parental attitude and conduct disorder in children
- Family environment and interaction
- Other related factors like socio-economic status, gender, birth order and family size
- Studies on intervention.

Parent child relationship in conduct disordered youth

A range of behaviours and associated emotions are exchanged between parents and their adolescent offspring. Some of these exchanges involve positive and healthy behaviours and others not. Some of the outcomes for adolescent development reflect good adjustment and individual and social success, whereas other outcomes reflect poor adjustment and problems of development. As is true for all facets of human development, there is diversity in the nature and implications of parent child relations in adolescence.

Positive parent adolescent relationships may be expected to involve feelings of attachment or closeness on the part of the young person to his or her parents. Such feelings may be beneficial to both parents and adolescents.

Similarly, when adolescents feel secure in their attachments to parents, they are more competent with peers, have fewer internalizing problems and fewer deviant behaviours.

On the other hand, poor attachment or anger about their relationship with parents is associated with the adolescent showing internalizing problems and behavioural deviance.

Several features related to the interaction of parents with their children are risk factors for conduct disorder. Parent disciplinary and punishment practices often are extreme in the homes of conduct disorder youths and they are more likely than both non referred youths and clinical referrals without conduct disorder to be victims of child abuse to be in homes whose spouse abuse is evident.

As they experience in adolescence, children are trying to gain independence and become self-sufficient adults. Children in authoritarian homes experience frustration during adolescence because they have been trained to be submissive to authority. This frustration may cause the adolescents to become alienated from their parents (Hurlock, 1973)

Indiramma (1986) conducted a study on families in India. She studied 40 neurotic children (which included 12 cases of conduct disorder) between the age of 5 and 15 and found that parents of children with conduct disorder displayed low acceptance, and high rejection and hostility. The parents were not involved with the child's activity and did not attempt to build up the child self esteem.

Johnson & O'Leary (1987) studied the behaviour patterns and conduct disorders in girls. Conduct disordered girls, 9 to 11 years old, were compared to Non Conduct–Disordered (NCD) girls of the same age using parental reports about themselves and their children and child report of themselves and their parents. Correlations were obtained between parental behaviour patterns and the behaviour patterns of the girls as perceived by three family members: mother, father, and their target child. The pattern of results suggested that, in terms of aggressive behaviour patterns, female children may be modeling the behavior of their parents, particularly that of their mothers.

Daniel (1989) compared the 4 groups of 8 to 13 years old children with conduct disorders, emotional disorders, mixed disorders of conduct and

emotion and a group of matched controls. She found that compared to the normals, children with conduct disorders had hostile, rejecting, authoritarian parents, who were extra punitive in their aggression

Harnish, *et al.* and the Conduct Problems Prevention Research Group (1995) investigated the relation between maternal depressive symptomatology and the development of externalizing behaviour problems in Caucasians and African American children, by incorporating mother-child interaction quality into a series of models. A representative sample of 376 first-grade boys and girls (mean age = 6.52) from diverse backgrounds (234 from the lowest 2 socio-economic classes) and their mothers completed an interaction task designed to measure the quality of mother-child interaction. Results revealed that mother-child interaction quality partially mediated the relation between maternal depressive symptomatology and child behaviour problems even when the effects of socio-economic status on both variables were taken into account. Although this model held for boys, girls and Caucasians, the relation between maternal depression and interaction quality was not significant for African Americans and suggested further investigation to understand the lack of generalizability of the model to African American mother-child dyads.

Wasserman, Miller, Pinner, Jaramillo (1996) studied the parenting predictors of early conduct problem in urban, high risk boys. As part of a larger prospective study the investigators examined concurrent and prospective relations among parenting and child's antisocial behavior in inner-city at high risk for delinquent behavior. Demographics, parenting and

child diagnosis were examined as they relate to child externalizing behaviour problems. Data support a cumulative risk model whereby each of several adverse parenting factors further compounds the likelihood of child conduct problem.

DeKlyen, Speltz and Greenbergs (1999) research literature linking negative and positive aspects of the father-child relationship with early onset conduct problems indicate that both negative (e.g., harsh, angry, and physically punitive) and positive (involvement, warmth, and secure attachment) dimensions of fathering, as well as aspects of the marital relationship, appear to be associated with the emergence of early onset conduct problems.

Mathijssen, Koot, Verhulst, Bruyn and Oud (1998) investigated the associations of the mutual mother-child, father–child and mother-father relationship and various patterns of family relation with child psychopathology, in a sample of 137 families referred to outpatient mental health services. Children were between 9 and 16 years old, and the immediate reason for the referral were emotional problems, behaviour problems at home or school, problems in interpersonal relations with peers, parents, or siblings and sleep or eating problems. Assessment of the relative associations of the family dyads showed that both the mother-child and mother-father relationship were related to child problem behaviour. However, whereas the mother-child relationship was consistently more related to externalizing behaviour, the mother-father relationship was particularly related to

internalizing behaviour. The findings gave clear support for the cumulative risk model that children whose fathers and mothers perceive their mutual relationship as negative showed more externalizing behaviour, when they lack, in addition, a positive relation with either parent. Furthermore, the result suggested a protective influence of the parent–child relationship. The child who was in alliance with one or both of his parents scored lower on externalizing behaviour, than child from families without such a cross-generations coalition.

The above study provided pointers to the importance of studying both parent - child as well as interparental relationship to better understand child and adolescent psychopathology.

Yuan *et al.* (1998) examined the effect of parental bonding in the development of conduct disorder during the growing up years of adolescents delinquents in Singapore and found that paternal care towards the adolescent had a significant impact on adolescent delinquency.

Stormshak, *et al.* and the Conduct disorder Research group (2000) examined the hypothesis that distinct parenting practices may be associated with type and profile of a child's disruptive behavior problems (e.g., oppositional, aggressive, hyperactive). Parents of 631 behaviorally disruptive children described the extent to which they experienced warm and involved interactions with their children and the extent to which their discipline strategies were inconsistent and punitive and involved spanking and physical

aggression. Parenting practices that included punitive interactions were found to be associated with elevated rates of all child disruptive behavior problems. Low levels of warm involvement were particularly characteristic of parents of children who showed elevated levels of oppositional behaviors. Physically aggressive parenting was linked more specifically with child aggression. In general, parenting practices contributed more to the prediction of oppositional and aggressive behavior problems than to hyperactive behavior problems, and parenting influences were fairly consistent across ethnic groups and sex. Individuals with early-emerging conduct problems are likely to become parents who expose their children to considerable adversity.

McCarty, *et al.* and the conduct Problems prevention Research Group (2003) tested four family variables as potential mediators of the relationship between maternal depressive symptoms in early childhood and child psychological outcomes in pre-adolescence using a normative sample of 224 youth and their biological mothers, The mediators examined included mother-child communication, the quality of the mother-child relationship, maternal social support, and stressful life events in the family. The results suggested that having a more problematic mother-child relationship mediated disruptive behaviour-disordered outcomes for youth, whereas less maternal social support mediated the development of internalizing disorders.

Katz and Nelson (2004) addressed the question of whether mothers of conduct-problem (CP) children differ from mothers of Non- Conduct Problem (NCP) children in their awareness and coaching of emotion and also

examined whether mother's awareness and coaching of emotion is associated with better peer relations in CP children. Results indicated that mothers of CP children were less aware of their own emotions and less coaching of their children's emotions than mothers of non-CP children. Moderation analyses revealed that children's level of aggression moderated the relationship between mother's meta-emotion and children's peer play. For both aggressive and non aggressive children, higher levels of mother awareness and coaching of emotion was associated with more positive and less negative peer play, although effects were stronger for families with non aggressive children. These data suggest that both aggressive and non aggressive children can benefit when parents are more aware and coaching of emotion.

Vostanis *et al's* (2006) study to establish the relationship between parental psychopathology and parenting strategies with child psychiatric disorders in a national survey population on a sample of 10,438 children of 5-15 years and their parents, from representative UK households revealed that parental psychopathology scores and non physical punishment was particularly prominent among families of children with conduct disorders.

Jefferis and Oliver (2006) investigated maternal childrearing cognitions associated with ineffective parenting practices and Intergenerational transmission of parenting problems and cognitions. Seventy-four mothers of 3-5 year old boys (23 clinical boys referred with conduct problems; 51 control) were studied. Results are consistent with a hypothesized model of intergenerational transmission of parenting problems,

whereby experiences of low care and high overprotection in childhood predispose mothers to a dysfunctional 'set' of parenting cognitions, impairing maternal capacity to provide sensitive responses to challenging child behaviours.

Jaffee, Belsky, Harrington, Caspi and Moffitt (2006) tested the specificity of and alternative explanations for this trajectory. The sample included 246 members of a prospective, 30 year cohort study and their 3 year old children. Parents who had a history of conduct disorder were specifically at elevated risk for socioeconomic disadvantage and relationship violence, but sub optimal parenting and offspring temperament problems were common to parents with any history of disorder. Recurrent disorder, comorbidity, and adversity in the family of origin did not fully account for these findings. The cumulative consequences of early-onset conduct disorder and assortative mating for antisocial behavior may explain the long-term effects of conduct disorder on young adult functioning.

Alienation in disordered conduct disordered children

The alienated person feels powerless in dealing with society, he has no strongly developed set of norms with which to judge his own behaviour or the behaviour of others, he feels isolated from others he is also a stranger to himself.

Derived from the Latin word for “to be made into a stranger,” alienation has been defined in a number of ways. Some definitions focus on

the impact of estrangement on the individual, while others focus on the role that society plays in generating a sense of disengagement. Alienation can be thought of as the failure to acknowledge one's culture and its traditional beliefs. The term may also refer to the relationship between the individual and society where society fails to respond to each individual and his/her specific needs.

Sociologist Seeman (1975 cited by Nicholas 2000) divides alienation into six separate and distinct attitudes like powerlessness, meaninglessness, normlessness, isolation, estrangement and social isolation. Powerlessness is the feeling of having little or no control over events and their outcomes within one's life. In normlessness, social norms no long dictate one's rules of behaviour. Instead, one acts upon commonly disapproved behaviours. Meaninglessness is the uncertainty with regard to values, norms, role expectations and definition of the situation (Sinha, 1986). In such a state the individual is unable to predict social situations and the outcomes of his or her own and others behaviour.

Social isolation includes isolation in the sense of being rejected or excluded in social relations, in the sense of lacking commonalities with others, that is, the absence of shared values; and in the sense of lacking a feeling of responsibility for others. It includes the feeling of lack of gratification in ordinary day-to-day role activities; and the feeling of pessimism about them.

When alienation is described as estrangement, the person displays anger toward the self, social institutions, and authority.

Isolation is a state of loneliness that is created which is different from aloneness.

All and all, alienation refers to a sense of loss accompanied by the feeling of being an outsider. Although it is a commonly held belief that the alienated individual is at fault for his/her feelings of estrangement, such disassociations may actually be a symptom of a larger societal problem. Adolescents seem especially prone to this type of disengagement from society and have a tendency to wallow in their misery. The feeling of alienation leaves one confused as to his/her values, beliefs, and personal relationships. The sense of powerlessness leaves one isolated from everyone, including parents, teachers, and peers.

Adolescence marks a change in the function and importance of the peer group. During this time, youth begin to rely less on their family unit and rely more on their peers to discuss problems, feelings and fears. Alienation of students by classmates can dramatically impact their coping resources. Alienation can take the form of peer rejection and/or bullying. Peer rejection refers to the rejection that unpopular and socially isolated students are subjected to by their peers at school. Peer victimization, also known as bullying, refers to repeated, unprovoked, harmful physical or psychological actions by one or more individuals against another. Bullying includes hitting, kicking, pushing, intimidating, name-calling, teasing, taunting, and making

threats. Bullying may also include exclusion and rejection of an individual from a group. Peer rejection is associated with risk for violent behaviour and depression, both of which contribute to further alienation. The literature indicates that school shooters (there were many incidents of school shootings in the U.S and a study on concealed gun carrying by Loeber *et al.* (2004) had identified the presence of symptom of conduct disorder in youngsters who carried the gun with them. And recently murder of schoolmates at school by adolescents boys with gun and pistol by in India has startled parents and teachers in India) commonly harbored feelings of rejection, isolation and loneliness, and felt that they did not belong or fit in. For these individuals, aggression may actually have been a means to attain social status, as aggression has been characterized as an important status consideration among adolescent boys.

Literature review on studies relating conduct disorder and alienation was found to be rare. As such review that could be found is presented here.

Shapiro and Wynne (2004) tested the youth bulge hypothesis. The self and other destructive conduct among American youth that has seen a steady increase as revealed by statistics suggests that the conduct is due to a disproportionate relationship between the youth population and the adult population. One hypothesis, the youth bulge theory, suggests that the conduct and this disproportion ultimately lead to various modes of youth alienation. The authors tested this hypothesis through a regression analysis which estimated the contemporaneous relationship between a measure of adolescent

disorder (the youth suicide rate over time) and the proportion of youths to adults. A statistically significant but small relationship was found between the two variables.

Butler, Fearon, Atkinson and Kevin Parker (2007) conducted a study on 85 young offenders referred for court-ordered mental health assessments. A model of interactive risk was tested in which parent-child relationships, social-contextual adversity and antisocial thinking were predicted to be associated with aggressive and delinquent behaviour in a multiplicative fashion. For aggression, strong associations were found with parent-adolescent alienation, but there were no interactions with social-contextual risk or antisocial thinking. For delinquency, parent-adolescent relationship quality interacted with both social-contextual risk and antisocial thinking. Better parent-adolescent trust-communication was associated with an attenuated effect of social-contextual risk and antisocial thinking on delinquency. Greater parent-adolescent alienation, however, was associated with relatively high levels of delinquent behaviour irrespective of social-contextual risk, whereas adolescents reporting less attachment-alienation showed greater delinquency as social-contextual risk increased

Alienation may occur both ways with each parent attempting to alienate the children from the other. Studies on parental alienation suggest alienated children lose the range of feelings for parents. It may cause harm to children, create psychological and emotional consequences and psychiatric disturbances. Alienated boys are found to have low self esteem, more likely to

be rejected by peers and may experience difficulties in cognitive functioning. Girls are reported as less affected than boys but do show negative effects on their social and cognitive development. They experience depressive anxiety and have a lesser degree participation in deviant behaviour (Ward and Harvey, 1993).

The general view is that children from alienated families are likely to develop a variety of pathological symptoms like difficulties in forming intimate relationships, lack of ability to tolerate anger or hostility with other relationships, psychological vulnerability and dependency, conflicts with authority figures and social isolation. Studies on severely alienated families show that effects of alienation is dramatic and point to the risk of harm to the children from being cut off from parent, as the tragedy occurs when they need contact with both sexes for a balanced development. (Ward and Harvey, 1993; Jo and Roseby, 1997; Waldron and Joanis, 1996; Kelly, 1997; Garrity and Baris, 1994 and Stahl, 1999).

Personality disorder in parents and conduct disorder in their offsprings

The concept of personality refers to the profile of stable beliefs, moods, and behaviours that differentiate among children (and adults) who live in a particular society. Contemporary theorists emphasize personality traits having to do with individualism, internalized conscience, sociability with strangers, the ability to control strong emotion and impulse, and personal achievement. Personality disorder is defined as a maladaptive set of individual characteristics that cluster to form a recognized disorder.

A longitudinal study by Johnson, Cohen, Kasen, Smailes, and Brook (2001) was conducted to investigate the role of maladaptive parental behaviour in the association between parent and offspring psychiatric disorder. Maladaptive parental behaviour substantially mediated a significant association between parental and offspring psychiatric symptoms. Parents with psychiatric disorders had higher levels of maladaptive behaviour in the household than did parents without psychiatric disorders. Maladaptive parental behavior, in turn, was associated with increased offspring risk for psychiatric disorders during adolescence and early adulthood. Most of the youths that experienced high levels of maladaptive parental behaviour during childhood had psychiatric disorders during adolescence or early adulthood, whether or not their parents had psychiatric disorders. In contrast, the offspring of parents with psychiatric disorders were not at increased risk for psychiatric disorders unless there was a history of maladaptive parental behavior. This study shows that maladaptive parental behaviour can have an

adverse effect on the behaviour exhibited by their offspring. Similar result is found between the presence of antisocial personality disorder in parents and the development of conduct disorder in their offsprings by several studies.

In a research conducted on parents of 126 boys attending a child psychiatric clinic to find the relation of psychiatric disorder in the parents of hyperactive boys and those with conduct disorder, by Stewart, Cummings and Deblois (1980), antisocial personality and alcoholism were found to be common in natural fathers of aggressive, antisocial boys than in the remaining boys but the prevalence of these disorders did not distinguish fathers of hyperactive boys from parents of those who were not hyperactive. This indicates that antisocial personality disorder in parents has the most telling effect on the development of conduct disorder in their offsprings.

In the Developmental Trends study, parental antisocial personality disorder was found to be the best predictor of childhood conduct disorder by Frick *et al.* (1992). They found an association between a diagnosis of conduct disorder and parental antisocial personality disorder in a sample of 177 clinic referred children aged 7-13.

Similarly in the New York state longitudinal study parental Antisocial Personality disorder was found to be a strong predictor of externalizing child behaviour. (Cohen, Brook, Cohen, Velez and Garcia 1990)

Vanyukov *et al's* (1993) study used conduct disorder symptom counts in preadolescent boys and antisocial personality disorder and childhood

conduct disorder symptom counts in their parents, as dimensional measures of behavioral deviation. A significant correlation was found for conduct disorder and antisocial personality disorder. Although socioeconomic level correlated negatively with parental symptom counts, no association was observed between parental socioeconomic status and children's conduct disorder symptom counts. Saliva cortisol level in the children was negatively associated with their conduct disorder symptom count and with their fathers' antisocial personality count. Cortisol level was also lower among sons whose fathers had conduct disorder as children and subsequently developed antisocial personality compared with the cortisol level in sons whose fathers either did not have any Axis I psychiatric disorder or did not develop antisocial personality.

Adoption studies point to influence of genetic factors in personality disorder.

Cadoret *et al.* (1995) found an interaction between genetic factors and child rearing environment. It was noted that adverse adoptive home environment increased risk of conduct disorder in offspring of antisocial parents.

Marmorstein *et al.* (2004), when examined conduct disorder and major depression disorder in adolescents in relationship to parent child conflict and psychopathology in parents, found that the presence of conduct disorder in an adolescent was related to increased rate of maternal major Depressive Disorder and parental antisocial behaviour.

Literature review on the relationship between parental personality disorder and conduct disorder in offsprings showed more studies on the relationship of antisocial personality disorder and behaviour in parents and conduct disorder. Studies relating other personality disorders and conduct disorders are rare.

Parental attitude and conduct disorder in children

In a broad way it can be said that the home sets the pattern for the child's attitudes toward people, things and institutions. Since the child loves his parents and other members of the family, he identifies himself with them, imitates their behaviour and learns to adjust to life as they do. The attitude of parents, therefore, exerts some influence on their offspring's approach towards people and events.

Over protectiveness by the parents consists of excessive contact of the parent and child. This leads to a prolongation of dependence and prevents the development of self–reliance in the child. Overprotection decreases the other interests of the child due to which he is not able to build up many interests outside the home. This gives rise to a low level of ego strength, a low level of aspiration and a low level of frustration-tolerance. It makes the child lose confidence in him and makes him excessively sensitive to criticism.

On the other hand, allowing the child to do things by himself and granting healthy level of freedom will foster independence which can contribute to self esteem and confidence.

Adler has shown long back that both overprotection and rejection impair the growth of the child. Rejection of the child by the parent affects his sense of security, increases his sense of helplessness and undermines self esteem. When the child grows up he develops various kinds of antisocial behaviour like aggression, cruelty, lying, stealing, showing off, etc.

Acceptance of the child by the parents makes child care a pleasure to the parents. Psychoanalytic studies have shown that while overprotection and rejection of the child by the parents are rooted in some kind of neuroticism in the parent themselves, acceptance of the child is rooted in the emotional maturity of the parents. When children are given reasonable freedom, they are found to be resourceful, cooperative, self-reliant and well adjusted in social situations. They develop a sense of responsibility and discharge their tasks with assurance and efficiency. On the other hand, if the parents are very indulgent, the child tends to become selfish, and demanding. He expects constant attention, affection and service by others. He reacts to discipline with impatience or with anger.

If the parents are dominating, though the child may grow up to be honest, polite and careful, he is also likely to be shy, self conscious and submissive. He feels inadequate, inferior and inhibited and not be able to build up proper peer relationships. On the other hand, if the parents are submissive to the child and allow him to dominate over them, if every wish of the child is satisfied, the child may boss over his parents and show scant

respect to them. He tends to become disobedient and irresponsible. Later he may defy authority and become aggressive, antagonistic and careless.

Parental attitudes have not only a strong impact on relationships within the family but also affect the attitudes and behaviour of the children to persons outside the family and also to social institutions.

Studies by Glueck (1950), and West and Farrington (1973) have shown the association between extreme parental criticism, rejection, neglect and conduct disorder in children.

Cass (1952, cited by Devi, 1983) has seen maternal dominance and overprotection causing maladjustment in adolescent delinquents.

Hoch (1967, cited by Devi 1983) in her study on Indian children has noticed that delinquents but not pre delinquents had defective parental attitude in the form of either rejection and neglect or over involvement and pampering.

Evidence for inadequate and inconsistent discipline in the genesis of conduct disorder has been consistently reproduced by various investigators like Glueck (1950), West and Farrington (1973) and Chazan and Threfall (1972)

Lukianowicz (1972) in a series of studies on delinquent children in remand home and child guidance clinic in Northern Ireland has found that majority of the fathers being either permissive or indifferent and mothers being nagging and rejecting. He found no difference in parents' attitude

toward male child but has seen fathers having positive attitude and mothers having negative attitude to the female child.

Rutter (1977) observed that the best-adjusted child will have parents who are warm, nurturant, supportive and controlling with high expectations.

Koudelkova *et al*. (1977) has shown that the defective attitudes of fathers and mothers are responsible for maladjustments and delinquency in children.

Sharma and Sandhu (2006) examined association between parenting dimensions and externalizing behaviour and found that parenting significantly influences externalizing behaviours which include conduct disorder in children.

From the studies on parental attitudes it can be concluded that the attitude of the parents affects aspects of child and adolescent development and defective attitudes maintained by parents create drift in parent-child relationship and can harbour deviant behaviour in children which can lead to conduct disorder.

Family environment and interaction

The family has everywhere been society's primary agency in providing for the child's biological needs and simultaneously directing his development into an integrated person capable of living in society and transmitting its culture. A healthy family environment contributes much to the healthy development of a child physically and mentally. Disturbances in the family

interaction in most cases can lead to a lack in capacities to take on life with its challenges and can lead to problems in conduct.

Disturbed home situation can arise either due to separations, divorce or deaths leading to broken families or due to constant unhealthy interactions between parents and other family members or deprivation of parent from childhood.

Most studies of parental dysfunction have focused on the parents of the conduct disorder child. But Glueck and Glueck (1968) comments on grandparents of antisocial children and adolescents. According to them grandparents on both paternal and maternal sides, are more likely to show conduct disorder (i.e. Criminal behaviour and alcoholism) than are grandparents of youth who are not antisocial. Longitudinal studies have shown that aggressive behavior is stable across generation within a family.

Parental separation, divorce and marital discord, separation from one or both parent due to several factors such as parental death, institutionalization and divorce, (in general, separation during childhood) increase risk of psychiatric impairment on adolescent variety of conduct disorders (Rutter *et al*., 1970). In relation to conduct disorder, researches consistently demonstrate that unhappy marital relationship, interpersonal conflicts and aggression characterize the parental relation of delinquents and antisocial children (Ruter and Giller 1984).

Rutter (1971), Chazan (1972) and Wolkind (1973) have demonstrated the role of marital tension of parents in the production of antisocial behaviour and maladjustment in pre school children.

Earls (1980) and Fine (1980) have shown that marital tension and the situation at home before parents' separation as the cause for conduct disorder in children rather than divorce itself.

Kelly (2000) reviewed important research of the past decade in divorce, marital conflict and children's adjustment and acknowledged the idea that there are direct effects of marital conflict as well as indirect effects mediated through quality of parenting and parent child relationship

One of the most important characteristics of parents of seriously delinquent violent juvenile is physical abusiveness toward their children and toward each other. There are several ways in which one might understand how abuse promotes violence. First, parental violence becomes a model of behaviour. Second, it often results in Central Nervous System (CNS) damage that contributes to a child's difficulty controlling impulses and functioning well at school or in the community. Finally it engenders rage that is frequently displaced from the abusing parent onto other figures such as teachers and peers.

Webster–Stratton (1985) compared abusive and non abusive families with conduct disordered children to define the relative contribution of psychosocial, sociological and parent child interactional variables in 19

abusive and 21 nonabusive families with conduct disordered children. Mother's report of having been abused as a child was found to be one of the most potent variables discriminating abusive from nonabusive families.

Conduct disordered youths are more likely than both non referred youths and clinical referrals without conduct disorder to be victims of child abuse and to be in homes where spouse abuse is evident (Widom, 1989).

And one of the most consistent findings about delinquency youths is that their family environments are low in warmth, high in conflict and characterized by inconsistent discipline. Beginning in early childhood, these forms of child reading breed antisocial behaviour and undermine both cognitive and social competence.

Patterson *et al.* (1989) argue that children who experience irritable and ineffective discipline at home and poor parental monitoring of their activities, together with a lack of parental warmth, are particularly likely to become aggressive in peer groups and at school. Such children experience aggressive means of solving disputes at home and is being given no clear effective guidance to do otherwise.

Wahler (1991) pointed out that conduct disordered boys cultivate their own deviance by driving social exchanges with their parents. In essence, the children are taught to behave in ways that push or elicit parent responses that foster the children's conduct disorder status. This observation presents a view on which parental insensitivity sets the stage for child maladjustment. In this

hypothesis, the children diminish parental non-synchrony through antisocial behavior.

Although severity and consistency of punishment contribute to aggressive behaviour (Patterson *et al*., 1992) some evidence suggests that parent punishment may be a response to child aggression rather than an antecedent to it (Eron, Huesmann, and Zelli, 1991). It is likely that parents respond to annoying and deviant behaviour of the child and in the process inadvertently exacerbate the child's deviant and then aggressive behaviour. The relation between child deviance and punishment is likely to be that each begets and promotes the other and in the process they both become more extreme.

Dadds *et al's* (1992) analysis of family interaction pattern in the home revealed that conduct disorderd children express high levels of aversive behaviour and anger and are part of a family system marked by conflict and aggression

Sanders *et al.* (1992) assessed the family interactions of depressed, conduct-disordered, mixed depressed-conduct disordered and nonclinic children, aged 7-14 years, during a standardized family problem-solving discussion in the clinic. The child's and the mother's problem-solving proficiency, aversive behaviour, and associated affective behaviour (depressed and angry-hostile) were observed. Although all clinic groups had lower levels of effective problem solving than did nonclinic children, their deficiencies were somewhat different. Conduct-disordered children displayed

both angry and depressed affect. In addition, conduct-disordered children had lower levels of positive problem solving and higher levels of aversive content than did non-conduct-disordered children. Depressed and conduct-disordered children had higher levels of self-referent negative cognitions than other group of comparison children. The study provides support for theories and treatment that stress the importance of family problem-solving and conflict resolution skills in child psychopathology.

Punishment practices often are extreme in the homes of conduct disordered youths. Such parents tend to be harsh in their attitudes and disciplinary practices with their children (Farrington, 1978; Kazdin 1985).

Apart from harsh punishment, studies have shown that more lax, erratic, and inconsistent discipline practices within a given parent and between the parents are related to delinquency. For example, severity of punishment on the part of the father and lax discipline on the part of the mother has been implicated in later delinquent behaviour. When parents are consistent in their discipline practices, even if they are punitive children are less likely to be at risk for delinquency (McCord, McCord and Zola, 1959).

Toupin, Dery, Pauze, Mercier, and Fortin (2000) examined the contributions of cognitive defects and family characteristics to conduct disorders in children. They experimented on 57 children (51 males and 6 females) with conduct disorder (including oppositional defiant disorder and attention deficit-hyperactivity disorder) and 35 controls aged 7-12 years. The control group was recruited from the same school as conduct disorder

participants in special education programs. The result indicated that more parental punishment was one of the significant predictors distinguishing those with conduct disorder from control participants.

Punishment practices apart research suggest that other ways of controlling child behaviour are problematic among parents of antisocial youths. Parents of antisocial children are more likely to give commands to their children to reward deviant behaviour directly through attention and compliance and to ignore or provide adverse consequences for prosocial behaviour (Patterson *et al*., 1992). Fine grained analysis of parent-child interactions suggest that antisocial behaviour, particularly aggression, is systematically albeit unwittingly, trained in the homes of antisocial children.

In a sample of 177 clinic-referred children aged 7-13, an association was found between a diagnosis of conduct disorder and several aspects of family functioning like maternal parenting (Supervision and persistence in discipline) and parental adjustment (parental antisocial personality disorder and paternal substance abuse) by Frick *et al.* (1992). The study examined familial risk to oppositional defiant disorder and conduct disorder, parental psychopathology and maternal parenting.

Study by Raine, *et al*. (1994) shows that a combination of factors is needed to produce conduct disorder. It was shown in 4,269 Danish children that the presence of both birth complications and maternal rejection predicted, later violent criminality at age 18 years.

Sanchez *et al*. (1994) examined placebo factors response in aggressive children with conduct disorder that may differentiate placebo responders from non responders hospitalized in a structural setting. The sample consisted of 25 children, aged 6.25 to 11.95 years, with conduct disorder and a profile of aggressive and explosive behaviour, who were assigned to placebo treatment as part of a double- blind study of lithium. Responders were compared to non responders with respect to a detrimental psychosocial environmental score, age, IQ and baseline ratings on the Chider's Psychiatric Rating scale and clinical global impressions. Responders had significantly higher detrimental psychosocial environmental score than non-responders. They were particularly more likely to come from violent homes and to have criminally charged parents

Loeber, Green, Keenan and Lahey (1995) found that parental substance abuse as one of the key factors in boy's progression to conduct disorder

Slee (1996) studied the family climate and behaviour in families with conduct disordered children. The aim of the exploratory study was to investigate mother's perceptions of family climate in families with a conduct disordered child in comparison with families with a normal child. The study revealed that mothers with a conduct disordered child perceived the family climate as less cohesive, less encouraging of the expression of feeling and more conflictual than their counterparts. The same mothers also perceived families to be more control oriented and less organized than their matched

controls. Independent behavioural observations supported the view that the mothers with conduct disordered children were control oriented.

The findings of the study of Whitbeck *et al.* (1997) on homeless and runaway adolescents suggested that runaway and homeless adolescents accurately depict troubled family situations that they choose to leave.

The study by McDonald *et al.* (2000) using multivariate analysis shows the association of both mothers and fathers' reports of husband's marital violence with child externalizing and internalizing problems among intact families seeking outpatient services for children's problems. Children in the observed group were found to display levels of behaviour problem including externalizing behaviour, anxiety and depression than did children in the neither group, but they did not differ from children in the occurred group. Results indicate that the occurrence of interparental violence, rather than children's observation of it, marks increased risk for child behaviour problems. This study of children living with their mothers in shelters due to their father's violence toward the mothers shows the significance of interparental violence in its association with the child's internalizing and externalizing behaviour problems which include conduct disorder symptoms.

Rey *et al.* (2000) examined whether there were differences in family environment among patients with attention deficit-hyperactivity disorder, oppositional defiant disorder and conduct disorder. The result showed that a poorer family environment was associated with conduct disorder and oppositional defiant disorder and predicted a worse outcome (e.g. admission

to a non-psychiatric institution, drug and alcohol abuse). The study revealed an association with conduct disorder only.

Kilgore, snyder and Lentz (2000) studied the contribution of parental discipline, parental monitoring and school risk to early–onset conduct problem in African American boys and girls. Perspective Analysis indicated that, after earlier conduct problem were controlled for, coercive parent discipline and poor parental monitoring at age 4 ½ were independent, reliable predictors of age 6 conduct problem for both boys and girls

Little empirical work has explored the relation between destructive sibling conflict and conduct problem in children.

Garcia, Shaw, Winslow and Yaggi (2000) examined the destructive sibling conflict and conduct problem in young boys. Early report of behaviour problems and rejecting parenting were added to the analyses to control for these predictors and to examine interactive effects. The interaction between destructive sibling conflict and rejecting parenting predicted aggressive behaviour problem across time and a rise in aggression scores was evident for children who had high levels of both sibling conflict and rejecting parenting.

The results of Chermack *et al' s* (2000) study on the relative influence of family history of alcoholism (FHA) and family history of violence (FHV) on reported childhood conduct problem and adult problem with alcohol, drugs and violence illustrated the relative importance of FHV as a risk factor in the developmental course leading to the problem of drugs and violence among

individuals with alcohol related problems enrolled in treatment for substance abuse or dependence.

Wakschlag *et al*. (1997) studied maternal smoking during pregnancy and the risk of conduct disorder in boys. Result showed that mothers who smoked more than half a pack of cigarettes daily during pregnancy were significantly more likely to have a child with conduct disorder than mothers who did not smoke during pregnancy appears to be a robust independent risk factor for conduct disorder in male offspring. Maternal smoking during pregnancy may have direct adverse effects on the developing fetus, a marker for a here to fore unmeasured characteristic of mothers that is of etiologic significance to the development of conduct disorder.

Biederman *et al.* (2000) found that the combination of conduct disorder and bipolar disorder in youth predicts especially high level of substance use disorders in relatives, which indicates the adverse effect of conduct disorder.

Toupin *et al.* (2000) studied the cognitive and familial contributions to conduct disorder in children. Findings indicate that children with CD are especially at risk for persistent antisocial behaviour.

Literature review on significance of family risk factors in development of childhood animal cruelty in adolescent boys with conduct problems by Duncan, Thomas, and Miller (2005) suggests that physical child abuse, sexual child abuse, paternal alcoholism, paternal unavailability and domestic

violence may be significant in development of childhood animal cruelty in conduct disorder children.

Research evidence shows that when parents give strong, controlling commands, children comply as long as the parents are present, but they do not comply as much when their parents are gone (Hetherington, 1983). These children hold resentment and guilt inside of them, and that breeds hostility. When their parents are absent, these children frequently run wild; authoritarian parents are never fully free to be absent, opinions (Briggs, 1970). This alienation from their parents can have long-term effects on the children. Baumrind (1989 cited by Ingersol 1989) believes that the so called "generation gap" is widened in authoritarian families. Other researchers agree that authoritarian parenting damages long-term relationships. Many times, when children from authoritarian homes finally break away from their parents, they avoid close relationships with their parents because they do not want to be smothered again (Nelsen and Lot 1991).

The review of literature on the relationship between conduct disorder and family environment/interactions show that an unhealthy family interaction can contribute to the severity of behaviour problems expressed by conduct disordered children.

Other related factors: socio-economic status, gender and birth order .

1. Socio-economic Disadvantage

Poverty, overcrowding, unemployment, receipt of social assistance ("welfare") and poor housing are among the salient measures of socioeconomic disadvantage that increase risk for conduct disorder and delinquency as pointed out by (Hawkins Catalano and Miller, 1992).

The effects appear to be enduring. For example, low income in childhood predicts adult's criminal behaviour 30 years later, (Kolvin Miller, Fleeting and Kolvin, 1988). Interpretation of the impact of low income and related indices of disadvantages is completed by the association of social class with many other known risk factors such as large family size, overcrowding and poor child supervision, among others. When these separate factors are controlled social disadvantage by itself does not always have shown adolescent relation to conduct disorder (Robins, 1978 Wadsworth, 1979). Also it is likely that socio-economic disadvantage exacerbate other factors. For example limited financial resources can decrease likelihood of child supervision (e.g. hiring baby-sitters) and increase stress (e.g. inability to repair an automobile and the attendant inconveniences). In general socio-economic disadvantage can be viewed as adolescent risk factor. However once all other associated features are controlled, the precise role of economic issues is not always evaluated.

There are contradictory findings in relation to socio-economic status and delinquency. The main reason is due to unsatisfactory criteria and each investigator using either the income or the social class to measure the socio-economic status.

Lukianowics (1972) has done extensive study on juvenile offenders and tried to find out if socio-economic status varies with sex of the delinquents and also with the population attending child clinics and remand home. He has found that three fifths of the children belong to lower class irrespective of their sex and place they are attending. Such studies are not available in Indian set up.

West and Farrington (1973) have found no association between fathers' occupation and delinquency in children, but delinquency is seen associated with low family income.

Toupin *et al' s* (2000) study indicated that more parental punishment and low socio-economic status were significant predictors distinguishing those with conduct disorder from control groups.

With regard to Indian studies relating conduct disorder to socio economic background, Hoch (1967, cited by Devi 1983) had observed that most of the pre-delinquents and delinquents originated from high social class and none from working class. She explains this is due to non attendance of people belonging to low socio-economic class.

Similar observations were made by Murthy *et al*., (1974) and Nagaraja (1978) with respect to behaviour disorders of childhood delinquents attending psychiatric clinics respectively.

Rutter (1977) feels that low income predisposes the family to various problems that cause delinquency. He also feels that the higher representation

of delinquency in Britain could be due to the bias on the part of the police, who would arrest working class more than middle class.

Webster–Stratton (1985) compared abusive and nonabusive families with conduct disordered children and found that low family income as one of the most potent factor discriminating abusive and non abusive families.

Loeber, Green, Keenan and Lahey (1995) found the low socioeconomic status, as one of the key factors in boy's progression to conduct disorder.

Wasserman, Miller, Pinner, Jaramillo (1996) studied the parenting predictors of early conduct problem in urban high risk boys. As part of a larger prospective study the authors examined concurrent and prospective relations among parenting and child antisocial behaviour in inner city at high risk for delinquent behavior. Demographics, parenting and child diagnosis were examined as they relate to child externalizing behaviour problems. Data support a cumulative risk model, whereby each of several adverse parenting factors further compounds the likelihood of child conduct problem

Hope and Bierman and the Conduct Problems Prevention Research Group (1998) examined the cross-situational patterns of behaviour problems shown by children in rural and urban communities at school entry. Behaviour problems exhibited in home settings were not expected to vary significantly across urban and rural settings. In contrast, it was anticipated that child behaviour at school would be heavily influenced by the increased exposure to

aggressive models and deviant peer support experienced by children in urban as compared to rural schools, leading to higher rates of school conduct problems for children in urban settings. Statistical comparisons of the patterns of behaviour problems shown by representative samples of 89 rural and 221 urban children provided support for these hypotheses, as significant rural-urban differences emerged in school and not in home settings. Cross-situational patterns of behaviour problems also varied across setting, with home-only patterns of problems characterizing more children at the rural site and school-only patterns of behaviour problems characterizing more children at the urban sites. In addition, whereas externalizing behaviour was the primary school problem exhibited by urban children, rural children displayed significantly higher rates of internalizing problems at school. The implications of these results are discussed for developmental models of behavior problems and for preventive interventions.

2. Gender

Johnson and O'Leory (1987) studied the parental behaviour patterns and conduct disorders in girls. When conduct disordered girls, 9 to 11 years old, were compared to non conduct disordered girls of the same age using parental reports about themselves and their children and child report of themselves and their parents and correlations were obtained between parental behaviour patterns and the behaviour patterns of the girls as perceived by three family members: mother, father and their target child, the pattern of results suggested that, in terms of aggressive behaviour patterns, female

children may be modeling the behaviour of their parents, particularly that of their mothers.

Zocolillo (1993) examined gender and conduct disorder and found that correlates of conduct disorder in girls are similar to those in boys (including aggression and internalizing disorders)

Chermack *et al.* (2000) examined gender differences regarding the relative influence of Family History of Alcoholism (FHA) and family history of violence on reported childhood conduct problem and adult problem with alcohol, drugs and violence. Overall the analysis illustrates the relative importance of FHV as a risk factor in the developmental course leading to the problem of drugs and violence among individuals with alcohol related problems enrolled in treatment for substance abuse or dependence. Further, there was evidence that women may be imparted more than men by family background variables (both FHA and FHV) in terms of the development of adults' problem with alcohol, drugs and violence.

Bierman, *et al.* and the Conduct Problems Prevention Research Group, (2004) found significant predictability for both girls and boys when the broad spectrum of disruptive behaviours is used to indicate risk.

3. Birth Order

Birth order is related to the onset of conduct disorder as reported by some studies. Conduct disorder is greater among middle children in comparison to only children, first born or youngest children (e.g. Glueck and Glueck 1968, McCord *et al*., 1959).

Large family size (i.e. more children in the family) increases risk of delinquency (e.g Glueck and Glueck, 1968). Family size is obviously related to of birth order. Efforts to separate family size and birth order factors have examined family size and the birth spacing of offspring. Children with older siblings are more likely to be delinquents. The older the siblings (i.e. the greater the space internalizing in age between them) the greater the likelihood of delinquency (Wadsworth 1979).

Increasing risk is associated with the number of brothers (rather than sisters) in the family (Offord, 1982). If one of the brothers is antisocial the others are at increased risk for conduct disorder.

Studies Related to intervention

The breadth of dysfunction of conduct disorder youth and their families makes the task of developing effective treatment demanding. Many different types of treatment have been applied to conduct disorder youths. Unfortunately little out come evidence exists for most of the techniques.

Treatments for conduct disorder have focused on psychosocial interventions and parent training and in some cases the use of medication.

They typically focus on helping young people understand the effect their behaviour has on others and developing skills for behavioural change. Treatment is rarely brief since establishing new attitudes and behaviour patterns takes time. However, early intervention that targets risks in multiple areas offers a child better opportunity for reducing and eliminating symptoms. Several effective psychosocial treatments have been identified for conduct disorder (Hanf, 1969; Henggeler, 1982; Henggeler *et al*., 1986; Kazdin *et al*., 1987; Kendall and Braswell, 1985; Patterson, 1982; Webster-Stratton, 1984).

Among the available psychosocial interventions, Parent Management Training (PMT) (Patterson, 1982) has been demonstrated to be especially promising. PMT has focused on altering coercive parent-child interactions that foster aggressive child behaviour in the home and that distinguish families with antisocial children.

Another promising treatment is cognitive behavioral Problem-Solving Skills Training (PSST) (Kendall and Braswell, 1985), which focuses on the cognitive processes and deficits that are considered to mediate maladaptive interpersonal behaviours.

Kazdin (1987) combined these two treatments by providing PMT for parents and PSST for children. This combined treatment has resulted in significantly less aggressive and externalizing behaviour at home, at school and greater overall adjustment in children than a contact-control group in which parents did not receive PMT but rather received contact meetings in which the children's treatment was discussed. These positive changes were

sustained for up to one year following the treatment. Another effective psychosocial treatment is Videotape Modeling Parent Training (Webster-Stratton, 1984), which includes a videotape series of parent-training lessons and is based on the principles of parent training originally described by Hanf (1969). This treatment is administered to parents in groups with therapist-led discussions of the videotape lesson. Results show that after treatment, parents rate their children as having fewer problems and rate themselves as having a better attitude towards their children and greater self-confidence regarding their parenting role. Observation of the children and parents showed results similar to the parents' viewpoint.

Henggeler *et al.* (1986) developed Multi Systemic Therapy (MST) which utilizes therapeutic interventions that are based on a family-ecological systems approach to delinquency and adolescent psychopathology (Henggeler, 1982). This treatment simultaneously considers the multiple systems of which an adolescent is a part (i.e., family, peers and extra familial systems) (Henggeler *et al*., 1986). The findings indicated that the use of a family-ecological treatment decreased conduct problems, anxious-withdrawn behaviours, immaturity, and association with delinquent peers significantly. Family-ecological treatment differs from traditional family therapy approaches through the emphasis placed on the utilization of theory and research findings within the field of developmental psychology and child-clinical psychology (Henggeler, 1982). The primary goal of family-ecological treatment is the reduction of an adolescent’s behavioural problems, but

additional benefits occur. For example, mother-adolescent and marital relations in families are evidenced to be warmer and the adolescent typically becomes more involved in family interactions.

Little and Kendall (1979, cited by Harris *et al*., 1991) identified three specific areas of potential deficit for the delinquent such as (a) lack of skills in interpersonal transactional (Problem solving), (b) difficulty in assuming another person point of view (role taking) and (c) inability to inhibit ones impulses (self-control). They suggested that a cognitive behavioural approach to these deficits could be integrated into residential and family based treatment programme.

Dodge (1993) pointed out that progress in understanding conduct disorder can be enhanced by reciprocal contribution between basic descriptive development psychopathology research and applied treatment studies. Basic research can guide treatment design, and treatment outcomes can test developmental theories. Conduct disorder seems to have self-perpetuating components pertaining to family, child-cognitive, per group and community systems. Interventions should be directed toward just Internalizing component. This may be successful in long-term prevention of serious conduct disorder because other forces counteract these changes. Two kinds of treatment studies are advocated, Internalizing directed toward developing adolescent technology of successful change procedures for individual process and a second using these multiple change procedures in adolescent comprehensive effort to prevent serious conduct disorder.

Ensink *et al.* (1997) evaluated the effectiveness of adolescent 12 week intervention programme for conduct-disordered boys aged 10-16 years at adolescent community mental health project in site Conduct disorder, khayelitsha. It was a descriptive study comparing a group of boys who participated in an intervention programme with adolescent non-participant group. The study result suggested that short-term community-based group therapy might be effective in treating delinquent behaviour among boys in an informal settlement. Nine of the 15 boys who were referred to for serious conduct problems participated in the intervention and the remaining 6 were non-participants. Six months after the Intervention, the treatment group showed a significant reduction in defiance, physical and delinquent aggression, as well as additional conduct problems. The non-treatment group showed a significant reduction only in defiance. The study result suggested that short-term community-based group therapy might be effective in treating deviant behaviour among boys in an informal settlement.

Dumas *et al.* (1999) describes the early Alliance interventions, an integrated set of four programs designed to promote competence and reduce risk for early onset conduct disorder, substance abuse and school failure. These interventions were evaluated as part of a prevention trial that begins at school entry and targets child functioning and socializing practices across multiple contexts (school, peer group, family) and multiple domains (affective social and achievement coping competence).

Ialongo, Poduska, Werthamer and Kellam, (2001) investigated the distal impact of two first-grade preventive interventions on conduct problems and disorder in early adolescence. The study evaluated the long-term impact of two first-grade preventive interventions on the occurrence of conduct problems and disorder and mental health service needs. This follow-up study was conducted five years later when the children were in the sixth grade (age 12). Three first-grade classrooms in each of nine urban elementary schools were randomly assigned to receive the intervention or serve as controls for the study. The two interventions were: The classroom-centered (CC) intervention, designed to enhance teachers' management of the classroom and children's social skills in first grade; and the Family-School Partnership (FSP) intervention, designed to promote communication between the parent and teacher and improve parent's management of the child's behaviour. By the spring of the sixth grade, children exposed to the Classroom centered intervention were significantly less likely than control children to have experienced aggression-related problems. They were less likely than controls to have received a diagnosis of conduct disorder, been suspended from school and received or been judged in need of mental health services. Also, both CC and FSP children were rated by teachers as exhibiting lower levels of conduct problems in sixth grade than control children. FSP intervention girls were significantly less likely to have been suspended in sixth grade than control girls. Overall, the CC intervention appeared to be the more effective of the two in reducing the prevalence of conduct problems and disorder at age 12 and in reducing mental service need and utilization.

In addition, the scientists found evidence that these later outcomes were due in part to success in addressing some of the early risks of attention/concentration problems and shy and aggressive behaviour. By helping children at age 6 to learn to accept authority, pay attention to task and participate socially can help them be successful at age 12 or later.

Conduct Problems Prevention Research Group (2002a) evaluated the first 3 years of the Fast Track prevention trial with children at high risk for adolescent conduct problems. In the study over 9,000 kindergarten children at 4 sites in 3 cohorts were screened and 891 were identified as high risk and then randomly assigned to intervention or control groups. Beginning in Grade I high-risk children and their parents were asked to participate in a combination of social skills and anger-control training, academic tutoring, parent training and home visiting. A multiyear universal classroom program was delivered to the core schools attended by these high-risk children. By the end of third grade, 37% of the intervention group was determined to be free of serious conduct-problem dysfunction in contrast with 27% of the control group. Teacher ratings of conduct problems and official records of use of special education resources gave modest effect-size evidence that the intervention was preventing conduct problem behaviour at school. Parent ratings provided additional support for prevention of conduct problems at home. Parenting behaviour and children's social cognitive skills that had previously emerged as proximal outcomes at the end of the 1st year of

intervention continued to show positive effects of the intervention at the end of third grade.

Conduct Problems Prevention Research Group. (2002b), using the Fast Track randomized prevention trial set out to test hypotheses from the Early-Starter Model of the development of chronic conduct problems 891 high-risk first-grade boys and girls (mean age 6.5 years) were randomly assigned to receive the long-term Fast Track prevention or not. After 4 years, outcomes were assessed through teacher ratings, parent ratings, peer nominations and child self-report. Positive effects of assignment to intervention were evident in teacher and parent ratings of conduct problems, peer social preference scores and association with deviant peers. Assessments of proximal goals of intervention (e.g., hostile attributional bias, problem-solving skill, harsh parental discipline, aggressive and prosocial behavior at home and school) collected after grade 3 was found to partially mediate these effects. The findings are interpreted as consistent with developmental theory. Stumphauser's (1976 cited by Kapur 1995) observation about western correctional institutions that the remand homes and orphanages rather than being adolescent place where youths are rehabilitated provided an environment where youths learn new antisocial behaviour is even more applicable to Indian correctional facilities and other institutions where destitute children are taken care. Research studies carried out on these have pointed to the pessimistic future for the children staying there.

Parent focused approach, family therapy, functional family therapy, multidimensional treatment foster care, multi systemic child or adolescent focused therapy, like cognitive behavioural and behavioural therapies, traditional psychotherapy, mentoring and school based interventions are used for the treatment of conduct disorder. The study by Conduct Problems Research Group (2004) examined the effects of the Fast Track program, which is a multi component, intensive intervention for children with early-onset conduct problems and continues from 1st grade through high school. Prior research has shown that Fast Track produces small positive effect sizes on children's social and behavioural outcomes at the end of 1st and 3rd grades in comparison to control children. This study addressed the important question of whether this intervention reduces cases of serious problems that can occur during the 4th and 5th grade years. Fast Track did have a significant but modest influence on children's rates of social competence and social cognition problems, problems with involvement with deviant peers and conduct problems in the home and community, compared to children in the control condition. There was no evidence of intervention impact on children's serious problems in the school setting at Grades 4 and 5. This evaluation indicates that Fast Track has continued to influence certain key areas of children's adjustment throughout the elementary school years, reducing children's likelihood of emerging as cases with problems in their social, peer or home functioning.

Problem Solving Skills Training (PSST) consists of developing interpersonal cognitive problem-solving skills. Several outcome studies have been completed with impulsive, aggressive and conduct disordered children and adolescents. Extensions of the problem-solving skills training approach have been examined in a few recent studies.

Yu *et al.* (1986) examined the effectiveness of the Rochester Social Problem Solving Program with psychiatric outpatients whose primary diagnoses were conduct or behaviour disorder. The study provides some support for the utility of problem-solving training.

Developments have also been achieved in the application of social skills training procedures designed to enhance peer relationship and promote interpersonal competence as well as reduce aggressive behaviour

Bierman and Furmann (1984) found that peer involvement in adolescent co-operative group experience enhanced the impact of conversational skills training on social performance and peer relations.

Rose and Lecroy (1985) associated group training with certain benefits, such as repeated opportunities for social modeling and feedback, observation of both alternative response during conflict and co-operative situations and group norms and the development of friendships. It is also noted that self-control training provided exposure to problem-solving and perspective taking, while social skills training provided instruction in helping, sharing and offering support to peers.

According to Dubow *et al.*, (1987) the combination of cognitive and social skills training procedures with aggressive preadolescent has led to post training improvements on teacher measures of aggression and prosocial behaviour relative to cognitive or social skills training only groups but was comparable inefficacy to an attention/play condition. Data obtained at six months follow–up revealed the maintenance to improvements for the attention/play intervention only.

A similar intervention by Baum *et al*., (1986) had been found as enhancing performance of relaxation postures, physiological control and role-played social skill from baseline levels.

Working with adolescent family

Adverse family factors consisting of marital disharmony and mental illness in the parents as well as difficulty in relationship manifested in poor and inconsistent discipline are some of the issues that may be dealt with by counseling the family. When these problems cannot be corrected or can only partially be modified the child may be taught how to distance himself emotionally from these difficulties or physically through placement in residential schools, homes of relatives who care for the child etc.

Among the Intervention programs involving Parent Management Skills Training, the initial work of Patterson (1981, cited by Kolko 1989) and his colleagues is well known. The program provides parents with an overview of

social learning before individualized training in observational methods, positive reinforcements, time-out and contingency contracts.

Griest *et al.* (1982) incorporated adjunctive methods to enhance parental motivations and accessibility by altering specific family conditions that have been found to commonly interfere with treatment participation (e.g. marital, social isolation). Parent management skill training is primarily directed towards parents and family therapy approaches to intervention attempt to address overall family system functioning and structural organization

A recent comparative investigation by Sayger *et al*. (1987 cited by Kolko 1989), included one form of strategic therapy that emphasized several issues such as rule setting, personal values and the family functions of conduct problem.

Kolko *et al.* (1991) examined the impact of group treatment programs on the social skills and peer relations of hospitalized conduct disordered and attention deficit disordered children. Significantly greater post treatment improvements were found at one year follow up for the child who were with the social cognitive skills training group. Child diagnosis did not differently affect treatment outcomes.

Gloria and Ronald (1990) examined critical pretreatment variables related to the engagement and retention of families in mental health services designed to reduce serious childhood aggression. One hundred and twenty

four families of 5 to 9 year old boys who met diagnostic criteria for conduct disorder were randomly assigned to receive either parent only, child only or combined parent child treatments. Premature termination was greatest in the parent only condition. Pre-treatment attributional motivations that were externalizing–oriented showed a clear association with premature termination. Moreover, assignment to a treatment condition that did not match parents' incoming motivations was predictive of premature termination. Overall, the findings have implications for further study of barriers and facilitators for the delivery of mental health treatment for childhood conduct problems especially with regard to pretreatment motivational cognitions and engagement issues.

Kingspern *et al.*, (1991) evaluated the effectiveness of various degrees and circumstances of programme completion of young offenders in adolescent residential treatment center. A two year follow-up was conducted on the socialized coping of conduct disordered boys who were admitted to adolescent residential treatment center. Subjects who completed treatment did better in general than subject who did not complete treatment.

Based on the longitudinal treatment studies of conduct disorder, Reid (1993) had proposed adolescent developmental approach to its prevention. Outcome studies for the treatment of CD and antisocial behaviour demonstrated that although none have been entirely successful, many interventions have powerful effects on various symptoms that comprise the disorder, highly predictive antecedent and risk factors. The development of conduct disorder and the potency and interrelationship among antecedent and

mediating variables is traced through the preschool and early elementary school years. Development and treatment research findings are synthesized to suggest possible integration of interventions that are promising for future preventive trials in the preschool and elementary school periods. It is concluded that multisetting interventions after school are essential.

Dogra and Veeraraghavan (1994) studied the effectiveness of psychological interventions on children with aggressive conduct disorder, which included play therapy and parental counseling. The results obtained revealed that psychological intervention was successful in bringing about adolescent change in the child with aggressive conduct disorder as compared to the group that did not undergo the intervention.

Nix *et al*, and the Conduct Problems Prevention Research Group (2005) examined whether the link between risk factors for conduct problems and low rates of participation in mental health treatment could be decoupled through the provision of integrated prevention services in multiple easily-accessible contexts. It included 445 families of first-grade children (55% minority), living in four diverse communities and selected for early signs of conduct problems. Results indicated that, under the right circumstances, these children and families could be enticed to participate at high rates in school-based services, therapeutic groups and home visits. Because different sets of risk factors were related to different profiles of participation across the components of the prevention program, findings highlight the need to offer

services in multiple contexts to reach all children and families who might benefit from them.

Though this type of intervention techniques are used there still exists controversy regarding successful management of conduct disorders. As far as Indian scene is concerned, in spite of its significance, there is a dearth of intervention studies reported so far.

METHOD

The title of the present investigation reads as “Psycho-social Correlates of Conduct Disorders and Efficacy of an Intervention Programme”

OBJECTIVES

The present research was planned with the objective to study conduct disorder among adolescent children in relation to (i) selected psychological factors namely children’s perception of parent-child relationships, alienation, parental personality disorder and parental attitude, (ii) selected social factors such as family environment, economic status, parental education and ordinal position of children and (iii) plan and execute an intervention module to reduce conduct disorder problems in adolescent children.

HYPOTHESES

The following hypotheses are examined in the present study.

1. Conduct disordered children differ from normal children in their perception of parent-child relationship.

2. Conduct disordered boys and girls differ from normal boys and girls in their perception of parent-child relationship.

3. Conduct disordered children differ from normal children in alienation.

4. Conduct disordered boys and girls differ from normal boys and girls in alienation.

5. Parents of conduct disordered children differ from the parents of normal children with regard to the presence of traits of personality disorder

6. Parents of conduct disordered children differ from the parents of normal children with respect to their attitude to children.

7. Conduct disordered children differ from normal children with respect to their family environment.

8. Conduct disordered boys and girls differ from normal boys and girls in their family environment.

9. In the case of conduct disordered children factors such as economic status, parental education and ordinal position affect variables such as perception of parent child relationship, feeling of alienation, presence of personality disorders traces in parents, parental attitude and family environment.

10. Psychological intervention is effective in reducing conduct disorder problems.

SAMPLE

The sample for the study consists of 190 adolescent children in the age group of 14-17yrs. They include 95 conduct disordered and 95 normal children with a distribution of 65 boys and 30 girls in each group.

Normal sample was drawn from eleven secondary and higher secondary schools of two districts in Kerala. Stratified random sampling technique was used to select the normal sample.

Conduct disordered children were selected from the schools, 3 hospitals and as referrals from doctors. Purposive sampling was used to select conduct disordered sample.

The sample represents different socio-economic strata.

Conduct disordered group

Inclusion criteria

1) Adolescent boys and girls of 14-16 yrs of age.

2) Children with a cut off score of 4 or above in the conduct disorder subscale of Developmental Psychopathology Check-List for Children (Kapur, Barnabas, Reddy, Rozario and Uma, 1995) were taken as the conduct disordered group in this study.

Exclusion criteria

1) Adolescents with history of over all delay in developmental milestones and who exhibited psychotic and neurotic symptoms.

2) Children with single parent.

3) Children already on medication

Normal group

Inclusion criteria

1) Adolescent boys and girls of 14-16 yrs of age.

2) Children who got a score below the cut off point of 4 as per the conduct disorder subscale of Developmental Psychopathological Check-List for Children **(**Kapur, Barnabas, Reddy, Rozario and Uma, 1995) was taken as the normal group.

Exclusion criteria

1. Children with single parent.

2. Children who had psychotic or neurotic features and those who had developmental delays as per Developmental Psychopathological Check-List for children.

TOOLS USED

The following tools were used in the present study

1. Parent-Child Relationship Scale (Rao, 1989)
2. Alienation Scale for Youngsters (Ajaykumar and Sanandaraj, 1987)
3. International Personality Disorder Examination (IPDE) ICD-10 Module Screening Questionnaire (Loranger *et al.*, 1997)
4. Parent Attitude Inventory (Radhika and Thomas Immanuel, 1999)
5. Family Interaction Scale (Asha, 1987)
6. Developmental Psychopathology Check-List for Children (Kapur, Barnabas, Reddy, Rozario and Uma, 1995)
7. Personal Data Sheet

DESCRIPTION OF THE TOOLS

1. Parent–Child Relationship Scale

The Parent–Child Relationship Scale developed by Rao (1989) is a revised version of revised Roe–Seigalman Parent–Child Relationship Questionnaire. This scale measures characteristic behaviour of parents' as experienced by their children.

The tool contains 100 items categorized into ten dimensions namely, protecting, symbolic punishment, rejecting, object punishment, demanding, indifferent, symbolic reward, loving, object reward and neglecting. Items of the scale are arranged in the same order as the dimensions and they rotate in a

cycle through the scale. Each respondent score the tool for both father and mother separately. Items are common for both the parents except for three items that are different in the Father and Mother forms due to the variation in paternal and maternal relationship with children.

Administration and Scoring

The respondents were asked to rate statements as to their own perception of their relationship with either father or mother on a five point scale ranging from “Always “ to “Very rarely” weighted 5, 4, 3, 2, and 1 on the scale points. The scale is scored separately for each of the parent, thus every respondent obtains ten scores for father form and ten for mother form on the ten dimensions in the scale. Each subscale yields a score by summing up the scores of the ratings on each item of the subscale. A high score, in each scale, is indicative of better perception.

Reliability

The test-retest reliability coefficient ranged from 0.77 to 0.87 for boys sample and 0.77 to 0.87 for the girls sample over the ten sub-scales.

Validity

Construct validity of the scales by correlating data on the PCR Scales with the data obtained on Brofenbrenner Parent Behaviour Questionnaire ranged from 0.29 to 0.58.

Adaptation of the scale

A Malayalam version of the Parent–Child Relationship Scale is used in the present study. For this purpose an expert in both languages translated the English version into simple Malayalam language without loosing the concept of items. Another expert equally competent in both the languages back translated this into English. As there was no difference in the original English version and back translated English version, the Malayalam version was considered satisfactory for use in the present study.

2. Alienation Scale for Youngsters

The Alienation Scale for Youngsters developed by Ajaykumar and Sanandaraj (1987) measures the variable Alienation of the subjects.

Alienation refers to the development of a life outlined and determined by others rather than a life based on one's own inner experience. Alienation of the individual from the society and life events is measured in the present scale. The subscale includes powerlessness, normlessness, meaninglessness and social isolation.

Administration and Scoring

The scale was administered individually. All the items are in the form of self descriptive statements. These items are all expected to measure the different components of alienation in various situations that the subject may confront with. All the items are worded in simple language. There were positive and negative items in each subscale. They were scored by giving a score of 5, 4, 3, 2, and 1 if the answer is strongly agree, agree, undecided,

disagree or strongly disagree for the positive items and 1, 2, 3, 4, and 5 for negative items. The total score of all the items of each subcategory is taken and the grand total is estimated. A high score indicates the subject as more alienated in each subcategory.

Reliability

Test–Retest method is used and the correlation between the scores had been found using Pearson Product moment method of correlation. The correlation coefficient obtained for the four subscales are 0.73, 0.76, 0.71 and 0.69.

Validity

The validity of the scale has been established by concurrent validity. For this, another scale Alien Inventory (Gireesan and Sananda Raj, 1986) measuring various components of alienation was administered. The validity coefficient obtained between the four scores of Alien Inventory and Alienation Scale For Youngsters has been found to be 0.58,.0.62, 0.56 and 0.71.

3. International Personality Disorder Examination ICD-10 Module Screening Questionnaire.

The IPDE ICD-10 Module Screening Questionnaire of the ICD-10 international personality disorder examination is administered to eliminate subjects who are unlikely to have a personality disorder or particular disorders of interest. The international Personality Disorder Examination (IPDE) is a

semi structured clinical interview originally designed to assess the personality disorders in the ICD-10 and DSM-III-R classification systems, and subsequently modified for compatibility with DSM-IV**.** The IPDE was developed for the World Health Organization (WHO) by Loranger in collaboration with other experts from the international psychiatric community.

The personality disorder assessed by the IPDE are Paranoid personality disorder, Schizoid personality disorder, Dissocial personality disorder, (Antisocial personality disorder), Emotionally unstable personality disorder which includes Impulsive type and Borderline type, Histrionic personality disorder, Anankastic personality disorder, Anxious (avoidant) personality disorder, Dependent personality disorder, and Personality disorder unspecified .

Reliability and validity of the IPDE

The inter-rater agreement and temporal stability of the IPDE were studied at 14 clinical facilities in 11 countries in North America, Europe, Africa and Asia. The field trial employed 58 psychiatrists and clinical psychologists as interviewers and observers of 716 patients. The reliability and stability of the IPDE were roughly similar to what has been reported with instruments used to diagnose the psychoses, mood, anxiety, and substance use disorders.

About the validity of the IPDE it was the opinion of most of the clinicians who participated in the field trial that IPDE was a useful and essentially valid method of assessing personality disorders for research purposes.

Administration and Scoring.

In the present study only the IPDE ICD-10 module screening questionnaire was used. This was administered to the parents (father and mother) of children in the study.

The subjects were asked to circle the true or false options for each of the 59 statements denoting the 9 personality disorder traits namely Paranoid personality disorder, Schizoid personality disorder, Dissocial personality disorder, (Antisocial personality disorder) Emotionally unstable personality disorder which includes Impulsive type and Borderline type, Histrionic personality disorder, Anankastic personality disorder, Anxious (avoidant) personality disorder and Dependent personality disorder.

If three or more items from a disorder are circled, it indicates that the subject has failed the screen for that disorder and should be interviewed. Here the scores are taken just to explain that the subject has failed the screening test of a particular personality disorder denoting that he may have the chance of having that disorder which needs to be further investigated, through the IPDE module interview schedule, for a diagnosis.

Translation of the Questionnaire from English to Malayalam

A Malayalam translated version of the questionnaire is used in the present study. A translator proficient both in English and Malayalam first translated the original English version into Malayalam language. Then another person who was an expert in both languages back translated the Malayalam version. No difference was found between the original English and the back translated English version of the questionnaire in terms of content or idea. Hence the Malayalam version was accepted as satisfactory for use in the present study.

4. **Parent Attitude Inventory**.

This scale developed by Radhika and Thomas Immanuel (1999) is intended to measure the attitudes of mother and father towards various aspects of child rearing. The items in the test are expected to tap the opinion and viewpoint of individuals that have a bearing on the cognitive, affective and behavioral aspects of parenthood.

The test measures four factors of parental attitude namely;

1. Independence measures the attitude of the parent towards granting autonomy to the children in thinking and acting and developing self reliance in them.

2. Acceptance measures the attitude of the parent towards the child which characterizes unconditional acceptance, warmth and affection in their relationships.

3. Punishment measures parents' attitude towards enforcing discipline in children through punitive methods.

4. Parental role measures perception of a parent regarding his or her duties and responsibilities in the role of parenthood.

Administration and Scoring

The scale was given individually to both father and mother of each child selected for the study.

Scoring for the present study was done using the scoring keys designed for the factors. Since the test measures four factors of parental attitude, it yields four scores. All items in the scale are negative items. Buffer items (representing the positive items) are also included in the scale. The 5 responses in the scale viz., strongly agree, agree, neutral, disagree and strongly disagree are given scores of 1, 2, 3, 4 and 5 respectively. The total score for each of the factors can be obtained by summing up the component scores within each factor. The total score for the scale can be obtained by summing up the scores of the individual factors. High score for the total scale indicates a favourable attitudinal position.

Reliability

Reliability of the PAI was estimated using two methods, viz., the Spearman–Brown split half and Cronbach's Coefficient Alpha. The Spearman–Brown reliability coefficient computed from 830 parents for the total set of items in the scale as well as for the individual dimensions are 0.86 and 0.76, 0.67, 0.65 and 0.69 for factors 1, 2, 3, and 4 respectively. Cronbach's Alpha Coefficient for the whole scale is 0.80 and for factors 1, 2, 3 and 4 are 0.76, 0.71, 0.68 and 0.65 respectively.

Validity

As the items have been selected from an extensive pool of items covering all the relevant aspects of the attitude construct the test is assumed to possess content validity. The meaningful dimensions obtained after factor analysis and the high factor loadings by items on these factors are taken as proof for the construct validity of the scale.

5. Family Interaction Scale

Family Interaction Scale (FIS) is a scale developed by Asha (1987) to measure family environment. The eight sub scales of FIS measure the social environmental characteristics of all types of families. The subscales of FIS are independence, cohesion, achievement orientation, intellectual orientation, conflict, social orientation, ethical emphasis and discipline.

Concept Interpretation

Independence	:	assesses the extent to which family members are assertive and self sufficient and make their own decision.
Cohesion	:	assesses the degree of commitment, help and support family members provide for one another.
Achievement orientation	:	assesses the extent to which activities are cast into an achievement oriented or competition oriented frame work.

Intellectual orientation	:	assesses the degree of interest and involvement in intellectual activities.
Conflict	:	assesses the amount of openly expressed anger, aggression and conflict among family members
Social Orientation	:	assesses the degree of interest in social activities
Moral emphasis	:	assesses the degree of emphasis on ethical issues and values.
Discipline	:	assesses the extent to which rules and procedure are used to family life.

Administration and Scoring

The FIS can be administered in groups as well as individually as per the requirement. Scoring is done with the help of scoring keys. In all the subscales except conflict high score indicates a high degree of measure under study. On the contrary in the subscale conflict a high scale indicates less conflict

Reliability

The odd-even reliability coefficient obtained for 58 members from 15 families range from 0.73 to 0.85 for the eight subscales. The test–retest reliability coefficients range from 0.71 to 0.87.

Validity

The ability of the scale to discriminate between two criterion groups namely normal and distressed families is taken as an index of validity

6. Developmental Psychopathology Check-List for Children (DPCL)

DPCL developed by Kapur, Barnabas, Reddy, Rozario and Uma, (1995) is a screening tool to assess psychopathology in children, which is brief, comprehensive yet developmental in perspective and can be used with relatively little training

The DPCL has 124 items and six sub scales. There are 8 items in the conduct disorder subscale of DPCL. They are (1) Stubbornness, (2) Disobedience, (3) Disruptiveness, (4) Quarrelsomeness, (5) Aggressiveness, (6) Temper tantrums, (7)Truancy and (8) Lying and stealing.

Administration and Scoring

The scale can be administered individually to parents of children selected for the study. The child/adolescent needs to have a score of at least 4 to consider the diagnosis of conduct disorder. The tool has applicability with both children and adolescents and has been used in a number of Indian studies.

Adaptation of the scale

A Malayalam version of the DPCL is used in the present study. For this purpose the English version was translated into simple Malayalam language without loosing the concept of items by an expert in both languages.

This was back translated into English by another expert equally competent in both the languages. As there was no difference in the original English version and back translated English version, the Malayalam version was considered satisfactory for use in the present study.

Reliability and Validity

The scale has been standardized on Indian population and was validated against CBCL. (Child Behaviour Checklist) (Achenbach and Edelbrock, 1983) specifically on the two broadband variables, i.e. Internalizing and Externalizing disorders. The correlation coefficient is between Internalizing disorder and Emotion disorders is 0.29, ($p>0.05$). The correlation coefficient of Externalizing disorders is 0.598 with conduct Disorder and 0.43 with Hyperkinesis ($p>0.01$ for both). The reliability for the entire Check Llist is 0.97.

7. Personal Data Sheet

Personal data sheet was developed and used to gain information about personal details, family details, health and socio-economic status of the subject.

DATA COLLECTION

For the purpose of data collection, 11 secondary and higher secondary schools were selected randomly from a list of schools in Thrissur and Ernakulam districts. A date was fixed for data collection in consultation with the Head of the School. Teachers were requested to identify children who displayed problems in behaviour as listed by the Conduct Disorder Screening Tool, DPCL. Then the parents of these children were given the Developmental Psychopathology Check-List to identify their children who exhibit the problems as per the diagnostic criterion for conduct disorders listed in the checklist. The parents were given the checklist when they came for parent teachers meetings. This procedure was used to select the conduct disordered group. For the normal group, from among those children who were described by teachers as children with no problematic symptoms, a random sample was selected and their parents were given the DPCL checklist. After the screening test, those who did not exhibit conduct problems as per the checklist were finalized as the normal group.

Regarding hospital cases, data was collected when they came for consultation with the doctor and those cases referred by psychologist or

psychiatrist was seen at a place convenient for both the client and the researcher.

From among the children who were thus identified for conduct disordered and normal groups, 100 boys and 50 girls from each group were given the questionnaires. The test was administered in a group setting. The researcher met the parents at school by prior appointments with the permission of school authorities and in necessary cases, house visits were done to collect personal details and additional information from parents and children and to administer tests to those who could not make it to the school for furnishing information.

A sample of 65 boys and 30 girls from each group in the age range of 14-16 was finalized after excluding incomplete data and dropouts. Children with both parents only were selected for the study.

DESIGN OF THE STUDY

Passive Correlational and before-after experimental designs were used in the present research.

The study was conducted in 3 phases.

First Phase

As a first step the researcher met teachers at school and psychologists at hospital. Selection of samples was done in this phase. Sample of conduct disordered group was finalized after screening by DPCL. Those who got a score below the cut off value in all subscales of DPCL were taken as the normal group.

Second Phase

In the second phase checklist, questionnaires and scales were administered to children from schools and to referred cases and parents. Test were administered to children at school in a group setting and also individually to cases from hospitals and referrals. Parents were given questionnaires when they came for Parent teachers meeting at school and individually when they came for consultation. House visits were done in certain cases to collect information.

Third Phase

The Third Phase was meant for providing intervention to the sample of conduct disordered children. Parents of all the 95 conduct disordered children were informed of the Intervention training. Due to one reason or another majority were not willing to come regularly to undergo training. Parents of 23 children consented for intervention.

INTERVENTION

Objective of Intervention

The objective was to study the effectiveness of an intervention package to reduce conduct disorder problems in adolescent children.

Design

It is a qualitative research. The study used before-after experimental model to assess the efficacy of the therapeutic package used.

Sample

The initial sample consisted of 23 conduct disordered children whose parents voluntarily sought psychological help from the researcher for modifying undesirable behaviour in their children. Only those children permitted by their parents to undergo training were selected for intervention. Informed consent was obtained in these cases.

The Intervention Package

The package of intervention used in the present study include individual counseling, anger management with problem solving techniques, simple relaxation therapy, relationship enhancement counseling and parental and family counseling. An outline of the techniques used in the various sessions is as follows:

(i) Individual Counseling

The therapist works with the individual client who has psychological problems, personal conflicts, relationship difficulties or academic concerns through a therapeutic relationship which facilitates personal exploration of the difficulties and takes into account the developmental and special needs of that individual. The counseling encourages the counselee to understand ones feelings and one thinks about oneself, others and ones life and this understanding is used to facilitate ways that aids in better adjustment.

(ii) Family Counseling

Family counseling or therapy happens when a whole family decides to work through their relationships to improve family communication. The family looks at how to solve a problem or to adjust to a new situation. The whole family goes along to the initial appointment with a counselor or therapist.

(iii) Anger Management

Anger management is a set of techniques people can use to avoid aggression when they are angry and to decrease the frequency and intensity of their angry feelings. The techniques include methods to calm themselves by learning to think in calming ways, how to solve problems by standing up for themselves without being angry or aggressive**.**

(iv) Relationship Counseling

Relationship counseling is the process of counseling the parties of a relationship in an effort to recognize and to better manage or reconcile

troublesome differences and repeating patterns of distress. The relationship involved may be between members of a family or a couple, employees or employers in a workplace, or between a professional and a client.

(v) Relaxation

Progressive muscle relaxation helps the person to focus on the difference between muscle tension and relaxation while one focuses on slowly tensing and relaxing each muscle group. This helps one to become more aware of physical sensations. And then the individual is led to form mental images to take a visual journey to a peaceful or calming situation.

Procedure

Parents were asked to mark the severity and frequency of symptoms exhibited by their children as per the Developmental Psychopathology Check-List (DPCL) before the intervention, after the intervention i.e., at the end of the 3rd month and after follow-up at the end of the sixth month.

The baseline scores of the subscale conduct disorder of DPCL were noted as the pre-intervention score. A score out of 40 each for frequency and severity of symptoms was recorded. A five point scale (for frequency a score of 1, 2, 3, 4, and 5 was given for never, sometimes, often, most of the time and always and for severity a score of 1, 2, 3, 4, and 5 was given for very low, low, moderate, high and very high) on each behavior exhibited as listed by the subscale. The scores were qualitatively analyzed to examine change in frequency and severity of behavior.

Intervention was done based on the convenience and interest of parents and children. A minimum of six sessions and a maximum of 10 sessions of training were given to each subject.

Rationale for the use of intervention.

Literature review points out conduct disorder as one of the most common forms of psychopathology and also one of the most costly in terms of personal loss to patients, families and society. It is one of the most difficult conditions to treat because the disorder is complex and pervasive. This complexity is exacerbated by the lack of resources in the families and communities in which conduct disorder develops. Treating conduct disorder requires an approach that addresses both the child and his/her environment for better results. Hence the intervention programme was designed with the objectives of helping the conduct disordered children to improve personal relationships, learn new and appropriate ways to have their needs met, control anger, complete school and lead meaningful life. As family environment and interaction between members exert influence on the way in which the child behaves, family counseling is incorporated in facilitating the changes needed for better adjustment of the child.

Statistical Analysis

The data collected were analyzed using both quantitative and qualitative methods.

The statistical analysis of the data includes Analysis of Variance, Levene's, Scheffe's Multiple Comparison, t-test, and Percentage Analysis.

Children with conduct disorder, who could complete all the components of intervention, were analyzed to qualitatively assess the data on intervention sessions.

RESULTS AND DISCUSSION

This chapter presents the results of analysis and discussion of the results obtained.

The results are presented in two parts. Part I deals with psychological and social factors in relation to conduct disorder. The psychological factors selected for the purpose of the study include children's perception of parent relation factors, alienation, perception of parents' attitude and parental personality characteristics. The social factors selected are family environment factors, socio-economic status and educational status of parents, rearing background and also ordinal position of children.

Part II deals with intervention and its results.

PART I

Psycho-social Factors in Relation to Conduct Disorder

For the purpose of analysis, the data collected from 95 conduct disordered and 95 normal children were subjected to two-way analysis of variance with groups of children (conduct disordered and normal) and sex as independent variables and psychological as well as social factors as dependent variables.

The results are presented in the following pages. Details of the sample are given in Table 1.

Table 1: Classification of the sample

Groups	Sex		Sample Total
	Boys	Girls	
Conduct disordered	65	30	95
Normal	65	30	95
Total	130	60	190

A. Psychological factors

(i) Perception of parental relationship

Altogether 10 characteristics of parental relationship are examined. The attempt was to see how children, both conduct disordered and normal, perceive each characteristics in relation to father as well as mother and how much the two groups differ in their perception of parental relationship.

***a) Perception of fathers' relationship*.**

Table 2: Summary of Analysis of Variance (two-way) of the scores on children's perception of fathers' relation as Protective

Source	Sum of squares	df	Mean sum of squares	F-ratio
Groups	663.17	1	663.17	16.85**
Sex	100.27	1	100.27	2.56
Interaction	0.58	1	0.58	0.02
Residual	7318.83	186	39.35	--
Total	8203.87	189	43.41	--

***Significant at 0.01 level*

The results presented in Table 2 show that children's groups have significant effect on their perception of fathers' relation as protective. Sex has no effect on perception. Interaction effect of group and sex is also not significant on perception of relation with fathers as protective.

Table 3: Means, SDs and t-value of the scores on perception of fathers' relation as protective by conduct disordered and normal children

Groups	N	Mean	SD	SE of Mean	t-value
Conduct disorder	95	32.12	6.23	0.64	4.46**
Normal	95	36.18	6.34	0.65	

*** Significant at 0.01 level.*

Table 3 presents the means, SDs and t-values of the scores on perception of fathers' role as protective by conduct disordered and normal children. The mean scores of the two groups indicate that normal children have better perception regarding their fathers' protective role than children with conduct disorder.

Boys and girls do not seem to differ in their perception of fathers' protective role. They are found more or less homogenous with respect to their perception.

Table 4: Summary of Analysis of Variance (two-way) of the scores on children's perception of fathers' relation as Loving

Source	Sum of squares	df	Mean sum of squares	F-ratio
Groups	991.87	1	991.87	21.87**
Sex	299.27	1	299.27	6.60**
Interaction	34.40	1	34.40	0.76
Residual	8435.17	186	45.35	--
Total	10079.37	189	53.33	--

*** Significant at 0.01 level.*

Summary of analysis of variance given in Table 4 shows the children's group as having significant effects on perception of fathers' relation as loving. Boy-girl status also seems to have a significant effect on their perception of fathers' relation. However, interaction effect in not seen significant.

Table 5: Means, SDs and t-values of the scores on perception of fathers' relation as loving (main effects)

Groups	N	Mean	SD	SE of mean	t-value
Conduct disordered	95	33.73	6.81	0.69	5.30**
Normal	95	38.98	6.85	0.70	
Boys	130	35.50	6.89	0.60	2.39*
Girls	60	38.20	7.88	1.02	

*** Significant at 0.01 level*
**Significant at 0.05 level*

The results provided in Table 5 reveals that conduct disordered and normal children differ from each other significantly regarding their fathers'

role as loving. Normal children are found to perceive their fathers as more loving than conduct disordered peers.

A comparison of boys and girls suggests that they differ from each other in their perception of father's role. Girls appear to view their fathers as more loving and attached than boys.

Table 6: Summary of Analysis of Variance (two-way) of the scores on children's perception of fathers' relation as giving symbolic reward

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	9938.09	1	9938.09	357.52**
Sex	147.00	1	147.00	5.29*
Interaction	129.25	1	129.25	4.65*
Residual	5170.32	186	27.80	--
Total	15999.50	189	84.65	--

*** Significant at 0.01 level*
**Significant at 0.05 level*

Summary of ANOVA (two-way) in Table 6 shows the group as having significant effect on father's relation as providing symbolic reward. Sex also appears to have significant effect on symbolic reward. Interaction effect of group and sex is also found significant.

Table 7: Means, SDs and t-values of the scores on perception of symbolic reward (main effects)

Groups	N	Mean	SD	SE of mean	t-value
Conduct disorder	95	17.25	3.19	0.33	19.09**
Normal	95	32.16	6.91	0.71	
Boys	130	24.11	8.64	0.76	1.32***
Girls	60	26.00	10.26	1.33	

*** Significant at 0.01 level*
**** Significant at 0.18 level*

The t-values given in Table 7 indicate that groups of conduct disordered and normal children differ from each other with reference to their perception of fathers' relation to them as providing symbolic reward. The mean scores show that normal children have a very favourable perception of their fathers' in relation to symbolic reward. On the contrary the conduct disordered children are found to have negative perception that is likely to suggest that they do not consider fathers as giving symbolic reward.

When boys and girls are compared it is seen that they differ in their perception of providing symbolic reward. But this difference is not highly significant. Any way the results point to the fact that compared to boys, girls have better perception of their fathers' as offering symbolic reward. This shows that girls consider their fathers as providing emotional and psychological security.

Table 8: Means, SDs and t-values of the scores on perception of symbolic reward (interaction effect)

Groups	N	Mean	SD	SE of mean	Groups compared	t-value
1. Conduct disordered boys	65	17.22	3.55	0.44	1&2	15.11**
2. Normal boys	65	31.00	6.44	0.79	1&3	0.17
3. Conduct disordered girls	30	17.33	2.31	0.42	3&4	12.37**
4.Normal Girls	30	34.67	7.32	1.34	2&4	2.47*

***Significant at 0.01 level*
**Significant at 0.05 level*

Results presented in Table 8 show the groups of conduct disordered and normal boys as significantly different from each other in their perception of fathers as providing symbolic reward. A similar tendency is visible with respect to groups of conduct disordered and normal girls. In both instances conduct disordered group seem to have poor perception of their fathers in relation to provision of symbolic reward. They consider parents as less concerned in giving them psychological security. Groups of conduct disordered boys and conduct disordered girls do not differ significantly from each other in their perception of fathers as providing symbolic reward. However, in the case of normal boys and girls, significant difference at 0.05 level is seen in their perception of fathers, as providing symbolic reward and girls seem to have better perception than boys.

Table 9: Summary of Analysis of Variance (two-way) of the scores on children's perception of fathers' relation as object rewarding

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	11862.42	1	11862.42	386.28**
Sex	357.88	1	357.88	11.65**
Interaction	38.46	1	38.46	1.25
Residual	5712.01	186	30.71	--
Total	19263.94	189	101.9	--

***Significant at 0.01 level*

Table 9 presents the results of analysis of variance of the scores on perception of fathers' relation as providing object reward. The F-ratio show significant effect for group on perception of object reward. Effect for sex on perception of object reward is also found significant. However, joint effect for group and sex is not seen significant on perception of object reward.

Table 10: Means, SDs and t-values of the scores on perception of object reward (main effects)

Groups	N	Mean	SD	SE of mean	t-value
Conduct disordered	95	13.04	2.10	0.22	20.12**
Normal	95	29.68	7.78	0.79	
Boys	130	20.43	9.57	0.84	1.89***
Girls	60	23.38	10.96	1.41	

***Significant at 0.01 level*
****Significant at 0.06 level*

Table 10 provides the means, SDs and t-values of the different groups of children compared. The t-value of the mean scores between conduct disordered and normal children reveals significant difference between the groups on perception of object reward. The mean scores show the normal

children as having better perception of their fathers regarding the provision of object reward. The conduct disordered children, however, seem to perceive their fathers' relation as less favourable.

A comparison of boys and girls suggests that girls as a group have better and favourable perception of fathers' relationship in providing object reward than that of the group of boys. Boys exhibit a tendency to see father figures in an unfavorable way. They consider fathers as less rewarding, not showing physical or concrete action of warmth and not accepting.

Table 11: Summary of Analysis of Variance (two-way) of the scores on children's perception of fathers' relation as demanding

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	19.97	1	19.97	0.49
Sex	269.37	1	269.37	6.56*
Interaction	38.16	1	38.16	0.93
Residual	7636.92	186	41.06	--
Total	7997.07	189	42.31	--

** Significant at 0.05 level*

Table 11 shows the results of analysis of variance of the scores of children on perception of fathers' relation as demanding. The results indicate no significant effect for children's group on perception of the characteristic but sex status seems to have a significant effect. No significant effect for interaction is seen.

Table 12: Means, SDs and t-values of the scores on demanding (main effect)

Groups	N	Mean	SD	SE of mean	t-value

Boys	130	32.46	6.41	0.56	2.56*
Girls	60	29.90	6.41	0.83	

** Significant at 0.05 level*

The means and t-values given in Table 12 reveal that the groups of boys and girls differ significantly at 0.05 level with regard to their perception of fathers' relation as demanding .The results further show that boys consider their fathers as more demanding than the girls.

Table 13: Summary of Analysis of Variance (two-way) of the scores on children's perception of fathers' relation as indifferent

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	543.01	1	543.01	20.18**
Sex	117.75	1	117.75	4.49*
Interaction	9.09	1	9.09	0.35
Residual	4876.32	186	26.22	--
Total	5692.86	189	30.12	--

***Significant at 0.01 level*
**Significant at 0.05 level.*

The summary of analysis of variance of the scores on perception of fathers' relation as indifferent is presented in table 13. The results reveal that group has a significant effect on children's perception. Sex also seems to show a significant effect at 0.05 level, on perception of fathers' relation to children as indifferent. But interaction effect of group and sex is not significant.

Table 14: Means, SDs and t-values of the scores on perception of relation as indifferent (main effects)

Groups	N	Mean	SD	SE of mean	t-value

Conduct disordered	95	26.35	5.86	0.60	5.09**
Normal	95	22.54	4.34	0.54	
Boys	130	24.98	5.59	0.49	1.99*
Girls	60	23.28	5.10	0.66	

*** Significant at 0.01 level.*
** Significant at 0.05 level*

The results shown in Table 14 reveal a significant difference between the mean scores of perception of indifference of the conduct disorder and normal children. An examination of the mean scores suggests that conduct-disordered group regard fathers as more indifferent to them than the normal children.

When the mean scores obtained by boys and girls are compared, it is seen that boys consider their fathers as more indifferent. This suggests that boys, in general, consider their fathers as less interested in them and as unconcerned and apathetic. Contrary to this girls appear to have a comparably better perception of their fathers.

Table 15: Summary of Analysis of Variance (two-way) of the scores on children's perception of fathers' relation as giving symbolic punishment

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	43.51	1	43.51	1.36
Sex	814.82	1	814.82	25.46**
Interaction	174.69	1	174.69	5.46*
Residual	5952.60	186	32.00	--
Total	7094.21	189	37.54	--

*** Significant at 0.01 level.*
** Significant at 0.05 level*

Results provided in Table 15 illustrate the effect of group, sex and interaction on the perception of symbolic punishment. The results indicate no significant effect for group. The effect of sex is significant at 0.01 level where as the combined effect of group and sex is significant at 0.05 level.

Table 16: Means, SDs and t-values of the scores on perception of symbolic punishment (main effect)

Groups	N	Mean	SD	SEG mean	t-value
Boys	130	29.04	5.69	0.49	4.94**
Girls	60	24.58	5.97	0.77	

*** Significant at 0.01 level*

The mean scores (Table 16) of boys and girls seem to differ at 0.01 level. The results indicate that the two groups differ significantly from each their with respect to their perception of symbolic punishment by their fathers. The boys regard as getting more punished symbolically than girls. Girls as a group seem to have a comparably more favorable perception and are found likely to feel as less punished symbolically.

Table 17: Means, SDs and t-values of the scores on symbolic punishment (interaction effect)

Groups	N	Mean	SD	SE of mean	Groups compared	t-value
1.CD Boys	65	30.58	4.89	0.61	1&2	3.21**
2. Normal Boys	65	27.49	6.05	0.75	1&3	5.58
3. CD girls	30	24.07	6.10	1.11	3&4	0.69
4. Normal girls	30	25.10	5.89	1.08	2&4	1.81

*** Significant at 0.01 level*

The results presented in Table 17 show that conduct disordered boys and normal boys differ in their perception of fathers providing symbolic punishment. But no difference is seen between the groups of conduct disordered girls and normal girls. Mean scores indicate that conduct disordered boys perceive their fathers negatively in relation to symbolic punishment. They seem to have the view that fathers use symbolic means of punishment more to show annoyance to them. However, normal boys see their fathers as using symbolic means less to punish them.

Results also indicate that conduct disordered girls and normal girls are similar with respect to their perception of their fathers giving symbolic punishment to them.

Significant difference is seen between conduct disordered boys and conduct disordered girls in their perception of their fathers giving symbolic punishment. Conduct disordered boys perceive their fathers as more punitive symbolically than conduct disordered girls. There is no significant difference between normal boys and normal girls, though the mean score indicate that

normal boys perceive their fathers as giving symbolic punishment more than normal girls.

Table 18: Summary of Analysis of Variance (two-way) of the scores on children's perception of fathers' relation as giving object punishment

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	237.98	1	237.98	7.29**
Sex	723.28	1	723.28	22.14**
Interaction	165.48	1	165.48	5.09*
Residual	6076.50	186	32.67	--
Total	7435.80	189	39.34	--

*** Significant at 0.01 level.*
** Significant at 0.05 level*

Results presented in Table 18 show that group has significant effect on perception of object punishment by fathers. Effect of sex is also significant on perception of object punishment by fathers. Similarly joint effect of group and sex is significant on perception of father's object punishment.

Table 19: Means, SDs and t-values of the scores on perception of object punishment (main and interaction effects)

Groups	N	Mean	SD	SE of mean	Groups compared	t-value
1.Conduct disordered children	95	23.38	7.04	0.72	1&2	3.56**
2.Normal Children	95	20.23	4.95	0.51		
3.Boys	130	23.13	6.19	0.54	3&4	4.50**
4.Girls	60	18.93	5.47	0.71		
5.Conduct disordered boys	65	25.34	6.596	0.818	5&6	4.34**
6.Normal boys	*65*	20.92	4.887	0.606	5&7	4.36**
7.Conduct disordered girls	30	19.13	6.118	1.117	7&8	0.28
8.Normal girls	30	18.73	4.4835	0.883	6&8	2.04*

*** Significant at 0.01 level*

Table 19 provides the t-values of the scores on perception of object punishment of the groups of conduct disordered and normal children, groups of boys and girls, conduct disordered boys and girls as well as groups of normal boys and girls. The conduct disordered and normal children are found to differ significantly from each other with regard to their views of object punishment by fathers. The former group seems to have poor perception and is likely to regard their fathers as punishing them more overtly. On the other hand normal children seem to have a better view of their fathers' punishment. They are found as regarding their fathers as less punishing overtly.

Similarly, when boys and girls are compared, boys seem to have poor perception and girls have comparably better perception of their fathers' punishment. The two groups differ significantly with respect to their perception of fathers' punishment.

Results shows the group of conduct disordered and normal boys and conduct disordered boys and girls as significantly different from each other in their perception of fathers as giving object punishment. No significant difference is seen between conduct disordered and normal girls. Same effect is seen between the groups of normal boys and normal girls.

Table 20: Summary of Analysis of Variance (two-way) of the scores on children's perception of fathers' relation as rejecting

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	751.39	1	751.39	20.06**
Sex	759.52	1	759.52	20.28**
Interaction	111.07	1	111.07	2.97
Residual	6965.64	186	37.45	--
Total	8969.37	189	47.46	--

*** Significant at 0.01 level*

The results presented in Table 20 show significant effect for children's group as well as for sex on their perception of fathers' relation as rejecting. No interaction effect for group and sex is noticed.

Table 21: Means, SDs and t-values of the scores on perception of rejection (main effects)

Groups	N	Mean	SD	SE of mean	t-value
Conduct disordered	95	21.97	8.02	0.82	5.21**
Normal	95	17.08	4.37	0.45	
Boys	130	20.88	7.07	0.62	4.17**
Girls	60	16.58	5.47	0.71	

*** Significant at 0.01 level*

Table 21 exhibits the results of t-test of the scores of different groups of children on perception of rejection. The t-value obtained in the case of conduct disordered and normal children indicate significant difference at 0.01 level between the two groups. The mean scores of the groups show that conduct disordered children perceive more rejection from fathers than the normal children.

When boys and girls were compared on perception of rejection it is found that boys more than girls view themselves as more rejected by the fathers.

A similar trend is seen with regard to perception of fathers' relation to their children as neglecting (Table 22). Group seems to have a significant effect on perception of neglect. Sex of children also seems to have a significant effect on perception of neglect. However, combined effect of the group and sex does not seem significant on perception of neglect.

Table 22: Summary of Analysis of Variance (two-way) of the scores on children's perception of fathers' relation as neglecting

Source	Sum of squares	df	Mean sum of squares	F-ratio

Group	1844.26	1	1844.26	60.49**
Sex	202.88	1	202.88	6.65*
Interaction	5.44	1	5.44	0.18
Residual	5671.04	186	30.49	--
Total	7928.72	189	41.95	--

*** Significant at 0.01 level.*
** Significant at 0.05 level*

Table 23: Means, SDs and t-values of the scores on perception of neglect (main effects)

Groups	N	Mean	SD	SE of mean	t-value
Conduct disordered	95	21.67	8.02	0.82	8.09**
Normal	95	17.08	4.37	0.45	
Boys	130	22.92	6.54	0.57	2.22*
Girls	60	20.70	6.11	0.79	

*** Significant at 0.01 level*
** Significant at 0.05 level*

Table 23 presents the means and t-values of the scores on perception of fathers' neglect by children. The mean perception scores reveal that conduct disordered and normal children differ between themselves in their perception of fathers' relation as neglecting. Conduct disordered children consider their fathers as more neglecting. Normal children appear to have a comparably better perception.

Again when boys and girls are compared, boys appear to view their fathers as more neglecting. Contrary to them girls are seen to consider their fathers as comparably less neglecting.

From the results so far presented and discussed it is evident that normal children have a better perception of fathers' relationship to them. It is noted

that unlike normal children conduct disordered children have a very negative perception of their fathers' relation to them. As a group they seem to consider their fathers as less protective, less loving, giving more symbolic and overt punishment, as rejecting and neglecting.

b) Perception of mothers' relationship

The results of analysis of variance of the scores on perception of mothers' relation to children as protective are summarized in Table 24. The results reveal that group has a significant effect on perception of mothers' relational provision as protective. Sex of the child has no significant effect on perception. But the combined effect of group and sex seems to be significant at 0.05 level.

Table 24: Summary of Analysis of Variance (two-way) of the scores on children's perception of mothers' relation as protective

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	1186.32	1	1186.32	38.66**
Sex	66.80	1	66.80	2.18
Interaction	197.08	1	197.08	6.42*
Residual	5709.95	186	30.70	--
Total	6965.18	189	36.85	--

*** Significant at 0.01 level*
** Significant at 0.05 level*

Table 25: Means, SDs and t-value of the scores on perception of mothers' relation as protective (main effects)

Groups	N	Mean	SD	SE of mean	t-value
Conduct disordered	95	34.33	5.93	0.59	5.59**
Normal	95	38.89	5.54	0.57	

*** Significant at 0.01 level*

The results (Table 25) indicate significant difference between conduct disordered and normal children in their perception of mothers' relation as protective. Conduct disordered children seem to regard their mothers as less protective. The normal children, on the other hand appear to have a comparably better perception of their mothers in relation to their protective role.

Boys and girls do not differ in their views regarding mothers' role as protective.

Table 26: Means, SDs and t-values of the scores on perception of mothers' relation as protective (interaction effect)

Groups	N	Mean	SD	SE of mean	Groups compared	t-value
1. CD Boys	65	34.62	5.52	0.69	1&2	3.30**
2. Normal Boys	65	37.80	5.47	0.68	1&3	0.77
3. CD girls	30	33.70	6.21	1.13	3&4	5.19**
4. Normal girls	30	41.27	5.01	0.92	2&4	2.95**

*** Significant at 0.01 level*

The results with regard to interaction effects (Table 26) indicate that conduct disordered boys and normal boys and normal boys differ in their perception of mothers' relation as protective. Conduct disordered girls and normal girls are also seen to differ. The means show that normal boys and girls have better perception of their mothers' role as protecting. From the results it is found that normal children perceive their mothers as having a defending attitude and overtly expressing it in their acts of guarding and shielding them from situations or experiences that are perceived as hostile and harmful. Contrary to this, groups of conduct disordered boys and girls appear to have a negative perception of their mothers as not protecting and defending in situations of risks and oppression.

Conduct disordered boys and girls do not differ significantly in their perception of mothers' relation as protective. A comparison of the mean scores of normal boys and normal girls show normal girls as perceiving mothers relation as more protective than normal boys.

Table 27: Summary of Analysis of Variance (two-way) of the scores on children's perception of mothers' relation as loving

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	1503.90	1	1503.90	40.26**
Sex	75.96	1	75.96	2.03
Interaction	50.96	1	50.96	1.36
Residual	6948.07	186	37.36	--
Total	8587.07	189	45.43	--

*** Significant at 0.01 level*

Summary of ANOVA (two-way) in Table 27 show significant effect for children's groups (Conduct disordered/Normal) on their perception of mothers' relation as loving. No significant effect for sex as well as interaction between group and sex is observed.

Table 28: Means, SDs and t-values of the scores on perception of mothers' relation as loving (main effect)

Groups	N	Mean	SD	SE of mean	t-value
Conduct disordered	95	35.63	6.39	0.66	6.34**
Normal	95	41.27	5.87	0.60	

*** Significant at 0.01 level*

The means, SDs and t-values provided in Table 28 show the conduct disordered and normal children as differing form one another significantly at 0.01 level. The results indicate conduct disordered group as having poor perception of their mothers' relation as loving. They seem to regard their mothers as less loving. At the same time normal children seem to view their mothers in a more favorable way. The results suggest that normal children

when compared to conduct disordered children perceive their mothers as more loving and showing affection.

Table 29: Summary of Analysis of Variance (two-way) of the scores on children's perception of mothers' relation as giving symbolic reward

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	10286.67	1	10286.67	401.47**
Sex	3.18	1	3.18	0.12
Interaction	264.27	1	264.27	10.31**
Residual	4765.80	186	25.62	--
Total	15571.27	189	82.39	--

***Significant at 0.01 level*

With respect to the provision for symbolic reward the summary of analysis of variance (Table 29) show that group has significant effect on perception of children. The effect of sex status is not significant on perception of mothers' relation in providing symbolic reward.

Table 30: Means, SDs and t-values of the scores on perception of symbolic reward (main effect)

Groups	N	Mean	SD	SE of mean	t-value
Conduct disordered	95	18.73	3.66	0.38	19.84**
Normal	95	33.62	6.34	0.65	

***Significant at 0.01 level*

The results of t-test in Table 30 suggest that groups of conduct disordered and normal children differ between themselves in their perception of mothers in relation to symbolic reward. Conduct disordered children seem to have a poor perception and regard their mothers as providing less symbolic

reward. Contrary to this, normal children are found to perceive their mothers favorably and view them as giving more symbolic reward.

Table 31: Means, SDs and t-values of the scores on perception of symbolic reward (interaction effect)

Groups	N	Mean	SD	SE of means	Groups compared	t-value
CD Boys	65	19.62	3.39	0.42	1&2	15.83**
Normal Boys	65	32.91	5.86	0.73	1&3	3.72
CD girls	30	16.80	3.52	0.64	3&4	12.65**
Normal girls	30	35.17	7.13	1.30	2&4	1.63

***Significant at 0.01 level*

Table 31 presents the means, SDs and t-values of the groups of conduct disordered and normal boys as well as girls. The results indicate significant difference between conduct disordered boys and normal boys in their perception of symbolic reward by their mothers. Significant difference is observed between conduct disordered girls and normal girls also. An examination of the mean scores of conduct disordered and normal boys as well as girls suggests that normal boys and girls perceive their mothers as showing concern for their emotional and psychological security.

Significant difference is seen between groups of conduct disordered boys and girls in their perception of mothers as providing symbolic reward. The mean scores show that conduct disordered boys perceive their mothers as giving more symbolic reward than conduct disordered girls. But when the mean scores of normal boys and girls are compared the group of normal girls

is found to perceive their mothers as giving symbolic reward more than normal boys.

Table 32: Summary of Analysis of Variance (two-way) of the scores on children's perception of mothers' relation as giving object reward

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	10193.57	1	10193.57	432.63**
Sex	14.59	1	14.59	0.62
Interaction	124.62	1	124.62	5.29*
Residual	4382.52	186	23.56	--
Total	15374.86	189	81.35	--

*** Significant at 0.01 level*
** Significant at 0.05 level*

Table 32 presents the summary of analysis of variance of the scores on children's perception of their mothers' relation as giving object reward. The results reveal significant effect for group. No significant effect for sex is found. But interaction effect is significant at 0.05 level.

Table 33: Means, SDs and t-values of the scores on perception of object reward (main effect)

Groups	N	Mean	SD	SE of mean	t-value
Conduct disordered	95	14.20	1.97	0.20	21.24**
Normal	95	29.32	6.65	0.68	

*** Significant at 0.01 level*

The results (Table 33) reveal highly significant difference between the two groups of children. Conduct disordered children appear to have a much negative perception of their mothers as providing object reward. However, normal children, on the other hand, seem to consider their mothers in a highly positive manner and as rewarding them overtly.

Table 34: Means, SDs and t-values of the scores on object reward (interaction effects)

Groups	N	Mean	SD	SE of mean	Groups compared	t-value
1.Conduct disordered boys	65	14.94	1.67	0.21	1&2	17.79**
2.Normal Boys	30	28.95	6.13	0.76	1&3	6.45**
3.Conduct disordered girls	65	12.60	1.59	0.29	3&4	12.67**
4.Normal girls	30	30.10	7.72	1.41	2&4	0.78

*** Significant at 0.01 level*

Means, SDs and t-values given in Table 34 indicate significant differences between the groups of conduct disordered and normal boys as well as between conduct disordered and normal girls. The results suggest that conduct disordered boys and girls have negative perception of their mothers regarding provision of object reward. These groups of children, unlike the

groups of normal boys and girls, consider their mothers as using more of physical means to show their annoyance with them.

Significant difference is seen between the groups of conduct disordered boys and girls. Comparison of mean scores of these groups value shows that conduct disordered boys perceive their mothers as providing object reward more than conduct disordered girls. No significant difference is seen between the groups of normal boys and girls with respect to their perception of object reward.

Table 35: Summary of Analysis of Variance (two-way) of the scores on children's perception of mothers' relation as demanding

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	18.74	1	18.74	0.42
Sex	0.24	1	0.24	0.01
Interaction	0.49	1	0.49	0.01
Residual	8323.55	186	44.75	--
Total	8348.61	189	44.17	--

The results presented in Table 35 show no significant effect for group of children on perception of relation as demanding. Sex also seems to have no significant effect on demanding nature of mothers. Again, interaction effect between groups and sex of children has no significant effect on children's perception of mothers' relation as demanding.

The results suggest homogeneity with respect to perception of mothers' relation as demanding, between conduct disordered and normal children as well as between boys and girls. Absence of interaction effect suggests that all

the different groups of children namely conduct disordered boys, conduct disordered girls, normal boys and normal girls are similar in their perception of their mothers' relation as demanding.

Table 36: Summary of Analysis of Variance (two-way) of the scores on children's perception of mothers' relation as indifferent

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	781.40	1	781.40	34.89**
Sex	524.11	1	524.11	23.40**
Interaction	66.27	1	66.27	2.96
Residual	4165.39	186	22.40	--
Total	5476.30	189	28.98	--

***Significant at 0.01 level*

Summary of ANOVA (two-way) given in Table 36 indicates significant effect at 0.01 level for group and sex of children on their perception of mothers' relation as indifferent. But no significant effect for interaction is seen on perception of relation as indifferent.

Table 37: Means, SDs and t-values of the scores on perception of mothers' relation as indifferent (main effects)

Groups	N	Mean	SD	SE of mean	t-value
Conduct disordered	95	25.04	5.46	0.56	5.34**
Normal	95	21.15	4.56	0.47	
Boys	130	24.22	5.05	0.44	4.46**
Girls	60	20.65	5.31	0.69	

*** Significant at 0.01 level*

Results of t-test (Table 37) indicate that conduct disordered children perceive their mothers as indifferent to them. A similar trend is seen in the case of boys also. This means that conduct disordered children, irrespective of sex view their mothers' as unconcerned, apathetic and passive, in their

attitude and showing no interest in giving importance to them. In contrast, normal children and girls, in general, view their mothers as less indifferent to them.

Table 38: Summary of Analysis of Variance (two-way) of the scores on children's perception of mothers' relation as giving symbolic punishment

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	86.77	1	86.77	2.74
Sex	107.17	1	107.13	3.39
Interaction	86.77	1	86.77	2.74
Residual	5885.09	186	31.64	--
Total	6267.00	189	33.16	--

Summary of analysis of variance (Table 38) reveals no significant effect for group and sex of children on their perception of mothers' relation as giving symbolic punishment. Effect of interaction is also not significant on perception of symbolic punishment.

The results suggest that conduct disordered and normal children are similar in their perception of their mothers' relation as giving symbolic punishment. Again boys and girls show no difference in their view of mothers' relation with respect to symbolic punishment. Further different groups of conduct disordered boys and girls as well as normal boys and girls are found homogenous with respect to their perception of symbolic punishment.

Table 39: Summary of Analysis of Variance (two-way) of the scores on children's perception of mothers' relation as giving object punishment

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	441.52	1	441.52	13.15**
Sex	141.48	1	141.48	4.21*
Interaction	7.00	1	7.00	0.21
Residual	6244.62	186	33.57	--
Total	6952.44	189	36.78	--

*** Significant at 0.01 level.*
**Significant at 0.05 level.*

The results in Table 39 show that the effect of group is significant on perception of mothers giving object punishment. Effect of sex is also significant (0.05 level) on perception of object punishment. But no interaction effect is seen between group and sex on object punishment by mothers.

Table 40: Means, SDs and t-values of the scores on object punishment (main effects)

Groups	N	Mean	SD	SE of mean	t-value
Conduct disordered	95	23.85	6.59	0.68	4.06**
Normal	95	20.42	4.95	0.51	
Boys	130	22.72	5.56	0.49	1.98*
Girls	60	20.87	6.92	0.89	

*** Significant at 0.01 level*
** Significant at 0.05 level*

The t-values obtained (Table 40) reveal that there is significant difference between conduct disordered and normal children in their perception of mothers' relation as giving object punishment. Conduct disordered children consider their mothers as punishing more overtly where as normal children perceive their mothers as less punishing overtly.

An examination of the mean scores obtained by boys and girls indicates that boys have a negative perception of their mothers and consider

them as punishing by physical means. But girls seem to view their mothers as punishing them less physically.

Table 41: Summary of Analysis of Variance (two-way) of the scores on children's perception of mothers' relation as rejection

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	1481.69	1	1481.69	57.23**
Sex	268.83	1	268.83	10.38**
Interaction	6.82	1	6.82	0.26
Residual	4815.72	186	25.89	--
Total	6892.55	189	36.47	--

***Significant at 0.01 level*

Table 41 illustrates the results of analysis of variance of the scores on perception of mothers' rejection by their children. The F-ratio obtained shows significant effect of group on children's perception as well as significant effect of sex of children on perception of rejection by mothers. The results show no significant effect for interaction.

Table 42: Means, SDs and t-values of the scores on perception of rejection (main effect)

Groups	N	Mean	SD	SE of mean	t-value
Conduct disordered	95	20.26	6.48	0.67	8.16**
Normal	95	14.11	3.48	0.36	
Boys	130	17.99	5.62	0.49	2.76**
Girls	60	15.43	6.46	0.83	

*** Significant at 0.01 level*

The results in Table 42 show that conduct disordered and normal children differ significantly in their perception of mothers' relation as rejecting. The conduct disordered children seem to consider their mothers as

rejecting, where as normal children perceive their mothers as less rejecting and refusing.

The results also point out that boys have a negative perception and see their mothers as rejecting i.e. renouncing them in aversion. On the other hand girls consider their mothers as less rejecting and less out rightly denying them.

Table 43: Summary of Analysis of Variance (two-way) of the scores on children's perception of mothers' relation as neglecting

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	1457.13	1	1457.13	51.18**
Sex	210.68	1	210.68	7.40**
Interaction	8.60	1	8.60	0.30
Residual	5297.56	186	28.48	--
Total	7299.60	189	38.62	--

***Significant at 0.01 level*

More or less similar results are obtained in the case of perception of mothers as neglecting (Table 43). Here also children's groups seem to have a significant effect on perception of neglect by their mothers. Effect of sex is also significant on perception of neglect. However effect of group-sex interaction is not significant on perception of mothers' relation as neglecting.

Table 44: Means, SDs and t-values of the scores on perception of neglect (main effect)

Groups	N	Mean	SD	SE of mean	t-value
Conduct Disordered	95	21.46	6.68	0.69	7.79**
Normal	95	15.34	3.75	0.39	
Boys	130	19.12	6.19	0.54	2.36*
Girls	60	16.85	0.03	0.79	

*** Significant at 0.01 level*
** Significant at 0.05 level*

The results of the comparison of conduct disordered and normal children show that conduct disordered children, as is seen in other variables discussed earlier, exhibit a negative perception and seem to consider their mothers as more neglecting and showing deliberate disregard towards them. Normal children appear to see their mothers as less neglecting.

Similarly, when perception of boys and girls is examined, it is found that boys have a negative view and consider their mothers as neglecting. Against this it is seen that girls consider their mothers as less neglecting and less disregarding.

The results with regard to children's perception of their mothers' relation to them lead to the assumption that conduct disordered children, in general, perceive their mothers as less protective, less loving, providing less symbolic and object reward, indifferent, and punishing overtly. To them mothers relate to them as rejecting and neglecting. Boys as a group also exhibit a more or less similar perception of their mothers' relation with them. This is unlike with normal children as well as girls as a group. Both normal children and girls seem to consider their mothers favorably and positively.

Thus the results of the present study with reference to children's perception of their parents (both fathers' and mothers') relationship to them suggest that conduct disordered children differ from normal children in their perception. Conduct disordered groups when compared to the groups of

normal children; seem to have negative/ poor perception in all the components of relationships studied.

Hypothesis 1 is accepted.

The results regarding perception of parent-child relationships of the groups of conduct disordered as well as normal boys and girl reveal that in all the variables, except giving symbolic reward, symbolic punishment and object punishment for fathers; being protective, giving symbolic reward and object reward for mothers where interaction effects are significant groups of boys and girls show difference among themselves in their perception of parental relationships to them.

Hypothesis 2 is partially accepted.

The present results are in line with the findings of Harnish *et al.* 1995 and Katz and Nelzon (2004) which emphasize the role of lack of maternal care and positive interaction with children for the development of childhood behaviour problems. The present results are also supported by the studies of Indiramma (1986), Johnson and O'Leary (1987), Daniel (1989) Jefferis and Oliver (2006).

The findings of the present study regarding children's perception of parental relation suggests that conduct disordered children do not have a favorable opinion about how their parents associate with them. This may be because of faulty child rearing practices prevailing in their families. It is pointed out that erratic, deviant and inefficient method of discipline and

parental supervision are often linked with conduct disorder and delinquent behavior among children. (Wilson, 1974; 1980). Such parenting behavior may encourage problem behaviours in children. Family discord or conflict may provide children with a model of aggression, inconsistency, hostility and antisocial behavior that they express in their own social interactions. (Bandura, 1969). Parent child relations that are hostile and negative lead to lack of positive support and also tend parents to participate in negative and unsupportive interactions. Thus, it becomes difficult for parents to establish as well as maintain long relationships that may be crucial for appropriate social behavior.

It is to be noted that parents are likely to be disturbed and may fail to provide their children with healthy relational provisions. Children perceive this failure and they in turn may react with frustration and show coercive behaviours. The present findings suggest that how parental behavour perceived by children is one of the strongest predictors of conduct disorder.

(ii) Alienation

Scores on alienation (Total score) and its different dimensions namely powerlessness, normlessness, meaninglessness and social isolation were analyzed in relation to group and sex of the sample. Analysis of variance (two-way) was employed to examine the effects of independent variables on dependent variables. The results are shown in the following pages.

Table 45: Analysis of Variance (two–way) on alienation and its dimension

Dimensions	Source	Sum of squares	df	Mean sum of squares	F-ratio
Alienation Total score	Group	27198.78	1	27198.78	217.02**
	Sex	4060.12	1	4060.12	32.396**
	Interaction	761.33	1	761.33	6.08*
	Residual	23311.30	186	125.33	--
	Total	63602.32	189	336.52	--
Powerlessness	Group	663.17	1	663.17	38.35**
	Sex	78.85	1	78.85	4.56*
	Interaction	94.75	1	94.75	5.48*
	Residual	3216.19	186	3216.19	--
	Total	4385.71	189	4385.71	--
Normlessness	Group	6354.09	1	6354.09	568.88**
	Sex	2224.73	1	2224.73	199.18**
	Interaction	77.54	1	77.54	6.94**
	Residual	2077.53	186	2077.53	--
	Total	12342.44	189	12342.44	--
Meaning les ness	Group	1081.78	1	1081.78	68.39**
	Sex	176.21	1	176.21	11.14**
	Interaction	65.87	1	65.87	4.17*
	Residual	2941.77	186	15.82	--
	Total	4673.45	189	24.73	--
Social isolation	Group	854.69	1	854.69	52.62**
	Sex	8.60	1	8.60	0.53
	Interaction	3.00	1	3.00	0.19
	Residual	3021.45	186	16.24	--
	Total	3979.24	189	21.05	--

*** Significant at 0.01 level*
** Significant at 0.05 level*

Table 46: Means SDs and t-values of the scores on alienation (total score) and its different dimensions (main effects)

No Dimensions	Groups	N	Mean	SD	SE of mean	t-values
Alienation (Total)	Conduct Disordered (CD)	95	124.08	11.45	1.17	15.39**
	Normal	95	96.76	12.97	1.33	
	Boys	130	113.56	17.89	1.57	3.58**
	Girls	60	103.62	17.58	2.27	
Powerlessness	Conduct Disordered	95	33.42	3.99	0.41	7.43**
	Normal	95	28.84	4.49	0.46	
	Boys	130	31.57	4.38	0.38	1.86*
	Girls	60	30.18	5.57	0.72	
Normlessness	Conduct Disordered	95	32.61	4.92	0.51	18.49**
	Normal	95	19.66	4.73	0.49	
	Boys	130	28.46	7.76	0.68	6.43**
	Girls	60	21.10	6.32	0.82	
Meaningless ness	Conduct Disordered	95	29.28	3.83	0.39	9.38**
	Normal	95	23.68	4.38	0.45	
	Boys	130	27.14	4.77	0.42	2.71**
	Girls	60	25.07	5.14	0.66	
Social isolation	Conduct Disordered	95	28.77	3.34	0.34	7.66**
	Normal	95	24.31	4.59	0.47	
	Boys	130	26.39	4.29	0.38	0.64
	Girls	60	26.85	5.21	0.67	

*** Significant at 0.01 level*
** Significant at 0.05 level*

The results presented in Table 45 in respect of alienation and its related areas show that group of children has significant effects on all the areas studied namely alienation (total score) powerlessness, normlessness, meaninglessness and social isolation. Sex of children seems to have significant effect on alienation, (total score) normlessness and meaninglessness at 0.01 level and on powerlessness at 0.05 level. Sex has no significant effect on social isolation. Interaction effect is significant on alienation (total score), powerlessness and meaninglessness at 0.05 level and on normlessness at 0.01 level. But no interaction effect is found on social isolation.

Table 46 presents the results of t-test conducted on the scores of alienation (total) and its different areas. The t-values obtained reveal that there is significant difference at 0.01 level between the groups of conduct disordered and normal children in all the areas studied. Conduct disordered children are found as more alienated than their normal peers. They are also found to feel powerlessness, normlessness, meaninglessness and social isolation more than the normal children.

Hypothesis 3 is accepted.

Table 47: Means, SDs and t-values of the score on alienation (total score) and its different dimensions (interaction effect)

Dimensions	Groups	N	Mean	SD	SE of mean	Groups Compared	t-values
Alienation (Total)	1. Conduct disordered boys	65	125.58	5.40	0.67	1&2	6.89**
	2. Conduct disordered girls	30	114.33	14.71	2.69	3&4	2.00*
	3.Normal Boys	65	98.54	12.56	1.56	1&3	17.72**
	4.Normal girls	30	92.90	13.23	2.42	2&4	5.93**
Powerlessness	1. Conduct disordered Boys	65	34.34	2.21	0.27	1&2	3.49**
	2. Conduct disordered girls	30	34.43	5.91	1.08	3&4	0.13
	3.Normal Boys	65	28.80	4.27	0.53	1&3	9.29**
	4.Normal girls	30	28.93	5.00	0.93	2&4	1.77
Normlessness	1. Conduct disordered Boys	65	35.37	2.32	0.29	1&2	14.32**
	2. Conduct disordered girls	30	26.63	3.55	0.65	3&4	7.07**
	3.Normal Boys	65	21.55	4.36	0.54	1&3	22.57**
	4.Normal girls	30	15.57	2.30	0.42	2&4	14.34**
Meaninglessness	1. Conduct disordered Boys	65	30.34	2.64	0.33	1&2	4.30**
	2. Conduct disordered girls	30	27.00	4.92	0.89	3&4	0.83
	3.Normal Boys	65	23.94	4.26	0.53	1&3	10.29**
	4.Normal girls	30	23.13	4.67	0.85	2&4	3.12**
Social isolation	1. Conduct disordered Boys	65	28.54	2.48	0.31	1&2	0.99
	2. Conduct disordered girls	30	29.27	4.71	0.86	3&4	0.18
	3.Normal Boys	65	24.25	4.64	0.58	1&3	6.58**
	4.Normal girls	30	24.43	4.57	0.84	2&4	4.03**

*** Significant at 0.01 level*
**Significant at 0.05 level*

When groups of boys and girls are compared, the results (Table 47) show that the two groups differ significantly in alienation (total), feeling of powerlessness, normlessness as well as in meaninglessness. Boys, both conduct disordered and normal, seem to feel more alienated, powerless, normless and also meaningless in life than both conduct disordered and normal girls. But groups of boys and girls are found more or less homogenous with reference to social isolation. Conduct disordered girls seem to have a highest score on social isolation than the other groups of girls as well as boys. The general trend evident from the results are that conduct disordered boys are more isolated having a feeling of powerlessness, normlessness, meaningless and social isolation than the other groups of children. And conduct disordered girls follow suit with feeling of being more isolated than the other groups of peers.

Hypothesis 4 is partially accepted.

The results are in line with those reported by Shapiro and Wynne, (2004) and Butler *et al.* (2007). Though not directly related to the present work, studies by Ward and Harvey (1993), Johnson and Roseby (1997) and Kelly (1997) lend support to the findings of the present study.

After examining the effect of child characteristics, the next step was to understand the role of parental attributes that relate to conduct disorder in children. The two parent variables included in the study are parental personality disorder and parental attitude regarding child management. Percentage analysis and analysis of variance are used to analyze the data.

(iii) Parental personality

Altogether nine personality disorder characteristics are examined. The number of parents (fathers as well as mothers) who belong to each category, by falling above the cut off point 3 as an indication of having a particular characteristic, is counted and percentage is calculated.

Table 48: Personality characteristics of parents of conduct disordered and normal children. Number and percentage in each category

Personality characteristics	Fathers N=95				Mothers N=95			
	CD Children		Normal Children		CD Children		Normal Children	
	No.	%	No.	%	No.	%	No.	%
Paranoid	41	43	27	28	27	28	24	26
Schizoid	43	45	32	34	39	41	27	28
Dissocial	29	31	6	6	20	21	4	4
Impulsive	27	28	15	16	27	28	9	9
Borderline	25	26	6	6	18	19	6	6
Histrionic	24	25	13	14	25	26	12	13
Anankastic	65	68	49	52	41	43	37	40
Anxious	45	47	27	28	42	44	38	40
Dependent	66	69	46	48	51	54	47	49

Table 48 provides information regarding personality make up of fathers and mothers of conduct disordered and normal children. It is interesting to note that many of the characteristics co-exist in parents both in their fathers and mothers. It could be seen that a good majority of fathers of conduct disordered children are dependent, anankastic, paranoid and schizoid. Many of them show presence of traces of dissocial personality and impulsivity and anxiety.

Among fathers of normal children only six persons possess dissocial characteristics where as among the conduct disordered 29 share antisocial characteristics along with other undesirable personality traits.

When mothers of conduct disordered children are examined 20 of them are found as having dissocial characteristics. Most of them seem to be anxious and dependent as in the case of fathers of conduct disordered group. Mothers of normal children also seem to be dependent, anxious and anankastic in nature.

The results in Table 48 suggest that parents, both fathers and mothers, of conduct disordered children possess personality characteristic that are likely to trigger pathological parent-child interactions.

Table 49: Personality characteristics of parents of conduct disordered boys and normal boys. Number and percentage in each category

Personality characteristics	Fathers *N=65*				Mothers N=65			
	Conduct disordered Boys		Normal Boys		Conduct disordered Boys		*Normal Boys*	
	No.	%	No.	%	No.	%	No.	%
Paranoid	28	43	21	32	20	31	19	29
Schizoid	30	46	26	40	30	46	19	29
Dissocial	20	31	5	8	14	22	4	6
Impulsive	17	26	11	17	20	31	9	14
Borderline	21	32	5	8	11	17	4	6
Histrionic	19	29	11	17	18	28	8	12
Anankastic	45	69	32	49	29	45	26	40
Anxious	38	58	23	35	30	46	27	42
Dependent	43	66	32	49	36	55	34	52

Among fathers of conduct disordered boys undesirable personality characteristics like paranoia and dissocial tendencies are found more than among fathers of normal children. Anxiety and dependence are found more in the case of conduct disordered and normal children's fathers.

The most prevalent characteristics found among mothers are dependency, anxiety, anankastic and schizoid tendency. Dependency is shown more by mothers of normal boys also.

Compared to fathers of antisocial boys, dissocial tendency is not very much pronounced among fathers of normal boys.

Table 50: Personality characteristics of parents of conduct disordered girls and normal girls. Number and percentage in each category

Personality characteristics	Fathers N=30				Mothers N=30			
	Conduct disordered Girls		Normal Girls		Conduct disordered Girls		*Normal Girls*	
	No.	%	No.	%	No.	%	No.	%
Paranoid	13	43	6	20	7	17	5	23
Schizoid	13	43	6	20	9	23	8	26
Dissocial	9	30	1	3	6	20	0	0
Impulsive	10	33	4	6	7	17	0	0
Border line	4	7	1	3	7	17	2	7
Histrionic	5	17	2	7	7	17	4	13
Anankastic	20	67	17	57	12	14	11	37
Anxious	7	23	4	6	12	40	11	37
Dependent	23	77	14	47	15	50	13	43

When personality characteristics of parents are examined it is found that both fathers and mothers possess dissocial characteristics to a considerable extent. Majority of the fathers of conduct disordered are dependent and anankastic in behaviour. Any way compared to the parents of conduct disordered boys parents of conduct disordered girls seem to share less number of unhealthy characteristics. Parents of normal children also seem to have a few undesirable personality characteristics.

Hypothesis 5 is accepted.

Studies by Stewart *et al. (*1980), Frick (1992), Marmorstein *et al.* (2004) are supportive of the present study.

The findings assume significance particularly in the context of interactions between parents and children. Quality of interaction is a crucial factor that decides the mental health of children. Healthy interaction depends upon the feeling of well-being of family members, especially fathers and mothers. Parents with unhealthy personality characteristics are likely to bring about negative outcomes from their interactions with children and this in turn may precipitate antisocial tendencies and conduct disorders in their children.

(iv) Parental Attitude

Parental, both fathers' and mothers', attitudes towards children are likely to influence children's development and well-being to a considerable extent. It is a fact that parents make decisions regarding whether children are to be given freedom, whether they are to be accepted, punished or rejected and what should be the parental role in controlling their wards. How they look upon their children is a crucial factor that determines the quality of life of children.

In the present study an attempt is made to relate parental attitude to children's problems, particularly conduct disorder. Apart from general attitude, attitude of fathers and mothers towards children's independence, acceptance, punishment and parental roles have been assessed. ANOVA (two-way) is employed to analyze the scores on parental attitude and its different dimensions,

The results are presented in Tables 51 to 56.

Table 51: Analysis of Variance of the scores on fathers' attitude and its dimensions:

Dimension	Source	Sum of squares	df	Mean sum of squares.	F-ratio
General attitude (Total score)	Group	22488.63	1	22488.63	237.63**
	Sex	33.75	1	33.75	3.53
	Interaction	570.61	1	570.61	6.03*
	Residual	17602.54	186	94.64	--
	Total	41562.95	189	219.91	--
Independence	Group	2241.82	1	2241.82	114.79**
	Sex	5.37	1	5.37	0.28
	Interaction	97.82	1	97.82	5.01*
	Residual	3632.67	186	19.53	--
	Total	5945.87	189	31.46	--
Acceptance	Group	1593.11	1	1593.11	111.91**
	Sex	123.52	1	123.52	8.68**
	Interaction	73.40	1	73.40	5.16**
	Residual	2647.73	186	14.24	--
	Total	4407.94	189	23.32	--
Punishment	Group	873.52	1	873.52	98.62**
	Sex	44.49	1	44.49	5.02*
	Interaction	4.22	1	4.22	0.48
	Residual	1647.48	186	8.86	--

Continued ….

	Total	2655.82	189	14.05	--
Parental role	Group	1098.59	1	1098.59	154.55
	Sex	7.85	1	7.85	1.10
	Interaction	11.39	1	11.39	1.60
	Residual	1322.18	186	7.11	--
	Total	2518.95	189	13.33	--

*** Significant at 0.01 level*
**Significant at 0.05 level*

The results in Table 51 show that group is significant on general attitude of fathers towards children. Group also has significant effect on their attitude towards giving independence, acceptance and punishment to their wards as well as their own role in managing children. Boy-girl status has significant effects with reference to attitude towards acceptance and punishment. Interaction effect is significant on general attitude, attitude towards independence and acceptance.

Table 52: Means, SDs and t-values of the scores on attitude of fathers (total score) and related dimensions (main effects)

Dimensions	Groups	N	Means	SDs	SE of mean	t-values
General attitude (total score)	Conduct disordered	95	87.60	9.60	0.99	15.30**
	Normal	95	109.63	10.23	1.05	
Acceptance	Conduct disordered	95	22.29	4.09	0.42	10.16**
	Normal	95	35.03	3.68	0.38	
	Boys	130	31.62	4.61	0.40	2.33**
	Girls	60	33.35	5.12	0.66	
Punishment	Conduct disordered	95	14.67	2.58	0.27	10.31**
	Normal	95	19.17	3.37	0.35	
	Boys	130	16.59	3.43	0.30	1.79***
	Girls	60	17.63	4.31	0.56	
Parental role	Conduct disordered	95	10.89	2.72	0.28	12.85**
	Normal	95	15.87	2.62	0.27	

***Significant at 0.01 level*
**Significant at 0.05 level*
****Significant at 0.10 level*

The results provided in Table 52 reveal that fathers' attitude towards conduct disordered and normal children are different. They are found to show very unfavorable attitude towards conduct disordered children. A comparably favorable attitude tends to exist in their treatment of normal children.

Boys and girls do not seem to differ with respect to fathers' general attitude towards them.

As far as fathers' attitude regarding acceptance and punishment is concerned again conduct disordered children are found as treated with a negative attitude. Fathers have shown unfavorable attitude towards accepting conduct disordered children. Also they are likely to punish them. This may be because they have the assumption that punishment is the best means to improve them. With respect to fathers' role in managing children it is found that in the case of conduct disordered they do not consider their role as significantly helping. But in the case of normal children their fathers seem to consider their role as important in managing them.

Table 53: Means, SDs and t-values of the scores on attitude of fathers (total score) and related dimensions (interaction effects)

Dimensions	Groups	N	Means	SDs	Se of mean	Groups compared	t-values
General attitude (total score)	1.Conduct disordered Boys	65	87.88	9.42	1.17	1&2	0.41
	2.Conduct disordered Girls	30	87.00	10.12	1.85	3&4	3.04**
	3.Normal Boys	65	107.55	8.94	1.11	1&3	12.22**
	4. Normal girls	30	114.13	11.50	2.10	2&4	9.70**
Independence	1.Conduct disordered Boys	65	33.34	4.36	0.54	1&2	2.15*
	2.Conduct						

Continued ….

	disordered Girls	30	31.43	3.05	0.56	3&4	1.12
	3.Normal Boys	65	39.18	5.08	0.63	1&3	7.04**
	4.Normal girls	30	40.37	4.12	0.75	2&4	9.56**
Acceptance	1.Conduct disordered Boys	65	29.17	4.26	0.53	1&2	0.44
	2.Conduct disordered Girls	30	29.57	3.76	0.69	3&4	4.09**
	3.Normal Boys	65	34.06	3.54	0.44	1&3	7.13**
	4.Normal girls	30	37.13	3.09	0.57	2&4	8.52**

***Significant at 0.01 level*
** Significant at 0.05 level*

Table 53 presents the means, SDs and t-values of the scores on fathers' attitude towards management of children. Fathers' attitude seems to differ in the cases of normal boys and normal girls, conduct disordered boys and normal boys and in the cases of conduct disordered girls and normal girls. Fathers' attitude towards conduct disordered children seems some what negative than their attitude towards normal children.

With regard to independence, again, their attitude is negative in the case of conduct disordered children than in the case of normal children, both boys and girls.

The results also suggest that attitude towards conduct disordered children, boys as well as girls, is one of less accepting when compared with their attitude towards normal boys and girls.

Thus, the results discussed above reveal that fathers tend to have a less favorable attitude in general and also regarding and provisions of independence and acceptance of the conduct disordered children. Against this, they appear to consider their normal wards with positive attitudes.

b) Mothers' attitude

Table 54: Analysis of variance of the scores on mothers' attitude and its dimensions

Dimensions	Source	Sum of squares	df	Mean sum of squares.	F-ratio
General attitude (Total score)	Group	17282.59	1	17282.59	154.15**
	Sex	209.97	1	209.97	1.87
	Interaction	2339.31	1	2339.31	20.87**
	Residual	20854.01	186	--	--
	Total	38346.57	189	--	--
Independence	Group	1589.17	1	1589.17	56.55**
	Sex	220.82	1	220.82	7.86**
	Interaction	309.30	1	309.30	11.01**
	Residual	5227.02	186	28.10	--
	Total	7046.57	189	37.28	--
Acceptance	Group	1317.05	1	1317.05	69.33**
	Sex	28.51	1	28.51	1.50
	Interaction	322.44	1	322.44	16.97**

	Residual	3533.34	186	18.99	--
	Total	4903.24	189	25.94	--
Punishment	Group	1069.39	1	1069.39	116.92**
	Sex	0.11	1	0.11	0.01
	Interaction	0.00	1	0.00	0.00
	Residual	1701.23	186	9.15	--
	Total	2939.37	189	15.55	--
Parental role	Group	747.34	1	747.34	111.47**
	Sex	1.73	1	1.73	0.26
	Interaction	65.87	1	65.87	9.83**
	Residual	1246.97	186	6.70	--
	Total	2000.47	189	10.58	--

Continued….

*** Significant at 0.01 level*

The results (Table 54) indicate that general attitude of mothers is influenced by the group of the children i.e. whether they belong to conduct disordered or normal group. Group also influences mothers' attitude towards giving children independence, acceptance and punishment as well as to parental role in managing them.

Sex of the children seems to affect mothers' attitude about giving independence to their wards.

Interaction of group and sex appear to influence mothers' general attitude, attitude towards independence of children and acceptance of them and also regarding parental role in the management of their children.

Table 55: Means, SDs and t-values of the scores on attitude of mothers (total score) and related dimension (main effect)

Dimensions	Groups	N	Means	SDs	SE of mean	t-values
General attitude (total score)	Conduct disordered	95	90.28	11.21	1.15	10.96**
	Normal	95	108.02	11.11	1.14	
Independence	Conduct disordered	95	33.36	5.68	0.58	6.49**
	Normal	95	38.57	5.38	0.55	
	Boys	130	35.23	5.37	0.47	2.47*
	Girls	60	37.55	7.26	0.94	
Acceptance	Conduct disordered	95	30.15	4.81	0.49	7.02**
	Normal	95	34.78	4.27	0.44	
Punishment	Conduct disordered	95	14.09	2.52	0.26	11.69*
	Normal	95	19.20	3.43	0.35	
Parental role	Conduct disordered	95	11.67	2.63	0.27	9.90**
	Normal	95	15.47	2.66	0.27	

***Significant at 0.01 level*
**Significant at 0.05 level*

Table of means, SDs and t-values (Table 55) show that mothers have distinctly and significantly different attitude towards conduct disordered and normal children. Conduct disordered children are considered unfavourably, as is revealed by the mean scores, where as mothers attitudes to normal children are comparatively more positive. No boy-girl difference is found in their attitude in general with respect to managing children.

A similar trend is seen in their attitude to conduct disordered with reference to independence, acceptance, and punishment as well as to parental role in controlling children. In all these dimensions conduct disordered children are considered negatively and mothers' attitude is not favourable as is seen in the case of their attitude to normal children. Normal children are looked upon by their mothers with favorable attitude.

It is also seen that mothers have a favorable attitude to girls regarding independence. No boy-girl difference, in their attitude, is seen in other dimensions of acceptance and punishment as well as in parental role in managing children.

Table 56: Means, SDs and t-values of the scores on attitude of mothers (total score) and related dimensions (interaction effect)

Dimension	Group	N	Mean	SD	SE of Means	Groups Compared	t-value
General attitude (Total score)	1.CD Boys	65	91.95	9.06	1.12	1&2	2.18*
	2.CD girls	30	86.67	14.36	2.62	3&4	4.37**
	3.Normal boys	65	104.92	9.85	1.22	1&3	7.81**
	4.Normal girls	30	114.73	10.84	1.98	2&4	8.54**
Independence	1.CD boys	65	3.49	5.46	0.68	1&2	0.34
	2.CD girls	30	33.07	6.22	1.14	3&4	4.72**
	3.Normal Boys	65	36.97	4.70	0.58	1&3	3.89**
	4.Normal girls	30	42.03	5.19	0.95	2&4	6.06**
Acceptance	1.CD Boys	65	30.77	4.45	0.55	1&2	1.88

Continued ….

	2.CD girls	30	28.80	5.3	0.97	3&4	4.18**
	3.Normal Boys	65	33.63	4.37	0.54	1&3	3.69**
	4.Normal girls	30	37.27	2.75	0.51	2&4	7.73**
Parental role	1.CD Boys	65	12.14	2.38	0.29	1&2	2.61*
	2.CD girls	30	10.67	2.91	0.53	3&4	1.83
	3.Normal Boys	65	15.14	2.57	0.32	1&3	6.90**
	4.Normal girls	30	16.20	2.73	0.49	2& 4	6.19**

***Significant at 0.01 level*
** Significant at 0.05 level*

The results (Table 56) show that, when conduct disordered boys and girls are compared, mothers seem to have a favourable attitude toward boys than girls. The same trend is seen with respect to their attitude to parental role in respect of conduct disordered groups of boys and girls. When conduct disordered boys and normal boys are compared mothers seem to have a favourable attitude to normal boys. This is evident in the dimensions of attitude to independence, acceptance and parental role. Again when conduct disordered girls and normal boys are compared mothers are found to exhibit a positive attitude to normal girls than to conduct disordered girls. Further, when it comes to the attitude to normal boys and girls, mothers' preference seem to be to girls. Thus it is seen that among boys, mothers show a favourable attitude to normal boys; among girls, they are for normal girls and between boys and girls mothers have favourable attitude towards conduct disordered boys than conduct disordered girls and normal girls than normal boys.

The results discussed above indicate that unlike the parents of normal children, parents (both fathers and mothers) of conduct disordered children tend to show unfavorable attitude towards their children. They do not seem to encourage autonomy in thinking and acting and in developing self reliance in their children. Again, there is a lack of acceptance, warmth and affection in their relationship with their children and also they are found to use punitive methods. Further, they have poor perception regarding their duties and responsibilities as parents.

Thus the results suggest that parents' both fathers' and mothers', attitude to conduct disordered children, irrespective of their biological sex status, is not very positive. This is likely to reflect in parents' behaviour to their children. As children are very sensitive, they are more likely to overtly react to parents' negative behaviour and this may in turn aggravate children's problems.

Hypothesis 6 is accepted.

The present results receive support from the studies of Hoch (1967), Rutter (1997), and Koudelkova *et al*. (1977). Findings by West and Farrington (1973) and Sharma and Sandhu (2006) are also in line with the present findings.

B. Social factors

Social factors investigated in the present study include family environment variables namely independence, cohesion, achievement orientation, intellectual orientation, conflict, social interaction, moral emphasis, discipline and general family interaction.

Other factors examined are parental educational status, income and rearing ordinal position of the child.

Data collected are analyzed using Analysis of Variance (two-way) and t-test for independent samples.

(v) Family Environment Factor

(a)Independence

This factor assesses the extent to which family members are encouraged to act openly and to express their feelings directly.

Table 57: Analysis of Variance (two-way) of the scores on family environment – Independence

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	141.68	1	141.68	18.38**
Sex	0.13	1	0.13	0.02
Interaction	85.40	1	85.40	11.08**
Residual	1433.63	186	7.71	--
Total	1602.72	189	8.48	--

***Significant at 0.01 level*

The results (Table 57) indicate significant effect for group on independence. No effect for sex is noticed. But joint effect of group and sex is significant.

Table 58: Means, SDs and t-values of the scores on independence (main and interaction effect)

Group	N	Mean	SDs	SE of mean	Groups compared	t-values
1.Conduct disordered	95	14.56	2.43	0.25	1&2	3.22**
2. Normal	95	15.88	3.21	0.33		
3. CD Boys	65	15.03	2.57	0.32	3&4	2.90**
4. CD girls	30	13.53	1.72	0.31	5&6	1.99*
5.Normal boys	65	15.45	2.78	0.35	3&5	0.88
6.Normal girls	30	16.83	3.85	0.70	4&6	4.29**

*** Significant at 0.01 level*
**Significant at 0.05 level*

The mean scores (Table 58) show that conduct disordered children feel less independence than the normal children. This suggest that they are not very much encouraged to act openly and independently. Unlike in the case of normal children they are not found as getting chances to express their feelings directly.

The results also show that conduct disordered boys show more independence than conduct disordered girls. No difference is seen between conduct disordered boys and normal boys. When compared to normal girls, normal boys get fewer chances to act openly. Of all the groups, the group of normal girls are found as getting more encouragement to express their feelings directly and openly. They are also seen as allowed to act independently.

b) Cohesion

Cohesion is meant to indicate the degree of commitment, help and support family members provide for one another.

Table 59: Analysis of Variance (two-way) of the scores on family environment – Cohesion

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	2206.18	1	2206.18	176.36**
Sex	16.20	1	16.20	1.30
Interaction	143.44	1	143.44	11.47**
Residual	2326.72	186	12.51	--
Total	4581.94	189	24.24	--

*** Significant at 0.01 level*

Summary of ANOVA (two-way) in Table 59 reveals that there is significant effect for group on cohesion. Sex has no effect for on cohesion whereas interaction of group and sex seems to have significant effect on cohesion.

Table 60: Means, SDs and t-values of the scores on cohesion (main and interaction effects)

Groups	N	Means	SDs	SE of mean	Groups compared	t-values
1.Conduct disordered	95	15.32	3.49	0.36	1&2	12.59**
2. Normal	95	21.96	3.76	0.39		
3. CD Boys	65	15.71	3.46	0.43	3&4	1.62
4. CD girls	30	14.47	3.46	0.63	5&6	3.14**
5.Normal Boys	65	21.17	3.57	0.44	3&5	8.85**
6. Normal girls	30	23.67	3.69	0.67	4&6	9.96**

***Significant at 0.01 level*

The means, SDs and t-values presented in Table 60 show that conduct disordered and normal children differ significantly with respect to cohesion. Conduct disordered children appear to have a comparatively low mean score than the normal children. This difference suggests that conduct disordered children as a group receives limited help and support from family members. Contrary to this normal children are found to receive more help and support and also family members are found more committed to them unlike in the case of their conduct disordered peers.

Conduct disordered boys and girls do not differ significantly in cohesion. But normal boys and girls differ significantly and normal girls out score normal boys. It is found that groups of conduct disordered and normal boys as well as groups of conduct disordered girls and normal girls differ from one another with respect to cohesion. Normal boys have got a higher score of cohesion than their conduct disordered peers. The highest score of cohesion is obtained by normal girls. The results suggest that normal children,

particularly normal girls receive more support and help from their family where as conduct disordered children particularly boys receive less support and commitment from their family.

c) Achievement orientation

This intends to assess the extent to which activities at home or school are cast into an achievement oriented or competitive framework.

Table 61: Analysis of Variance (two-way) of the scores on family environment - Achievement orientation

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	2079.19	1	2079.19	219.17**
Sex	16.40	1	16.40	1.73
Interaction	10..96	1	10.96	1.16
Residual	1764.57	186	9.49	--
Total	4070.65	189	21.54	--

***Significant at 0.01 level*

The results (Table 61) reveal that group of children has significant effect on achievement orientation. No significant effect is obtained for sex on achievement orientation. Effect for interaction between group and sex of children is also not found significant on achievement orientation.

Table 62: Means, SDs and t-values of the score on achievement orientation (main effect)

Groups	N	Mean	SD	SE of means	t-values
Conduct disordered	95	14.45	2.99	0.31	15.46**
Normal	95	21.38	3.18	0.33	

***Significant at 0.01 level*

The results of t-test indicate difference between conduct disordered and normal children as significant at 0.01 level. An examination of the mean scores shows that conduct disordered children are less achievement oriented than the normal children. They, as a group, are found as less interested in competitive pursuits.

d) Intellectual orientation

This measures the interest in intellectual and creative activities and the extent to which the activities are cast into an intellectual framework.

Table 63: Analysis of Variance (two-way) of the scores on family environment - Intellectual orientation

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	1172.26	1	1172.22	83.72*
Sex	7.44	1	7.44	0.53
Interaction	14.28	1	14.28	1.02
Residual	2604.39	186	14.00	--
Total	3874.36	189	20.50	--

**Significant at 0.05 level*

The results (Table 63) show significant effect for group on intellectual orientation. No significant effect for sex is seen. Interaction effect for group and sex is also not significant on intellectual orientation.

Table 64: Means, SDs and t-values of the scores on intellectual orientation (main effects)

Groups	N	Means	SDs	SE of means	t-values
Conduct disordered	95	12.69	3.42	0.35	9.45**
Normal	95	17.82	4.03	0.41	

***Significant at 0.01 level*

Mean scores and t-values presented in Table 64 indicate that conduct disordered and normal children differ significantly in intellectual orientation. The conduct disordered children are found less intellectually oriented than the normal children. This suggests that conduct disordered children are not likely to get their activities cast into an intellectual framework.

e) Conflict

This assesses the amount of openly expressed anger, aggression and conflict among family members.

Table 65: Analysis of Variance (two-way) of the scores on family environment – Conflict

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	2654.39	1	2654.39	172.97**
Sex	1.44	1	1.44	0.09
Interaction	108.49	1	108.49	7.07**
Residual	2854.28	186	15.35	--
Total	5595.00	189	29.60	--

***Significant at 0.01 level*

The Table 65 presents the results of ANOVA (two-way) of the scores on conflict. The results indicate significant effect for group on conflict. Effect for sex is not found significant. However interaction effect on conflict is significant at 0.01 level.

Table 66: Means, SDs and t-values of the scores on conflict (main and interaction effects)

Groups	N	Means	SDs	SE of means	Groups Compared	t-values
1.Conduct disordered	95	13.48	3.62	0.37	1&2	12.92**
2. Normal	95	20.93	4.29	0.44		
3. CD boys	65	13.94	3.73	0.46	3&4	1.82*
4. CD girls	30	12.50	3.21	0.59	5&6	1.94*
5. Normal Boys	65	20.35	4.34	0.54	3&5	9.04**
6. Normal girls	30	22.17	3.98	0.73	4+6	10.35**

***Significant at 0.01 level*
**Significant at 0.05 level*

The mean conflict scores of the groups of conduct disordered and normal children and the t-values (Table 66) obtained reveal that the difference between the two groups is significant at 0.01 level. The mean score suggests that normal children experience less conflict and are less likely to express their anger and conflict to their family members. On the other hand conduct disordered children experience more conflict and express their negative feelings of aggression and problems more to their family members.

A more or less similar trend is seen when groups of conduct disordered boys and girls as well as groups of normal boys and girls are compared. Groups of normal boys and girls are found to have less conflict than groups of conduct disordered boys and girls. This is an indication of conduct disordered boys and girls expressing their conflicts openly within their family. Their negative feelings of anger and aggression are shown to members of the family and vice versa. However, this tendency is not seen among normal children. It may be because they are encouraged to share their problems with family and thus are able to turn to the royal roads of normal socially desirable behaviour patterns.

f) Social orientation

This is meant to assess the degree of interest and extent of participation in social, cultural and recreational activities.

Table 67: Analysis of Variance (two-way) of the scores on family environment - Social orientation

Source	Sum of squares	df	Mean sum of squares	F-ratio

Group	340.99	1	340.99	37.21**
Sex	7.71	1	7.71	0.84
Interaction	0.91	1	0.91	0.10
Residual	1704.44	186	9.16	--
Total	2122.74	189	11.23	--

***Significant at 0.01 level*

The F-ratio (Table 67) reveals highly significant effect for group of children on social orientation. But effects for sex of children and interaction effect for group and sex are not found significant on social orientation.

Table 68: Means SDs and t-values of the score on social orientation (main effects)

Groups	N	Means	SDs	SE of mean	t-values
Conduct disordered	95	13.09	2.90	0.29	6.71**
Normal	95	16.03	3.13	0.32	

***Significant at 0.01 level*

Means and t-values given in Table 68 indicate that groups of conduct disordered and normal children differ significantly from each other on social orientation. The conduct disordered children are found less socially oriented than the normal children. They show less interest in cultural and recreational activities and their participation in such activities are also less in comparison with normal children.

g) Moral emphasis

This pertains to the degree of emphasis on ethical and religious values.

Table 69: Analysis of Variance (two-way) of the scores on family environment- Moral emphasis

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	596.81	1	596.81	42.80*
Sex	88.62	1	88.62	6.36*
Interaction	21.31	1	21.31	1.53
Residual	2593.73	186	13.95	--
Total	3301.40	189	17.47	--

**Significant at 0.05 level*

The results shown in Table 69 indicate significant effects at 0.05 level for group and sex of children on moral emphasis. Combined effect for group and sex is not seen as significant on moral emphasis.

Table 70: Means, SDs and t-values of the scores on moral emphasis (main effect)

Groups	N	Means	SDs	SE of Means	t-values
Conduct disordered	95	19.62	3.11	0.32	6.45**
Normal	95	23.17	4.37	0.45	
Boys	130	20.93	4.30	0.38	2.28*
Girls	60	22.40	3.74	0.48	

***Significant at 0.01 level*
**Significant at 0.05 level*

Table 70 exhibits the results of t-test on the scores of different groups of children on moral emphasis. The findings reveal that there is difference between groups of conduct disordered and normal children on moral emphasis. Normal children seem to score more in this area. The results suggest that families of normal children may be more concerned with the moral up bringing of their children and hence emphasise on ethical and

religious values. However, this trend is not evident in the case of conduct disordered children.

Again when the groups of boys and girls are considered they are also found to differ significantly with respect to moral emphasis. Girls seem to get a higher score than boys which suggests that in the case of girls family members more strictly emphasize ethical and religious values than they do in the case of boys.

One possible reason for this differential treatment given to boys and girls may be the still prevailing traditional values of Kerala. The general tendency is to bring up girls as God fearing and rule abiding future citizens. They are trained and their character is molded accordingly. Contrary to this boys are given much freedom to confront and internalize the newly emerging trends and values in the modern world. Hence the difference in the degree of moral emphasis shown in the cases of boys and girls.

h) Discipline

This assesses the extent to which set rules and procedures are used in family life.

Table 71: Analysis of variance (two-way) of the scores on family environment - Discipline

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	60.90	1	60.90	6.25**
Sex	1.56	1	1.56	0.16
Interaction	23.17	1	23.17	2.38

Residual	1813.54	186	9.75	--
Total	1944.40	189	10.29	--

***Significant at 0.01 level*

The results (Table 71) indicate that there is significant effect for group of children on discipline. Effects for sex as well as interaction effect are not significant on discipline.

Table 72: Means, SDs and t-values of the scores on discipline (main effects)

Groups	N	Means	SDs	SE of mean	t-values
Conduct disordered	95	15.05	2.99	0.31	3.29**
Normal	95	16.55	3.25	0.33	

***Significant at 0.01 level*

Means and t-values provided in Table 72 show the group of conduct disordered children as different from the group of normal children. It is evident from the results that family sets rules and procedures more in the case of normal children than in the case of conduct disordered children. From the results it may be assumed that there is a lack of well defined rules and regulations for conduct disordered children in their families. Absence of guidelines regarding appropriate behaviors is likely to make children confused and annoyed and such a family environment may breed problems of unrest and unruly behaviour in children.

i) Family Environment (total score)

This gives a general assessment of the social environmental characteristics of the family and indicates whether the family is healthy or distressed.

Table 73: Analysis of Variance (two-way) of the scores on family environment (Total score)

Source	Sum of squares	df	Mean sum of squares	F-ratio
Group	57686.85	1	57686.85	229.68**
Sex	7.48	1	7.48	0.03
Interaction	1356.09	1	1356.09	5.39*
Residual	46717.14	186	251.17	--
Total	107499.70	189	568.78	--

***Significant at 0.01 level*
**Significant at 0.05 level*

Table 73 provides the results of analysis of variance of the total scores on family environment. No significant effect for sex is seen. But the effect for interaction between group and sex is found significant at 0.05 level.

Table 74: Means, SDs and t-values of the scores on family environment (main and interaction effect)

Groups	N	Means	SDs	SE of Means	Groups Compared	t-values
1.Conduct disordered	95	118.27	16.07	1.65	1&2	15.24**
2. Normal	95	153.64	15.92	1.63		
3. CD Boys	65	119.95	17.65	2.19	3&4	1.51
4. CD girls	30	114.63	11.36	2.08	5&6	1.78*
5. Normal Boys	65	151.69	14.56	1.81	3&5	11.18**
6. Normal girls	30	157.87	18.07	3.29	4&6	11.09**

***Significant at 0.01 level*
**Significant at 0.05 level*

The results of t-test on the scores of family environment are presented in Table 74. It seems that conduct disordered children have obtained a comparatively less score for general family interaction than that of their normal counterparts. The results reveal that in comparison with normal children conduct disordered children are found to belong to distressed families.

Hypothesis 7 is accepted.

Conduct disordered boys and girls do not differ with respect to their family environment. They are more or less similar with regards to the social environmental characteristics of their families. Normal boys and girls seem to differ in relation to their family environment and normal girls are found to

belong to families that are healthier in terms of interaction among family members.

Conduct disordered girls are found to come from families that are more distressed when compared to the families of other groups of children. Families of conduct disordered boys are also found as distressed and with poor interaction among family members.

As against the cases of conduct disordered boys and girls, normal boys and girls belong to healthy families having very healthy social environmental characteristics.

Hypothesis 8 is accepted.

The present results are supported by the works of Webster-stratton (1985) and Rey *et al.* (2000). Findings by Patterson *et al.* (1989), Dadds *et al.* (1992), Sanders *et al.* (1992), Slee (1996) are also in line with the results reported in the present study.

The above results may be interpreted in terms of the quality of social support that children receive from their families. It is reported that, supports and satisfying relations with significant members contribute to feeling of well-being. Negative relations are likely to breed frustrations and in turn end up in deviant behaviors. Children who engage in delinquent behaviour may be motivated to do so in part by a desire to belong to particular gangs and reap the expected benefit of companionship, protection and excitement. The power of such desires for affiliation to encourage anti-social behaviour/conduct

disorder highlights the significance of these needs during the developmental years. This is not just for problem children but for the normative population of children as well. The disparity between what children expects and wants from family and what they receive from there is a crucial determinant of problem behavior in children.

The results also suggest the families of conduct disordered children as lacking many important social characteristics that are likely to help children develop as mentally healthy and law abiding. For e.g. family interaction, which does not emphasis, moral values and discipline may be detrimental to the psychological well-being of children. It is also found that families of conduct disordered children are not achievement oriented or intellectual oriented. Encouraging children to get engaged in interesting and fruitful activities is a significant step in managing their behaviour. As lazy brains create more problems, it is very essential to get children involved in activities that enhance their self respect and self esteem and thus prevent them from engaging in deviant behaviour.

In order to examine the association of conduct disorder to parental economic status, education and ordinal position of children the data collected from the sample of conduct disordered children (N=95) were analyzed using Analysis of Variance (one-way), Post Hoc Test of Scheffe and Lavene's test for Equality of Variance. Classification of the sample and criteria used for classification is shown in Table 75.

Table 75: Classification of the sample of conduct disordered children in terms of economic status, parental education and ordinal position.

Variables	Criteria	Groups	No. of Subjects
Economic Status	Below Rs25,000/-	1. Low income	27
	Bet : Rs 25001/-and Rs 50,000/-	2. Middle income	44
	Above Rs.50,001/-	3. High income	24
Parental Education	Below SSLC	1. Less Educated	49
	Above SSLC	2. Better educated	46
Ordinal Position	First Born	1. Eldest	46
	Last Born	2. Youngest	32
	Between first born and last born	3. Middle	17

Impact of independent variables namely; economic status, parental education and ordinal position on dependent variables of children's perception of parent-child relationship and its components relating to father and mother, alienation and its subscales, parental personality disorder (both father and mother characteristics), parental attitude (father and mother) to children and its different components and family environment and its different dimensions was assessed. Only results showing significant relationships are tabled. The results are discussed in the following pages.

j) Economic status

Table 76: Analysis of Variance (one-way) of the scores on fathers' attitude to punishment and mothers' attitude to parental role (Results in detail are given in Appendix 1)

Variables	Source	Sum of squares	df	Mean squares	F-ratio
Fathers attitude to punishment	Between groups	89.41	2	44.70	7.65**
	Within groups	537.48	92	5.84	
	Total	626.88	94		
Mothers attitude to parental role	Between groups Within groups	59.07 591.81	2 92	29.54 6.43	4.59*
	Total	650.88	94		

** *Significant at 0.01 level*
* *Significant at 0.05 level*

The results of analysis of variance show significant effects for economic status on fathers' attitude to punishment and mothers' attitude to parental roles only. In all the other variable economic condition of the family seems to have no effects. This means that children's perception of parental relation to them is not at all related to the economic status of the family. Similarly, alienation and parental personality disorders have no association to the family economic status of conduct disordered children. Family environmental characteristics are also not related to economic status. Further, economic status does not affect parental attitude to independence, acceptance, fathers' attitude to parental role and mothers' attitude to punishment of their children.

Table 77: Multiple comparisons-Scheffe-of the scores of low, middle and high income group of conduct disordered children on fathers' attitude to

punishment and mothers' attitude to parental role (Results in detail are given in Appendix II)

Dependent Variable	(1) ECONO	(J)ECONO	Mean Difference (I-J)	Std. Error	Sig	95% Confidence Interval	
						Lower Bound	Upper Bound
PAIFPUN	1	2	-72	.59	.477	2.18	.75
		3	-2.60*	.69	.001	-4.31	-.89
	2	1	.72	.59	.477	-75	2.18
		3	-1.88*	.62	.012	-3.42	-.34
	3	1	2.60*	.69	.001	.89	4.31
		2	1.88*	.62	.012	.34	3.42
PAIMROLE	1	2	-86	.62	.384	-2.40	.68
		3	-2.17*	.720	.013	-2.40	.38
	2	1	.86	.62	.384	-.68	2.40
		3	-1.31	.65	.136	-2.93	.30
	3	1	2.17*	.72	.013	.38	3.96
		2	1.31	.65	.136	-.30	2.93

** Significant at 0.05 level*

Table 78: Scheffe-Homogeneous subsets

Variables	Econo	N	Sub set for Alpha = 0.05	
			1	2
Fathers' Attitude to punishment	1	27	13.70	
	2	45	14.42	
	3	23		16.30
	Sig.		0.53	1.00
Mothers' attitude to parental role	1	27	10.74	
	2	45	11.60	11.60
	3	23		12.91
	Sig.		0.44	0.15

An examination of the values in Tables 77 and 78 indicate that fathers belonging to high income group differs from low income and middle income groups in their attitude to punishment of children. High-income fathers seem to believe more in differential punishment, for the desirable and undesirable behaviour of their children, so as to control them.

With reference to mothers' attitude in parental role, high income mothers seem to differ from low income mothers significantly. High-income groups tend to have a comparably positive attitude than the low-income group regarding parental role in controlling their children.

(k) Parental Education

The results relating parental education to different dependent variable studied could be summarized as follows. Difference in educational status of parents does affect conduct disordered children's perception of their fathers' relation as demanding and mothers' relation as neglecting. No other

component of parent-child relationship studied is related to parental education. Again parental education does not relate to variables such as alienation, parental personality disorder, parental attitude and family environment of conduct disordered children

Table 79: Lavene's Test for variances of the scores of conduct disordered children's perception of better educated and less educated parents in relation to components of parent-child relationship.

Variables	Groups	Means	SD	N	SE of mean	t-values
Fathers as demanding	Less educated	33.39	6.39	49	0.91	1.99*
	Better educated	30.89	5.76	46	0.85	
Mothers as neglecting	Less educated	22.84	7.38	49	1.05	2.11*
	Better educated	20.00	5.56	46	0.82	

** *Significant at 0.05 level*

The results in Table 79 suggest that, as shown elsewhere in this thesis, parents of conduct disordered children in general, are demanding in nature. The present results indicate that the less educated fathers are perceived as more demanding than the better educated fathers with regard to their relationship to children is concerned. This suggests that less educated fathers are likely to express authority and command to a very high degree than better educated fathers.

With respect to neglect by mothers, the t-value is significant at 0.05 level. The mean scores show significant difference between children's perception of less educated and better educated mothers. Less educated

mothers are viewed as more neglecting than better educated mothers. This indicates that less educated mothers are seen by their conduct disordered children as deliberately disregarding and careless towards their children. This is likely to leave the children to devalue themselves and may, in turn, trigger problems in behaviour.

(l) Ordinal position of children

Ordinal position seems to influence psychological development of children to a considerable extent. The first-born child is always a much sought after and pampered child. The family provides them with all the facilities it could afford and look at them with much expectation. The neighbourhood social set up also does show special concern to the eldest in the family. The last born child, being the youngest also enjoys many privileges in the family. Middle children jammed in between the first and last born are found as the neglected ones among the siblings in the family. The concept of family members and significant others regarding the role and responsibility of each child is likely to influence his/her behavioral development. It is in this context that the relationship of ordinal position of conduct disordered children to the different independent variables is examined.

The results in Table 80 reveal significant effects of ordinal position, on cohesion and family environment (total score). No effect is observed for ordinal position of conduct disordered children on other dimensions of family environment, parent-child relationship, alienation, parental personality disorders and parental attitude.

Table 80: Analysis of Variance (one-way) of the scores on family environment-cohesion and family environment (total) (Results in detail are given in Appendix III)

Variables	Source	Sum of squares	df	Mean Squares	F-ratio
Cohesion	Bet groups	102.78	2	51.39	4.53*
	Within groups total	1043.75	92	11.35	
		1146.53	94		
Family Environment (total)	Bet groups	1728.51	2	864.26	3.53*
	Within groups	22532.37	92	244.92	
	Total	24260.88	94		

** Significant at 0.05 level*

Table 81: Multiple camparisons-Scheffe of the scores of first, last and middle born CD children on cohesion and family environment (Total score)

Dependent Variable	(1) ORP	(J)ORP	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Cohesion	1	2	-10	.77	.992	-2.02	1.82
		3	-2.82*	.98	.018	-5.24	-.39
	2	1	.10	.77	.992	-1.82	2.02
		3	-2.72*	1.03	.035	-5.28	-.15
	3	1	2.82*	.98	.018	.39	5.24
		2	2.72*	1.03	.035	.15	5.28
Family Interaction total	1	2	-.19	3.59	.999	-9.12	8.73
		3	-11.47*	4.53	.045	-22.74	-.20
	2	1	.19	3.59	.999	-8.73	9.12
		3	-11.28	4.79	.068	-23.20	.64
	3	1	11.47*	4.53	.045	.20	22.74
		2	11.28	4.79	.068	-.64	23.20

**Significant at 0.05 level*

Table 82: Scheffe-Homogeneous subsets

Variables	ORP	N	Sub set for Alpha = 0.05	
			1	2
Cohesion	1	47	14.81	
	2	32	14.91	
	3	16		17.63
	Sig.		1.00	1.000
Family Environment (Total)	1	47	116.28	
	2	32	116.47	
	3	16		127.75
	Sig.		1.00	1.00

The results of multiple comparisons in Table 82 indicate that middle born children differ from first born and last born children in cohesion. Middle children seem to be more cohesive than the other two groups. As reported elsewhere in the thesis, conduct disordered children as a group receive limited support and help from family members. But, however, among the conduct disordered, the middle born children are in a better position, than their first and last born siblings and to get more help from their family.

A similar trend is evident in general family environment (total score) also. Compared to first born and last born children, the middle born children seem to have a comparatively higher score for overall family interaction. Though conduct disorder children are found to belong to distressed families, the level of distress experienced by the groups of conduct disordered children seems to vary in relation to their ordinal position. Among the three groups,

the middle born is found as experiencing less distress than the other two groups.

Hypothesis 9 is partially accepted

The results of the present investigation thus point out that the conduct disordered children have poor perception of their parents' relationship to them. They are found more alienated than the groups of normal children. It also found that a considerable number of their parents, fathers and mothers, show traces of personality disorder. Again parents' attitude to their conduct disordered children is not very positive. Also distressed family environment is a potent factor that tends to breed conduct problems in children. Further, parental economic status, education and ordinal position of conduct-disordered children have minimal effect on other psychosocial factors examined in the present study.

PART II

INTERVENTION

Seven cases were taken for studying the efficacy of the intervention package. Each child was studied separately and individually. Parents were asked to mark the severity and frequency of symptoms exhibited by the children as per the DPCL on pre, post and follow up phases of intervention. The intervention package included individual counseling, anger management with problem solving techniques, relaxation therapy, relationship enhancement counseling, parental counseling and family counseling.

The results presented were analyzed qualitatively and without the use of statistics. A comparison of scores at pre, post and follow up phases was attempted. The response pattern of each case was explained with the help of Tables 83 to 89 and Figures1 to 21.

PROFILE ANALYSIS

Case 1. Master T.Y

Master T.Y the 16 year old teenager, belonged to an upper middle class family. He was a standard 12 student and had recently changed school from a residential setting. His father was a lawyer and mother a house wife. The client was the eldest of the three sons.

His family was characterized by conflict between parents, difference of opinion regarding disciplinary practices, unhealthy and aggressive interactions, blaming, physical assault of the client etc.

The client was brought for intervention by his parents for his behaviour including violating rules of the school, skipping classes, disturbing classroom activities, bullying, leaving school and hostel without permission, staying out late, using alcohol, gang activities and using drugs.

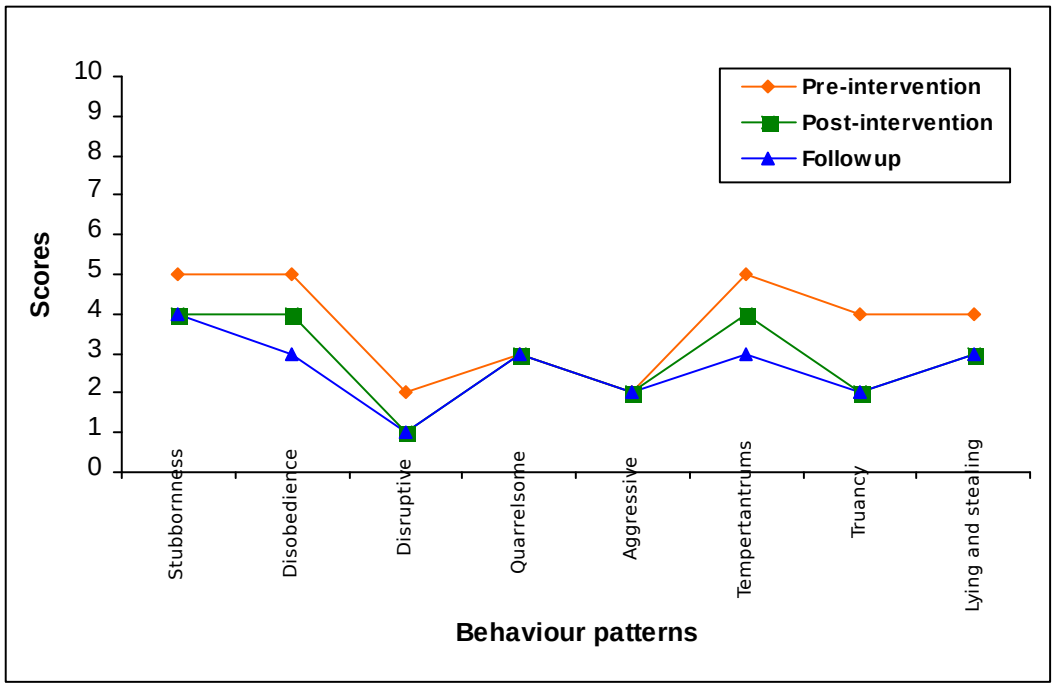
He attended 10 sessions of interventions. Parental and family counseling were done in 3 sessions. The results of intervention are given in Table 83 and Figures 1, 2, 3 and 4.

Table 83: Scores on severity and frequency of behaviour problem exhibited by case 1.

Severity										
Sessions	**Stubborness**	**Disobedience**	**Disruptive**	**Quarrel some**	**Aggressive**	**Temper tantrums**	**Truancy**	**Lying/stealing**	**Maximum score**	**Obtained score**
Pre-test	5	5	2	3	2	5	4	4	40	30
Post-test	4	4	1	3	2	4	2	3	40	23
Follow-up	4	3	1	3	2	3	2	3	40	21
Frequency										
Pre- Test	5	5	2	4	2	5	4	4	40	31
Post-test	4	3	1	3	2	4	3	3	40	23
Follow-up	4	4	1	2	2	3	1	3	40	20

FIGURE 1

Diagrammatic representation of severity of symptoms in each behaviour at pre-intervention, post-intervention, and follow-up phases of case 1



The clients score on severity of symptom, for the total problems, at pre-intervention, post-intervention and follow up sessions are 30, 23 and 21 respectively. The results in Table 83 show a considerable reduction in the severity of symptoms, from baseline (30) to the post–intervention (23) sessions. Follow up scores also reveal a decline in severity.

A reduction of scores is seen at post-intervention session in all the behaviours except in quarrelsome behaviour and aggressiveness. In these two behaviours intervention does not help to modify them. Follow up scores indicate that the subject could either maintain or reduce the scores at post-intervention as a result of psychological intervention.

FIGURE 2

Diagrammatic representation of frequency of symptoms at pre-intervention, post-intervention, and follow-up phases of case 1

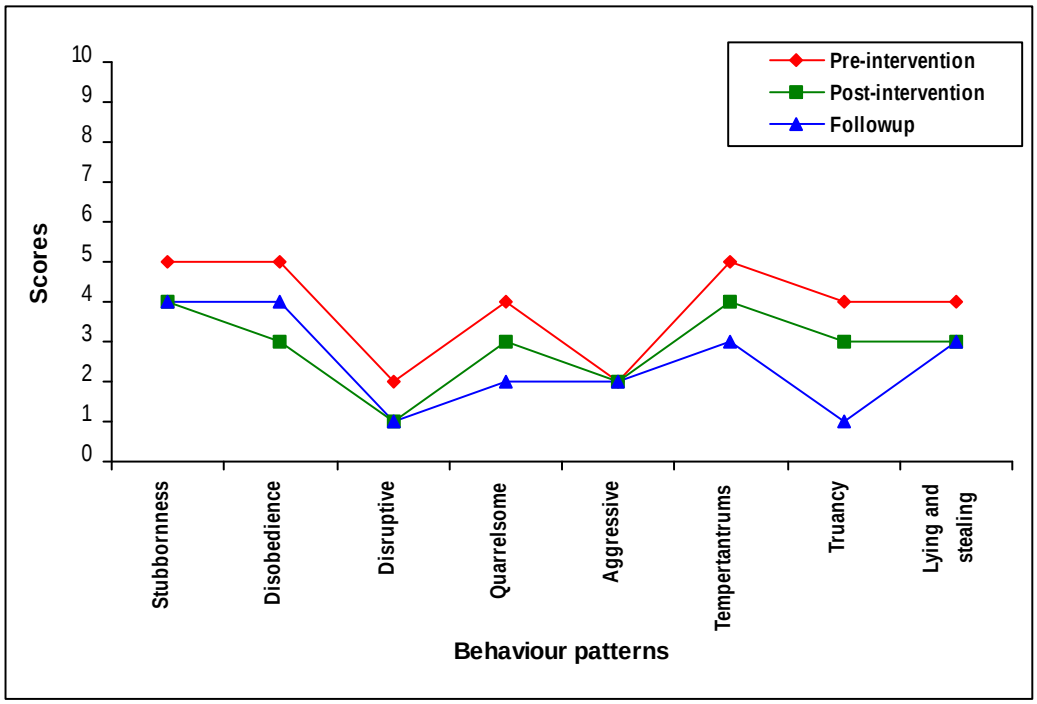


Table 83, shows the subjects' baseline score on frequency of symptoms, for total problems as 31. The reduction of scores from 31 at base-line to 23 at post-intervention and 20 at follow up shows that intervention is effective in modifying conduct disorder (problems) exhibited by the client.

The frequency of different behaviour exhibited by the client shows high score on stubbornness, disobedience, and temper tantrums followed by quarrel, truancy, and lying. Incidents of quarrel, temper tantrums and truancy has come down to 2, 3, and 1 from 4, 4, and 4 respectively at follow up session.

FIGURE 3

Diagrammatic representation of efficacy of intervention in change in severity of behaviour pattern of case 1.

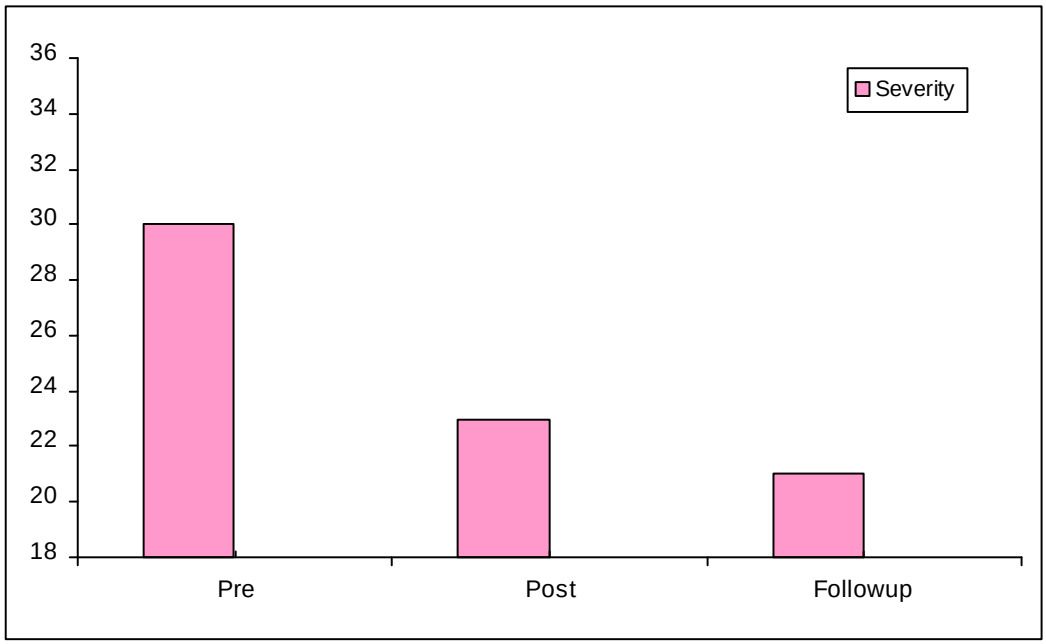
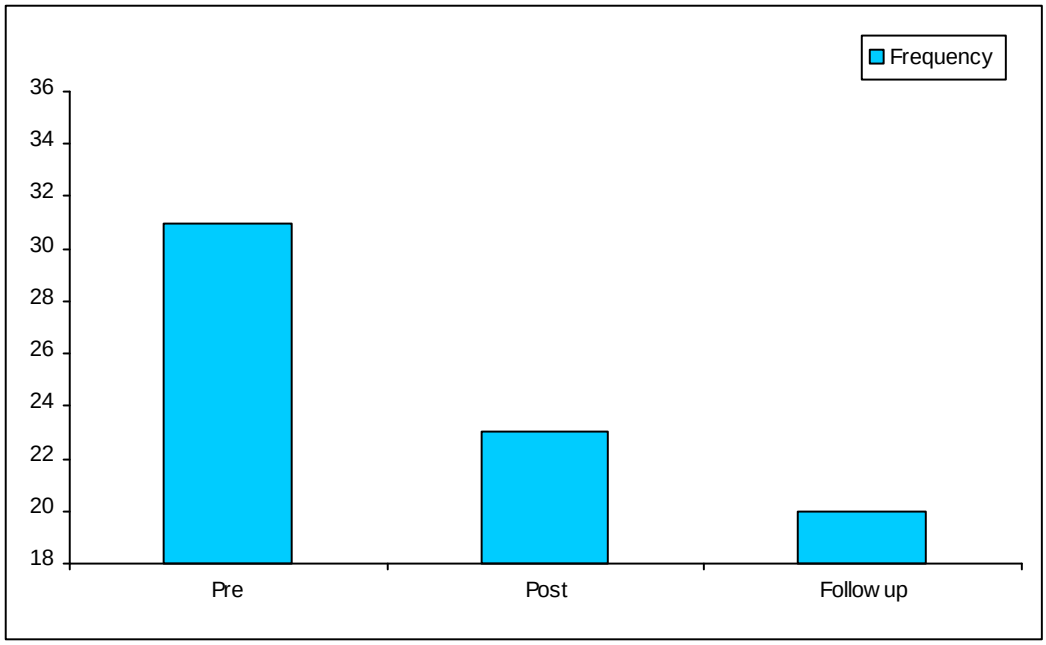


FIGURE 4

Diagrammatic representation of efficacy of intervention in change in frequency of behaviour pattern of case 1



The diagrammatic representation of total scores on severity and frequency of symptoms at the three phases of intervention shows the change in behaviour of case 1.

The client showed improvement as revealed by his post intervention results. He was able to make some improvement in controlling his anger. The incidents of quarrel also came down. By the time he came for follow up sessions the incident of truant behaviour became nil.

The results suggest that psychological techniques are helpful in controlling the severity and frequency of undesirable behaviour patterns in conduct disordered adolescent children.

Case 2. Master. B. D

Master B.D was a sixteen year old class 11 student. He was the younger of the two siblings. He came from a middle class family. His father worked as a manager in a hotel, mother a house wife and his sister was studying for a professional course.

The client came from a distressed family characterized by quarrel between parents, over expectation of mother and irresponsible, aggressive nature of father who is a chronic alcoholic.

He was brought to the researcher for psychological intervention for his deviant behaviour. This included uncontrollable temper and smashing things, quarrelling with others, skipping school and roaming around, using drugs, displaying arrogance, being sarcastic to family members and keeping emotional distance from them.

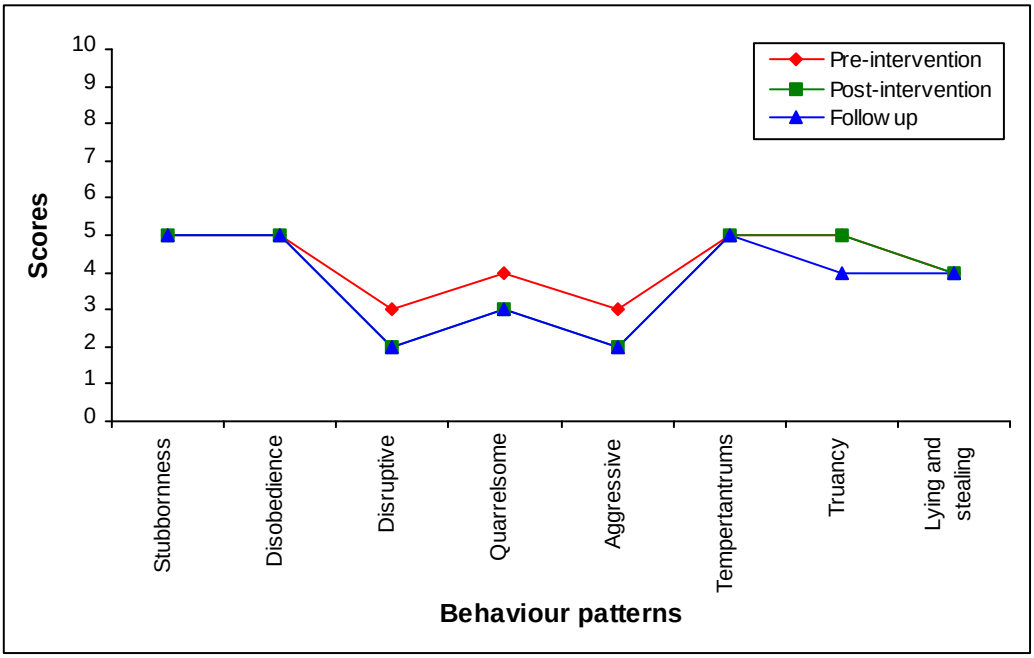
He attended 6 sessions and family members attended 6 sessions of intervention. The outcomes of intervention are presented in Table 84 and Figures 5, 6, 7 and 8.

Table 84: Scores on severity and frequency of behaviour problem exhibited by Case 2.

Sessions	Stubborness	Disobedient	Disruptive	Quarrelsome	Aggressive	Temper tantrums	Truancy	Lying & Stealing	Maximum score	Obtained score
Severity										
Pre-test	5	5	3	4	3	5	5	4	40	34
Post-test	5	5	2	3	2	5	5	4	40	31
Follow up	5	5	2	3	2	5	4	4	40	30
Frequency										
Pre-test	5	5	2	5	3	5	5	4	40	34
Post-test	5	5	2	4	3	5	5	4	40	33
Follow up	5	5	2	3	2	4	5	4	40	30

FIGURE 5

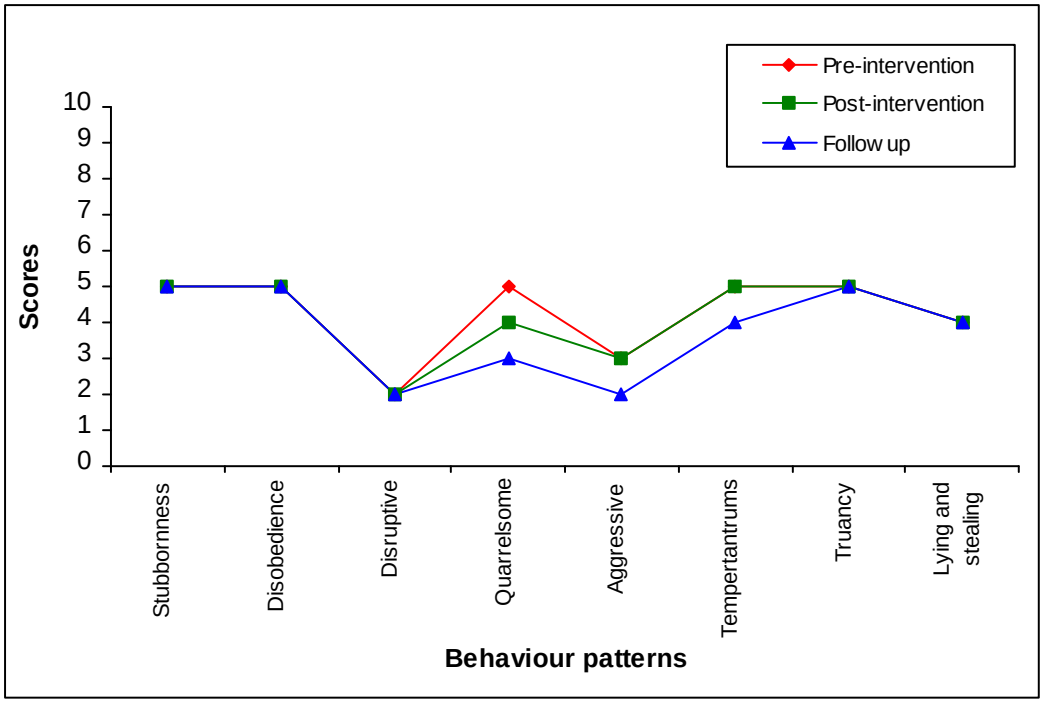
Diagrammatic representation of severity of symptoms at pre-intervention, post-intervention, and follow-up phases of case 2



The scores on severity given in Table 84 show that the client exhibited behaviours like stubbornness, disobedience, quarrelsome nature, temper tantrums, truant nature and lying was high on severity scale. After intervention the severity of disruptiveness, aggressiveness and quarrelsome behaviour came down, though marginally, at post –intervention phase and was maintained at the follow-up stage also.

FIGURE 6

Diagrammatic representation of frequency of symptoms at pre-intervention, post-intervention, and follow-up phases of case 2

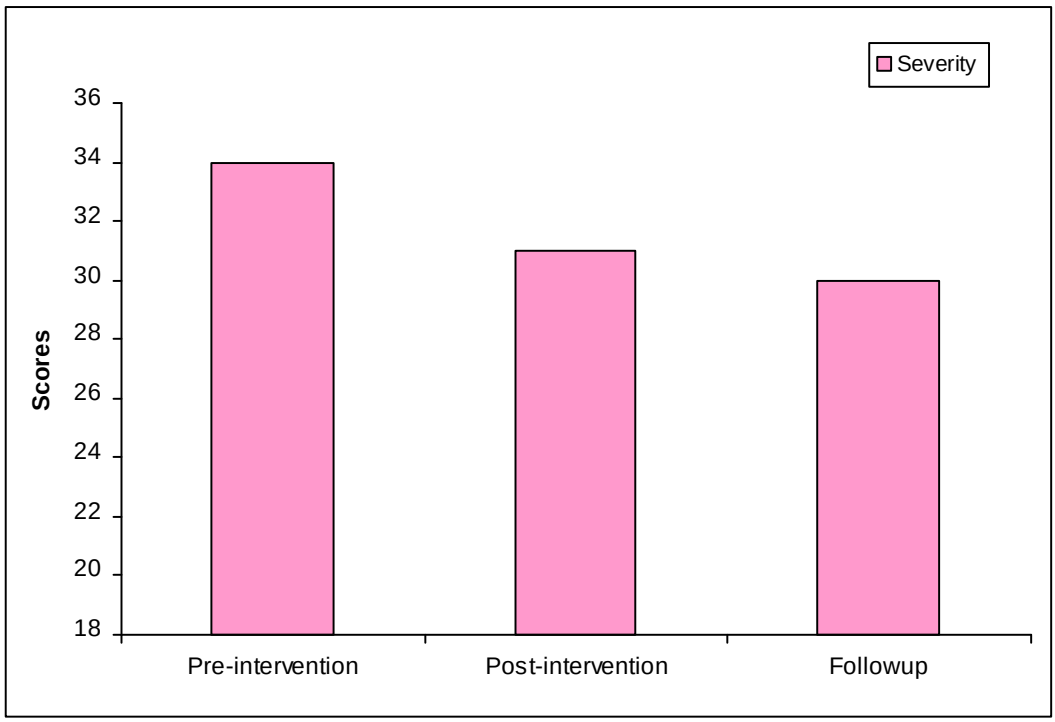


He exhibited stubborn and disobedient behaviour always and he had high incidents of quarrel with others for which he got a score of 5. Temper tantrums, truant behaviour and lying almost all the time indicates the seriousness of his conduct problems.

The scores on frequency of behaviour exhibited given in Table 84 gives a picture of his conduct problems. The incidents of quarrel came down at the post intervention phase. His score of 5 on quarrel at pre-intervention stage came down to 4 and again at intervention phase improvement was noted as the score changed to 3. Though no change in aggressiveness and temper tantrums was noticed at post intervention phase it came down at the follow up stage.

FIGURE 7

Diagrammatic representation of efficacy of intervention in change in severity of behaviour pattern of case 2.

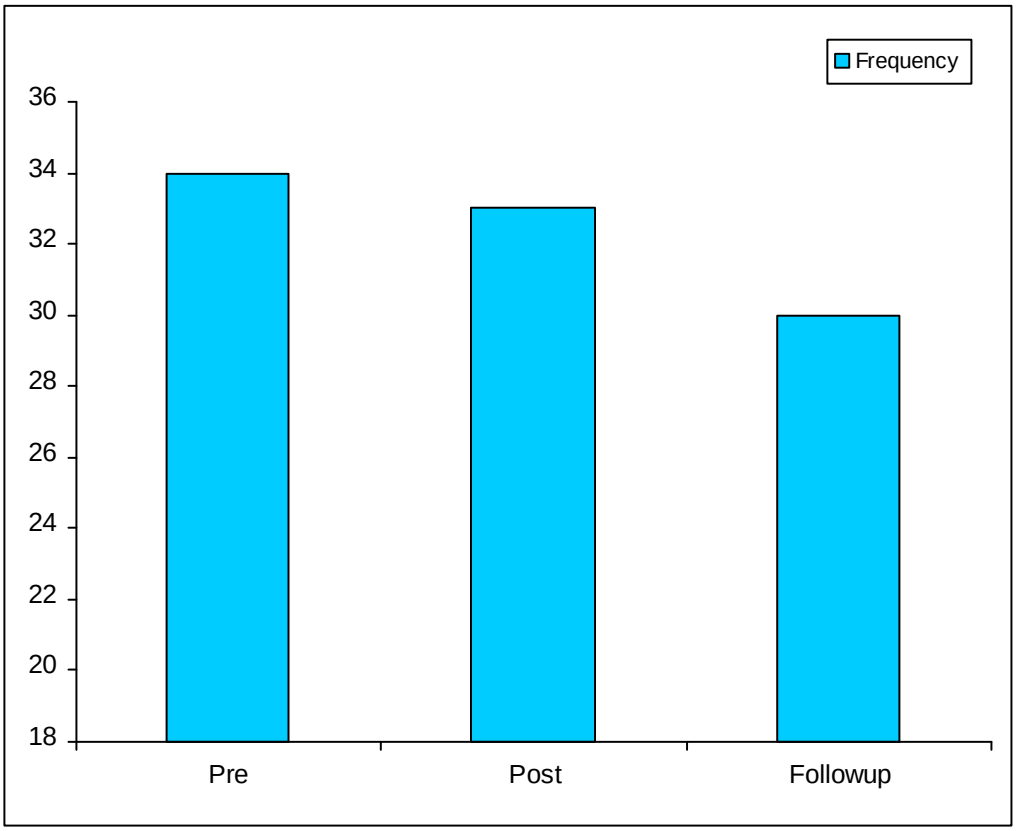


T

The figure shows the change in behaviour pattern in the three phases of intervention.

FIGURE 8

Diagrammatic representation of efficacy of intervention in change in frequency of behaviour pattern of case 2.



The subject showed a little improvement as shown in the post test scores of severity and frequency. It seems that the frequency and severity of picking up a quarrel came down. Though severity of temper tantrum didn't show any change the frequency came down. On aggressiveness too a marginal change was noticed after intervention.

Case 3. Master. A. L.

Master A..L. was a 16 yr old school drop out. His mother was a house wife and she had married twice. His stepfather was a peon in a bank.

He came from a broken family. His biological father was an alcoholic and his stepfather too was an alcoholic. Because of his mother's second marriage to his father's nephew, mother's relatives were not in good terms with her. He lived with his mother, stepfather and their two children. Earlier his family was rich and well known but later due to mismanagement they became economically weak. The family environment was characterized by frequent fights between his mother and biological father, mother and step father and lack of social support because of mother's second marriage. He was alienated from his family and relatives.

The client was brought for intervention because of his involvement in gang activities. He was not serious with his studies and dropped out, was absent from home for days together, had bad temper and got involved in a police case for assaulting a relative.

The client attended 9 sessions of intervention. Family and parental counseling was done in 4 sessions.

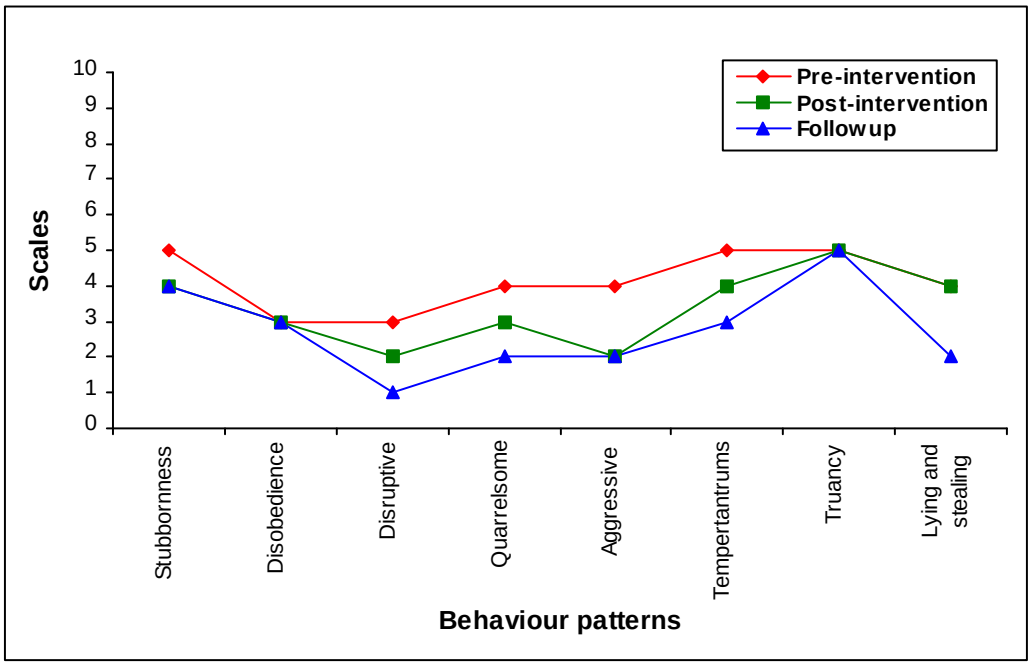
The improvement observed in the client is shown in Table 85 and figures 9, 10, 11 and 12.

Table 85: Scores on severity and frequency of behaviour problem exhibited by Case 3.

Severity										
Sessions	**Stubborness**	**Disobedience**	**Disruptive**	**Quarrel some**	**Aggressive**	**Temper tantrums**	**Truancy**	**Lie/Stealing**	**Maximum score**	**Obtained score**
Pre-test	5	3	3	4	4	5	5	4	40	33
Post-test	4	3	2	3	2	4	5	4	40	27
Follow up	4	3	1	2	2	3	5	2	40	22
Frequency										
Pre-test	5	4	2	5	4	4	5	4	40	33
Post-test	4	4	1	3	2	4	5	4	40	27
Follow up	4	3	1	2	2	3	5	3	40	23

FIGURE 9

Diagrammatic representation of severity of symptoms at pre-intervention, post-intervention, and follow-up phases of case 3

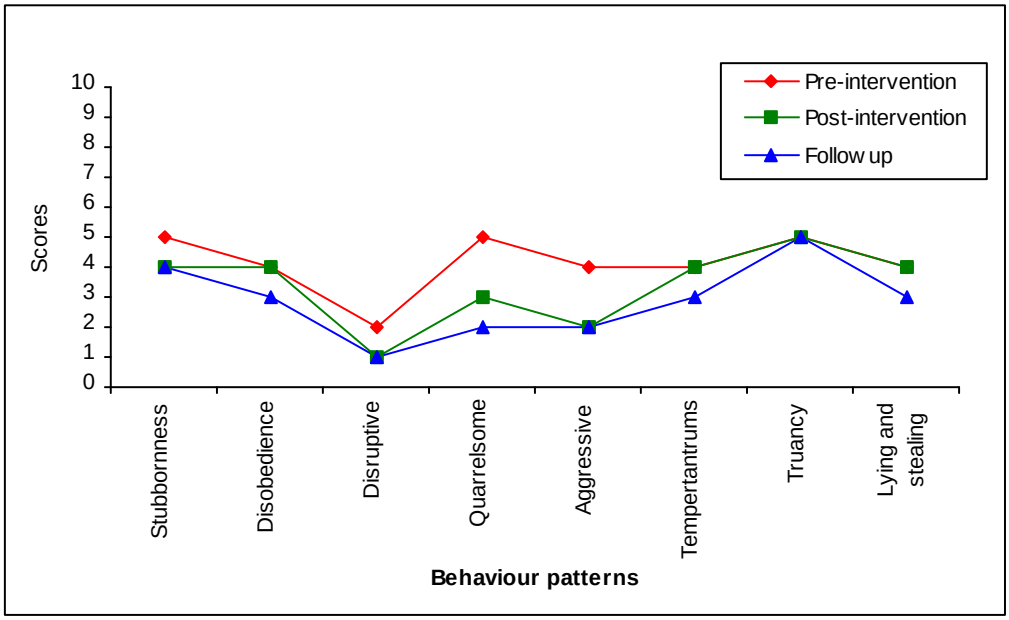


The table on severity of symptoms shows scores on severity of quarrel, aggressiveness and temper tantrums had come down. There was a change in

his tendency to lie. The scores at three phases of intervention show the improvement in these areas.

FIGURE 10

Diagrammatic representation of frequency of symptoms at pre-intervention, post-intervention, and follow-up phases of case 3



The incidents of quarrel came down to a score of 2 at follow up phase from a score of 5 during pre-intervention phase which was a relief for his family. And improvement is noticed in the domain of aggression. He did not have a single instance of assault in between the post intervention and follow up phase. Though there was no change in the frequency of disobedience, temper tantrums and lying at post intervention stage it came down at the follow up phase. His score of 4 on aggressive behaviour at pre-intervention stage came down to 2 at post–intervention phase and the change was maintained at follow up stage also.

FIGURE 11

Diagrammatic representation of efficacy of intervention in change in severity of behaviour pattern of case 3.

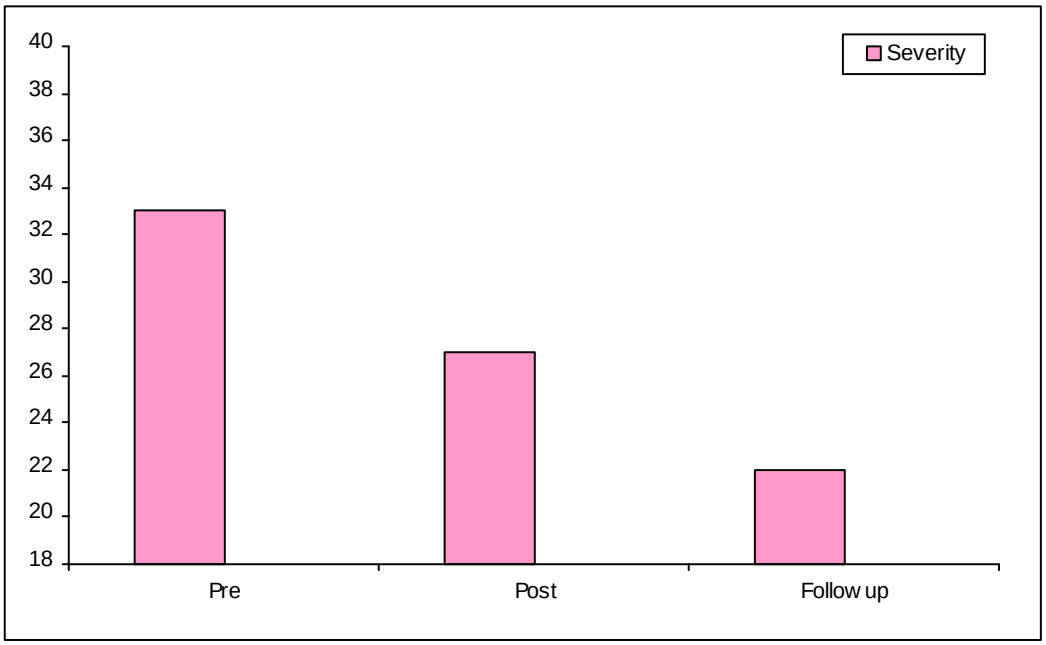
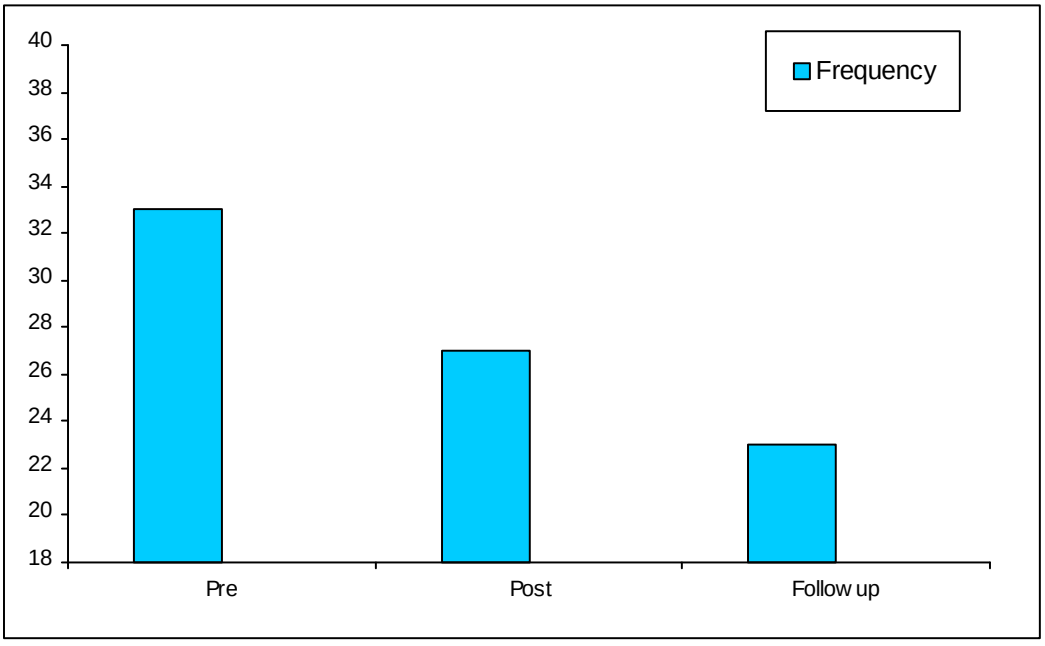


FIGURE 12

Diagrammatic representation of efficacy of intervention in change in frequency of behaviour pattern of case 3.



The figures 11 and 12 show the change in behaviour as depicted by the change in total score on severity and frequency. A comparison of total scores

on severity and frequency at the pre, post-intervention and follow up phase shows that the severity and expression of conduct problems has come down. The intervention programmes have helped Master A.L to gain insights regarding his problem behaviour and this helped him to change. Family counseling proved helpful as parents tried to understand and accept some of his genuine needs and provide support.

Case 4. Master. E. N

Frequent anger attacks, disobedience, stubbornness, reports of quarrel and truancy and poor marks were the immediate reasons for which 16 year old plus 2 student, Master E.N. was brought for providing intervention. He came from a middle class family .His father was a technician and mother was running a beauty parlour. He was the elder one of the two siblings.

The client was cooperative and very cordial. He admitted that he had a bad temper and this made things worse and led to quarrel with students at school. He was not much worried about future and believed he can make money some way but was not sure of the means to achieve it. Relationship with parents also was not very healthy.

The client was trained with the package. He attended 10 sessions. Family counseling was proved effective as it encouraged open communication at home and improved parental understandings of the needs and view points of the client.

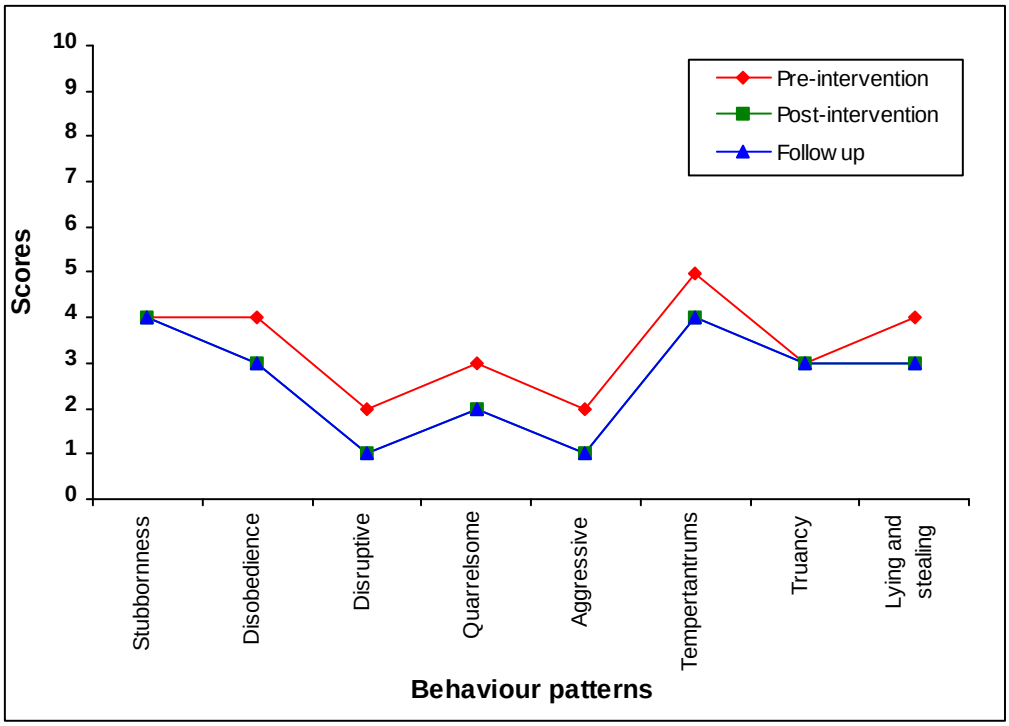
The intervention could help modifying the behaviour of the client as revealed by his pre-intervention, post-intervention and follow up scores given in Table 86 and Figures 13, 14, 15 and 16.

Table 86: Scores on severity and frequency of behaviour problem exhibited by Case. 4

Severity										
Sessions	**Stubborness**	**Disobedience**	**Disruptive**	**Quarrel some**	**Aggressive**	**Temper tantrums**	**Truancy**	**Lie/Cheat**	**Maximum score**	**Obtained score**
Pre-test	4	4	2	3	2	5	3	4	40	27
Post-test	4	3	1	2	1	4	3	3	40	21
Follow up	4	3	1	2	1	4	3	3	40	21
Frequency										
Pre-test	5	4	2	4	2	5	4	4	40	30
Post-test	4	4	1	3	1	5	3	3	40	24
Follow up	4	4	1	2	1	4	3	3	40	22

FIGURE 13

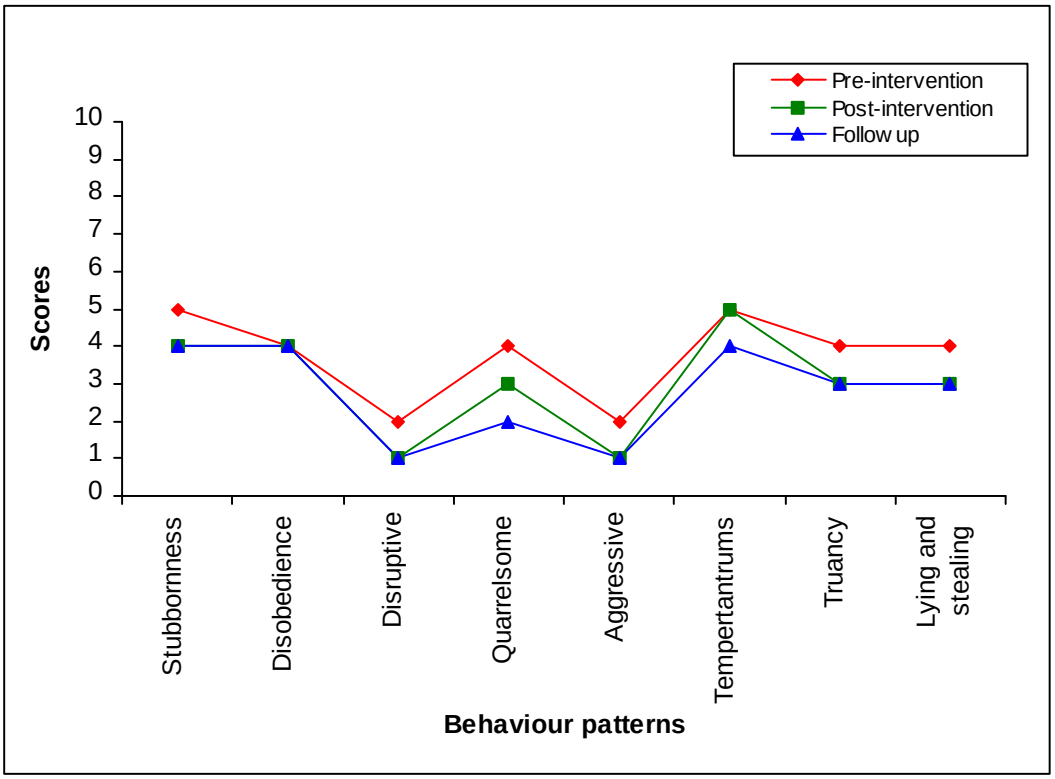
Diagrammatic representation of severity of symptoms at pre-intervention, post-intervention, and follow up phases of case 4



He got a maximum score of 5 in temper tantrums on severity scale at the pre-intervention phase. On stubbornness disobedience and lying and stealing he got a score of 4 followed by quarrelsome nature with a score of 3.In the post-intervention phase he showed marginal reduction in the severity of disobedience, quarrelsome behaviour, aggressiveness and lying and the post-intervention session scores were maintained at the follow up phase also.

FIGURE 14

Diagrammatic representation of frequency of symptoms at pre-intervention, post-intervention, and follow up phases of case 4



He always exhibited stubborn nature and temper tantrums. His score of 5 on these dimensions highlights the nature of this problem at the pre-intervention phase. He frequently showed disobedience, quarrelsome nature and truant beaviour. He frequently lied about his activities and other related matters. The positive change in these behaviours on frequency dimension at post test phase and maintenance of this at the follow up phase shows the effectiveness of the intervention package.

FIGURE 15

Diagrammatic representation of efficacy of intervention in change in severity of behaviour pattern of case 4.

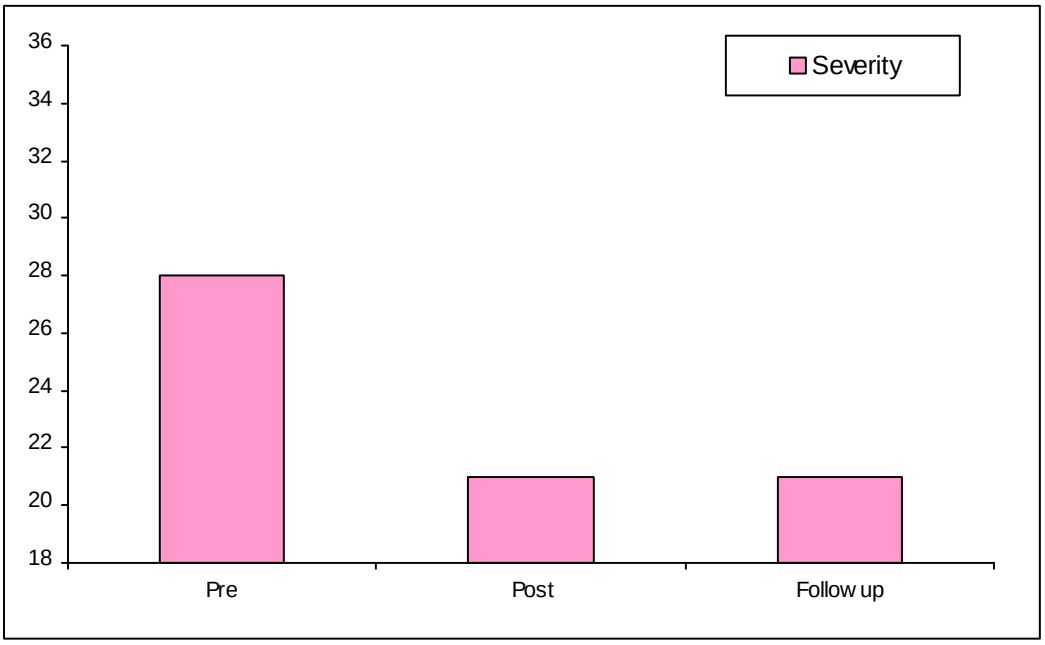
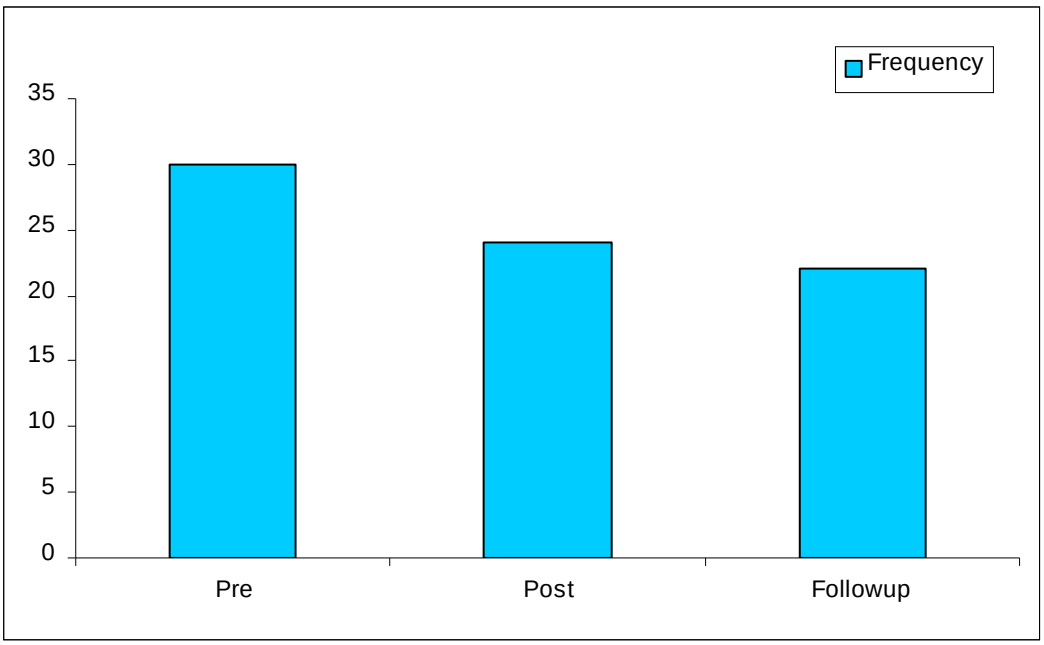


FIGURE 16

Diagrammatic representation of efficacy of intervention in change in frequency of behaviour pattern of case 4.



The Figures 15 and 16 above show the change in severity and frequency of behaviour. The total scores of severity and frequency at the three phases of intervention gives a picture of the effect of intervention in reducing undesirable behaviour pattern in case 4.

Case 5. Master. A. S.

Master A.S. the 14 year old client was the eldest of the two siblings and he belonged to a middle class family. His father worked as a laborer and mother as a nurse.

The client was brought for intervention with the complaints of temper tantrums, disobedience, stubbornness, lying, quarrelling behaviour, truancy and stealing money. His family relations were strained with problems between parents. Father was alcoholic and aggressive in interactions with his wife and children and used to gambling.

The client attended 10 sessions of intervention. Family and parental counseling was done in 4 sessions.

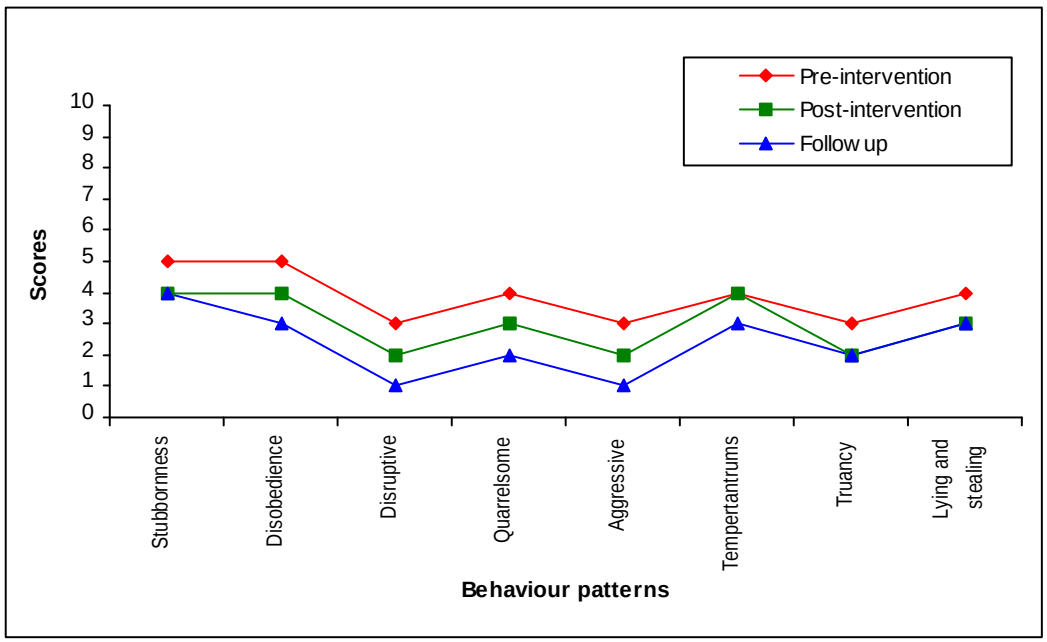
The results of intervention are presented in Table 87 and Figures 17, 18, 19 and 20.

Table 87: Scores on severity and frequency of behaviour problem exhibited by Case 5.

Sessions	Stubborness	Disobedience	Disruptive	Quarrel some	Aggressive	Temper tantrums	Truancy	Lie/Cheat	Maximum score	Obtained score
Severity										
Pre-test	5	5	3	4	3	4	3	4	40	31
Post-test	4	4	2	3	2	4	2	3	40	24
Follow up	4	3	1	2	1	3	2	3	40	19
Frequency										
Pre-test	5	5	3	4	2	4	4	4	40	31
Post-test	4	4	2	3	2	4	3	3	40	25
Follow up	4	4	1	3	1	3	3	3	40	22

FIGURE 17

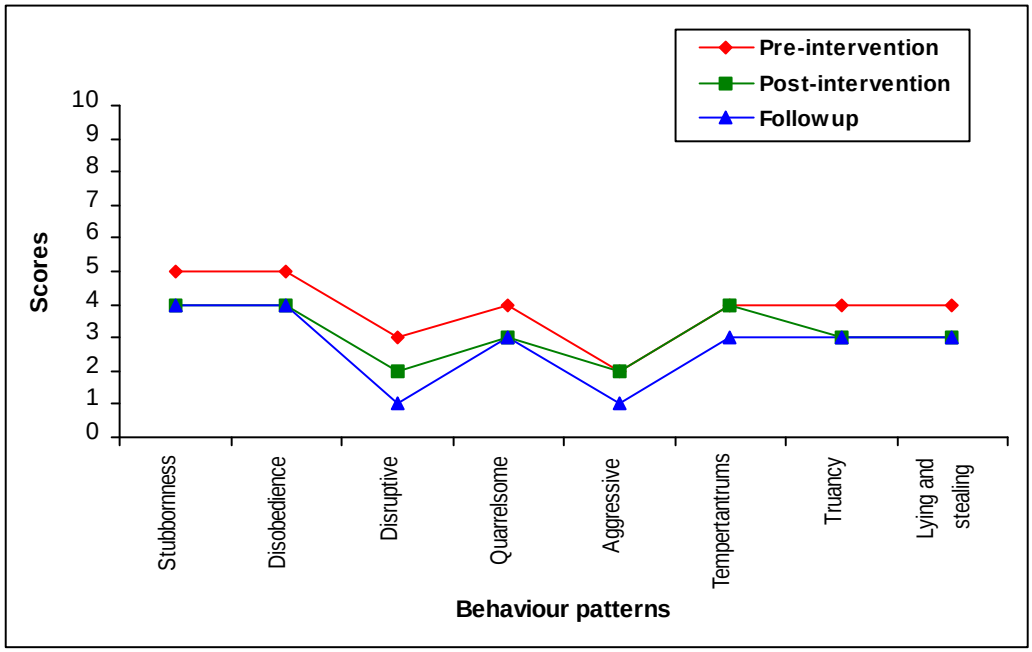
Diagrammatic representation of severity of symptoms at pre-intervention, post-intervention, and follow-up phases of case 5



The scores on severity of the conduct problems show that the more severe conduct problems exhibited by A.S are stubbornness, disobedience, quarrelsome nature, temper tantrums and lying followed by aggressiveness at the pre intervention stage. At post–intervention stage he maintained the positive change in all the problem behaviour. At follow up phase he got a score below that of which he got at post intervention stage which showed improvement.

FIGURE 18

Diagrammatic representation of frequency of symptoms at pre-intervention, post-intervention, and follow-up phases of case 5



A.S's stubbornness, disobedience, disruptiveness, quarrelsome nature, truancy and cheating came down a little in the post intervention phase. He was able to exert some control over his temper tantrums at the follow up phase. On other behaviours the change in post intervention phase was maintained in follow up phase also.

FIGURE 19

Diagrammatic representation of efficacy of intervention in change in severity of behaviour pattern of case 5.

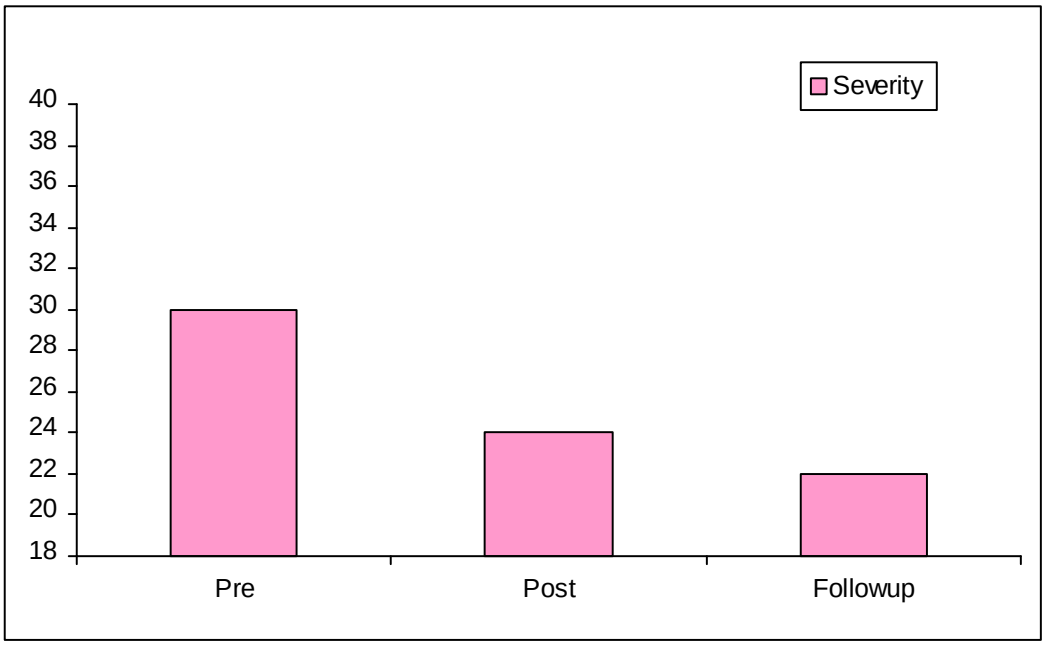
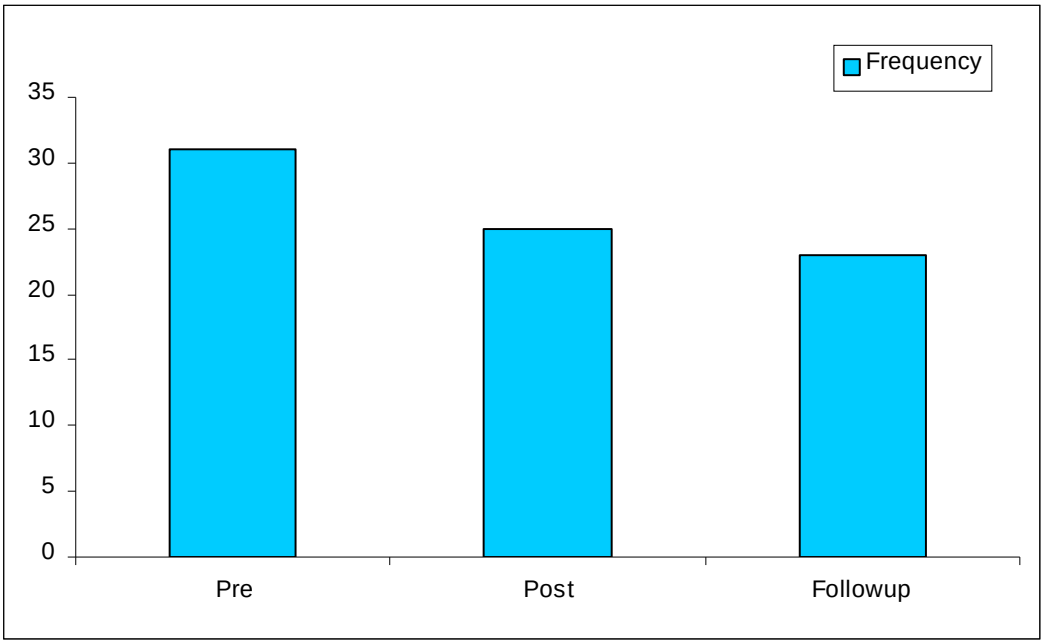


FIGURE 20

Diagrammatic representation of efficacy of intervention in change in frequency of behaviour pattern of case 5.



The scores at the three phases of intervention show improvement in his behaviour. The severity and frequency of symptoms have decreased and this is evident from the diagrammatic representation of total scores of severity and frequency at the three phases of intervention.

Case 6. Ms. N.E.

Ms N.E. was an 8th standard student aged 14 yrs. Her mother was from very poor social background. She was the second wife of her husband who was from a rich family. Her mothers worked as a dance teacher and father was a businessman.

The client lived with her mother. Father used to be away most of the time. He was ambitious about Ms N.E's future but mother was not much interested in providing more resources for her studies or behaviour. The client's interactions with male teachers or friends were not healthy.

Ms N.E was referred to the researcher for intervention with the complaints of stubbornness, temper-tantrums, manipulative nature, disobedience, lying, disturbing the class, impulsivity and inappropriate behaviour with members of opposite sex.

The client attended 10 sessions of intervention. Her mother attended 5 family counseling sessions. The results are given in Table 88 and Figures 21, 22, 23 and 24.

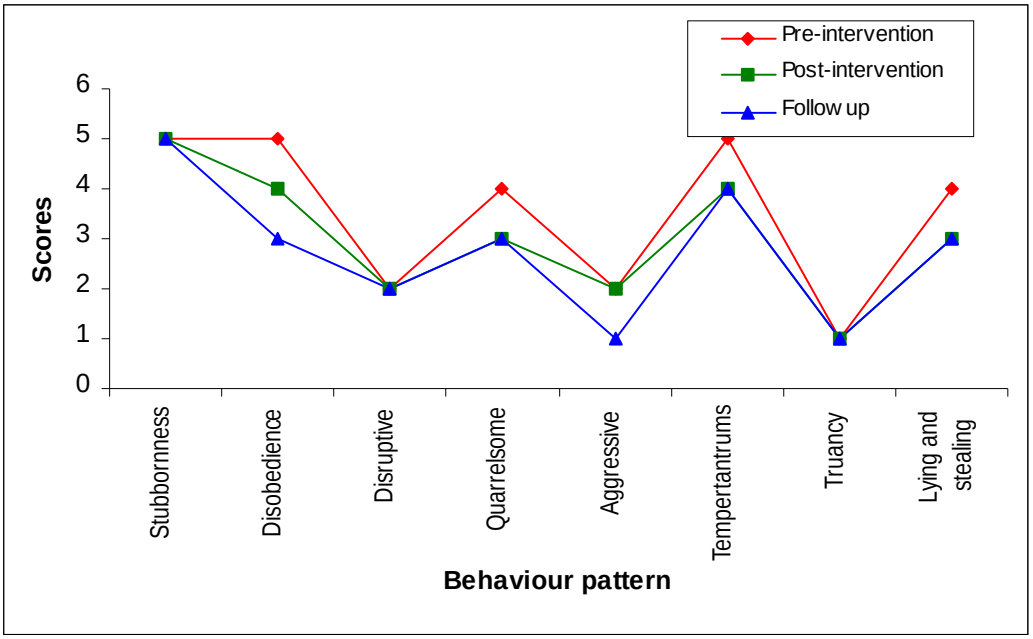
Table 88: Scores on severity and frequency of behaviour problem exhibited by Case 6.

Severity

Sessions	Stubborness	Disobedience	Disruptive	Quarrel some	Aggressive	Temper tantrums	Truancy	Lie/Cheat	Maximum score	Obtained score
Pre-test	5	5	2	4	2	5	1	4	40	28
Post-test	5	4	2	3	2	4	1	3	40	24
Follow up	5	3	2	3	1	4	1	3	40	22
Frequency										
Pre-test	5	5	2	4	2	5	1	5	40	29
Post-test	5	4	2	3	2	3	1	4	40	24
Follow up	5	3	2	3	1	4	1	3	40	22

FIGURE 21

Diagrammatic representation of severity of symptoms at pre-intervention, post-intervention, and follow-up phases of case 6

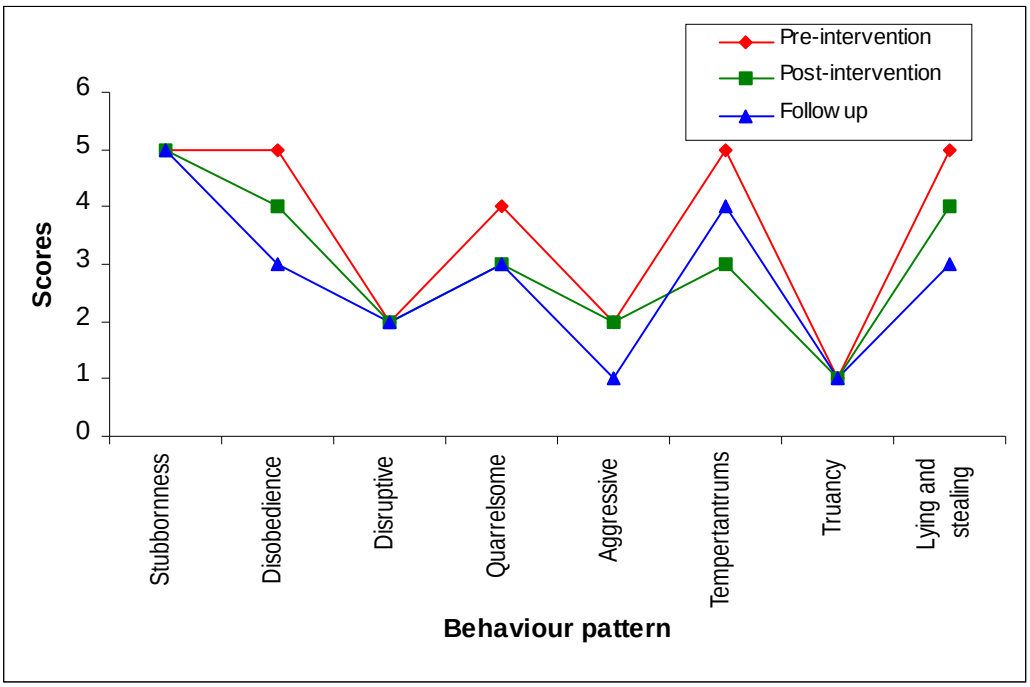


Ms N.E did not show much improvement in reducing the severity of her stubborn nature. Her score of 5 at all three phases of intervention indicates

this. On all other behaviour problems she showed slight improvement at post-intervention and follow up sessions.

FIGURE 22

Diagrammatic representation of frequency of symptoms at pre-intervention, post-intervention, and follow-up phases of case 6



The frequency of behaviour problem exhibited by the client came down in the post-intervention phase. She always exhibited stubborn nature even after attending intervention sessions. The positive changes noticed as the reduction in the expression of disobedience, quarrelsome nature and lying at post intervention phase were maintained at the follow up phase too except on temper tantrums in which she had a relapse.

FIGURE 23

Diagrammatic representation of efficacy of intervention in change in severity of behaviour pattern of case 6.

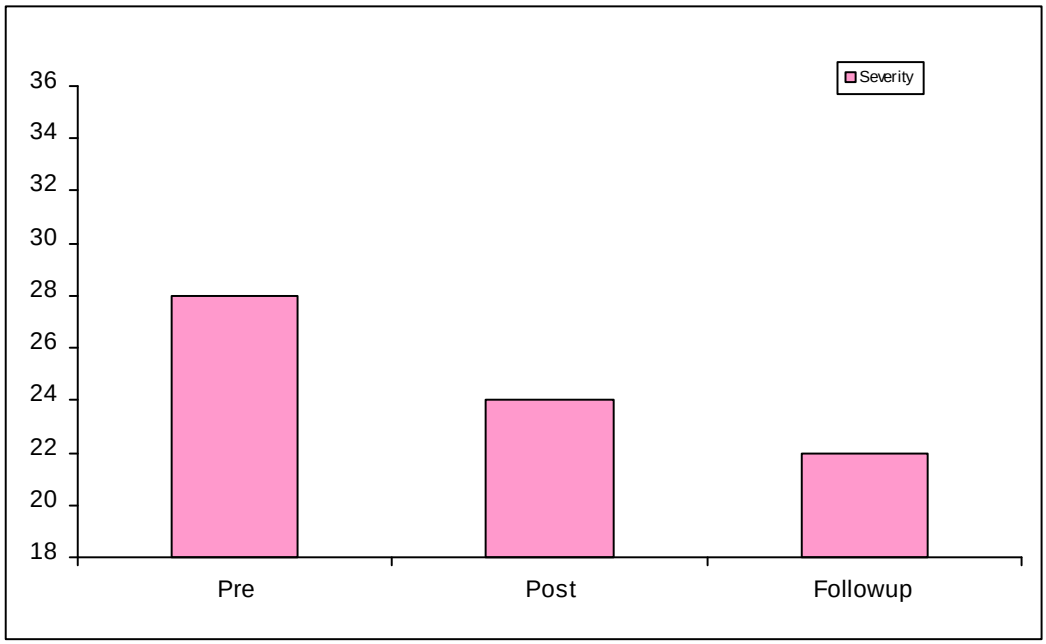
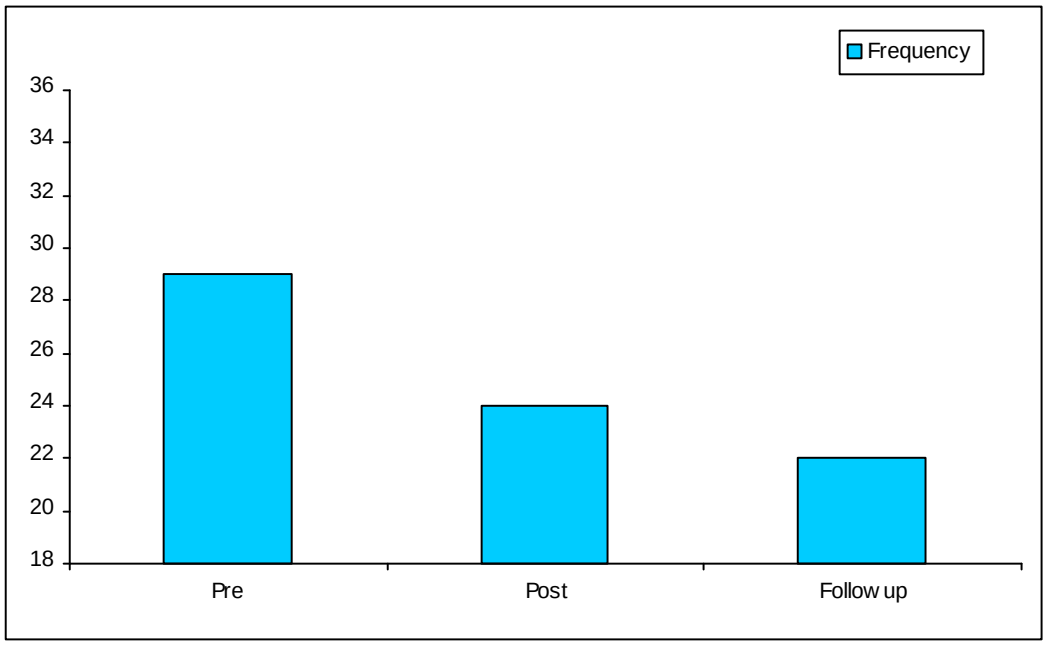


FIGURE 24

Diagrammatic representation of efficacy of intervention in change in frequency of behaviour pattern of case 6.



The total scores on pre, post and follow up phases of intervention which is diagrammatically represented in the figure above show some positive

changes in behaviour as a result of intervention. Incidents of temper tantrums, quarrel, stubbornness, disobedience and interrupting the class came down though marginally. On the whole the client could control some of her undesirable behaviour as revealed by the improved score at post-intervention and follow up phases.

Case 7. Master. M. A

Master M.A. aged 14 was an 8th standard student and came from a lower middle class family. He was elder of two siblings. His father had a small business and mother was a house wife.

The client was brought for consultation with complaints of disobedience, truancy, stubbornness, quarrelsome behaviour, frequent lying, use of bad language, temper tantrums, physical assault when angry and highly demanding and getting angry if his demands were not met immediately.

He was trained with the psychological intervention package. He attended 8 sessions. Family and parental counseling was done in 3 sessions.

The outcomes of intervention in terms of severity and frequency of symptoms at pre-intervention, post-intervention and follow up sessions are presented in Table 89 and Figures 25, 26, 27 and 28.

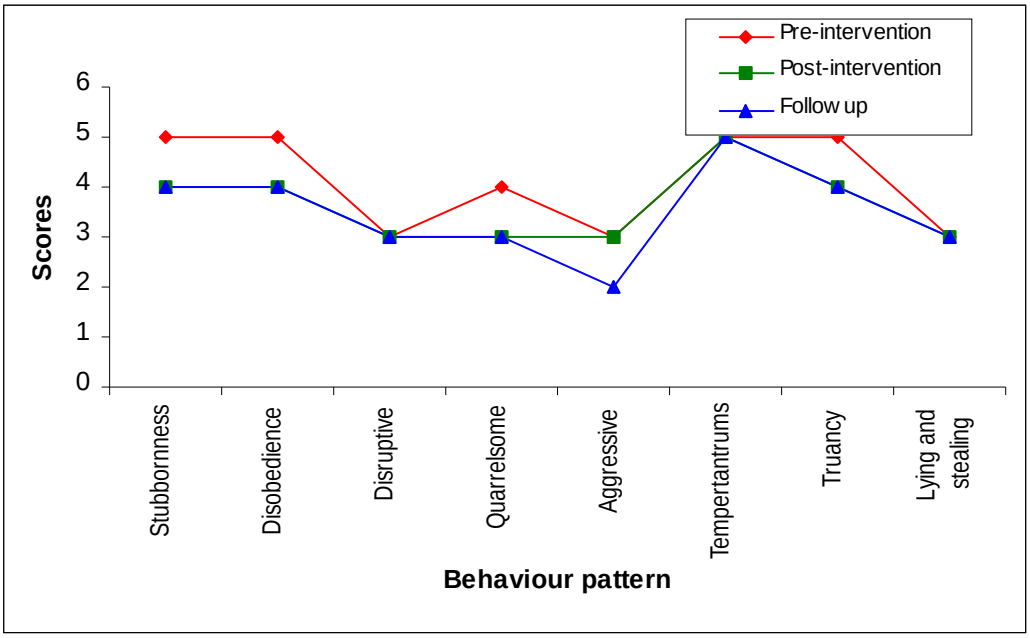
Table 89: Scores on severity and frequency of behaviour problem exhibited by Case 7.

Severity

Sessions	Stubborness	Disobedience	Disruptive	Quarrelsome	Aggressive	Temper tantrums	Truancy	Lie/Stealing	Maximum score	Obtained score
Pre-test	5	5	3	4	3	5	5	3	40	33
Post-test	4	4	3	3	3	5	4	3	40	29
Follow up	4	4	3	3	2	5	4	3	40	28
Frequency										
Pre-test	5	5	3	5	3	5	5	5	40	36
Post-test	5	4	3	4	2	5	5	5	40	33
Follow up	4	4	4	3	3	5	4	4	40	31

FIGURE 25

Diagrammatic representation of severity of symptoms at pre-intervention, post-intervention, and follow-up phases of case 7

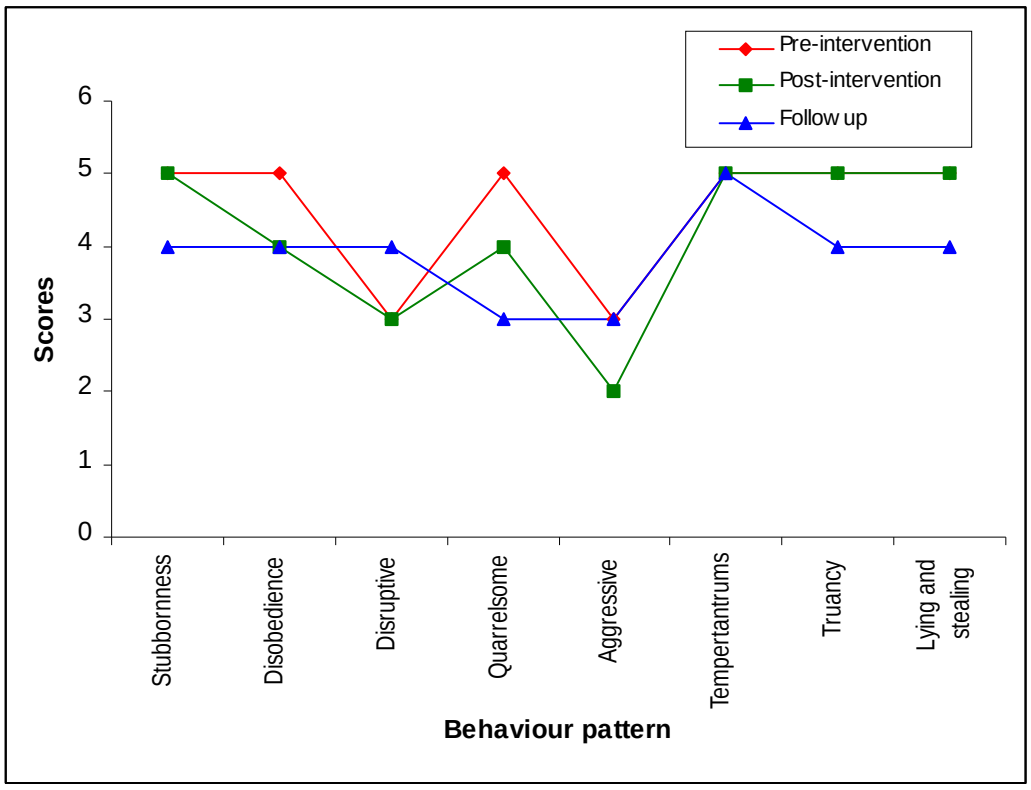


The severity of symptomatic behaviour of conduct disorder exhibited by the client was very severe with a score of 5 in most of the behaviour

patterns except on disruptive, aggressive and lying behaviour where it was moderate with a score of 3. A change of score from 5, 5, 4 and 5 at pre-intervention phase to a score of 4, 4, 3 and 4 respectively for stubbornness, disobedience, quarrelsome nature and truant behaviour exhibited indicates a mild positive change. This change was maintained in the follow up phase too. And aggressiveness also came down a little from the post intervention phase. But no change was noticed in temper tantrums.

FIGURE 26

Diagrammatic representation of frequency of symptoms at pre-intervention, post-intervention, and follow-up phases of case 7



Regarding the frequency of conduct problems exhibited, a reduction in occurrence appeared only for disobedience, quarrelsome nature and aggressiveness in the post intervention phase. The change is depicted

diagrammatically in figure 26. When it came to the follow-up session the frequency came down in the expression of stubbornness, quarrelsome behaviour and truancy. But he had a relapse in disruptive behaviour and aggressive behaviour at the follow-up phase.

The diagrammatic representation of the change of total scores on severity and frequency of symptoms at pre-intervention, post-intervention and follow up phases is given in the figure 27 and 28 .

The diagrammatic representation of the change of total scores on severity and frequency of symptoms at pre-intervention, post-intervention and follow up phases is given in the figure 27 and 28 .

FIGURE 27

Diagrammatic representation of efficacy of intervention in change in severity of behaviour pattern of case 7.

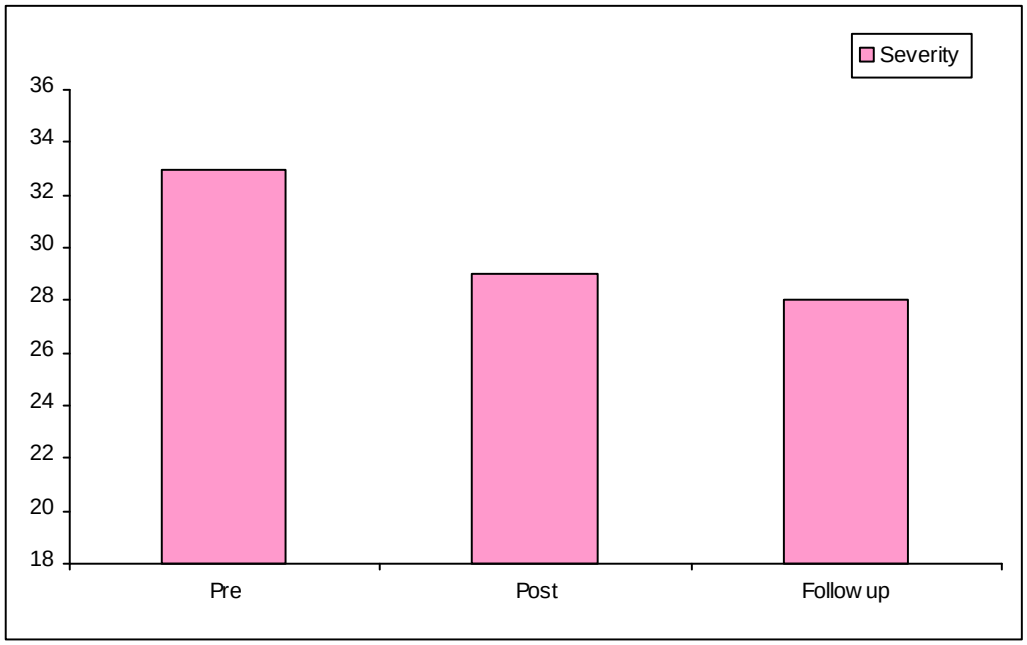
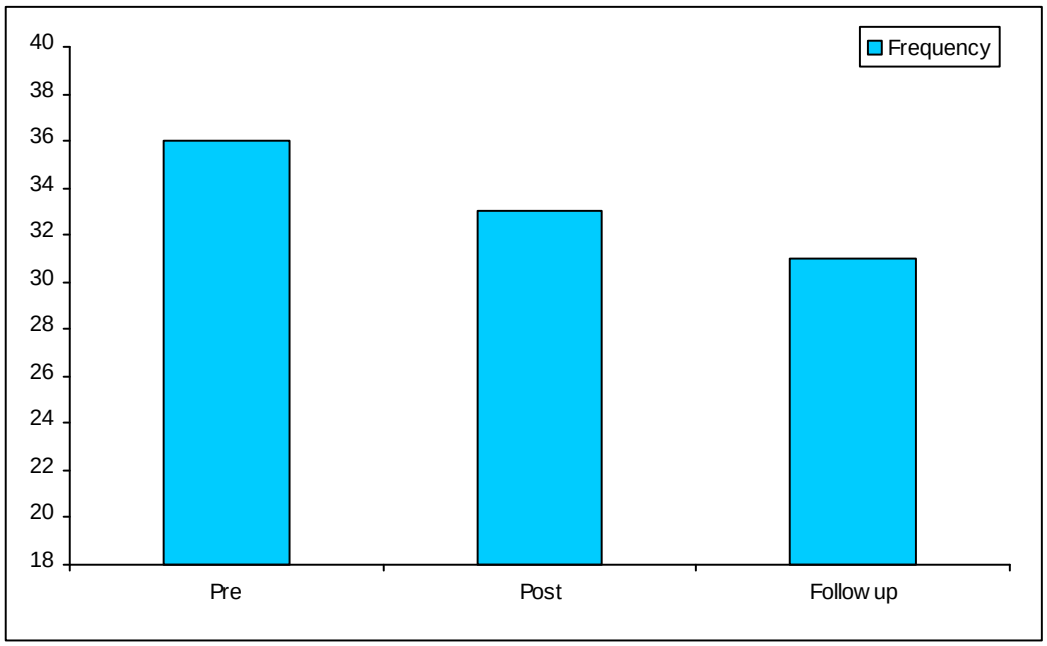


FIGURE 28

Diagrammatic representation of efficacy of intervention in change in frequency of behaviour pattern of case 7.



The Figure shows a reduction of severity and frequency of symptoms exhibited by Case 7. Incidents of quarrel and assault have come down. Though he continued to exhibit undesirable pattern of behaviour at post-intervention and follow up phase a comparison of scores at the three phases of intervention points out the positive change that occurred after intervention.

The analysis of the scores on severity and frequency of behaviour problems at the three phases of intervention shows that at post-intervention and the follow up stages reduction of symptoms was noticed though in some cases the change was only marginal. Intervention programmes on a long term basis with regular follow up may produce positive changes in the children. The participation of family in the treatment and training for the family on how to deal with the problems will enhance the progress of mastering healthy adjustment technique and reduction of conduct problems in conduct disordered children.

Hypothesis 10 is accepted.

The results are in line with those reported by Sayger *et al.* (1987), Kolko *et al* (1991) and Dogra and Veeraraghavan (1994). Post intervention improvement is reported by these authors in the cases of conduct disordered children.

Review of literature on the prognosis of conduct disorder presents a dismal picture. The task of getting the child to attend training session is very difficult because of the nature of symptoms and their tendency to disobey

rules and regulations. Besides, family involvement plays an important role. In most cases the family environment of conduct disordered children will be chaotic and the inability of the family to put in the needed effort also arrests the progress of therapy and intervention.

To conclude, the findings of the study implicate that family and parents play a pivotal role in shaping the behaviour of children. During the developmental years children are in need of rewarding and healthy relationships with significant people particularly their parents. Families that provide for positive emotional interaction, feeling of belongingness and psychological safety and emphasize moral and ethical concerns, intellectual stimulation and social orientation help children develop in a healthy way. In contrast, parental deficits in terms of psychiatric problems, negative attitudes, overemphasis on corporal punishment and discipline, rejection and neglect of their wards contribute to breed unhealthy patterns of behaviour in children. The findings suggest that parenting, as a skill, needs to be qualitatively perfected by every father and mother for the benefit of their offsprings.

The qualitative analyses of the individual cases suggest that psychological intervention is effective in managing conduct disorder. All the seven children who underwent behavioural management training exhibited change in undesirable behaviours. All of them could modify most of the behaviours manipulated. It is to be noted that many researchers categorically states that it is difficult to change conduct disorder problems. The present findings are against this notion and this piece of research concludes that

carefully designed package of psychological intervention involving conduct disordered children and their parents will be beneficial to the children to enhance their mental well being.

SUMMARY AND CONCLUSIONS

Conduct disorder has been defined as a wide range of behaviour in which the basic rights of others and major age–appropriate societal norms are violated.

There are several theories of conduct behaviour that focus on psychological and social relationship factors on some level. One explanation for conduct behaviour in children revolves around certain characteristics of family and specific members like parents that put children at risk for conduct disorder. In particular, familial norms and standards and familial interactions convey what forms of behaviour are acceptable and may inadvertently communicate that such behaviour is an acceptable way of life through actual examples. At times angry outbursts, violence and criminal acts may be perceived as the only effective method for overcoming barriers to achievement and satisfaction of needs.

Broken homes are considered as one of the strong predictors of delinquency and conduct disorder. Family dysfunction, parental inadequacies, conflict between parents, inadequate discipline, marital problems, mental illness etc, are found to be associated with increased incidents of conduct disorder among children and adolescents.

The present study is planned to examine some of the crucial factors both psychological and social in nature in relation to conduct disorder among adolescent children and to design and test the efficacy of an intervention strategy for the management of conduct disorder.

Sample

The sample consisted of 190 adolescent children of which 95 are conduct disordered and 95 normal. Each group included 65 boys and 30 girls. The sample of conduct disordered children were selected from schools and clinics based on the scores in Developmental Pathological Check List. Normal children were selected from schools and were also screened for normality using the same scale. The sample for intervention consisted of 7 (6 boys and 1 girl) conduct disordered children.

Conduct disordered Children

Inclusion criteria

1) Adolescent boys and girls of 14-16 yrs of age.

2) Children with a cut off score of 4 or above in the conduct disorder subscale of Developmental Psychopathology Check List for Children (Kapur, Barnabas, Reddy, Rozario &Uma, 1995) were taken as the conduct disordered group in this study.

Exclusion criteria

1) Adolescents with history of over all delay in developmental milestones and who exhibited psychotic and neurotic symptoms.

2) Children with single parent.

3) Children already on medication

Normal children

Inclusion criteria

1) Adolescent boys and girls of 14-16 yrs of age.

2) Children who got a score below the cut off point of 4 as per the conduct disorder subscale of Developmental Psychopathological Check List for Children **(**Kapur, Barnabas, Reddy, Rozario & Uma, 1995) was taken as the normal group.

Exclusion criteria

1. Children with single parent.

2. Children who had psychotic or neurotic features and those who had developmental delays as per Developmental Psychopathological Check List for children.

Tools Used

The following tools were used in the study to measure the Psycho-social correlates of conduct disorder.

1. Parent –Child Relationship Scale.

2. Alienation Scale for Youngsters
3. International Personality Disorder Examination ICD-10 Module Screening Questionnaire
4. Parent Attitude Inventory.
5. Family Interaction Scale
6. Developmental Psychopathology Check list for Children.
7. Personal Data Schedule.

Administration and Scoring

Data were collected from both parents of conduct disordered children, normal children and children themselves. The tools were administered to them individually particularly in referral cases. Group testing was done in school setting.

Scoring was done as per the directions provided in the manuals of the inventories and scales.

Description of Tools

1) Parent-Child Relationship Scale (Rao, 1989)

The Parent-Child Relationship Scale measures characteristic behaviour of parents as experienced by their children. The tool contains 100 items categorized into ten dimensions namely, protecting, symbolic punishment, rejecting, object punishment, demanding, indifferent, symbolic reward, loving, object reward and neglecting. Each respondent score the tool for both father and mother separately.

2) Alienation Scale for Youngsters (Ajaykumar and Sanandaraj, 1987)

The Alienation Scale for Youngsters measures the variable Alienation of the subjects. The subscale includes powerlessness, normlessness, meaninglessness and social isolation.

3) International Personality Disorder Examination ICD-10 Module Screening Questionnaire. (Loranger, 1997)

IPDE ICD-10 module screening questionnaire of the IPDE was administered to the parents (father and mother). The subjects are asked to circle the true or false options for each of the 59 statements denoting the 9 personality disorder traits namely Paranoid personality disorder, Schizoid personality disorder, Dissocial Personality disorder (Antisocial personality disorder), Emotionally unstable personality disorder which includes Impulsive type and Borderline type, Histrionic personality disorder, Anankastic

Personality disorder, Anxious (avoidant) personality disorder and Dependent Personality Disorder.

If three or more items from a disorder are circled, it indicates that the subject has failed the screening for that disorder and should be interviewed. In the present study the scores are taken just to explain that the subject has failed the screening test of a particular personality disorder denoting that he may have the chance of having that disorder traits in him that needs to be confirmed with the IPDE interview schedule for a diagnosis.

4. Parent Attitude Inventory. (Radhika and Thomas, 1999)

This scale is intended to measure the attitudes of mother and father towards various aspects of child rearing. The test measures four factors of parental attitude namely Independence, Acceptance, Punishment and Parental role.

5. Family Interaction Scale (Asha, 1987)

Family Interaction Scale (FIS) is a scale developed to measure family environment. The eight sub scales of FIS measure the social environmental characteristics of all types of families. The subscales of FIS are independence, cohesion, achievement orientation, intellectual orientation, conflict, social orientation, ethical emphasis and discipline.

6. Developmental Psychopathology Check-List for Children (DPCL) (Kapur, Barnabas, Reddy, Rozario, &Uma, 1995)

Developmental Psychopathology Check-List is a screening tool to assess psychopathology in children, which is brief, comprehensive and developmental in perspective. The DPCL has 124 items and six sub scales. There are 8 items in the Conduct Disorder subscale of DPCL. They are (1) Stubbornness, (2) Disobedient, (3) Disruptive, (4) Quarrelsome, (5) Aggressive, (6) Temper tantrums, (7) Truancy and (8) Lying and stealing.

7. Personal Data Sheet

Personal Data sheet was used to gain information about personal details, family details, health and socio economic status of the subject.

Intervention

Though parents of all the 95 children were informed of the intervention programme parents of only 13 children were consented for intervention. However, only 7 children, 6 boys and 1 girl, were able to complete the entire session. Intervention was done based on the convenience and interest of parents and children. A minimum of five sessions and a maximum of 10 sessions of training were given to each subject. Intervention techniques included individual counseling, family counseling, anger management, relationship enhancement and relaxation therapy.

Analysis of Data.

The statistical analysis of the data included Analysis of variance (two-way), t-test, Levene's test for equality of variances, Multiple Comparison-

Scheffe and Percentage Analysis. A profile analysis was also done to qualitatively assess the data on intervention sessions.

Major findings of the study

1. Conduct disordered adolescent children are found to perceive their fathers as less protective when compared to normal children.

   Conduct disordered boys and girls differ from normal boys and girls in their perception of fathers' protective role.

2. Conduct disordered adolescents see their fathers as less loving. On the contrary, normal children see their fathers as more loving.

   Conduct disordered adolescent girls view their fathers as more loving than conduct disordered boys. They differ from normal boys and girls respectively in their perception of fathers as loving.

3. Compared to the group of normal children conduct disordered group perceive their fathers as giving less symbolic reward.

   Regarding symbolic reward normal boys and girls have better perception of their fathers as offering symbolic reward than conduct disordered boys and girls.

4. Groups of conduct disordered children view their fathers as providing less object reward. But normal children consider fathers as proving more object reward.

When conduct disordered boys and girls are compared it is seen that girls have favourable perception of fathers' relationship in providing object reward than boys. Both the groups differ from normal boys and girls in their perception of fathers as giving object reward.

5. Conduct disordered adolescents perceive their fathers as more demanding, unlike normal children who perceive their fathers as less demanding.

   Conduct disordered boys and girls consider their fathers as more demanding than normal boys and girls.

6. Fathers are viewed by their conduct disordered children as more indifferent. Normal adolescents regard their fathers as less indifferent.

   Conduct disordered boys and girls consider their fathers as more indifferent than normal boys and girls who have a comparably better perception of their fathers.

7. Conduct disordered adolescents, compared to normal children, are found to perceive their fathers as giving more symbolic punishment. Compared to girls, boys regard themselves as getting more punished symbolically.

8. Conduct disordered adolescents perceive their fathers as giving more object punishment than normal adolescent group.

Conduct disordered boys seem to have poor perception of their fathers giving object punishment.

9. Fathers are perceived as rejecting by their conduct disordered children. On the other hand, normal adolescents see their fathers as accepting. Conduct disordered boys perceive their fathers as more rejecting than conduct disordered girls.

10. Conduct disordered group of adolescent children perceive their fathers as more neglecting, but normal children regard their fathers as not neglecting.

    Boys perceive their fathers as more neglecting than girls.

11. Conduct disordered group of adolescents perceive their mothers as less protective, unlike the normal children who perceive their mothers more protective.

    Conduct disordered boys and girls do not differ in their views regarding mothers' role as protective.

12. Conduct disordered adolescents when compared to normal children, perceive their mother as less loving.

    There is no significant difference among conduct disordered boys and girls in the perception of mothers' relation as loving.

13. Conduct disordered children regard their mothers as providing less symbolic reward than normal children who perceive their mothers as providing more symbolic reward.

    Conduct disordered boys and girls do not differ in their perception of mothers' relation as providing symbolic reward.

14. Conduct disordered children have a negative perception of their mothers as providing object reward than that of normal children.

    There is no difference among conduct disordered boys and girls in their perception of mothers as providing object reward.

15. Conduct disordered children and normal children do not differ in their perception of mothers' relation as demanding.

    Conduct disordered boys and conduct disordered girls do not differ in their perception of mothers' relation as demanding.

16. Conduct disordered children view their mothers as more indifferent than normal group of children.

    Conduct disordered boys and girls do not differ in their perception of mothers' relation as indifferent.

17. Conduct disordered and normal children are similar in their perception of their mothers' relation as giving symbolic punishment.

Conduct disordered boys and girls do not differ in their perception of mothers as giving symbolic punishment.

18. Conduct disordered children perceive their mothers as giving more object (physical) punishment than the mothers of normal children.

Compared to conduct disordered girls' perception of their mothers, conduct disordered boys consider their mothers as punishing them by physical means. They perceive their mothers are giving more object punishment.

19. Conduct disordered children consider their mothers as more rejecting than normal children who perceive their mothers as less rejecting. Conduct disordered boys have a more negative perception of their mothers relation as rejecting than that of conduct disordered girls.

20. Conduct disordered children perceive their mothers relation as more neglecting than normal children.

Conduct disordered boys have a more negative view of their mothers' relation as neglecting than conduct disordered girls.

21. Conduct disordered adolescents are found to be more alienated than normal adolescents. Conduct disordered adolescents are found to feel powerlessness, normlessness, meaningless and social isolation more than normal children.

Conduct disordered boys feel more alienated, powerless, normless and also meaninglessness in life than conduct disordered girls. Conduct disordered girls feel more social alienation than normal group of girls.

22. Undesirable personality characteristics like paranoia and dissocial tendencies are found in parents of conduct disordered children than parents of normal children.

Compared to fathers of normal boys traits of dissocial (antisocial) personality characteristic was found to be more in fathers of conduct disordered boys.

The most prevalent personality characteristics found among mothers of conduct disordered boys are dependency, anxiety, anankastic and schizoid tendency.

Compared to parents of conduct disordered boys, parents of conduct disordered girls are found to have less number of unhealthy personality traits. Both mothers and fathers of conduct disordered children are found to possess dissocial (antisocial) personality trait to a considerable extent.

23. Fathers of conduct disordered children have very unfavourable attitude towards them.

24. Fathers of conduct disordered children both boys and girls have a negative attitude towards giving independence to their children.

25. Fathers of conduct disordered children have an unfavourable attitude towards accepting conduct disordered children.

26. Fathers of conduct disordered children are found to have an unfavourable attitude towards punishing their children and hence more punitive

27. Attitude towards parental role is unfavourable in the case of fathers of conduct disordered children. They don't consider their role as significantly helping.

28. Mothers of conduct disordered children have unfavourable attitude in general towards their children than the mothers of normal children.

29. Mothers of conduct disordered children have a negative attitude towards giving independence to their children. Mothers of normal children have a favourable attitude towards giving independence to their children.

30. Mothers of conduct disordered boys and girls have unfavourable attitude with reference to accepting their children.

31. Mothers of conduct disordered children have an unfavourable attitude towards punishing their children and hence more punitive.

    Mothers of normal children are found to be less punitive.

32. Mothers of conduct disordered children have a negative attitude to parental role in managing their children.

33. When conduct disordered boys and girls are compared mothers seem to have a more favourable attitude towards boys than girls.

34. Conduct disordered children experience less independence than normal children. Conduct disordered children are not much encouraged to act independently by the family.

    Among conduct disordered boys and girls, boys show more independence than girls.

35. Conduct disordered adolescents receive limited help and support from family members. They differ from normal children significantly with respect to cohesion.

    Conduct disordered boys and girls do not differ in the dimension of cohesion. Normal girls experience high amount of cohesion in the family.

36. Conduct disordered boys and girls differ from normal children in achievement orientation.

37. Conduct disordered children are found less intellectually oriented than normal children.

38. Conduct disordered children are more likely to experience conflict and express their anger to family members than normal children.

39. Conduct disordered children are found less socially oriented than normal children.

40. Normal children are found to give more importance to moral values than conduct disordered children. Girls, more than boys, are found to consider moral values as more important.

41. There is a lack of well set rules and discipline in the families of conduct disordered children.

42. In the case of fathers' of conduct disordered children, economic status affect their attitude to punishment significantly. Fathers belonging to high income group differ from low income and middle income group and believes more in differential punishment so as to control them.

43. Mothers of conduct disordered children from high income group tend to have a comparably positive attitude than the low income group regarding parental role.

44. The less educated fathers of conduct disordered children are found to be more demanding with regard to their relationship to children than the better educated fathers.

45. Conduct disordered children view their less educated mothers as more neglecting than the better educated.

46. The middle born among conduct disordered children differ from the first born and last born in cohesion and family interaction. They are in a better position to get more help from the family and experience

comparatively less distress in family situations than the first born and last born children.

47. The programme used to examine the efficacy of an intervention programme in controlling the undesirable behaviour problems in conduct disordered children seem to reduce the degree of severity and frequency of symptoms exhibited though marginally.

Conclusions

1. Conduct disorder children have poor perception regarding different components of parent-child relationships.

2. Conduct disordered children feel alienated and have the feeling of powerlessness, normlessness, meaninglessness and social isolation.

3. Parents of conduct disordered children show the presence of traces of personality disorders, particularly dissocial (antisocial) personality disorder.

4. Parents of conduct disordered children have unfavourable attitude towards their children.

5. Conduct disordered children come from distressed families.

6. In the case of conduct disordered children factors such as parental economic status, education and ordinal position of children have minimal effects on perception of parent –child relationship, feeling of alienation, parental personality disorder, parental attitude and family environment.

7. Intervention package used is effective in reducing severity and frequency of conduct problems and increasing desirable behavior.

Implication

1. The understanding gained from the study is expected to be useful (i) in planning similar intervention programmes for conduct disordered children (ii) in organizing parent management programs aimed at training parents to train their conduct disordered children and (iii) for policy makers in designing rehabilitation strategies for problem children.

Scope for Further Research

1. The present findings that relate the presence of traces of dissocial (antisocial) personality in parents and conduct disorder in their offspring can be seen as a step towards further research on the genetic influences in conduct disorder.

2. Short term cross sectional studies may be planned among affected children and their parents from different socio cultural backgrounds.

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