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.


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
Method

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.
Method

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:

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)
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**
Method

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 losing 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
Method

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.
Method

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 losing 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.
Method

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
Method

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.
Method

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.