INTRODUCTION AND RELATED STUDIES

Delinquency being a worldwide phenomenon is probably one of the most serious threats to society today. It is an imprecise, social, clinical and legal label for a wide variety of law and norm violating behaviours. Delinquency is a behaviour against the criminal code committed by an individual who has not reached adulthood (Bartol and Bartol, 2004). The term refers to a large variety of disapproved behaviours of children and adolescents which the society does not approve of and for which some kind of admonishment, punishment or corrective measure is justified in the public interest (Paranjape, 2004).

A growing number of psychologists approach the issue of crime and delinquency with an emphasis on developmental and cognitive processes. Over the past few decades, the learning disabilities in adolescents have been identified as contributing significantly to delinquent behaviour (Wolff et al., 1982). Moffitt and Silva (1988) found that self reported delinquency was related to verbal memory and visual motor integration deficits. Emerson (2003) studied that aberrant behaviours such as aggression, self injury, property destruction, stereotyped movements are highly prevalent in individuals with learning disabilities.

The link between learning disabilities (LD) and delinquency has been explained differently by different researchers. The significant among these explanations are: school failure hypothesis, differential treatment hypothesis and susceptibility hypothesis. The school failure view point postulates that LD leads to school failure which leads to negative self image resulting in school dropout and delinquency (Hirschi, 1969). Secondly, the differential treatment hypothesis advocated by Broder et al. (1981) states that youth with LD and non-learning disabled youth engage in the same rate and kind of delinquent behaviours; however police and other officials treat LD youth differently so as to increase the incidence of adjudication. Thirdly, the susceptibility hypothesis given by Murray (1976) contends that LD are frequently accompanied by a variety of socially troublesome personality characteristics which directly contribute to the development of delinquency.

Personality factors have for a long time occupied an important role in research on antisocial behaviour. Most research relating personality to delinquency has adopted the approach of Eysenck (1977) who proposed that psychoticism (P),
Neuroticism (N) and Extraversion (E) are crucial in predicting delinquency and criminality. Whereas Heaven and Virgin (2001) found the relationship between delinquency and psychoticism but found a lack of consistency with respect to extraversion and neuroticism. Other personality characteristics associated with delinquency are high level of impulsiveness (Wilson and Herrnstein, 1985), low self esteem (Kaplan, 1980), greater need for stimulation (Farley and Sewell, 1976), hyperactivity (Loeber et al., 1991) and aggressiveness (Coie et al., 1991).

Similarly, family is an important agent exerting a great impact on the child’s behaviour and on whether he becomes normal or delinquent. A dysfunctional family can be a center wherein delinquency grows; on the other hand, a strong family can nurture and protect when peers and school fail (Fleener and Fran, 1999). Other significant familial variables in delinquency research are size of the family, birth order, parental education, alcoholism and criminality in parents. Fleener and Fran (1999) studied that a typical delinquent hails from a rural and poor economic background, his family is large and his parents are divorced. Further Farrington et al. (2001) found that antisocial parenting predicts delinquency in an adolescent. Mutzell (1995) studied that the children of alcoholic fathers were more vulnerable to delinquency and criminality.

THE PRESENT RESEARCH

The present research addresses the gaps in previous research by investigating the collective role of learning disabilities, personality and family environment in delinquency. Though these factors have been studied as being the causes of delinquency, there have been inconsistencies reported and hardly any attempt has been made to study them in conjunction. So the present study has been designed to study their role in delinquency.

OBJECTIVES

The present study had the following objectives:

1) To study the link of delinquency with learning disabilities.
2) To study the link of delinquency with personality of the adolescents.
3) To study the link of delinquency with the family environment of adolescents.
4) To study the link of delinquency with significant familial variables like birth order, family structure, literacy of parents, alcoholism and criminality in parents.

**HYPOTHESES**

The present study hypothesized the following:

1) There will be a significant link between delinquency and following indices of learning disabilities:
   a. Visual-Motor Deficits
   b. Language deficits

2) There will be a significant link between delinquency and following dimensions of Personality:
   a. Psychoticism
   b. Extraversion/Introversion
   c. Neuroticism

3) There will be a significant link between delinquency and following dimensions of family environment:
   a. Relationship Dimensions
   b. Personal Growth Dimensions
   c. System Maintenance Dimensions

4) There will be a significant link between delinquency and other familial variables like birth order, family structure, literacy of parents, criminality in parents, alcoholism in parents and delinquency.

5) There will be a significant interactive effect of LD, Personality and Family Environment on delinquency.

**METHODOLOGY**

**Sample**

In the present study, the sample consisted of 115 male delinquents of age ranging between 13 to 17 years, taken from Observation Home situated at Ludhiana in Punjab (India). To draw comparisons among delinquents and non-delinquents on
selected variables, non-delinquent subjects were also studied. A total sample of 130 non-delinquents comprised of school students, dropouts and workers was taken. Efforts were made to maintain inter-group homogeneity on the variables of education, socioeconomic status, gender and age. Table 3.1 shows the frequency distributions means and standard deviations of the age of the subjects in both the groups. For the selection of the sample, following aspects were taken into consideration:

a) Only literate delinquents and non-delinquents were taken into the sample who could read words printed in Hindi or Punjabi.

b) The subjects having visual/ hearing problems and other physical handicaps were not taken into the sample.

The above mentioned considerations were important to meet the criterion for the diagnosis of LD (Poikkeus et al., 1999).

**Psychological Measures**

The following tests were used in the present study to collect the required information from the subjects:

1) Standard Progressive Matrices (SPM; Raven, Court and Raven, 1983)

2) The Bender-Gestalt Test (B-G; Pascal and Suttell, 1951)

3) Stroop Color and Word Test (Golden and Freshwater, 1998)

4) Eysenck Personality Questionnaire – Revised (EPQ-R; Eysenck and Eysenck, 1975)

5) Family Environment Scale (FES; Moos and Moos, 1986)

Besides, the above tests, other demographic details of the participants and their families was collected on a separate form along with the administration of psychological measures. The information pertaining to subjects’ birth order, literacy of parents, family structure, alcoholism and criminality in parents was collected.

**Procedure**

The Family Environment Scale and the Eysenck Personality Questionnaire – Revised were adapted to be used on delinquent population. The words printed on the
word page of Stroop Color Word test were translated into Hindi and Punjabi. Moreover, the delinquents were extended complete cooperation in grasping the test items.

To meet this criterion of average and above average intelligence in learning disabled individuals, the subjects in the present study were controlled on intelligence as reported earlier. Because the neuropsychological correlates of learning disability potentially include visual-spatial abilities (Moffitt and Silva, 1998), motor skills (Denckla and Rudel, 1978) and lingual skills (Karanth and Rozario, 2003), therefore, the Bender-Gestalt test and Stroop Color and Word test were used to measure LD. Then following criterion was used to classify the subjects into learning disabled and non-learning disabled categories.

(1) The subjects having raw score above 46 were screened out for visual-perceptual deficits (Pascal and Suttell, 1951).

(2) Interference score of the Stroop Color Word test was used as a key score to assess learning disabled subjects (Criterion given in the manual).

The subjects exhibiting deficits in one of these measures were screened out for learning disabilities (Poikkeus et al., 1999).

RESULTS

In order to achieve the objective of the present study, the main analyses carried out on the data collected were percentage analysis, chi-square, t-test and Discriminant Analysis. The chi-square analysis was applied to compare the groups for different variables with scores on nominal scale. t-test was applied to compare the groups on the measures of learning disabilities, personality and family environment. The Discriminant Analysis was done to identify the variables which are important predictors of the groups under study.

1) The results show that 89.2% delinquents are learning disabled while only 21.5% adolescents in the control group are having LD. Among the former group, 68.7% delinquents have been found to have language deficits, 97.5% have visual perceptual deficits and 66.3% have been assessed to have both the deficits. In the learning disabled non-delinquent group, all the adolescents
have visual perceptual deficits while only 8.7% have language deficits. The results also reveal that 38.7% delinquents had criminal parent and 74.19% delinquents had an alcoholic parent. The results also show that 67.7% of delinquents reported of using drugs, 63.4% delinquents were previously arrested for their juvenile acts. Regarding the nature of crime, it was found that 54.8% delinquents were involved in theft cases, 31.1% were involved in vandalism, 9.6% delinquents were arrested due to sexual assaults and only 4.3% had indulged in fatal assaults (murders).

2) The chi-square analysis done on the personal and familial information obtained from the sample suggested that family structure accounts significantly for delinquency. While 68.8% delinquents reported their families to be disrupted, only 6.5% non-delinquents reported their families to be disrupted. The results also depict a significant association between parental literacy and delinquency. The literacy of the delinquents’ parents has been found to be lower than the parents of non-delinquents. The birth order wasn’t found to be significantly accounting for delinquency.

3) t-ratios were derived from the means and standard deviations of different scores on the indices of learning disability, personality and family environment dimensions in both the groups. The results indicate that the delinquents and non-delinquents differ significantly on visual motor or perceptual motor ability assessed by Bender-Gestalt test and reading ability assessed by Stroop Color and Word test. Delinquents exhibited impairment in perceptual motor and lingual spheres reflecting the learning disabilities in them. Further significant group differences have been found on the psychoticism and extraversion dimensions of personality. Delinquents scored higher on psychoticism but lower on extraversion than the non-delinquent group. The results also reveal significant group differences on the perception of the family environment dimensions. In the relationship dimensions, the delinquents perceived their families to be lower on cohesion and expressiveness but higher on conflict than the non-delinquents. Analyzing the personal growth dimensions, the delinquents reported their family environments to be lower than the non-delinquents on all these dimensions i.e. independence, achievement, orientation, intellectual cultural orientation, active
recreational orientation and moral religious emphasis. Further, the delinquent group perceived their families to be lower than the control group on the system maintenance dimensions i.e., organisation and control.

4) The Discriminant Analysis I applied on the data reveals that the psychoticism dimension of EPQ-R, conflict in the family environment and learning disabilities as assessed by Bender-Gestalt test and interference score of Stroop Color and Word test are important predictors of delinquency. While the variables related to family environment i.e. intellectual cultural orientation, cohesion, moral religious emphasis, organisation, achievement orientation, expressiveness, independence, active recreational orientation and extraversion dimension of personality show a higher discriminant co-efficiency in non-delinquents’ group, suggesting the predictability of these variables for this group.

5) To see the difference in the proportion of subjects with learning disabilities in delinquents and non-delinquents, Z-test was applied which revealed that learning disabilities constitute one of the significant factors in delinquency. To further clarify the link between delinquency and the variables under study, Discriminant Analysis II was applied again on delinquents and non-delinquents with learning disabilities. The results revealed that psychoticism and conflict in the family environment are the main predictors of learning disabled delinquent’s group whereas the dimensions of family environment which predict the membership in learning disabled non-delinquent group are: intellectual cultural orientation, cohesion, organisation, moral religious emphasis, achievement orientation and expressiveness.

The results described above give us significant interpretations. The present study found a greater proportion of learning disabled adolescents in delinquent sample and conveyed that learning disabilities are important contributors in delinquency. It has been found that the delinquents manifest the profile of neuropsychological variation. These learning disabilities render them weak in socio cognitive skills, thus making them vulnerable to delinquent acts. Similarly Waldie and Spreen (1993) reported that learning disability may be linked to certain socially troublesome
personality traits which may lead to increased susceptibility to delinquent behaviour through unwise social choices.

Further it is seen that the delinquents tend to be high on psychoticism and low on extraversion. Adolescents scoring high on psychoticism are described as antisocial, cold, aggressive, callous and hostile. These traits probably increase their susceptibility to delinquency. Similar results have been reported by Heaven and Virgen (2001). Contradicting the previous findings by Eysenck and Eysenck (1975), the results of the present study have shown the delinquents to be lower in extraversion. This can be attributed to the greater proportion of learning disabilities in delinquents which possibly lowers down their social skills by affecting their linguistic and perceptual skills. Extraversion consists of two components: sociability and impulsivity but the delinquents tend to lag behind in sociability as reported by John et al. (1994) who studied that a high level of delinquency was related to a high level of sensation seeking facet of extraversion. The results also convey that the two groups do not differ significantly on the personality dimension of neuroticism.

Concurrent with prior research (Grieco and Eileen, 2000), the findings indicate that the families of delinquents are characterized by less warmth, affection, freedom of expression and more conflict, anger and aggression. Whereas the family environment of the non-delinquent group has been reported to be congenial and growth oriented where the child healthy development is promoted by encouraging him to be self assertive, competitive and virtuous.

Moreover the results also indicate that the majority of delinquents come from disrupted families. Their parents tend to have lower literacy. We also infer from the results that the personality traits and family environment of learning disabled children interact in certain ways in predicting delinquent behaviour. A learning disabled adolescent having the traits of psychoticism, if raised in an adverse family environment, would be at higher risk for engaging himself in delinquent behaviour. Similarly, the neurological difficulties of youngsters result in the possession of certain troublesome personality traits leading to antisocial behaviour in the absence of cohesive family environment. On the contrary, a conducive family environment and positive parental involvement can go a long way in the normal development of a learning disabled child or adolescent.
IMPLICATIONS

These findings have implications for assessment and prevention strategies for children with learning disabilities. An early intervention programme can be designed for these children and their families which aims at primary prevention of delinquency. For those already involved in delinquent acts, special education services and family empowerment services can give effective results.