



THE RELATIONSHIP BETWEEN
LEARNING DISABILITIES AND JUVENILE DELINQUENCY:
A LINK BASED ON FAMILY AND SCHOOL

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The University of Kansas Institute for Research in Learning Disabilities is supported by a contract (#300-77-0494) with the Bureau of Education for the Handicapped, Department of Health, Education, and Welfare, U. S. Office of Education, through Title VI-G of Public Law 91-230. The University of Kansas Institute, a joint research effort involving the Department of Special Education and the Bureau of Child Research, has specified the learning disabled adolescent and young adult as the target population. The major responsibility of the Institute is to develop effective means of identifying learning disabled populations at the secondary level and to construct interventions that will have an effect upon school performance and life adjustment. Many areas of research have been designed to study the problems of LD adolescents and young adults in both school and non-school settings (e.g., employment, juvenile justice, military, etc.)

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COOPERATING AGENCIES

Were it not for the cooperation of many agencies in the public and private sector, the research efforts of The University of Kansas Institute for Research in Learning Disabilities could not be conducted. The Institute has maintained an on-going dialogue with participating school districts and agencies to give focus to the research questions and issues that we address as an Institute. We see this dialogue as a means of reducing the gap between research and practice. This communication also allows us to design procedures that: (a) protect the LD adolescent or young adult, (b) disrupt the on-going program as little as possible, and (c) provide appropriate research data.

The majority of our research to this time has been conducted in public school settings in both Kansas and Missouri. School districts in Kansas which have or currently are participating in various studies include: Unified School District USD 384, Blue Valley; USD 500, Kansas City, Kansas; USD 469, Lansing; USD 497, Lawrence; USD 453, Leavenworth; USD 233, Olathe; USD 305, Salina; USD 450, Shawnee Heights; USD 512, Shawnee Mission; USD 464, Tonganoxie; USD 202, Turner; and USD 501, Topeka. Studies are also being conducted in several school districts in Missouri, including Center School District, Kansas City, Missouri; the New School for Human Education, Kansas City, Missouri; the Kansas City, Missouri School District; the Raytown, Missouri School District; and the School District of St. Joseph, St. Joseph, Missouri. Other participating districts include: Delta County, Colorado School District; Montrose County, Colorado School District; Elkhart Community Schools, Elkhart, Indiana; and Beaverton School District, Beaverton, Oregon. Many Child Service Demonstration Centers throughout the country have also contributed to our efforts.

Agencies currently participating in research in the juvenile justice system are the Overland Park, Kansas Youth Diversion Project, and the Douglas, Johnson, Leavenworth, and Sedgwick County, Kansas Juvenile Courts. Other agencies which have participated in out-of-school studies are: Penn House and Achievement Place of Lawrence, Kansas; Kansas State Industrial Reformatory, Hutchinson, Kansas; the U. S. Military; and Job Corps. Numerous employers in the public and private sector have also aided us with studies in employment.

While the agencies mentioned above allowed us to contact individuals and support our efforts, the cooperation of those individuals--LD adolescents and young adults; parents; professionals in education, the criminal justice system, the business community, and the military--have provided the valuable data for our research. This information will assist us in our research endeavors that have the potential of yielding greatest payoff for interventions with the LD adolescent and young adult.

Abstract

The link between learning disabilities (LD) and juvenile delinquency (JD) represents a perplexing and presently unanswered issue. While numerous studies corroborate the high prevalence rate of learning disabilities among juvenile delinquents, the specific nature of an LD/JD relationship remains unclear. Studies attempting to document such a causal relationship have assumed different perspectives with the result that findings and attempted conclusions are questionable and inconclusive. The present study was undertaken to investigate the relationship between learning disabilities and juvenile delinquency with regard to the environmental factors of family and school. Subjects consisted of 90 student-inmates from a correction facilities representing 23 LD, 15 JD, 47 LD/JD, and 5 "normals." The data used in the statistical analysis were response scores from four questionnaires: a three-part student questionnaire and a teacher questionnaire. Findings indicated that variables used in this study characterized the LD and JD groups. These variables were similar among groups and provided the basis for a LD/JD relationship.

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As part of an attempt to determine the cause(s) of juvenile delinquency much interest has focused on the link between learning disabilities (LD) and juvenile delinquency (JD) (Berman, 1976; Broder, Peters, & Zimmerman, 1977; Hurwitz, Bibace, Wolff, & Rowbotham, 1972; Keilitz, Zaremba, & Broder, 1979). Juvenile justice personnel have been attracted by the incidence of LD among many of the adolescents brought before the juvenile courts. Parents and educators alike have been deeply concerned about juvenile delinquency as a probable consequence of learning disabilities. Perplexed and troubled parents, professionals, and the public working with adolescents are now searching for answers and solutions to this complex problem.

Among the rationales which have been proposed as explanations of a JD/LD link (Murray, 1976), the "school failure rationale" and the "susceptibility rationale" are the most popular. While the former traces juvenile delinquency to a primary learning problem, the "susceptibility rationale" suggests that the LD adolescent is more susceptible to delinquent influences due to such personality characteristics as impulsiveness, poor ability to learn from experience, and poor perception of social cues. Existing studies of the "causal" relationship between LD and JD may be divided into three categories: (a) evidence of simple association between the conditions of being delinquent and learning disabled (Berman, 1976; Hurwitz et al., 1972); (b) evidence specifying difference in the incidence of learning disabilities among delinquents and non-delinquents (Broder et al., 1977; Murray, 1976); and (c) evidence of incidence of learning disabilities among delinquents without

reference to a non-delinquent group (Berman, 1976; Broder et al., 1977; Compton, 1974; Critchley, 1968; Duling, Eddy, & Risko, 1970; Keilitz et al., 1979).

While numerous studies corroborate the high prevalence rate of learning disabilities among juvenile delinquents, the specific nature of an LD/JD relationship remains uncharted. Studies attempting to document such a causal relationship assume different perspectives with the result that findings and conclusions are questionable and inconclusive. The task of determining a possible link between learning disabilities and juvenile delinquency is compounded by the definitional problems characterizing both fields (Chalfant & King, 1976; Duane, 1978; Greguras, Broder, & Zimmerman, 1978); Hammill, 1976; Krisberg & Austin, 1978; Little, 1978). Thus, research results and conclusions related to an LD/JD relationship to date have been marred by inconsistent definitions of the specific populations under study, poor design and presentation (Murray, 1976), and hence a lack of generalizability. Future studies must establish prevalence rates for the LD and JD populations and, more importantly, must investigate further environmental factors to assist in the development of prevention and remediation programs.

Several environmental factors have been noted as probable influences on both learning disabilities and juvenile delinquency, among which family and school are the most significant. In terms of the absence or presence of delinquency, "early training" has repeatedly been pointed to as a basic influence (President's Commission on Law Enforcement and Administration of Justice, 1967). Birth order, sibling spacing, family size, and other family related variables (Belmont, Stein & Witles, 1976; Deshler & Alley, 1978; Nutall, Nutall, Polit, & Juan, 1976) have been found to effect children's academic achievement. Likewise, the extreme importance of the role of the family in preventing delinquent behaviors has been mentioned repeatedly.

Nevertheless, it is still unclear how poor family life contributes to delinquency. Among the factors frequently cited in the literature are: (a) the absence of one or both parents due to desertion, death, imprisonment and even occupational necessity; (b) the incapacity of one or both parents due to physical or mental illness, alcoholism, unemployment, low income or poor management; and (c) the unwanted child resulting in emotional deprivation in the family, immature parents, marital discord and lack of privacy due to overcrowded conditions (Blakely, Stephenson, & Nichol, 1974).

Outside the family, the schools often are found to influence delinquent conduct as well as certain learning problems. Inappropriate education rather than impaired learning may create failure in certain students and eventually lead to negative self-concepts and unacceptable behavior (President's Commission on Law Enforcement and Administration of Justice, 1967). For the juvenile delinquent, the school has played an important role by defining what is or is not defiant; establishing the conditions under which success is more or less possible for specific types of students; and by contributing the alleviation or maintenance of deviance as a response to behaviors defined as unacceptable. Often, the school has made it exceedingly difficult for students to find their way back once defined as deviant (Kassebaum, 1974; Toby, 1967).

Because the family and the school are two of the most important institutions involving all children, these environmental factors were analyzed in an effort to empirically substantiate a possible JD/LD link. The following research questions were examined:

1. What are the variables which characterize learning disabled adolescents?

2. What are the variables which characterize juvenile delinquents?
3. Are the variables of the learning disabled individual and the juvenile delinquent similar?
4. Are the variables found in No. 1 clustered around common denominators?
5. Are the variables found in No. 2 clustered around common denominators?
6. What are the variables which characterize the learning disabled individuals who are delinquent?
7. Do the learning disabled individuals who are juvenile delinquents have variables similar to the learning disabled or the juvenile delinquent?
8. Is there a relationship between the learning disabled individual and the juvenile delinquent?

Method

The purpose of the present study was to determine if a relationship exists between learning disabilities and juvenile delinquency by establishing the similarities between the two conditions and providing a descriptive profile of each group.

Subjects and Setting

Subjects were selected from the Education Department of the Kansas State Industrial Reformatory (KSIR). The primary goal of this institution is to provide safe and humane treatment with an opportunity for KSIR inmates to receive academic and vocational training. Educational programs include a Basic Education Program, a Regular Education Program, a GED program, a supplemental program for educationally deprived student inmates,

and an Associate of Arts degree program offered through a local junior college.

A total of 90 student-inmates from the Basic Education, Regular Education, and GED programs were selected for inclusion in the study based on IQ range, grade completed, achievement scores from the Sequential Tests of Educational Programs (STEP) and Stanford Achievement Test, as well as information from a teacher questionnaire. Subjects were divided into four categories: Juvenile Delinquent-Learning Disabled, Juvenile Delinquent-non-Learning Disabled, Non-Juvenile Delinquent-Learning Disabled, and Non-Juvenile Delinquent-Non-Learning Disabled.

Characteristics

Identification of student-inmates as learning disabled was based on IQ scores, clinical history, discrepancy information (Bond & Tinker, 1967), achievement scores from the STEP and the Stanford, and teacher-questionnaire items dealing with psychological components (Chalfant & King, 1976). Subjects were placed in the delinquency category based on KSIR records, definitional criteria for juvenile delinquency, and items from both the teacher questionnaire and part three of the student-inmate questionnaire. The two major groups of the study, juvenile delinquents (JD) (n = 62) and non-juvenile delinquents (NJD) (n = 28) were further divided into learning disabled (LD) and non-learning disabled (NLD). Distribution of subjects among groups is illustrated in Table 1.

Table 1

Delinquents, Non-Delinquents, Learning Disabled,
and Non-Learning Disabled by Group

	Juvenile Delinquents (JD) (n = 62; 69%)	Non-Juvenile Delinquents (n = 28; 31%)
LD	47 (75%)	23 (82%)
NLD	15 (24%)	5 (18%)

Instrumentation

The following instruments were used for purposes of subject selection and data collection: Sequential Tests of Educational Programs Series (STEP), Stanford Achievement Test, and Wechsler Adult Intelligence Scale (WAIS).

Additional information was gathered on subject characteristics through student and teacher questionnaires. Questions pertaining to the subjects' background characteristics, subjects' past and present behaviors, attitudes, etc., were divided into three parts: (a) Questionnaire 1--Questions on family and childhood history; (b) Questionnaire 2--Questions pertaining to past school years and the adolescent period; and (c) Questionnaire 3--Items seeking information on the inmates' activities after high school to the present. Response options varied from item-to-item and included open-ended formats, multiple-choice, and Likert-type scales.

Administration of Questionnaires

On the average, student inmates required 2-3½ hours to complete their questionnaires, while the time necessary for the teacher questionnaire was approximately 10-15 minutes per student. A 19-point instruction sheet distributed to all instructors before completion of the questionnaire provided for consistency and reliability.

Statistical Analysis of the Data

The data used in the statistical analysis were response scores from the student-inmate and teacher questionnaire representing a total of 143 questions. Completion questions which resulted in a significant rate of missing values were not used in the statistical analysis. Hence the responses examined were ordinal and representative of all four questionnaires.

In analyzing the data, a variable characterizing a specific group was established by arbitrarily setting a criterion of at least 75% of the subjects in a specific group responding to a particular variable in a given way.

A common denominator was defined as a specific area representative of various variables in which specific research has been conducted with regard to the LD or JD. The six common denominators included: (a) parent biological and cultural legacy; (b) family; (c) home life; (d) characteristics of subjects which comprise the LD, JD and LD/JD group; (e) school behavior and social composition; and (f) school.

The Chi-square test was used to statistically evaluate research questions concerned with whether or not variables were similar among the LD, JD and LD/JD groups. The p value used to indicate any significant difference between groups was .05.

Results of the above descriptive and statistical analysis of data were summarized and used in response to the underlying research question in this study: Is there a relationship between the learning disabled individual and the juvenile delinquent?

Results

The specific nature of the relationship between learning disabilities and juvenile delinquency was examined with regard to the environmental factors of family and school. Four groups representing 23 LD subjects, 15 JD, 47

LD/JD, and 5 "normal" subjects participated in the study. A three-part student-inmate questionnaire and a teacher questionnaire provided response scores for the environmental factors based on family and school.

A comparison of the profiles of each group emerging after analysis of the data showed that based on the 328 variables statistically analyzed, 186 variables were placed in the profile for describing the LD, JD and/or LD/JD groups. A total of 143 variables were found to be representative of the LD adolescent, while 147 variables characterized the juvenile delinquent. Based on the descriptive statistics for both the LD and the JD groups, the proportion of variables found in any one common denominator did not cluster. Only a slight cluster was found for the variables which represented the school behavior and home life characterizing the LD group.

Insert Table 1 about here

For the LD/JD group a total of 128 variables were found to be representative. Based on the p value of the chi-square test, only two variables characterizing the LD group and the JD group indicated a significant difference at the .05 level. These variables were: (a) that other family members had experienced learning and handicapping problems, and (b) that they (the adolescents) had taken part in juvenile court programs. For the LD/JD, LD, and JD groups, only one variable indicated a significant difference at the .05 level. The significant variable that characterized all three groups was that their teachers considered the labels "retarded" or "dumb" as typifying students in the LD/JD, LD, and JD groups.

Thus, results showed that some variables used in this study did, in fact, characterize the learning disabled individual and juvenile delinquent. The

variables found to be similar among the LD and JD groups formed the link between the groups without any evidence that one group caused the other to respond in a particular way.

Based on the clustering of variables, no link was found between the six common denominators. However, single variables provided a connection between groups. Although only slightly significant, the home life and school behavior and social make up of the LD group provided some basis for further research.

Summary and Conclusions

The purpose of the present study was to determine if a relationship exists between LD and JD. Four questionnaires were used to collect data on variables characterizing LD, JD, and LD/JD individuals, and, in particular, the relationship between the learning disabled individual and juvenile delinquent.

Results indicated that variables used in this study characterize the LD and JD groups. These variables were similar among groups and provided the basis for a relationship between the learning disabled and the juvenile delinquent.

Specific variables found to characterize these groups are supported by findings by Glueck & Glueck (1950) as well as the President's Commission on Law Enforcement (1967).

Focusing on specific variables found to characterize the LD and JD group in this study shows that no strong evidence supports the findings (Lees & Newson, 1954) that a majority of delinquents are not last born but intermediate children.

Specific characteristics of the juvenile delinquent are a lack of religious affiliation and close association with parents (authority figures) and relatives. This group found close association and assistance

in resolving problems among friends. Jaffe's (1963) research indicating that parents of delinquents exhibit values which are inconsistent and contradictory may reflect the attitudes of juvenile delinquents and their disassociation from their parents. Juvenile delinquents lack an interest in school which was projected in the response, "would prefer to skip school all day if I had a choice." Also, group members indicated no interest in learning new skills or skills which were not learned in school. Likewise, plans for future educational activities were not representative of this group.

Although a majority of variables used in this study were similar in response and provided the bases for a relationship between learning disabilities and juvenile delinquency, attitudinal responses differed. Learning disabled youngsters viewed school more positively. They also had close association with parents and relatives and had religious affiliations.

These attitudinal findings should provide the direction for educational development of treatment and techniques to be used with the LD and JD group.

Limitations of the Study

The limitations of the present study relate to (a) the selection of student-inmates as representative of juvenile delinquents; (b) possible lack of standardized administration of the student-inmate questionnaire despite built-in safeguards; (c) validity of the use of variables characterizing the LD and JD group; and (d) lack of control group (eliminated because of the small number of "normals" in this study).

Educational Implications

Findings of this study suggest that the learning disabled individual and the juvenile delinquent exhibit many similarities. Although not significantly different, statistically, more variables under the second and fifth common denominators (the Family, and School Behavior and Social Makeup) differed among

the LD and JD group. This finding points up the need for individualized educational programming and close communication between school and parents of LD and JD children. Treatment programs such as family therapy may also be warranted.

Suggestions for Future Research

Because similarities were noted among the LD and JD groups the specific variables must be further investigated. It is also suggested that replications include LD adolescents not adjudicated. Also, the small sample size of each group in this study suggest the need for replication which would provide a measure of stability and generalizability of results.

Furthermore, a longitudinal study of the relationship of LD and JD based specifically on family and school should be conducted. Families including a learning disabled or juvenile delinquent youngster could be followed over a number of years and compared to "normal" families. The schools working with these youngsters could also be studied longitudinally.

Finally, it must be determined whether further research should be conducted on the relationship between LD and JD or the causal link between LD and JD. These are distinctly different and energies must be directed where most beneficial.

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Table 1

Common Denominators

Common Denominator	No. of Variables Characteristic LD	No. of Variables Characteristic JD	No. of Variables in Area
I. Parent Biological and Cultural Legacy	11 (37%)	13 (43%)	30
II. Family	15 (41%)	13 (35%)	37
III. Homelife	14 (70%)	13 (65%)	20
IV. Characteristics of Subjects	36 (61%)	33 (56%)	59
V. School Behavior and Social Makeup	52 (32%)	65 (40%)	163
VI. School	14 (74%)	10 (53%)	19
		Total 328 Variables	