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*Emphasis on Adolescents and Young Adults*

A COMPARISON OF YOUTHS WHO HAVE COMMITTED  
DELINQUENT ACTS WITH LEARNING DISABLED,  
LOW-ACHIEVING, AND NORMALLY-ACHIEVING ADOLESCENTS

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## ABSTRACT

A major issue in the field of learning disabilities is whether or not learning disabilities increases the probability of, or directly causes, delinquent behavior. Several rationales have been developed to explain a direct causal link between these two groups. However, until recently research to investigate and substantiate a causal link has been questionable. Recent studies have reported that there are a significant number of juvenile delinquents who have some type of learning problem. However, definitional problems have not directly established a causal link.

An attempt was made to compare a group of youths who had committed delinquent acts with learning disabled, low-achieving, and normally-achieving adolescents. Data were collected from school records, parent and youth interviews, and screening instruments. Analysis of the data revealed that the youth who had committed delinquent acts most resembled the low-achieving group based on student and parent interview responses. The delinquent youth group generally indicated below average grade point averages; however, their achievement test scores were average. In addition, family relationships and difficulty in problem solving appeared to distinguish this group from all three groups. Results support a conclusion that factors other than learning problems may be intervening to cause delinquent behaviors.

## Introduction

Issues relating to the causes of juvenile delinquency have become of great interest in the field of learning disabilities in the past few years. Research dealing with the relationship between learning disabilities (LD) and juvenile delinquency (JD) has primarily addressed the role of cognitive/academic deficits or problems in increasing the possibility of, or directly causing, delinquent behavior. Most recently, increased interest in the impact of learning disabilities on adolescents has resulted in several studies involving adolescent delinquent behavior. Such studies have suggested that learning disabilities and juvenile delinquency are related (Broder, Peters, & Zimmerman, 1978; Campbell, 1978; Keilitz, Zaremba, & Broder, 1979; Zimmerman, Rich, Keilitz, & Broder, 1979). However, the nature of this link, or rather the possible existence of a direct causal relationship, has not yet been determined.

The purpose of this study was to investigate the similarities between four groups of adolescents, described as (a) delinquent, (b) low-achieving (LA), (c) learning disabled (LD), and (d) normally-achieving (NA) in an attempt to determine which population the delinquent youths most resembled. Based on results of studies reported by Campbell (1978), Broder et al. (1978), and others it was predicted that the group of delinquent youth would exhibit more similarities with the learning disabled youth than with any of the other groups. In addition, as a result of the reported high probability of a LD/JD link, a relationship between learning problems and delinquent behavior was predicted.

Specifically, answers were sought to the following research questions.

1. Do youths at intake into the juvenile justice system most resemble learning disabled, low-achieving, or normally-achieving adolescents?
2. What special problems do the youths demonstrate compared with other groups?
3. What kinds of behavior can be specified for purposes of corrective and preventive programming?

### Rationale

Interest in determining whether or not a link exists between learning disabilities and juvenile delinquency generally stems from practitioners in the field of juvenile delinquency rather than from LD professionals. Early speculation regarding the existence of a possible link between learning disabilities and juvenile delinquency began appearing regularly in the literature in the early to mid-seventies. A number of practitioners in the field of juvenile delinquency argued that a large number of juvenile delinquents suffered from learning disabilities (e.g., Berman, 1974; Jacobson, 1974, 1976; Poremba, 1964, 1975). In some instances, incidence rates as high as 90% were proposed as estimates of the number of delinquents suffering from learning disabilities (Compton, 1974). In attempts to explain how juvenile delinquency and learning disabilities may be linked, several rationales emerged.

One rationale described by Murray (1976), the "school failure rationale," traces delinquent behavior to a primary learning problem. An individual's learning problem becomes aggravated by labels such as "poor" learner, by poor peer associations as a result of "poor" learner

status, and negative parental attitudes regarding learning failure. Eventually, failure overwhelms the student and results in absenteeism and the possibility of suspension, expulsion, or simply a decision to drop out of school. The student then performs a delinquent act which completes the school/personal failure process.

Another explanation presented by Murray to clarify the JD/LD link is the "susceptibility rationale." This rationale attempts to explain an LD/JD link by pointing out that learning disabled adolescents may be more susceptible to delinquent influences because of psychological problems such as impulsiveness, poor perception of social cues, and an inability to learn from experience. Problems in these areas are interpreted as causing a lessening of the impact of normal social sanctions so that delinquent behavior is not readily interpretable as an unacceptable act. The result is greater susceptibility to delinquent behavior than normal youth.

Zimmerman et al. (1979) pointed out that the implication of both the "school failure" and "susceptibility" rationales is that the condition of learning disability increases the frequency or severity of delinquent acts. However, in their test of this hypothesis, they discovered that learning disabled delinquents performed delinquent acts at about the same frequency and of the same severity as normally-achieving youth. These results indicated that if indeed school failure or an increased susceptibility to delinquency has any impact on causative factors, such has not been substantiated through current data on rate and severity of delinquent acts.

As a result of their investigation, Zimmerman et al. proposed two additional rationales. First, learning disabled youth who commit

delinquent acts are more likely to get caught than non-learning disabled adolescents. Second, once the learning disabled youth gets caught committing a delinquent act he/she is more likely to be adjudicated than non-learning disabled youth.

A review of the literature reveals that empirical verification of an actual link between learning disabilities and juvenile delinquency to support the need for a rationale did not develop at the same rate as the development of rationales. As is often true, untested assumptions are difficult to eradicate. Much of the effort directed toward the LD/JD population during the early to mid-seventies operated on the untested assumptions that failing in school caused delinquency, and that psychological problems caused by learning disabilities increased delinquent behaviors.

Attempts to identify whether, in fact, the incidence of learning disabled youth in delinquent populations is higher than in the general population have been limited. Murray (1976) concluded that, of all reports through 1975, only two studies adequately examined the incidence of learning disabilities in both delinquent and non-delinquent youths. However, because of definitional problems regarding learning disabilities, neither of these studies demonstrated a higher incidence of learning disabilities among juvenile delinquents than among non-delinquent populations.

More accurate and definite results were reported by Campbell (1978) who found twice the incidence of learning disabilities among delinquent youth compared to non-delinquent youth. Broder, Peters, and Zimmerman (1978) obtained similar results thus confirming Campbell's findings.



However, definitional problems regarding the criteria for inclusion in the LD sample also confounded Campbell's results. The basis for screening/identification was a discrepancy of at least two years between grade placement and actual achievement. Then, a series of measures to either refute or confirm learning problems based on the minimum two-year cut-off were administered. A two-year discrepancy between grade placement and achievement may be viewed as a highly suspect criterion for classifying adolescents as learning disabled.

Despite these problems, recent studies indicate that there is some link between learning disabilities and juvenile delinquency. However, the nature of this relationship, its extent, and the generalization of this relationship across all settings and communities has not been determined.

#### Definitional Problems

An important element in the LD/JD research has been the difficulty of coming to grips with the definitional problems related to learning disabilities. In the entire field of learning disabilities, and especially in the area of adolescent learning disabilities, a firm data base on which to form a definition and consequently make sound intervention decisions has been lacking. Research studies at the University of Kansas Institute for Research in Learning Disabilities (IRLD) are attempting to create such a data base in the area of adolescent learning disabilities.

Because learning disabilities has been viewed, historically, as a cognitive dysfunction typically manifested in poor academic performance (Johnson & Myklebust, 1967; Kirk, 1963; Lerner, 1976), the Kansas IRLD attempted to collect data on these factors. The data were obtained from



a variety of sources including permanent products, observational information, reports from regular and special class teachers, parents, and self-reports of LD individuals.

Taken as a whole, these data indicated that learning disabilities in adolescents is a multitrait construct with very heavy loading on cognitive/ academic factors (Warner, Alley, Deshler, & Schumaker, 1980). In addition, the data enabled a differentiation of the group characteristics of learning disabled adolescents, low-achieving adolescents, and normally-achieving adolescents.

The impact of these results on correct identification of learning disabilities within populations, in this case the juvenile delinquent population, is significant. Matching the characteristics identified as descriptive of the learning disabled, low-achieving, and normally-achieving groups with the characteristics demonstrated by a population of juvenile delinquents will provide information on which population they most resemble. Subsequent intervention and/or prevention decisions may be based on this information.

#### Methodology

Four groups of adolescents and their parents served as subjects for this study. The adolescents included learning disabled, low-achieving, normally-achieving, and delinquent students in grades 7 through 12. LD students were those currently being served in programs for the learning disabled and validated by a team of professionals (LD teachers and school psychologists) according to exclusionary criteria in the federal definition of learning disabilities.

Low-achieving students were defined as students who: (a) scored below the 33rd percentile on the most recent group-administered achieve-

ment test, (b) were not receiving special education services, and (c) had received at least one F in a major academic course in the last grading period.

The normally-achieving students were selected from intact groups and consisted of students who were: (a) members of the marching band at a senior high school or (b) attended a junior high school. Data relating to the ability and achievement of this group were obtained from school records. For the junior high students, percentile ranks were available for composite achievement on the SRA achievement test and for an educational ability score. Percentile ranks were available on the Stanford Achievement Test (composite) and the Differential Aptitude Test for the senior high students. For the total normally-achieving sample ( $n = 36$ ), the mean composite achievement percentile rank was 78.3 ( $SD = 20.9$ ). The mean ability percentile rank was 79.6 ( $SD = 21.6$ ).

The delinquent group was comprised of those adolescents who agreed to participate at intake into the juvenile court system before being adjudicated. These youths were participating in a diversion program in a suburban community in northeastern Kansas. The youths involved in the diversion program were generally first offenders who had been apprehended committing misdemeanors. These youths were singled out of the overall group of juvenile offenders for participation in the diversion program by an officer of the juvenile court.

Therefore, the population of delinquents sampled involved only those individuals who had committed relatively minor offenses and did not include those youths who continued in the juvenile justice system. However, it is possible that this group represented a population of youths might potentially commit more serious crimes at a later date.

Many potential subjects for the delinquent group were eliminated by apprehensive parents, lawyers, and the youth because of the delicate emotional and legal issues arising at the time of intake. Therefore, the sample may have been biased by strong negative feelings about participation in the study.

All adolescents and their parents agreed to participate in the study. The students from the LD, LA and delinquent youth groups were drawn from a single school district in northeastern Kansas. The subjects for the LA and LD groups were drawn from the data base of information on 246 LD students and 229 LA students from eastern Kansas collected by ongoing research efforts of the University of Kansas Institute for Research in Learning Disabilities. Data for the LA, LD, and NA groups, drawn from the previously collected data base, were matched on the basis of sex and grade level with students in the delinquent youth group.

Each adolescent and parent was given a questionnaire covering a wide variety of descriptive variables. In addition data regarding the delinquent youth group were collected on grade point average, attendance, achievement, and grade placement. Also, to determine the percentage of students within the delinquent group who had a high probability of being LD, the academic teachers of the delinquent group were asked to complete the Bayesian Screening Procedure-Teacher Checklist on each student.

### Results

Results from school records showed that members of the delinquent youth group were not achieving poorly. In fact, scores on the Iowa Test of Basic Skills and the Differential Aptitude Test demonstrated average

aptitude and achievement. However, attendance and grade point average were not consistent with these scores. The grade point average for the delinquent youth group reflected a D average for the group, while the average absences for this group were found to be about 7.5 days per class/per semester, i.e., approximately 15 days of absence for the entire year (see Table 1). Results indicate that although these individuals have the ability to achieve, and have demonstrated average achievement levels, they have chosen, for some reason, not to meet the work demands of the classroom. In fact, their grade point average and attendance indicated that they were doing just enough work to get by in a course. The formal academic achievement scores of these delinquent youth in this study were further substantiated by teacher judgment of classroom achievement using the Bayesian Screening Procedure (Alley, Deshler, & Warner, 1979).

Of the 267 total referrals to the diversion program, the parent(s) of 117 participating youth agreed to have their child screened for probability of learning disabilities. The Teacher Checklist yielded a total of 13 (11.1%) participants who, by teacher judgment, manifested most of the academic problems that best differentiate learning disabled from non-learning disabled secondary-level students. The characteristics that best differentiate LD and non-LD students are found in at least 85% of the learning disabled population.

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Insert Table 1 about here

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A psychometric battery, including tests of word recognition, word meaning, use of mathematical algorithms to solve word problems, and monitoring spelling errors, was administered to the 12 participants identified as high probability for learning disabilities by the teachers. Using the most conservative estimates, seven (5.98%) of the 117 participants had a high probability of learning disabilities as judged by both teacher perception and psychometric performances. Using a less stringent criterion on the psychometric battery, a prevalence figure of 6-11% might be expected.

Twenty-one variables were singled out from the total youth questionnaire using the criterion of retaining any variables that showed significant differences between any combination of the three groups (LA, LD, NA) investigated. The delinquent youth group differed from the normally-achieving group on 13 variables. The delinquent youth group was different than the LD group on four variables. However, compared to the low-achieving group the delinquent youth group differed on only one variable (see Table 2).

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Insert Table 2 about here

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Specifically, the delinquent youth group differed from the learning disabled youths on the following characteristics. The parents of delinquents spent less time helping them with homework, the delinquent group went less to their parents if they had a problem, and the youth felt that their parents were not as effective in helping them solve their problems when they did go to them. In addition, the delinquent youth's

self-perception of his/her rate of learning was higher than that of the LD group. These youths reported no problems in academic/school performance. In general, the delinquent youth group indicated that they were fairly satisfied with their school progress.

Results from the parent questionnaire supported the results of the youth questionnaire. Thirty-three variables were drawn from the parent questionnaire as differentiating between LA, LD, or NA groups. Of the 33 variables, the parents of the delinquent youth group differed from those of the normally-achieving youth group on 23 variables. The responses of parents of the delinquent youth group were different from those of the parents of the LD youths on 14 variables. However, again, the parents of the delinquent youth group responded differently than the parents of the low-achieving youth group on only 3 of 33 variables (see Table 3).

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Insert Table 3 about here

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Specifically, when compared to parental responses of the LD youth group, the delinquent youth group was described by their parents as more influenced by group values, more negative about getting along with authority figures, reacting violently more often to not getting their own way, more social, and less likely to let their parents know their whereabouts. In addition, fewer members of the delinquent group were reported as having been identified as learning or reading disabled.

Further evaluation of the direction of scores for specific variable clusters also provided helpful information, although significant differences were not found on all variables for all groups. The delinquent youths scored lowest on almost all variables reflecting

emotional/behavioral problems. On the parent questionnaire, the lowest scores were found on variables related to cooperation with authority figures, response to criticism, reactions to not getting their own way, depression, moodiness, impulsiveness, staying on task, and parents' knowledge of whereabouts. On the youth questionnaire, the lowest scores were obtained on variables related to talking out problems with others, although both parents and youths reported that, for the most part, the youths were often with others and not socially isolated.

The overall results of the parent and youth questionnaire indicated that when the response characteristics of the delinquent group were compared to those of the three other groups, they were most similar to the low achieving group; however, unlike the low achievers, the delinquent youth did not see himself/herself as having learning problems. Factors relating to moodiness and an inability to learn from experience (as measured by the parent questionnaire) distinguished the delinquent youth group from all other groups. The data also suggest that there may be clusters of factors such as emotional/behavioral variables that impact on the delinquent youth group more than on the other three groups examined.

#### Implications

The data suggest that this group of delinquents does not demonstrate a higher-than-expected incidence of learning disabilities. Despite current research reporting a prevalence rate of more than 30% learning disabled in the population of juvenile delinquents (Broder, Peters, & Zimmerman, 1978; Campbell, 1978), the group in this study demonstrated less than a 10% prevalence of learning disability. In addition, factors affecting school success do not appear directly related to aptitude or achievement based on results of the present study. Even though aptitude



and achievement were at normal levels, success in school was minimal, and marked absence rates were found. These factors indicate that learning problems may not be the primary source of the students' lack of success in school. In fact, the data suggest that it may be the students' choice, for whatever reasons, to place a low value on school success and, therefore, limit the amount of effort directed toward school. In addition, their response regarding school performance reflected relative satisfaction with their personal performance in school.

Responses to the youth and parent questionnaires reflect that although the delinquent youth group most often resembles the low-achieving group, actual achievement scores do not reflect lower achievement. Again, there is indication that other variables intervene to cause limited school success. Parents of the delinquent youths saw their children as more moody, and more unable to learn from experience than the parents of other groups. This inability to learn from experience may indicate that the delinquent youth may be more susceptible to performing delinquent acts.

### Conclusions

The assumption that juvenile delinquency is caused by a learning disability, or even that learning problems cause delinquency has not been substantiated by these data. School failure in itself may not be a factor, but school failure despite normal achievement levels may be. This is supported by the fact that the delinquent youths do not see themselves as poor learners, and their achievement scores support this. This is not to say that learning problems cannot contribute to, or even cause, a chain of events that lead to delinquent behavior. Indeed, this study found a proportion of the delinquent youth to have a high pro-

bability of being learning disabled. However, based on results of the present study, it may be misleading to assume that learning problems are the vital key in prevention and/or rehabilitation of delinquency.

It is important to note that the significant factors that the youth identified were related to parent relationships. The students perception regarding the inability of parents to deal with problems may indicate that the quality of the parent-youth relationship needs to be investigated. It appears that family relationships, or even an inability to cope with problems in general, may be factors that significantly impact the behavior of these individuals.

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TABLE 1  
SCHOOL RECORDS DATA FOR DELINQUENT YOUTH GROUP

	Grade Placement	Grade Point Average*	Absences per Class/Semester	ITBS Average Grade Equiv.	Grade Placement at Testing	DAT %ile rank Verbal Reasoning & Numerical Ability
MEAN	9.6	3.013	7.472	9.103	9.543	58.56
STANDARD DEVIATION		.714	5.968	1.818	.864	25.936
RANGE {		LOW	0	5.98	7.11	10
		HIGH	26	11.89	9.89	99

\* 1 = A, 4 = F

n = 39

Parenthesis around a score indicates that a significant difference was not found between the delinquent youth group score and that group's score. A score that does not have parenthesis around the score indicates that a significant difference was found between the delinquent youth groups score and that group's score.

Table 2  
Youth Questionnaire

VAR #	Question #	LA	LD	NA	Delinquent Group
9	3 # of things at home	(13.10)	(13.57)	14.44	12.91
13	5a How frequently do parents punish you?	(3.07)	(2.82)	2.76	3.41
15	6b How do parents punish you? Hit (yes) (no)	(1.31)	(1.32)	1.11	1.35
25	10 If you got good grades, what would happen?	(2.24)	(2.68)	3.03	2.49
26	11 If you fail what would happen?	(2.97)	(3.00)	3.51	2.50
27	12a How much time do you spend doing homework each night?	(2.17)	(2.36)	(3.10)	2.52
28	12b How much time do parents spend helping you with homework?	(1.00)	1.77	(0.95)	0.83
29	13 How good is parent help with homework?	(1.96)	(2.29)	(2.03)	1.81
30	14 How do you like school?	(3.59)	(3.43)	3.95	3.24
31	15 If you had a choice, which would you do on a school day?	(2.56)	(2.68)	(3.03)	2.47
32	16 How fast do you learn?	(2.55)	(1.89)	(3.53)	3.09
35	19a How satisfied are you with the way you are doing inschool?	(3.21)	(4.29)	(4.97)	4.13
41	20 How much schooling do you expect to get?	(4.14)	(3.86)	6.10	4.31
45	22.1 } If having problem in school ask {parent} for help	(1.66)	2.07	2.13	1.43
55					
62	23.1 } If having problem in school {parent} likely to be	2.38	2.50	(2.26)	1.78
75					
86	29.2 How often do you stay home & do things with family?	(3.62)	(4.14)	4.38	3.30
96	31.2 School Activity Total	(1.55)	(1.96)	4.49	2.04
97	31b # of hours spent on school activity	(4.19)	(4.40)	7.62	3.22
104	34.4 How often do you read for pleasure?	(2.96)	(2.86)	4.36	3.10
106	34.6 How often do you do mechanical activities?	(3.14)	(3.50)	1.82	3.02

n=46

n=45

n=39

n=55

Paranthesis around a score indicates that a significant difference was not found between the delinquent youth group score and that group's score. A score that does not have paranthesis around the score indicates that a significant difference was found between the delinquent youth groups score and that group's score.

Table 3  
Parent Questionnaire

VAR #	QUESTION #	QUESTION	A	LD	NA	Delinquent Group
11	10	Education of parent #1	3.25	3.44	(5.18)	4.67
12	11	Education of spouse	(3.61)	(3.34)	(5.26)	4.34
46	22	Mother's health during pregnancy	(4.87)	4.03	(5.06)	4.98
84	29a4	Has child been diagnosed as LD?	(1.13)	1.61	(1.00)	1.07
85	29a5	Reading disabled?	(1.13)	1.52	(1.00)	1.17
91	29sum	Sum of education diagnoses	(0.39)	(1.42)	0.15	0.81
107	37A1	Gets along well with authority figures	(5.43)	5.53	6.33	4.45
108	37A2	When criticized tries to improve	(4.33)	(4.38)	5.58	4.09
111	37A5	When not getting way, reacts violently	(1.87)	1.84	1.61	2.76
112	37A6	Is depressed	(2.22)	(2.15)	1.94	2.70
113	37A7	Is moody	2.06	1.94	2.00	2.88
117	37A11	Not on task more than 5-10 minutes	(1.02)	(2.91)	2.00	3.24
118	37A12	Acts on impulse	(3.39)	(3.36)	2.33	3.88
120	37A14	Goes along with group values rather than own	(3.43)	3.15	3.09	4.30
127	37A21	Able to complete instructions in correct order	(4.00)	(4.24)	(5.41)	4.72
129	37A23	Completes tasks correctly and on time	(3.41)	3.50	5.09	3.97
135	37A29	Misinterprets what others say	(2.84)	(3.21)	2.30	3.50
136	37A30	Has trouble learning from experience	2.58	2.55	2.12	3.84
138	37A32	Is socially assured	(4.69)	(4.25)	5.30	3.97
143	38A5	Goes places with others when asked	(4.58)	3.85	(4.31)	5.00
144	38A6	Asks other youths over to house	(4.58)	(3.27)	(3.27)	4.16
145	38A7	Asks others youths to go some place with him or her?	(4.37)	3.03	3.47	4.42
149	42	Parent knows where youth is when not at home	(4.69)	5.19	5.58	4.10
151	43A2	Hangs around neighborhood	(4.42)	(3.81)	1.50	3.61
153	43A4	Goes over to friend's house	(4.32)	(3.81)	3.29	4.56
154	43A5	Stays after school for school activities	(2.03)	(1.47)	4.31	2.08
158	45A1	Daycare?	(1.16)	(1.06)	(1.48)	1.27
159	45A2	Preschool?	(1.32)	(1.23)	1.70	1.27
160	45A3	Kindergarten?	(1.91)	(1.87)	1.33	1.86
161	45A4	Special Class?	(1.29)	1.63	(1.30)	1.15
162	45A5	Summer School?	(1.47)	(1.41)	2.00	1.42
163	45sum	Sum of different schools attended	(2.13)	(2.19)	0.45	1.86
164	46	How much time spent on homework?	(2.40)	(2.11)	1.01	1.72

n=32                      n=33                      n=33                      n=33

Parenthesis around a score indicates that a significant difference was not found between the delinquent youth group score and that group's score. A score that does not have parenthesis around the score indicates that a significant difference was found between the delinquent youth group's score and that group's score.