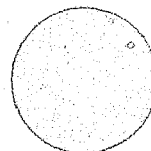


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THE RELATIONSHIP BETWEEN  
DELINQUENCY AND IQ

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## ABSTRACT

Prior to the 1930s, low IQ was believed to be associated with delinquency. Subsequent to the 1930s, for a variety of reasons, it was accepted that IQ bore no significant relation to crime and delinquency. Today, textbooks in the field ignore IQ. However, although somewhat debatable, in the last two decades, the results of numerous empirical studies have claimed that IQ is indirectly related to delinquency through a variety of school and social variables. These studies, including others with opposite viewpoints, are reviewed here, and some policy implications are proposed.

Until the 1930s, it was widely accepted that low IQ was associated with high levels of crime and delinquency. After the 1930s, for a variety of reasons, it was commonly accepted that IQ bore no significant relationship to crime and delinquency. Today textbooks on crime and delinquency virtually ignore IQ, or explain to the reader that IQ is no longer taken seriously, because no differences have been found among researchers (Austin, 1978, p. 212; Hirschi & Hindelang, 1977, pp. 571, 572; Walsh, 1987, p. 285).

However, as Hirschi and Hindelang point out (1977, pp. 578-579), in Cohen's theory of delinquency, IQ intervenes between social class and delinquency; Cloward and Ohlin suggest a positive relationship between IQ and delinquency; Sutherland also suggests a relation between IQ and delinquency; and social control theory suggests an inverse relation between IQ and delinquency. Moreover, claim Hirschi and Hindelang (1977, pp. 577, 581), Thomas and Thomas concluded, from a review of 350 studies first summarized by Sutherland, that important differences existed in IQ between delinquents and non-delinquents "beyond question." Hirschi and Hindelang believe that IQ is at least as important as class and race in explaining delinquency.

The whole problem of delinquency revolves around the educational process. Juvenile delinquency reveals rather unsatisfactory school adjustment, poor marks, dislike for school and teachers, and early-dropping out. Unsatisfactory social adjustment is related to dropping out of school. School

programs have been largely blamed for much of the frustration among students, which often results in delinquent behavior. Much of the literature on delinquency names the school as the strategic agency in the control and prevention of delinquency (Kvaraceus, 1945, pp. 4, 135, 148, 265, 276-277, 298).

Therefore, there are mixed findings about the relation between IQ and delinquency. Although the school is not the only organization which is associated with delinquency, this is where both delinquent and non-delinquent children and adolescents spend a good part of their lives; this is where IQ can be expressed.

#### Theoretical Perspectives

Hirschi (1972, pp. 112, 117, 120, 122) believes that delinquency is related to dropping out of school, school retardation, interest in school, and poor reputation at school, through the mechanism of academic competence. Perceived competence is inversely related to delinquency. Students with little academic competence who perform poorly in school are more likely to commit delinquent acts. Delinquency is a means of relieving frustration generated by unpleasant school experience.

However, Hirschi (1972, pp. 123, 125, 127, 203) states that in control theory, delinquency is not seen as an alternative route to some remote goal. Boys who do badly in school reduce their interest in school and come to hate it; therefore, they are free to commit delinquent acts. They do not continue to

desire success (as in strain theory); they do not care what teachers think of them; they are not forced into delinquency. Boys who violate middle-class values (in opposition to Cohen), regardless of how they are treated in school, are less likely to become delinquent.

According to Hirschi, positive feelings toward controlling institutions and persons in authority are the first line of social control. If a person feels no emotional attachment to a person or institution, the rules of that person or institution tend to be denied legitimately; therefore, the child who does not like school or does not care what teachers think is likely to believe that the school has no right to control him. The child who does not like school, who is unconcerned about the opinion of others, who has little respect for others, and who has little desire for success in conventional terms, is unlikely to feel that the demands of law are binding on his conduct.

Kvaraceus (1945, pp. 122-123, 124, 140, 144, 147) states that delinquents fear frustration and lack of ability to compete with other children. They sometimes lack acumen to avoid detection when they engage in delinquent behavior. The "dull-normal" delinquents face discouragement and failures in the classroom, due to the inability to obtain learning out of books. Unsuccessful efforts to cope with academic problems which they see their classmates solve with little or not trouble may eventually result in severe frustration and consequent aggression. A child who is continually kept back with younger children

will develop a feeling of insecurity, inferiority, and dislike of the total school program. Lacking any legitimate school satisfaction, and being the oldest and usually the largest pupil in the class, the repeater will adopt aggressive behavior of various types and degrees to demonstrate superiority or to gain satisfaction. This can damage the morale of the student with the result that he drops out of school. Truancy is seen as an escape from conflict and failure. The delinquent drops out of school because the school is full of tension, defeat, conflict, and frustration to him or her.

Andrew (1977, pp. 99, 102) claims that an imbalance in either Verbal or Performance IQ, that is, if one is higher than the other, may constitute stress factors similar to that of a low overall IQ in predisposing boys to delinquency. Intellectual imbalance may relate to emotional or neurological problems, both of which are believed to be numerous among delinquents. The high Performance versus Verbal scores in IQ may reflect an expansion of a notes function, for example, the psychopathic character structure and the manic personality development often associated with delinquency. This imbalance may not provide sufficient support for verbal means of inhibiting acting-out.<sup>1</sup>

Moffitt, Gabrielli, and Mednick (1981, pp. 152, 153) state that low IQ children may be likely to engage in delinquent behavior because their poor verbal abilities limit their opportunities to obtain rewards in the school environment. Delinquents with low IQs are more easily apprehended than

other delinquents. Historically, it was believed that delinquents were unable to distinguish right from wrong.

Maskin (1974, p. 320) claims that one of the major causes of delinquency is the early difficulty of mastering the basic intellectual skills that the schools and society demand. This, in turn, leads to defeat and failure, the development of a negative self-image, and a search for status outside the school.

Walsh and Beyer (1986, p. 420) and Walsh, Beyer, and Petee (1987, pp. 177-179) claim that delinquents with higher Performance versus Verbal scores possess autonomic nervous systems that are relatively unresponsive to anxiety. This leads to hyperactivity, which prevents short-term memory disruption and anticipatory anxiety when contemplating antisocial acts. This lower anxiety will lead to a higher propensity that the contemplated act will be actualized. The high Performance versus Verbal scores can be the result of low left-hemispheric arousal which can result in poor intellectual processing skills and subsequent acting out.

Therefore, IQ is the result of both genetic and social structural factors, for example, heredity, the way the school is organized to handle low IQ children, the prevention of delinquency, and so forth. This paper is about the relation between IQ and delinquency. 2

#### Methodology

In this paper I shall review some studies which empirically test the relation between IQ and delinquency. The literature on

this topic is vast. I inspected both the psychological and sociological abstracts from 1970 to 1989, or a span of two decades. One study published in 1990 and several studies done prior to 1970 were also included. I selected studies which made an important contribution to the field or added new information. There is always some bias on the part of the researcher when this selection is made. I concentrated heavily on the school. However, it must be emphasized that IQ can express itself in the family, street gang, work relations, and in interaction with people. A study of this type has to be limited.

#### Review of the Literature

Kvaraceus (1945, pp. 122-123, 139, 143, 144, 146, 147, 149), in studying a special bureau in Passaic, New Jersey, which housed delinquents, showed that in the regular schools, 43.5% of the delinquents had repeated grades. The school marks of the delinquents were inferior and unsatisfactory. Thirty-four percent of the delinquents had fled from school compared to 6.8% of the general school population. Delinquents changed schools more frequently. Very few delinquent children went on to high school. At least 67% of delinquents expressed a strong dislike for school. The mean IQ level of the delinquents was 88.74, with more than 10% having IQs of less than 70. These IQ levels were lower than the Passaic school population as a whole. The IQ of girls was lower than that of boys.

Lipton, Martinson, and Wilks (1976, pp. 358-369) cite four studies. The Collegefields Project consisted of male probationers



between 14 and 16 years old; they were given academic education and remedial training in an academic setting for a period from four to seven months. The results revealed that the program was somewhat effective in improving skills, improving attitudes toward teachers, and improving the IQ of the delinquents.

The second study was the one in which New York State in 1961 sponsored an ex-post facto study of the relation between the type of education during incarceration and net grade achievement. The results revealed a net grade achievement of 1.02 grades which was unrelated to IQ.

The third study was the one in which Sullivan in 1967 in New York State studied the effects of a three-month program in education for institutionalized male youths between 18 and 20 years old. He found significant improvement in IQ and in reading comprehension.

The final study was the one in which Roman in 1957 administered reading instruction to low IQ samples as part of a juvenile court clinic program. He found that youngsters with remedial reading plus group therapy improved the most.

Hirschi (1972, Chap. VII, p. 179) did a study based on the Richmond Youth Project in Western Contra Costa County (near San Francisco). The original study was based on 17,500 students entering public junior and senior high school in 1964. For Hirschi's study, complete data were obtained for 4,077 students.

The results revealed that 13% who considered themselves best in school ability compared to 35% of those who considered

themselves below average in ability committed two or more delinquent acts. Forty-nine percent of boys who disliked school compared to 9% who liked school committed two or more delinquent acts. The boy who cares less about his teachers and cares less about what teachers think of him are more likely to commit delinquent acts, claims Hirschi. Hirschi concludes that self-perception of ability affects delinquency independently of actual scholastic ability, but not independently of attitudes toward teachers and schools. The causal chain, says Hirschi, runs from academic competence to school performance to dislike of school to rejection of school's utility to commission of delinquent acts.

Hirschi administered the Differential Aptitude Test to his subjects, and compared their verbal scores to the incidence of delinquency. He found that the higher the boys' scores on this test, the less likely they were considered to be delinquent. Hirschi also concludes that boys who reject the education game are more likely to become delinquent. Hirschi, however, includes many minor delinquent acts in his study.

In Wolfgang, Figlio, and Sellin's famous study in Philadelphia (1972, pp. 42, 58-59, 64-65, 94, 246, 277), IQ scores were available for about 84 to 89% of the sample. The researchers found that twice as many delinquents (9.4%) as non-delinquents (4.5%) were retarded. The largest number of school moves and lower grade achievements were made by nonwhite delinquents.

They also found that the average IQ for nondelinquents was 107.87 and for delinquents was 100.95. The lower SES

delinquent whites <sup>had</sup> and a mean IQ score of 101.87 compared to the mean IQ score of higher SES nondelinquent nonwhites of 100.26. The lowest mean IQ score was found among nonwhite delinquents in the lower SES, 93.84. The biggest difference between the races was that between white high SES nondelinquents (111.39) and nonwhite low SES delinquents (93.84)--17.55 points. Ignoring the variables of delinquency and SES level, the difference between the races decreases to 13.28. The researchers conclude that race was the most important variable accounting for IQ differences rather than delinquency or SES.

They also found that about 76% of the delinquent nonwhites were low or very low achievers compared to 28% of the whites. They found that the highest grade completed was positively related to IQ. They also found that recidivists were more likely to be nonwhite, to be in the lower SES, to have low IQ scores, and to be retarded, to have completed fewer school years, to have had more disciplinary problems in school, and to have had lower achievement levels than one-time delinquents.

Wolfgang et al. conclude that the school variables together have the strongest power of prediction for delinquency. They also conclude that the "disadvantaged" position of race can account for the high rates of delinquency.

Hirschi and Hindelang (1977, pp. 573-576, 582) reviewed six studies on IQ and delinquency: (1) Healy and Bronner in 1936 matched 105 dleinquents with nondelinquents in six submeasures. They found a nonsignificant difference in IQ in favor of the

non-delinquents. (2) McCord and McCord in 1959 found that rates of conviction were almost half in the 81-90 IQ groups compared to one-quarter in the 110 or above IQ groups. (3) Toby and Toby in 1961 found intellectual status to be a significant forerunner of delinquency independent of SES. (4) Reess and Reess in 1961 examined the juvenile court records of more than 9,200 white boys in Davidson County, Tennessee. They found that the rate of delinquency per 100 cases was 4.8 in the high IQ level and 10.3 in the low IQ level. They found that IQ was more important than social class as a predictor of official delinquency.

(5) West in 1973 followed 411 London boys over a 10-year period. West found that one-quarter of those with IQ scores of 110 or more had a police record compared to one-half of those with IQ scores of 90 or less. In addition, 1 in 50 boys with an IQ of 110 or more was a recidivist compared to 1 in 5 boys with an IQ of 90 or less. Even when controlled for several variables, IQ was still important.

(6) Weis collected Wechsler Bellevue IQ scores and self-reports of delinquency for 255 male and female 11th-grade students in the state of Washington. Weis found that 27% of those with IQ scores of less than 110 compared to 49% of those with IQ scores over 110 had low scores in the property deviance scale. He found a smaller difference (23% vs. 41%, respectively) in a social deviance scale.

Agnew (1990) administered an intelligence test composed of three tests, namely, the Quick Test of Intelligence, the General

Aptitude Test, Part V (Vocabulary), and the Gates Reading Test, to a sample of delinquents. He found that IQ had a slight positive, nonsignificant value of .08 with delinquency. He concludes that IQ can sometimes have a positive rather than a negative effect on delinquency.

Austin (1978) collected data primarily from public schools in Richmond, California, from a study called the "Richmond Youth Project." Data from a stratified probability sample of 5,545 students were analyzed. Questionnaires were completed on 4,077 students. Only whites were included in this study. The IQ tests administered were the Differential Aptitude Test, Verbal Reasoning, Differential Aptitude Test, Numerical Reasoning, and the Stanford Binet IQ scores. Two independent variables were educational zeal and teacher appeal. Indicators of theft were the dependent variables.

The results revealed that 18% of the variance in teacher appeal was explained by IQ, and 36% of the variance in theft was explained by teacher appeal. Austin concludes that the relation between IQ and adolescent theft is weak because teacher appeal intervenes between IQ and delinquency.

Several researchers have documented a greater Performance than Verbal IQ score, but a couple have noted a greater Verbal than Performance IQ score (Andrew, 1977; Andrew 1982; Hecht & Jurkovic, 1978; Hubble & Groff, 1981; Ollendick, 1979; Petee & Walsh, 1987; Walsh & Beyer, 1986; Walsh, Beyer, & Petee, 1987; Walsh, Petee, & Beyer, 1987). However, the review of the

literature indicates more strongly the Performance versus Verbal imbalance rather than the Verbal versus the Performance imbalance.

Moffitt et al. (1981) found that in two longitudinal studies there was a significant negative correlation between IQ and level of delinquency. The finding held independently of social class.

Maskin (1974) studied 126 female delinquents placed in the Treatment Unit of Juvenile Hall, San Bernardino, California. The girls ranged in age from 10 to 14, were first-time offenders, and were treated for 10 months. The results revealed that the graduates of the program obtained significantly higher IQs than the recidivists.

Walsh (1987) studied 256 male delinquents formerly on probation in Toledo, Ohio, and Boise, Idaho. IQ was measured by the Verbal Section of WISC. Juvenile delinquency scores were based on the Andrew Violence Scale.

The results revealed that the dull-normal delinquent category was the most violent, followed by the borderline delinquent, followed by the average subjects, and finally followed by the bright-normal group. High IQ was positively associated with high levels of property crime. The verbal IQs of the delinquents were significantly below population norms.

Walsh concludes that the relationship between IQ and delinquency is complicated. He also concludes that crimes which take some degree of foresight may be more successfully executed with offender populations of higher IQ individuals, while impulsive crimes are those which offer instant gratification and are committed by individuals with low IQ.

Menard and Morse (1984) studied data taken from a longitudinal, random subsample of San Diego high school youths. The final sample consisted of 257 youths. Self-reported delinquency data were used. Two models were employed. One was the Office of Youth Development (OYD) which suggests that IQ leads to delinquency only by institutional response to these levels of IQ, by denying opportunity, or by labeling those with low IQ. The other model was the individual IQ-delinquency model.

The results revealed that the individual delinquency model explained 4.5% of the variance in both serious and nonserious delinquency, and the total influence of IQ explained less than 2% of the variance. The OYD model, however, explained 28.6% of the variance in nonserious delinquent behavior and 20.4% of the variance in serious delinquent behavior. The researchers found that the structuralist model, with twice as many variables, explained over four times as much variance in delinquency as the IQ-delinquency model.

They conclude that all the influences on both nonserious and serious delinquency operate through either negative social labeling or delinquent peer groups. Neither IQ, nor aptitude, nor grades have a direct effect on nonserious delinquency; however, with serious delinquency, labeling has an indirect effect on delinquency.

Harry and Minor (1986) criticized Menard and Morse's analysis. They claimed that Menard and Morse's specification of an intervening variable does not negate the causal impact of IQ on

delinquency. They also claimed that Menard and Morse had assumed that labeling caused delinquency, without developing theoretical and empirical arguments for this. They also questioned Menard and Morse's use of the five variables used for perceived academic access.

Harry and Minor reanalyzed Menard and Morse's correlation matrix with a more plausible and less restrictive set of assumptions. They found in their reanalysis that labeling was a result rather than a cause of delinquency. They found that although the effect of IQ on delinquency was indirect, it was not negligible. They conclude that better data are required for this type of analysis.

White, Moffitt, and Silva (1989) analyzed data on 1,037 members from a longitudinal study of a New Zealand birth cohort. IQs were examined for all subjects based on the WISC-R scales. The results revealed that male and female delinquents showed significantly lower IQ scores than non-delinquents. They also found that the incidence of delinquent behavior by high-risk subjects was 2.1 times greater than for low-risk subjects. The highest mean IQ scores were achieved by the low-risk non-delinquent group. Risk status was not related to IQ scores but delinquent outcome was related to IQ scores. The authors conclude, however, that the majority of low IQ children failed to become delinquent.

Moffitt and Silva (1988) analyzed data on children involved in the New Zealand Multi-disciplinary Health and Development Study. The IQs, using the Wechsler Inventory Scale for Children-Revised



(WISC-R), were obtained on two groups: (1) delinquents who had been detected by the police, and (2) delinquents who had not been known to the police. All delinquency was measured by self-reported data; however, self-reported delinquency was verified by consensus from at least one adult.

The results revealed that the two groups did not differ significantly in IQ. However, the IQs of a controlled <sup>group</sup> ~~group~~ of nondelinquents were significantly higher than that of the two groups. The results appeared to be independent of social class and perhaps also independent of the detection of the delinquent acts.

Andrew (1979) compared violence scores, based on a scale composed by her, with the results of a reading test measured by the Wide Range Achievement Test. The subjects were 120 consecutive probation referrals age 13 to 17, from California; they were of low SES, and comprised both Anglo and Non-Anglo boys and girls.

The results revealed that delinquents who earned high reading scores also scored low on the Violence Scale (no violence) and vice versa. Sex and ethnicity proved to be somewhat significant.

Offord, Pouchinsky, and Sullivan (1978) studied 73 juveniles placed on probation in the years 1972-1973 in Great Britain. IQ scores were obtained on the subjects. The mean IQ of the sample was 100.6. Two groups were studied: (1) a primary group in which the anti-social behavior first occurred in the presence of

satisfactory school performance, and (2) a secondary group in which the anti-social behavior first occurred after a period of poor school performance.

The results revealed that the secondary group was poorer, more depressed and unhappy, and more likely to have had reading and learning problems than the primary group. The IQs of the primary and secondary groups were 105.2 and 96.1, respectively.

The authors concluded that the secondary group was doing more poorly in school than the primary group, but for reasons other than IQ. The poor school performance of some appear to be attributed to a behavioral problem present when they began school. Some, however, might be suffering from a cognitive defect. The secondary group was poorer than the primary group, and was less likely to have biological parents living at home. The lower IQ boys were on probation significantly more times for more months than the upper IQ boys. The researchers agree that both the family and the school could have had a negative effect on the secondary group which could have lowered this group's self-esteem. IQ appeared not to have played an initial role in the genesis of anti-social behavior.

#### Conclusions

The review of the literature generally seems to support the conclusion that IQ plays some part in delinquency, although it is largely indirect rather than direct. Many variables intervene between IQ and delinquency, for example, peer influence,

attitudes toward teachers and schools, perception of educational competence, labeling, differential opportunity, type of offense, family background, cognitive factors, and so forth. Several models were specified, both from American society and cross-culturally. However, the IQ-delinquency controversy is far from settled, because some still believe that IQ is directly related to delinquency regardless of SES and race, and some do not believe that IQ is related to delinquency at all.

Continuing research is needed. Hundreds of models are possible. It has not been completely determined where and how IQ relates to delinquency. Many low IQ youths do not become delinquent. As mentioned, the family and other variables can mediate between IQ and delinquency. Therefore, it can be stated that low IQ is neither a necessary nor a sufficient condition for delinquency to occur, although it might be related in some way to delinquency. We do know that since delinquency generally does not require much ingenuity or refined techniques, low IQ youths are capable of committing delinquent acts. The more research, the more answers will be found.

The results of some research reviewed here reveals that it is possible to raise IQ to some extent. Although it is uncertain exactly how IQ relates to delinquency, as a policy issue I suggest that schools do what they can to raise IQ scores of motivated students. A normal or high IQ is functional for other reasons, for example, employment. Second, I suggest that school

should continuously reassess their programs to see if they are meeting the needs of low IQ students and are individualizing their needs. Third, I suggest that delinquents be encouraged where possible to attend school or even college, if they are motivated and have the necessary ability. Finally, I recommend that the validity of IQ tests be researched and perhaps less emphasis should be placed on IQ. There are other ways besides IQ scores to express intelligence, ability, and creativity, for example, athletics, music, sociability, altruism, sports, and so forth. IQ tests don't necessarily cover all of these areas. Perhaps IQ tests are culturally and ethnically biased.

A final conclusion concerns a value judgment. Can we force delinquents to attend school against their will? My answer is no, because education is not appropriate for everyone. Many will continue their education in adulthood. Education cannot be forced upon students who don't want to continue in school. However, we cannot ignore the results of numerous research projects on IQ and delinquency as a policy decision to motivate a select group of both pre-delinquents and actual delinquents to continue in school.<sup>3</sup>

## NOTES

1. Most often, the Performance and Verbal scores, or even IQ itself, refer to the standardized Wechsler Inventory Scale for Children, Revised (WISC-R) or the Wechsler Adult Inventory Scale (WAIS). Other tests besides these are mentioned, where appropriate.
2. I shall not get into the debate about the meaning, measurement, and appropriate causes of various levels of IQ. This is not the purpose of this study. However, a brief mention of this will be made in the conclusions.
3. As a probation officer for the City of New York, I always try to encourage probationers to return to school or college where there is interest, motivation, and some evidence of ability.

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