

Intelligence And Crime

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Views 1,395,881

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The study of intelligence in criminological research has ebbed and flowed considerably during the past century. In the first quarter of the 1900s, hundreds of studies categorized criminal offenders as "feeble-minded" and "mentally deficient." Fifty studies conducted from 1910 to 1914 identified an average of 51 percent of institutionalized delinquents as feeble-minded (Sutherland). In 1931, however, E. H. Sutherland challenged this prevailing view. He compared the IQ scores of adult offenders to those of army draftees—representative of the general population—and the two groups had nearly identical IQ levels. He concluded that intelligence was not a "generally important cause of delinquency" (p. 362). This rejection of IQ was widely accepted in the criminological literature through the mid-1970s. In 1977, Hirschi and Hindelang reviewed a half-dozen well-known empirical studies and concluded that IQ predicted delinquency as strong, if not more strongly, than race and social class—two variables prominently featured in criminological theory. This revisionist perspective stimulated greater interest in IQ and crime over the next two decades. In 1994, Herrnstein and Murray published their highly controversial book *The Bell Curve* in which they argued, among other things, that racial differences in crime rates resulted from racial differences in intelligence. This book has received widespread negative reaction and has possibly created a general backlash against studies of intelligence and crime.

Measuring the size of the IQ-crime correlation

The central question of IQ-crime studies is whether individuals with less intelligence, on average, commit more crime than those with more intelligence. That is, are IQ and crime negatively correlated? The best answer, drawn from previous research, is a qualified "yes."

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Delinquents and criminals average IQ scores 8 to 10 points lower than noncriminals, which is about one-half a standard deviation. IQ and criminal behavior are negatively correlated at about $r = -.20$ (Hirschi and Hindelang; Wilson and Herrnstein). Here are five well-known studies that illustrate the correlation between IQ and crime.

Terrie Moffitt and colleagues studied 4,552 Danish men born at the end of [World War II \(/history/modern-europe/wars-and-battles/world-war-ii\)](#). They examined intelligence test scores collected by the Danish army (for screening potential draftees) and criminal records drawn from the Danish National Police Register. The men who committed two or more criminal offenses by age twenty had IQ scores on average a full standard deviation below nonoffenders, and IQ and criminal offenses were significantly and negatively correlated at $r = -.19$.

Donald Lynam and colleagues studied 430 seventh-grade boys in [Pittsburgh \(/places/united-states-and-canada/us-political-geography/pittsburgh\)](#), [Pennsylvania \(/places/united-states-and-canada/us-political-geography/pennsylvania\)](#). They measured both IQ and self-reported participation in delinquent acts. Those boys who committed serious delinquent acts, such as stealing cars, breaking and entering, or selling drugs, scored 8–10 IQ points lower than boys who had not. IQ scores and delinquency were correlated at $r = -.22$, with the correlation between verbal IQ and delinquency being much stronger than the correlation with performance IQ ($r = -.33$ versus $-.06$).

Hakan Stattin and Ingrid Klackenber-Larsson followed 122 Swedish males from ages three through thirty. They measured IQ at ages three, five, eight, eleven, fourteen, and seventeen and counted the number of registered criminal offenses through age thirty. Frequent offenders, those men with four or more criminal offenses, averaged IQ scores of only 91 points; sporadic offenders averaged 97 IQ points; and nonoffenders averaged a full 102 points. Remarkably, IQ at age three significantly correlated with registered crime at (Spearman's) $\rho = -.25$. IQ at the later ages also correlated with crime at around $\rho = -.20$.

Scott Menard and Barbara Morse studied 257 high school students in [San Diego \(/places/united-states-and-canada/us-political-geography/san-diego\)](#), [California \(/places/united-states-and-canada/us-political-geography/california\)](#), measuring both IQ and self-reported delinquency. IQ was correlated with nonserious crime—

such as petty theft, liquor violations, vandalism, truancy, and running away—at $r = -.08$. IQ was correlated with serious crime—such as gang fights, auto theft, grand theft, and robbery—at $r = -.16$.

Deborah Denno analyzed data from 987 African American school children in Philadelphia. Her data contained multiple measures of intelligence collected at ages four, seven, and thirteen as well as officially recorded criminal offenses. Chronic, violent offenders consistently had low IQ scores. For example, female chronic offenders were almost four times less likely to be in the top third of verbal-IQ test scores than female nonoffenders. Similarly, male violent offenders scored 10 to 17 percentile points lower on measures of vocabulary, reading, and language than nonoffenders.

In addition to finding a robust IQ-crime correlation, studies have turned up two other empirical regularities worth noting. The first regards two different types of IQ measures: performance IQ (PIQ) versus verbal IQ (VIQ). Performance IQ is measured with nonverbal tests of attention to detail, manual design construction, and visual puzzle solving. Verbal IQ is measured with tests of general factual knowledge, abstract reasoning, mental arithmetic, and vocabulary. Studies have consistently found that criminals have PIQ scores close to the general population but VIQ scores substantially lower. This $PIQ > VIQ$ finding holds even when controlling for race, class, and reading ability (Moffitt), suggesting that verbal intelligence is a more important correlate of criminal behavior than other types of intelligence.

The second regularity regards official versus self-reported measures of crime. While IQ consistently correlates with both of these measures, the correlation between IQ and official measures tends to be somewhat stronger than the correlation with self-reported crime (Hirschi and Hindelang).

Is $R = -.20$ a meaningful correlation size?

While studies have frequently found that IQ and crime correlate at around $r = -.20$, they disagree about how to interpret the size of this correlation coefficient. At one extreme, some studies have dismissed the IQ-crime correlation as being simply too small to matter. Menard and Morse concluded that "the association between IQ and delinquent behavior is so weak as to be negligible," and so it "contributes nothing to existing delinquency theory" (pp. 1374, 1347). Likewise, a task force of the [American Psychological Association \(/medicine/psychology/psychology-and-psychiatry/american-psychological-association\)](https://www.apa.org/psychology/psychology-and-psychiatry/american-psychological-association) figured that since a correlation of $r = -.20$

produces an explained variance of only 4 percent ($r^2 = .04$), the IQ-crime correlation is "very low" (Siegel, p. 174). At the other extreme, some studies have identified IQ as a critical, if not the fundamental, correlate of crime. Herrnstein and Murray argued that the effect of IQ on crime, as well as other social problems, is so strong that "much of the attention now given to problems of poverty and unemployment should be shifted to . . . coping with cognitive disadvantage" (p. 251).

In between these two extremes is a more sensible interpretation of the IQ-crime correlation as moderately strong. One way to gauge the strength of the IQ-crime correlation is to compare it to other correlates of crime. A study by Wright and others (1999a) looked at social bonds and crime in late adolescence and early adulthood. They found that some social bonds correlated with crime much more strongly (in absolute value (/science-and-technology/mathematics/mathematics/absolute-value)) than $r = -.20$; for example, delinquent friends correlated with crime at $r = .40$, and living with one's parents correlated at $r = -.32$. Other social bonds correlated less strongly, for example, full-time employment ($r = -.13$) and romantic partnerships ($r = -.13$). Still other social bonds correlated right at $r = -.20$, including educational achievement, occupational aspirations, and months unemployment. These comparisons show IQ to be a moderately strong, though neither the strongest nor weakest, correlate of crime.

Another way to gauge the IQ-crime correlation is to restate it in more intuitive terms. Rosenthal and Rubin allow for this with their binomial effect size display (BESD), a procedure that translates simple correlations into equivalent experimental results. In this approach a correlation of $r = -.20$ is equivalent to an experimental intervention that reduces subjects' success rates from 60 percent to 40 percent. Hypothetically, then, randomly assigning high IQs to low-IQ

individuals would decrease their criminal behavior by about 30 percent (i.e., from 60 percent to 40 percent)—certainly a meaningful change.

Explaining the IQ-crime correlation

Once the IQ-crime correlation is measured, the next task is to explain it. Why are IQ and crime negatively correlated? Explanations of the IQ-crime correlation typically take one of three approaches, that: (1) IQ and crime are spuriously, not causally, correlated; (2) low IQ increases criminal behavior; or (3) criminal behavior decreases IQ.

A popular argument against IQ as a cause of crime criticizes IQ tests as only measuring middle-class knowledge and values rather than innate intelligence. As a result, the observation that some minority groups and the poor score low on IQ tests simply reflects their diverse cultural backgrounds. These same groups also commit proportionately more crime because they suffer structural disadvantages such as poverty and discrimination. Consequently, the same people who score low on IQ tests also tend to commit more crime, and so IQ and crime are empirically correlated, thus this correlation is not causal but reflects only culturally biased testing of intelligence.

A variation of this argument holds that the structural disadvantages that increase crime rates also reduce educational opportunities thus lessening individuals' ability and motivation to score well on IQ tests. The IQ-crime correlation occurs only because they are both rooted in structural disadvantage, which, in statistical terms, represents a "spurious" correlation.

Although these discrimination hypotheses have wide appeal, they have received fairly little support in empirical studies, for IQ and crime are significantly correlated within race and class groups as well as when statistically controlling for race, class, test-taking ability, and test-taking motivation (e.g., Hirschi and Hindelang; Lynam et al.).

Another argument against IQ as a cause of crime holds that school teachers and administrators treat students differently by perceptions of the students' intelligence—giving negative labels and fewer educational opportunities to less intelligent students. These labels and constrained opportunities, in turn, produce feelings of alienation and resentment that lead students to delinquent peers and criminal behavior (Menard and Morse). As such, society's reaction to

intelligence, and not any property of intelligence itself, increases criminal behavior. Unfortunately, few studies have adequately tested this labeling hypothesis.

A final argument against IQ holds that even if all people commit crime with equal frequency, less intelligent people would be less able to evade detection and would be arrested more often. This detection hypothesis has received some empirical support in that IQ scores tend to correlate more strongly with officially recorded crime than self-reported crime. However, most studies still find a significant correlation between IQ and self-reported crime, which is not easily explained by differential police detection (e.g., Moffitt and Silva).

In contrast to the above spurious arguments, some explanations emphasize IQ as a cause of crime. The earliest causal explanation, popular during the early 1900s, portrayed criminals as so "feeble-minded" and "mentally deficient" that they could neither distinguish right from wrong nor resist criminal impulses. This feeble-mindedness hypothesis, however, lost favor long ago as it became clear that few criminals are actually mentally deficient and most recognize, though may not follow, behavioral norms (Moffitt et al.).

A more recent, and more compelling, causal explanation emphasizes the importance of intelligence—especially verbal intelligence—during childhood socialization. The socialization of children involves constant verbal communication and comprehension of abstract symbols; therefore, children with poor verbal and cognitive skills have greater difficulty completing the socialization process, which puts them at risk of undercontrolled, antisocial behavior. Empirical studies overall have supported this developmental hypothesis (Moffitt, p. 116), and it fits with the especially strong correlation between verbal IQ and crime.

A final causal explanation links IQ to crime through school performance. Less intelligent students do less well in school, which results in academic frustration. This frustration, in turn, weakens their attachment and commitment to schooling, and a weakened bond to school, as per social control theory, allows for more criminal behavior (Hirschi and Hindelang). This school-performance hypothesis has received strong support from empirical studies, and it is probably the most widely accepted explanation of the IQ-crime correlation (Moffitt).

One last approach to IQ and crime deserves mention even though few criminological studies have examined it. Rather than low IQ increasing criminal behavior, criminal behavior might decrease IQ. Many facets of a criminal lifestyle can impair cognitive abilities, including physical injuries, especially head traumas, drug use, and withdrawing from school (Moffitt).

The future of IQ-crime studies

Turning to the future of IQ-crime studies, two questions stand out. Will criminologists continue to study intelligence and crime, and if so, which research questions should be pursued?

Starting with the second question, one issue for future studies involves society's response to intelligence. Menard and Morse hypothesized that school teachers and administrators negatively label low-IQ students thus increasing their risk of criminal behavior. In addition to testing this hypothesis, studies should examine other societal reactions to IQ as well. Stories abound of classmates stigmatizing bright students as "brains" and "geeks," especially in schools with overall low scholastic achievement. Bright students might avoid these negative labels by cutting back on schoolwork and acting out antisocially. Indeed, peers' labels of high-IQ students may cause more harm than officials' labels of low-IQ students.

Another issue for study involves the nature of IQ's effect on criminal behavior. Up until now, causal arguments have assumed that low IQ increases criminal behavior; however, it is possible that in various ways high IQ actually increases criminal behavior. For example, more-intelligent individuals may feel greater confidence of committing crimes without getting caught, which, as per deterrence theory, should lead to more criminal behavior. More-intelligent individuals might also have more opportunities for some crimes, such as [white-collar crime](#) ([/social-sciences-and-law/law/crime-and-law-enforcement/white-collar-crime](#)). (See Wright et al., 1999b, for a discussion of simultaneous positive and negative causal linkages, between social class and crime.)

An additional issue for study involves the effect of low IQ after a crime is committed. As discussed above, low IQ correlates more strongly with arrests and imprisonment than with self-reported crime (Hirschi and Hindelang), which has been taken as evidence for the detection hypothesis—that low-IQ criminals get caught more easily. Another possibility, though, is that low-IQ criminals experience more negative outcomes once in the criminal justice system. If criminal justice officials, from police officers to judges to parole officers,

believe that low intelligence increases criminal behavior, they might prejudge low-IQ criminals as greater risks and correspondingly give them fewer opportunities and harsher punishments.

The question of how to study intelligence and crime, however, is meaningless if few criminologists study it, and this might happen because of its highly politicized nature. Critics have derided IQ-crime causation theories as social Darwinism and as supportive of regressive social policies. Advocates have countered that critics' political preferences have blinded them to empirical realities (Hirschi and Hindelang). This type of conflict dampens research interest in intelligence and crime.

Ultimately, the best answer about whether to study IQ and crime takes a middle path between critics and advocates. Cullen and others exemplify this approach in their critique of *The Bell Curve*. They catalog potentially serious misuses of IQ-crime research in both criminological theory and public policy and strongly encourage researchers to avoid these misuses. At the same time, they also argue not to "throw the baby out the with bathwater" by ignoring the well-documented empirical link between intelligence and crime. Instead, criminologists should accept that "IQ is a criminogenic factor, and, thus, is an individual difference that must be included in theories of crime causation" (p. 403).

Bradley R. E. Wright

See *also* Crime Causation: Biological Theories; Crime Causation: Psychological Theories; Crime Causation: Sociological Theories; Criminology: Modern Controversies; Education and Crime; Prediction of Crime and Recidivism.

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