Crimes and the Bell curve: The role of people with high, average, and low intelligence

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ABSTRACT

The present study examines whether crime rates can be reduced by increasing the IQ of people with high, average, and low IQ. Previous studies have shown that as a determinant of the national level of income per capita growth and technological achievement, the IQ of the intellectual class (those at the 95th percentile of the Bell curve distribution of population intelligence) is more important than the IQ of those with average ability at the 50th percentile. Extending these findings, our study incorporates the non-intellectual class (IQ at the 5th percentile) to examine the role of IQ classes in determining crime rates across countries. We conducted hierarchical multiple regression analyses with IQ, seven types of crimes, and nine control variables: urbanization, alcohol consumption, unemployment rate, young to old population ratio, income inequality, education attainment, drug consumption, police rate, and income per capita. Regardless of types of crimes, we found evidence that raising IQ will lessen crime rates, with raises in the 95th percentile group having the most number of significant impacts, followed by the 50th and then the 5th percentile groups. Furthermore, none of the nine control factors was stronger than the 95th percentile group in predicting crime rates. We conclude that the intellectual class influences rates of more types of crime than the non-intellectual class does. The intellectual class has the highest authority in determining law enforcement and development policies. Therefore, increasing the IQ of politicians and leaders from this class than other social classes will have a more significant influence in reducing crime rates, through enhanced functionality and quality of institutions across countries.

1. Introduction

Intelligence (IQ) or cognitive ability is a significant predictor of various essential life outcomes across domains (Kuncel, Ones, & Sackett, 2011). Intellectually competent individuals learn faster and are better at acquiring information, knowledge, and skills related to their occupations. Thus, these individuals are more efficient and innovative problem solvers, with their IQ resulting in enhanced job performance (Byington & Felps, 2010; Ree, Carretta, & Teachout, 1995; Salgado, Anderson, Moscoso, Bertua, & De Fruyt, 2003a; Schmidt & Hunter, 2004). Therefore, at a cross-country level, IQ has been shown to be a significant determinant of important socioeconomic indicators: gross domestic product (GDP) per capita (Hanushek & Kimko, 2000; Jones & Schneider, 2010; Lynn & Vanhanen, 2002, 2006; Zajenkowski, Stolarski, & Meisenberg, 2013), GDP per capita growth (Burhan, Mohamad, Kurniawan, & Sidek, 2014a; Jones & Schneider, 2006; Meisenberg, 2012; Ram, 2007; Weede & Kämpf, 2002), technological achievement (Burhan, Mohamad,

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Kurniawan, & Sidek, 2014b; Gelade, 2008; Lynn, 2012; Rindermann, 2012), and quality of institutions (Jones & Potrafke, 2014; Kanyama, 2014).

Despite considerable evidence that IQ is related to economic development, the question remains as to whether all individuals play an equal role within this process. With regard to the normal distribution (or Bell curve) of population IQ (Herrnstein & Murray, 1994), empirical evidence shows that individuals with IQs in the furthest right-hand portion of the curve have a greater impact on GDP per capita, GDP per capita growth, and technological achievement, than can individuals of average IQ (e.g., Gelade, 2008; Hanushek & Woessmann, 2008, 2012; Park, Lubinski, & Benbow, 2008; Pritchett & Viarengo, 2009; Rindermann, Sailer, & Thompson, 2009; Rindermann & Thompson, 2011; Weiss, 2009). The "intellectual class" at the 95th percentile for IQ is significantly smaller than the group with average IQ, but this class contributes more to the growth of national income and technological progress than do those of average ability. However, Rindermann et al. (2009) have shown that the intellectual class is important only for raising national income and technological progress, and not for reducing crime rates. Unlike previous research, Rindermann et al. examined the impact of IQ on crime, and in particular homicide rate, focusing on the non-intellectual group (with an IQ at the 5th percentile) along with the 95th and 50th percentile-level groups.[1] Among these three groups, raising the IQ of the 5th percentile group had the highest impact on reducing homicide rates. Thus, crime has been mostly attributed to the non-intellectual class, consistent with the poor socioeconomic status of this group.

The well-being of individuals in a society is expected to result from not only greater monetary wealth or technological advancement but also the removal of socioeconomic barriers. Raising people's trust in the quality of government institutions such as law enforcement agencies will enhance happiness (Hudson, 2006), and the prevalence of crime will reduce levels of happiness (e.g., Davies & Hinks, 2010; Moller, 2005; Powdthavee, 2007). It has been broadly verified that having a lower IQ increases the probability of a person breaking the law (Neisser et al., 1996) and having a longer criminal career (McGloin & Pratt, 2003; Piquero & White, 2003). In the past, researchers have claimed that the relationship between low IQ and criminal behavior occurred because criminals with lower IQs are more likely to be detected and captured by authorities (Murchison, 1926; Sutherland, 1931). However, this theory was later refuted by empirical evidence (e.g., Herrnstein & Murray, 1994; Lochner & Moretti, 2004; Moffitt & Silva, 1988). In fact, there is evidence that crime is motivated by a perception of net relative gains for breaking the law, after weighing the expected costs and benefits of engaging in criminal activities (Becker, 1968). Therefore, given that people can produce earnings through both illegal activities and legal labor markets, people with perceived better legal employment prospects are less likely to engage in illegal pursuits (Altindag, 2012; Machin

& Meghir, 2004; Mocan, Billups, & Overland, 2005). A person with a high IQ is also generally more perceptive, patient, and able to work towards long-term rewards (Jones, 2008; Potrafke, 2012; Shamosh & Gray, 2008). Research has shown that having a high IQ is a protective factor against criminal involvement, even when individuals come from disordered social backgrounds (Kandel et al., 1988; Levine, 2011). In contrast, individuals with lower IQs generally have a poorer ability to make decisions, compete for resources, and learn from experience. This raises the probability of engaging in antisocial behavior (Levine, 2011). All of these factors explain the negative correlations found between IQ and crime rates across individuals (e.g., Beaver et al., 2013; Diamond, Morris, & Barnes, 2012; Levine, 2011; McDaniel, 2006), states (e.g., Bartels, Ryan, Urban, & Glass, 2010; Kura, 2013; McDaniel, 2006; Pesta, McDaniel, & Bertsch, 2010; Templer & Rushton, 2011), and countries (Beaver & Wright, 2011; Rushton & Templer, 2009).

2. Aim

Much research has focused on discovering the causes of crime and modeling prevention and intervention programs that can lessen criminal activities (Beaver et al., 2013). However, sub-classifications of crime have not been adequately studied, and are of importance because some categories of crime may be more strongly associated with IQ than other categories are (McDaniel, 2006). Furthermore, to investigate precisely this phenomenon, it is essential to measure other factors associated with crime, since failing to control for IQ will produce flawed and biased estimates (Beaver & Wright, 2011; Rushton & Templer, 2009). In accordance with Rindermann et al. (2009), our study investigated the impact on national crime rates of three classes of IQ: intellectual (95th percentile), average (50th percentile), and non-intellectual (5th percentile). Adopting standard models of crime from Altindag (2012), our study differs from previous empirical literature on the IQ–crime relationship in two respects. First, we employ the rates of seven types of crime as dependent variables: homicide, assault, rape, robbery, property crimes, burglary, and vehicle theft. Second, as motivated by Altindag (2012) and other previous studies, we control for nine variables that can influence the effect of IQ on crimes: percentage of urban population, percentage of population that consumes drugs, per capita alcohol consumption, the ratio of young to old in the population, income inequality index, societal level of education, rate of police officers, unemployment rate, and per capita income.

3. Method

We adopted Altindag's (2012) linear model of crime, which consists of seven criminal indicators: homicide, assault, rape, robbery, property crimes, burglary, and vehicle theft.[2] These dependent variables were predicted by seven independent

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[1] IQ stratum was determined on the basis of the normal distribution of IQ scores for each country. For example (see Table 3), the IQ scores in Singapore at 95th, 50th, and 5th percentiles were recorded at 127.22, 104.56, and 78.86, respectively. In addition, although the 95th percentile IQ is highest for Singapore, the average IQ (at 50th percentile) is lower in Singapore (104.56) than in South Korea (106.37).

[2] Altindag (2012) also employed "larceny" as the eighth criminal indicator. He defined and calculated "larceny" as the difference between the property crime rate and the sum of the burglary rate and motor vehicle theft rate. However, we found that using this method would result in negative values for several countries, particularly Cyprus, Serbia/Yugoslavia, and Trinidad and Tobago. Therefore, we chose not to employ this method and excluded "larceny" from our analysis.