Biology, Immigration, and Public Policy

Gregory B. Christainsen*

I. INTRODUCTION

What is human nature? To what extent is human behavior determined by biological factors? To what extent is it influenced by social factors: child-rearing practices, peer groups, intellectual currents, and public policies? Much debate on these matters has unfolded since the time of Darwin.

This article discusses modern developments in the fields of biology, evolutionary psychology, psychometrics, and behavioral genetics. Researchers from many countries have now contributed to this literature. It then refers to related immigration issues and public policies – e.g., the American Head Start program and European preschool efforts – that have been recommended to improve the cognitive skills and preference sets of immigrant children.

Section II of the paper surveys perspectives on human nature, starting with those of Adam Smith and David Hume – two Scottish Enlightenment figures who influenced the emergence of a distinct discipline known as economics – and proceeding to those of Darwin’s circle, anthropologist Franz Boas, and more recent thinkers. Section III highlights some of the major contributions to the scientific fields referred to above. Section IV discusses the relevance of the scientific research for immigration issues. Section V refers to related research on preschool education and provides a summary and concluding remarks.

II. HUMAN NATURE

Adam Smith is justly famous in the history of economic thought for maintaining that human behavior is largely self-interested in nature. In *The Theory of Moral Sentiments* (1759/1976) he also highlighted the human capacity for sympathy, but he had no illusions about the strength of people’s humanitarian inclinations.

* Professor, California State University, East Bay, USA 94542. E-mail: gregory.christainsen@csueastbay.edu. The author would like to thank participants in the 2011 conference of the Association of Private Enterprise Education for productive discussions. The journal editors also offered helpful comments. David Cesarini provided leads to some of the reference material. The usual caveat applies.
For the most part, Smith’s friend David Hume echoed Smith on human nature, alleging that people have “limited generosity” (Hayek 1967). Hume also launched a notorious attack on orthodox religion and the so-called Argument from Design. According to the argument, the order in the universe cannot be explained without invoking a Grand Designer, or God. But just as Smith talked of the market as a self-ordering process, Hume argued that the order in the universe as a whole does not require a Central Planner. The universe has self-ordering processes of its own (Hume 1779/1990).

Hume went so far as to offer a preview of Charles Darwin’s theory of adaptive evolution, noting that the “. . . parts in the animals or vegetables and their curious adjustment to each other” does not require a Designer because he (Hume) “would fain know how an animal could subsist unless its parts were so adjusted? Do we not find that it perishes whenever this adjustment ceases, and that its matter corrupting tries some new form?” Human beings cannot “pretend to an exemption from the lot of all living animals” (Hayek 1967).

Hume saw the human mind itself as consisting of features selected for in a process of evolution. For example, we hold dogmatically to common-sense notions of physics that cannot be proven with absolute certainty – e.g., that gravity will continue to exist in the near future. If we did not subscribe to such common-sense notions, we might take actions that would threaten our survival (e.g., leaving a building via an upstairs window) (Hume 1739–40).

Erasmus Darwin, the grandfather of Charles, was a contemporary of Smith and Hume and himself a participant in the Enlightenment. His influence on Charles has been widely accepted by intellectual historians. However, in his book, On the Origin of Species (1859), Charles Darwin did not refer to the market order discussed by Adam Smith, nor did he endorse what was later called “Social Darwinism”. Hume had pointed out long before (Hume 1739–40) that showing something is the case, does not, in and of itself, tell us what ought to be the case. For example, if free markets result in huge differences in wealth between rich and poor, we are not automatically obliged to accept those differences.

The science of genetics was still primitive at the time of Darwin’s work. His half-cousin Francis Galton became the world’s leading proponent of the view that human traits are strongly influenced by heredity. A behavioral geneticist before “behavioral genetics” existed as a formal academic discipline, Galton suggested that researchers conduct studies of identical twins as a way to try to isolate the effects of nature and nurture on outcomes. If, when placed in different social environments, the twins ended up more or less the same in terms of intelligence and dispositions, it would suggest a major role for heredity. However, if the twins turned out to be very different, it would lend support to the view that factors in the social environment are of greater importance in shaping people.
Many commentators today are unaware of how prevalent the hereditarian viewpoint was in the late 19th and early 20th centuries. In the United States 30 states passed laws providing for compulsory sterilization of groups of individuals. By the time such laws had been enacted, however, socialist and progressive ideas had already begun to permeate the intellectual classes of Europe and the US, and these ideas would eventually prevail (at least in a practical sense) on the question of nature vs. nurture.

Karl Marx, of course, had an enduring influence. He asserted that “the human essence is no abstraction inherent in each individual. In its reality it is the ensemble of the social relations.” Marxists have fought hard to keep Darwinian concepts out of the social realm. Darwinism is thought to offer a quite good account of the development of non-human species and the evolution of humans’ physical attributes, but the development of human consciousness is thought to depend on the economic system and the interplay of economic classes. The human mind can only reach its full potential with the emergence of a classless society, i.e., communism.

Marxists were thus quite happy to see Darwinism undermine belief in the god of Christianity, but not the god of communism. The influence of Marxist ideas concerning the nature of Man remained strong for most of the 20th century. There was a downplaying of any independent role for ethnicity (and gender). To be sure, one might observe differing behaviors from one ethnic group to another, but this was seen – even by many economists – to be the result of the different social conditions in which the groups had to operate.

In intellectual circles support for eugenics and for rankings of races on human traits went out of fashion with the end of Nazism. In the field of anthropology Franz Boas led the way by even denying the existence of distinct biological races. Aside from superficial characteristics such as skin and eye color or hair texture, the idea of “races” was viewed as a purely social construct. The American Anthropological Association has endorsed this view into the 21st century.

The victory of the nurturists had far-reaching consequences. If there are no significant biological differences among races – and no significant differences between male and female brains – why on average are there very different labor market outcomes for races and genders? Racist and sexist attitudes and institutions are typically held responsible.

III. PSYCHOMETRICS, BIOLOGY, EVOLUTIONARY PSYCHOLOGY, AND BEHAVIORAL GENETICS

It was in this milieu in 1969 that Arthur Jensen dropped a 123-page bomb in the Harvard Educational Review (Jensen 1969). Jensen argued that (a) there is a genuine difference in the average intelligence level of whites and blacks, (b)
compensatory education has little to recommend it as a way of improving people’s general ability to reason and to learn, and (c) the white-black difference probably has a genetic component. The backlash against the article was so intense that Jensen had to be provided security just to help him walk across the campus at Berkeley.

A similar response confronted Harvard entomologist Edward O. Wilson with the publication of *Sociobiology: A New Synthesis* (Wilson 1975). In Wilson’s case his sin was to view people’s behavior in biological terms; people are seen as just another animal species, albeit with more highly developed brains. From a Marxist perspective, Wilson’s work was an illegitimate extension of Darwinian concepts into the human realm. Two Marxist colleagues of Wilson, Richard Lewontin and Stephen Jay Gould, led the charge, with the climactic moment in the struggle being a conference at which Wilson was doused with a pitcher of water.

Perhaps the most persuasive work to emerge in opposition to a Marxist perspective has been that of Thomas Bouchard, Sandra Scarr, Robert Plomin (Plomin et al. 2008), and others in the field of behavioral genetics, with their use of twin and adoption studies. While Eric Turkheimer in particular has pleaded with his peers not to underestimate the impact of the social environment, the findings in the field have been stunning: identical twins separated early in life nevertheless resemble one another later on in terms of intelligence and personality; they tend to resemble each other more so than do fraternal twins separated early in life. Fraternal twins, in turn, even if separated at birth, tend to resemble each other later in life more so than two people selected at random off the street.

On the other hand, biologically-unrelated adoptees reared in the same family do not show a clear tendency to resemble one another later in life – despite the shared environment of their foster parents and the surrounding community. How could one expect a government program to shape people in a predictable way if living in a certain family has no predictable (long-term) result?

Most controversially, black adoptees raised in white families ended up scoring near a typical “black” level on intelligence tests (on average), not at all near a “white” level; by adulthood, their adoptive parents and the community in which they were raised counted for essentially nothing as far as general intelligence was concerned (Weinberg, Scarr, and Waldman 1992). Less noticed was the finding

1. In a separate work Jensen (1980) spelled out – to the satisfaction of most practitioners in the psychology profession – the statistical conditions that have to met for tests to be considered unbiased. He went on to argue that the white-black difference in average test scores cannot be explained by test bias. Furthermore, controlling for socioeconomic status only marginally affects average racial differences in the results, and socioeconomic status itself depends on intelligence, among other factors (Jensen 1998).

2. It is true that the authors of the study suggested that its results could be due to factors in the social environment. Black children raised in white households might be treated differently than white children, not only by their adoptive parents, but also by members of the surrounding community. They also said that the results may have been confounded by preadoption influences. Note, however, that the measured IQs of the adopted black children originally were found to be higher than the average for black children.
from formal personality testing (DeBerry 1991) that, relative to whites, the black adoptees were also inclined (on average) to be impulsive, extroverted, aggressive, rebellious, and hedonistic.

In sharp contrast, East Asians growing up in white households in the US and Belgium have tended to score considerably above the white mean in terms of intelligence (Winick, Meyer, and Harris 1975; Clark and Hanisee 1982; Frydman and Lynn 1989). East Asians, or at least the Chinese among them, also tend to be relatively quiescent independently of their child-rearing environment and have less variable heart rates (Kagan, Resnick, and Snidman 1988).

While not subscribing to a genetic view of racial differences in average intelligence or personality, Turkheimer (2000, 2011) has endorsed a still-provocative set of “laws of behavioral genetics”: (1) all human behavioral traits are heritable; (2) by adulthood, the effect of being raised in the same family is smaller than the effect of genes; and (3) a substantial portion of the variation in complex behavioral traits is not accounted for by either genetic inheritance or families. For Turkheimer “the bottom-line is that everything is heritable, an outcome that has taken all sides of the nature-nurture debate by surprise” [emphasis added]. Happiness (De Neve et al. 2011, Nettle 2011), religiosity, homosexuality, general political orientation (Settle et al. 2010) – they all have a genetic component.

Most studies have found personality characteristics – conscientiousness, introversion, neuroticism, etc. – to be as much as 50 percent heritable, but typically their heritability comes out lower than 50 percent. Richard Nisbett (2009) grants that intelligence has a significant genetic component, but argues that it, too, has a heritability of less than 50 percent. Turkheimer has argued that the heritability of intelligence is lower for people of lower socioeconomic status (e.g., Turkheimer et al. 2003), whereas adoptees tend to be placed in middle and upper-middle income families. However, most studies of adults (as opposed to children) have found general intelligence to be strongly heritable. Two twin studies of Indians reared in India (Nathawat and Puri 1995; Pal, Shyam, and Singh 1997) found the heritability of intelligence to exceed 0.80.

so we are supposed to believe that social factors may first have acted to raise their IQs and then acted to bring them back down. No one has shown the mechanism whereby the social environment would have had these effects, whereas the pattern directly conforms to what would be predicted by the behavioral genetics literature; the role of heredity increases with age.

It is also true that, later on, the study’s most famous author, Sandra Scarr, in an article testifying to the strength of Arthur Jensen’s integrity, admitted that she and her colleagues had deliberately slanted their narrative to appease their overwhelmingly nurturist peers. “The test performance of the . . . adoptees was not different from that of ordinary Black children reared by their own families in the same area of the country. My colleagues and I reported the data accurately and as fully as possible, and then tried to make the results palatable to environmentally committed colleagues. In retrospect, this was a mistake” (Scarr 1998).
All factors considered, earning income – which involves intelligence, aggressiveness, other personality characteristics, and looks – appears to be at least 40–60 percent heritable (Bowles and Gintis 2002; Björklund, Jäntti, and Solon 2005; Cesarini 2010). Further research on permanent income, as opposed to 1–3 year income measures influenced by transitory factors, is expected to yield higher heritability estimates.

The absence of influences from the “shared environment” (e.g., family) on intelligence and personality has been startling to researchers, and it should be emphasized that this result has still not been absorbed by many of the people who participate in the making of public policy. Indeed, many are completely unaware of it. Families (or governments) can certainly provide opportunities and encourage achievement by children, but child-rearing practices and the presence of siblings affect personality and intelligence much less than people generally imagine. And as David Rowe (1994) pointed out, parenting styles themselves are somewhat heritable.

In childhood, child-rearing practices do seem to have an impact, but the impact fades by adulthood. It is thus now commonplace in behavioral genetics to say that the influence of heredity increases with age, whereas a “common sense,” but false, assumption of many people is that child-rearing has a cumulative impact on the way people are by adulthood.

As far as factors in the social environment outside the family are concerned, Judith Rich Harris (1998) has stressed the possible impact of peer groups, with the roles that children adopt inside groups being somewhat dependent on chance factors. For example, a child who might have developed leadership qualities in one group may end up being an also-ran in another group. Rowe, the tenacious hereditarian, pointed out that the peer groups to which children gravitate are also somewhat dependent on genetically-influenced inclinations.

Another line of research in biology emphasizes the somewhat random nature of early development. For example, identical twins sharing a womb will not get exactly the same nutrients from their mother. One twin may get more and be heavier at birth. The tiny, rather fragile brains of fetuses are subject to disturbances during pregnancy such that an axon, configurations of cells, or neural pathways may not end up the same in otherwise identical creatures. Experiments with genetically identical mice, flies, and other creatures have found that, even at an early stage, they do not necessarily resemble one another even when put in the same environment (Finch and Kirkwood 2000, Austad 2000).

Genetic mutations may play a critical role. It has been understood for some time that genetic mutations occur during the long sweep of evolution. Mutations can result from radiation, viruses, mutagenic chemicals, and other sources. What recent research has added to the discussion, with special application to identical twins, is the common presence of “somatic mutations,” i.e., alterations in DNA that often occur after conception. Thus, these mutations are not passed on to the
next generation of children. If the mutant cells then divide, an individual can have patches of tissue that differ genetically from that of the body’s other cells. More broadly, identical twins may differ from each other in a variety of ways although they are still much more alike one another than biologically-unrelated people (Maiti et al. 2011).

Cells may lose or acquire additional DNA as they divide. Some genes, such as those in the brain, are notorious for doing this. The mechanism that causes genes to increase or decrease in number is not yet well understood, but the upshot of this research is that, even before birth, and well before the social environment could have an impact, it is predictable that monozygotic twins will vary in the amount of DNA they have, a matter of potentially great importance for their respective psychiatric profiles (Maiti et al. 2011).

There thus seem to be chance influences on development that can be said to be biological, but not inherited. The field of epigenetics, which expands on the possibility that factors in the environment can cause genes to “switch off” and have an impact on the next generation as well, also raises provocative questions, but there has as yet been no big payoff from research efforts in the field.

Wilson’s “sociobiology” was so vociferously attacked that researchers started to shy away from practicing it. Led by John Tooby and Leda Cosmides (e.g., Cosmides and Tooby 1992), “evolutionary psychology” is a somewhat more acceptable field (in a political sense) that has emerged to help take its place. What has helped to make it more acceptable is its emphasis (so far) on human similarities instead of human differences. An emphasis on similarities would appear to be more consistent with a vision of Equality for the peoples of the world. A focus on differences raises the discomfiting specter of Inequality. In this case, the similarities refer to human dispositions that appear to exist irrespective of culture: e.g., preferences for one’s own children and kin, admiration for generosity, facial expressions for various emotions, incest taboos, beliefs about death, privacy for copulation, revulsion at the sight of excrement, etc.

Evolutionary psychology has also ventured into biological differences between male and female brains (e.g., Pinker 2002, chap 18), but it has shied away from discussions of racial differences. Nevertheless, there has now been a great deal of genetic research indicating the existence of biologically-distinguishable peoples. Groups of people differ not only in terms of eye color, hair texture, and the like, but in terms of many other physical characteristics including average brain size (Rushton and Ankney 2009).

Genetic classifications of different peoples do not necessarily correlate with skin color, but they are essentially continental in scope and do correspond rather well with every-day concepts of “race” or “ethnicity”, including self-classifications. Cavalli-Sforza (Cavalli-Sforza, Menozzi, and Piazza 1994), Rosenberg (Rosenberg et al 2002), Risch (Tang et al. 2005), and Allocco
(Allocco et al. 2007) have been just a few of the major contributors to this literature. Serre and Paabo (2004) have dissented from the direction of this research.

With improved technology now available for the research, studies are now finding “genetic clusters within clusters,” for example, Ashkenazi Jews who are biologically distinguishable from other ethnic Europeans, who can, in turn, be reliably divided into gentiles with southeastern European ancestry and gentiles with northwestern European ancestry (Price et al. 2008).

Of course, it is a very contentious matter, especially in the United States, to suggest that ethnic Europeans and people of sub-Saharan African ancestry may differ with respect to the frequency with which they possess the genes that are relevant for intelligence. Rushton and Jensen (2005) presented multiple lines of (indirect) evidence that they do, including data concerning the ubiquity of the difference in mean intelligence levels on a worldwide basis, average brain size, reaction times, and the intelligence of transracial adoptees. Richard Nisbett (2005, 2009) has been perhaps their most notable critic, but Nisbett now concurs that there is such a thing as general intelligence (‘g’), that IQ is predictive of success at school and work, that genes significantly influence IQ scores, that IQ is related to brain size, and that some studies have found average brain size to vary along racial lines. There is now a consensus (Wicherts et al. 2010a, Lynn and Meisenberg 2010, Wicherts et al. 2010b) that the average level of intelligence in sub-Saharan Africa is quite low. The only question is why.

The more pressing issue for Europe concerns the intelligence of immigrants of North African and Middle Eastern/South Asian origin, including Turks. There is a significant – on the order of 8 percent – difference in average brain size between the indigenous people of such ancestry and ethnic Europeans (Jurgens et al. 1990, Smith and Beals 1990). Again, a consensus is emerging that there are real and substantial differences in average intelligence between the immigrants and the native populations. Gaps in average test results narrow some over time, but sizable differences persist into the second and third generations of immigrant families. Some groups in Britain have scored reasonably well, but a typical group of immigrants on the European continent from North Africa/South Asia averages at least half a standard deviation lower on an IQ test than ethnic Europeans.

The (average) IQ deficits of indigenous South Asians and North Africans can to some extent be plausibly explained, at least in part, by lower standards for nutrition, health, and education. Nutritional differences can also help to account for differences in average brain size across groups. In the case of immigrants in more affluent countries such as Germany, France, and the Netherlands, however, efforts to downplay the possible existence of genetic factors start to lose their force.
The low average test scores may be partly due to the practice of cousin marriages in some segments of these immigrant groups. Contemporary scientific research suggests that cousin marriages can result in increased birth defects, illness, and infant mortality. British Pakistanis, more than 50 percent of whom marry first cousins, account for almost a third of all British children with genetic illnesses (*BBC News*, 16 November 2005). Schull and Neel (1965) found an average IQ deficit of 4 points among Japanese children produced after marriages of first cousins. Others (Ansari and Sinha 1978, Afzal and Sinha 1983, Jensen 1998, p. 194) have found larger effects, but may not have adequately controlled for the children’s socioeconomic status.

In any case, the host countries must now support dependent communities for an indefinite period. In a similar fashion, Hispanics (primarily mestizos) in the US score poorly on intelligence tests (on average), tend to have less massive brains than whites (Ralph Holloway, cited in Rushton and Ankney 2009, p. 709), and have a high rate of dependency. In Israel, Jews with significant European ancestry generally have higher test scores than Jews with exclusively North African/South Asian ancestry.

**IV. IMMIGRATION AND COOPERATION**

However, there is still a case to be made for a liberal policy with respect to immigration, just as there is a case for a liberal trade policy with respect to less developed countries (LDCs). With respect to trade policy, even if a less developed country did not have a productivity advantage in *any* industry, there could nevertheless be mutual gains from trade insofar as the LDC would have a comparative advantage in various sectors. A more developed country would then be advised to concentrate resources in *its* areas of comparative advantage and trade for the goods and services for which the LDC has the comparative edge.

In a similar fashion, insofar as even lesser-skilled immigrants are able to perform work or start businesses in many areas, some native residents are freed up to work in areas of greater relative strength. Members of both groups can be made better off. Lejour and de Mooij (2005) estimated that Turkey’s accession to the European Union would produce net gains, with additional gains coming from the impact that accession could have on internal Turkish policies.

The other side of the immigration argument involves not only concerns about the high dependency rates among such immigrant groups (e.g., Borjas 2001), but broader issues of social cooperation. The cooperation, or lack thereof, affects the performance of work teams in private, profit-seeking enterprises, affects the formation and operation of nonprofit entities, and also affects the operation and the very nature of political institutions. It may unfortunately be the case that mass – as opposed to selective – immigration has a negative impact in these areas.
Insofar as the effects potentially involve private organizations, immigration’s impact can be internalized to a large extent. Managers can decide in a particular case if the benefits of employing immigrant workers exceed the costs. The impact on political institutions and the broader society is more worrisome in light of its pervasiveness. Parts of cities, whole cities, and possibly whole countries may reflect the relative presence or relative absence of cooperative efforts.

Obstacles to social cooperation concern factors related to intelligence, impulsiveness, and ethnic diversity. As Garett Jones (2008) has found, in cases where the incentives to cooperate are ambiguous – as in so-called “prisoner’s dilemmas” – a certain threshold of intelligence may have to be crossed for cooperation to occur. The gains from cooperation may not always be clear to all. Thus, intelligent people may realize gains to cooperation that less intelligent people, or mixed groups of intelligent and less-intelligent people, may miss out on.

Impulsiveness is relevant insofar as cooperation involves the passage of time and reciprocity. Perhaps I would be willing to help you now on the expectation that, later on, you would be willing to help me. But, to make the arrangement worthwhile, the present value of the help I expect to receive later on must equal or exceed the sacrifice that I would make for you. Present value, in turn, depends on my discount rate, and discount rates vary across groups of people. For example, if children are asked to postpone the receipt of a candy bar or a marshmallow on the understanding that they will receive a bigger one or a greater number later on, not all children respond in the same way (Mischel 1961, 1996). And impulsiveness seems to be related to intelligence (Dohmen et al. 2010).

Robert Putnam (2007) has undertaken the most exhaustive study of the impact of ethnic diversity on cooperation and was quite chastened by his findings. He sat on them for more than five years before he finally published them. Putnam found resoundingly that, other things equal, the more ethnically diverse the community, the less that cooperation tends to take place. For example, Los Angeles was found to be a rather uncooperative place. Other things equal, people in ethnically diverse communities develop fewer friendships, participate less in community activities, watch more television, and are less happy. Björnskov (2003) concluded that high levels of life satisfaction in still-not-highly-diverse Scandinavia are more dependent on social capital than on affluence.

William Hamilton (1964) articulated a genetic basis for altruism in terms of the likelihood of the altruism’s beneficiaries’ passing on copies of the genes of the acting person. However, his math initially suggested that genuine altruism would extend only to close relatives. According to his method, for example, you are only 1/32 related to a second cousin and only trivially related to randomly selected members of the general population.

Hamilton (1975) later noted that inbreeding among members of an ethnic group could significantly lessen the genetic distance between oneself and a randomly selected member of the same ethnic group. Harpending (2002) calcu-
lated that a typical person is almost as genetically close to an average member of his own ethnic group vs. the rest of humanity as he is to a nephew vs. the rest of the ethnic group.

Singer (2000, p. 44) remarked on the highly-cooperative aspects of Japanese society. In 2011, there was not a significant amount of looting in Japan even in the wake of a massive earthquake. In fact, 2.3 billion yen of lost cash was turned in, having been found in wallets and safes that had disappeared in the aftermath of the quake (*Daily Mail*, 17 August 2011). However, Singer made no mention of Japan’s ethnic homogeneity, its high average level of intelligence, or its lack of impulsiveness. Nor did he mention its paucity of immigration. Cesarini et al. (2008) found that a willingness to cooperate is, itself, significantly heritable.

Last, and certainly not least, is the impact of immigration on political institutions. Preserving an impartial Rule of Law is difficult under the best of circumstances, but putting aside parochial interests for the sake of the benefits of political cooperation becomes more difficult in the presence of a very diverse population. Rindermann (2008) found that education and intelligence lend support for the Rule of Law, democracy, and political liberty, with the acquisition of education depending on underlying cognitive ability. Caplan and Miller (2010) reported that a pro-market orientation is better predicted by cognitive ability than educational level. Cousin marriages are doubly problematic for a classically liberal society; they not only depress IQ, but increase the intensity of nepotism in political affairs.

**IV. SUMMARY AND CONCLUDING REMARKS**

Recent literature in biology and related disciplines may ultimately have a profound impact on how we view the world. It is becoming more firmly established that all human traits have a genetic component. Less appreciated are findings that people’s shared environment is of comparatively little importance, at least for intelligence and standard personality characteristics. More esoteric features of the natural and social environment – somatic mutations, gene-environment interactions within peer groups – merit additional research.

A propensity to cooperate has a genetic component and is positively related to intelligence and a lack of impulsiveness. What has been less obvious is the basis for cooperation among seemingly-unrelated members of an ethnic group. The extent of cooperation may depend on the degree of inbreeding within the group. Ethnic diversity, the presence of which is affected by immigration levels (as well as birth rates), appears to have negative consequences for cooperation.

Intelligence and income are strongly influenced by genetic factors and are important not only for personal success (Gottfredson 2003), but in terms of not having to be supported by people outside of one’s family. Immigration is problematic in this context, too; low IQ immigrants increase the rate of dependency.
Intelligence and (a lack of) impulsiveness are also important for the maintenance of functioning markets, the Rule of Law, and democratic institutions. Immigration offers gains from trade, but low intelligence tends to reduce support for markets and lessen social cooperation. Ethnic diversity has negative effects here as well insofar as it spawns favoritism.

It is possible that a disposition toward low intelligence or impulsiveness can be remediated by certain programs in cost-effective ways. However, the American Head Start program, which offers enrichment initiatives on behalf of preschool children, has not been found to have any lasting effects on the intelligence of African-Americans (Currie and Thomas 1995). Oklahoma and Georgia guarantee preschool for all, but with no enduring impact on test scores. Scarr (1997) found no lasting effects of childcare programs on children’s personalities except in extreme cases. These outcomes are consistent with the thrust of the research in behavioral genetics.

Heckman and his colleagues (Heckman et al. 2006) concluded their research without much enthusiasm about efforts to alter general intelligence, but much more hope about efforts to improve children’s “preference sets” – i.e., get children pointed in the right direction and limit bad behavior. Baumister et al (2011) concluded that preschool education efforts in the German-speaking world enhance the cognitive ability of children, but the magnitude of this impact decreases over time. They did not follow children all the way to adulthood, nor was there a clear impact on the children of immigrants. Moreover, preschool education appeared to worsen behavioral problems. In the end, it is a question of weighing risks and benefits. Mass immigration does have benefits, but also very large risks.

REFERENCES


This paper discusses recent scientific research that has shifted the terms of the debate about the respective roles of nature and nurture in shaping behavior. The research includes literature in the areas of biology, psychometrics, evolutionary psychology, and behavioral genetics. The paper then shows the relevance of this literature for ongoing concerns about mass immigration in developed countries. The literature has implications not only for the personal success of the immigrants, but rates of social dependency and the outlook for political and social cooperation in increasingly diverse societies. Efforts to remediate IQ deficits or behavioral problems in some immigrant groups are seen to be problematic.