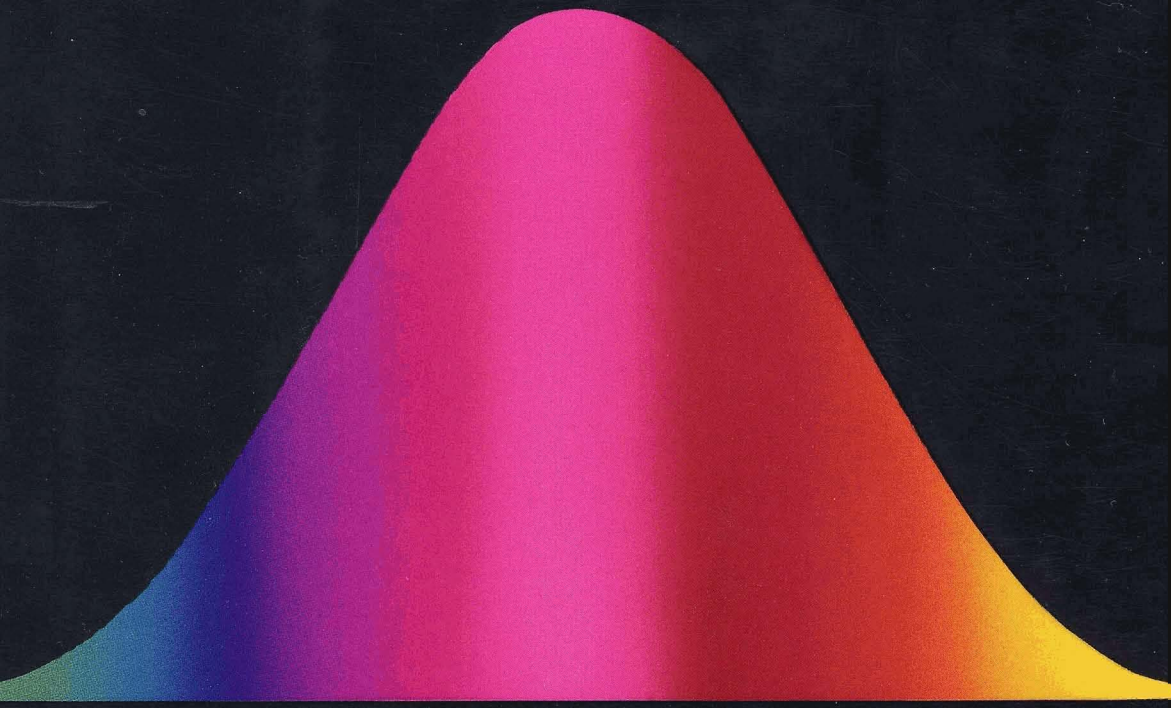
THE BELL CURVE

Intelligence and Class Structure in American Life



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Chapter 14

Ethnic Inequalities in Relation to IQ

Ethnic differences in education, occupations, poverty, unemployment, illegitimacy, crime , and other signs of inequality preoccupy scholars and thoughtful citizens. In this chapter, we examine these differences after cognitive ability is taken into account.

We find that Latinos and whites of similar cognitive ability have similar social behavior and economic outcomes. Some differences remain, and a few are substantial, but the overall pattern is similarity. For blacks and whites, the story is more complicated. On two vital indicators of success—educational attainment and entry into prestigious occupations—the black-white discrepancy reverses. After controlling for IQ, larger numbers of blacks than whites graduate from college and enter the professions. On a third important indicator of success, wages, the black-white difference for year-round workers shrinks from several thousand to a few hundred dollars.

In contrast, the B/W gap in annual family income or in persons below the poverty line narrows after controlling for IQ but still remains sizable. Similarly, differences in unemployment, labor force participation, marriage, and illegitimacy get smaller but remain significant after extracting the effect of IQ. These inequalities must be explained by other factors in American life. Scholars have advanced many such explanations; we will not try to adjudicate among them here, except to suggest that in trying to understand the cultural, social, and economic sources of these differences, understanding how cognitive ability plays into the mix of factors seems indispensable. The role of cognitive ability has seldom been considered in the past. Doing so in future research could clarify issues and focus attention on the factors that are actually producing the more troubling inequalities.

America's pressing social problems are often portrayed in ethnic terms. Does the nation have an unemployment problem? It depends. Among whites in the recession year of 1992, unemployment was under seven percent, but it was fourteen percent among blacks.[1] Poverty? The poverty rate in 1992 for whites was less than twelve percent but thirty-three percent for blacks.[2] Such numbers, and the debate over what they should mean for policy, have been at the center of American social policy since the early 1960s. As Latinos have become a larger portion of the population, the debate has begun to include similar disparities between Latinos and whites.

Such disparities are indisputable. The question is why. Surely history plays a role. Open racism and institutional discrimination of less obvious sorts have been an important part of the historical story for blacks and are relevant to the historical experience of Latinos and Asian-Americans as well. Cultural differences may also be involved. An ethnic group with a strong Roman Catholic heritage, such as Latinos, may behave differently regarding birth control and illegitimacy than one without that background. The tradition of filial respect in the Confucian countries may bear on the behavior of American teenagers of East Asian ancestry when one looks at, for example, delinquency.

Part II showed the impact of cognitive ability on poverty, illegitimacy, crime, and other social problems in America among whites. Chapter 13 showed that the major ethnic groups in America differ, on the average, in cognitive ability. There is accordingly reason to ask what happens to ethnic differences in economic and social behavior when intelligence is held constant. This chapter examines that question.

The NLSY, with its large samples of blacks and Latinos (though not Asians), permits us to address the question directly and in detail. We will show what happens to the ethnic gap on a variety of indicators when IQ is taken into account. To anticipate: In some cases, large ethnic differences disappear altogether, or even reverse, with whites having the disadvantageous outcome compared to blacks and Latinos. In other cases, substantial differences remain, even after the groups are equated not only for cognitive ability but for parental SES and education as well. We do not try to press the analysis further, to find the other reasons why groups may differ socially. The goal of this chapter is to broaden the search for answers after three decades during which scholars have ignored the contribution of IQ to ethnic differences in the main social outcomes of everyday life.

First, we look at the indicators of success that were the focus of Part I, then the indicators of problems that were the focus of Part II.

ETHNIC DIFFERENCES IN EDUCATIONAL AND OCCUPATIONAL SUCCESS

We begin with what should be hailed as a great American success story. Ethnic differences in higher education, occupations, and wages are strikingly diminished after controlling for IQ. Often they vanish. In this sense, America has equalized these central indicators of social success.

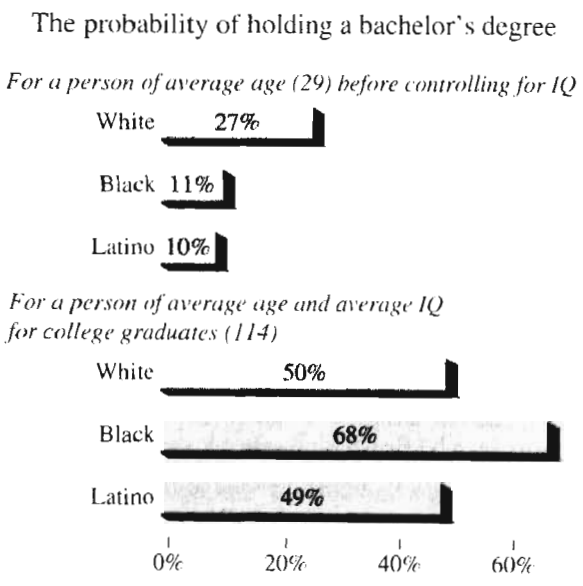
Educational Attainment

The conventional view of ethnic differences in education holds that blacks and Latinos still lag far behind, based on comparisons of the percentage of minorities who finish high school, enter college, and earn college degrees. Consider, for example, graduation from high school. As of 1990, 84 percent of whites in the NLSY had gotten a high school diploma, compared to only 73 percent of blacks and 65 percent of Latinos, echoing national statistics.[3] But these percentages are based on everybody, at all levels of intelligence. What were the odds that a black or Latino with an IQ of 103—the average IQ of all high school graduates—completed high school? The answer is that a youngster from either minority group had a *higher* probability of graduating from high school than a white, if all of them had IQs of 103: The odds were 93 percent and 91 percent for blacks and Latinos respectively, compared to 89 percent for whites.[4]

College has similarly opened up to blacks and Latinos. Once again, the raw differentials are large. In national statistics or in the NLSY sample, whites are more than twice as likely to earn college degrees than either blacks or Latinos.[5] The average IQ of all college graduates was, however, about 114. What were the odds that a black or Latino with an IQ of 114 graduated from college? The figure below shows the answers.

All the graphics in this chapter follow the pattern of this one. The top three bars show the probabilities of a particular outcome—college graduation in this case—by ethnic group in the NLSY, given the average age of the sample, which was 29 as of the 1990 interview. In this figure, the top three bars show that a white adult had a 27 percent chance of holding a bachelor's degree, compared to the lower odds for blacks (11 percent) and Latinos (10 percent). The probabilities were computed through a logistic regression analysis.

After controlling for IQ, the probability of graduating from college is about the same for whites and Latinos, higher for blacks



The lower set of bars also presents the probabilities by ethnic group, but with one big difference: Now, the equation used to compute the probability assumes that each of these young adults has a certain IQ level. In this case, the computation assumes that everybody has the average IQ of all college graduates in the NLSY—a little over 114. We find that a 29-year-old (in 1990) with an IQ of 114 had a 50 percent chance of having graduated from college if white, 68 percent if black, and 49 percent if Latino. After taking IQ into account, blacks have a better record of earning college degrees than either whites or Latinos. We discuss this black advantage in Chapter 19, when we turn to the effects of affirmative action.

Occupational Status

One of the positive findings about ethnic differences has been that education pays off in occupational status for minorities roughly the same as it does for whites.[6] This was reflected in the NLSY as well: Holding education constant, similar proportions of blacks, Latinos, and whites are found in the various occupational categories.[7]

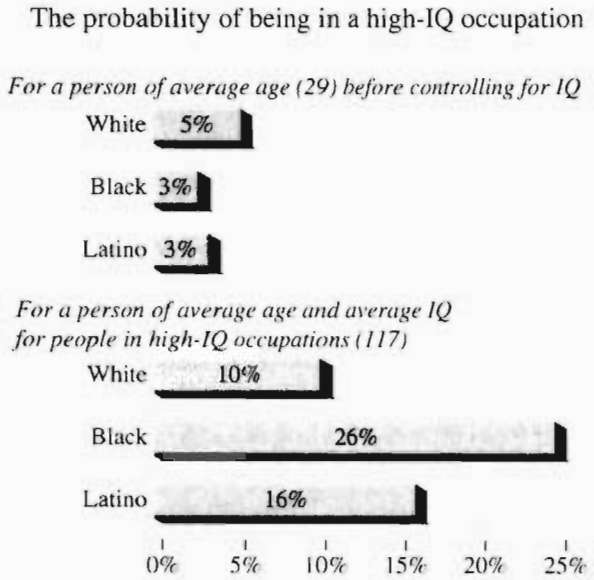
To what extent does controlling for IQ produce the same result? We know from Chapter 2 that occupations draw from different segments of the cognitive ability distribution. Physicians come from the upper part of the distribution, unskilled laborers from the lower part, and so forth. If one ethnic group has a lower average IQ than another ethnic group, this will be reflected in their occupations, other things equal. What would the occupational distributions of different ethnic groups be after taking cognitive ability into account?

Sociologist Linda Gottfredson has examined this question for blacks and whites.[8] If, for example, black and white males were recruited without discrimination into careers as physicians above a cutoff of an IQ of 112 (which she estimates is a fair approximation to the lower bound for the actual population of physicians), the difference in the qualifying population pools would place the black-white ratio at about .05—about one black doctor for every twenty white ones. According to census data, the actual per capita ratio of black to white male physicians was about .3 in 1980, which is about six black doctors for every twenty white ones. Another example is secondary school teaching, for which a similar calculation implies one black high school teacher for every ten white ones. The actual per capita ratio in 1980 was instead about six black teachers for every ten white ones. In both examples, there are about six times as many blacks in the occupation as there would be if selection by cognitive ability scores were strictly race blind. Gottfredson made these calculations for occupations spanning most of the range of skilled jobs, from physician and engineer at the top end to truck driver and meat cutter at the low end. She concluded that blacks are overrepresented in almost every occupation, but most of all for the high-status occupations like medicine, engineering, and teaching.[9]

We confirm Gottfredson's conclusions with data from the NLSY by going back to the high-IQ occupations we discussed in Chapter 2: lawyers, physicians, dentists, engineers, college teachers, accountants, architects, chemists, computer scientists, mathematicians, natural scientists, and social scientists. Grouping all of these occupations together, what chance did whites, blacks, and Latinos in the NLSY have of entering them? The figure below shows the results.

Before controlling for IQ and using unrounded figures, whites were almost twice as likely to be in high-IQ occupations as blacks and more than half again as likely as Latinos.[10] But after controlling for IQ, the picture reverses. The chance of entering a high-IQ occupation for a

After controlling for IQ, blacks and Latinos have substantially higher probabilities than whites of being in a high-IQ occupation



black with an IQ of 117 (which was the average IQ of all the people in these occupations in the NLSY sample) was over twice the proportion of whites with the same IQ. Latinos with an IQ of 117 had more than a 50 percent higher chance of entering a high-IQ occupation than whites with the same IQ.[11] This phenomenon applies across a wide range of occupations, as discussed in more detail in Chapter 20.

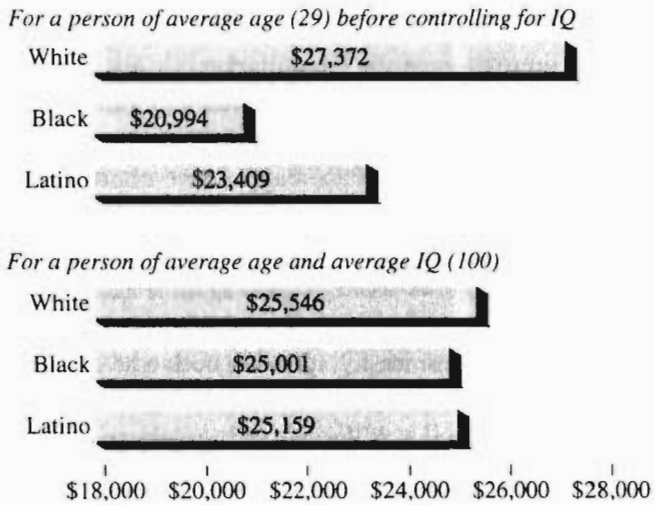
Wages

We come now to what many people consider the true test of economic equality, dollar income. Two measures of income need to be separated because they speak to different issues. *Wages* provides a direct measure of how much a person gets per unit of time spent on the job. *Annual family income* reflects many other factors as well, being affected by marital status (does the family have two incomes?), nonwage income (from stock dividends to welfare), and the amount of time spent earning wages (did the person have a job for all fifty-two weeks of the year?). We begin with wages, the measure that most directly reflects the current workplace.

As of 1989, white year-round workers (of average age) in the NLSY

sample (men and women) made an average of $6,378 more than blacks and $3,963 more than Latinos.[12] The figure below shows what happens controlling for intelligence, this time presenting the results for a year-

After controlling for IQ, ethnic wage differentials shrink from thousands to a few hundred dollars



round worker with an IQ of 100. The average black who worked year-round was making less than 77 percent of the wage of the average employed white.[13] After controlling for IQ, the average black made 98 percent of the white wage. For Latinos, the ratio after controlling for IQ was also 98 percent of the white wage. Another way to summarize the outcome is that 91 percent of the raw black-white differential in wages and 90 percent of the raw Latino-white differential disappear after controlling for IQ.

These results say that only minor earnings differences separate whites, blacks, and Latinos of equal IQ in the NLSY.[14] Because this finding is so far from what the public commentary assumes, we explore it further. We focus on the situation facing blacks, because the black-white disparities have been at the center of the political debate. Parallel analyses for Latinos and whites generally showed smaller initial income disparities and similar patterns of convergence after controlling for IQ.

Our finding that wage differentials nearly disappear may be a surprise especially in light of the familiar conclusion that wage disparities persist even for blacks and whites with the same education. For example, in the 1992 national data collected by the Bureau of the Census, median earnings of year-round, full-time workers in 1992 were $41,005 for white male graduates with a bachelor's degree and only $31,001 for black males with the same degree.[15] Similar disparities occur all along the educational range. The same pattern is found in the NLSY data. Even after controlling for education, blacks in the NLSY still earned only 80 percent of the white wage, which seems to make a prima facie case for persistent discrimination in the labor market.

Blacks and whites who grow up in similar economic and social circumstances likewise continue to differ in their earning power as adults. This too is true of the NLSY data. Suppose we control for three factors—age, education, and socioeconomic background—that are generally assumed to influence people's wages. The result is that black wages are still only 84 percent of white wages, again suggesting continuing racial discrimination.

And yet controlling just for IQ, ignoring both education and socioeconomic background, raises the average black wage to 98 percent of the white wage and reduces the dollar gap in annual earnings from wages for year-round workers to less than $600. A similar result is given as the bottom row in the following table, this time extracting as well the effects of different occupational distributions between whites and blacks. The rows above it show what happens when separate wages are computed for different occupational groupings.

Black Wages as a Percentage of White Wages, 1989

Occupation	Controlling Only for Age	Controlling for Age and Education	Controlling for Age, Education, and Parental SES	Controlling Only for Age and IQ
Professional/technical	87	92	95	102
Managers/administrators	73	72	74	82
Clerical workers	99	97	101	119
Sales workers	74	74	77	89
Craft and kindred workers	81	80	83	96
Transport operatives	88	87	90	108
Other operatives	80	80	84	100
Service workers	92	96	102	119
Unskilled laborers	67	69	72	84
All employed persons	80	82	86	98

The table contains a number of noteworthy particulars, but the most interesting result, which generalizes to every occupational category, is how little difference education makes. A common complaint about wages is that they are artificially affected by credentialism. If credentials are important, then educational differences between blacks and whites should account for much of their income differences. The table, however, shows that knowing the educational level of blacks and whites does little to explain the difference in their wages. Socioeconomic background also fails to explain much of the wage gaps in one occupation after another. That brings us to the final column, in which IQs are controlled while education and socioeconomic background are left to vary as they will. The black-white income differences in most of the occupations shrink considerably. Altogether, the table says that an IQ score is more important—in most cases, much more important—in explaining black-white wage differences than are education and socioeconomic background for every occupational category in it.

Analyzing the results in detail would require much finer breakdowns than the ones presented in the table. Why is there still a meaningful differential in the managers/administrators category after controlling for IQ? Why do blacks earn a large wage premium over whites of equivalent age and IQ in clerical and service jobs? The explanations could have something to do with ethnic factors, but the varieties of jobs within these categories are so wide that the differentials could reflect nothing more than different ethnic distributions in specific jobs (for example, the managers/administrators category includes jobs as different as a top executive at GM and the shift manager of a McDonalds; the service workers category includes both police and busboys). We will not try to conduct those analyses, though we hope others will. At the level represented in the table, it looks as if the job market rewards blacks and whites of equivalent cognitive ability nearly equally in almost every job category.

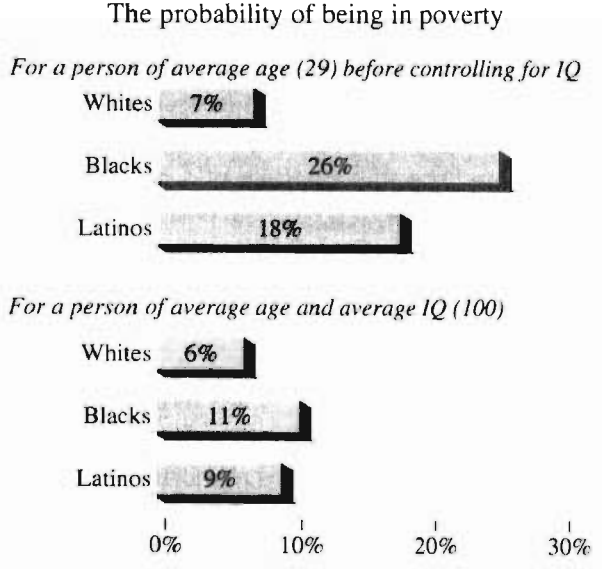
Although we do not attempt the many analyses that might enrich this basic conclusion, one other factor—gender— is so obvious that we must mention it. When gender is added to the analysis, the black-white differences narrow by one or two additional percentage points for each of the comparisons. In the case of IQ, this means that the racial differ-

ence disappears altogether. Controlling for age, IQ, and gender (ignoring education and parental SES), the average wage for year-round black workers in the NLSY sample was 101 percent of the average white wage.

Annual Income and Poverty

We turn from wages to the broader question of annual family income. The overall family income of a 29-year-old in the NLSY (who was not still in school) was $41,558 for whites, compared to only $29,880 for blacks and $35,514 for Latinos. Controlling for cognitive ability shrinks the black-white difference in family income from $11,678 to $2,793, a notable reduction, but not as large as for the wages discussed above: black family income amounted to 93 percent of white family income after controlling for IQ. Meanwhile, mean Latino family income after controlling for IQ was slightly higher than white income (101 percent of the white mean). The persisting gap in family income between blacks and whites is reflected in the poverty data, as the figure below shows. Controlling for IQ shrinks the difference between whites and other ethnic groups substantially but not completely.

Controlling for IQ cuts the poverty differential by 77 percent for blacks and 74 percent for Latinos



If commentators and public policy specialists were looking at a 6 percent poverty rate for whites against 11 percent for blacks—the rates for whites and blacks with IQs of 100 in the lower portion of the graphic—their conclusions might differ from what they are when they see the unadjusted rates of 7 percent and 26 percent in the upper portion. At the least, the ethnic disparities would look less grave. But even after controlling for IQ, the black poverty rate remains almost twice as high as the white rate—still a significant difference.[16] Why does this gap persist, like the gap in total family income, while the gaps in educational attainment, occupations, and wages did not? The search for an answer takes us successively further from the things that IQ can explain into ethnic differences with less well understood roots.[17]

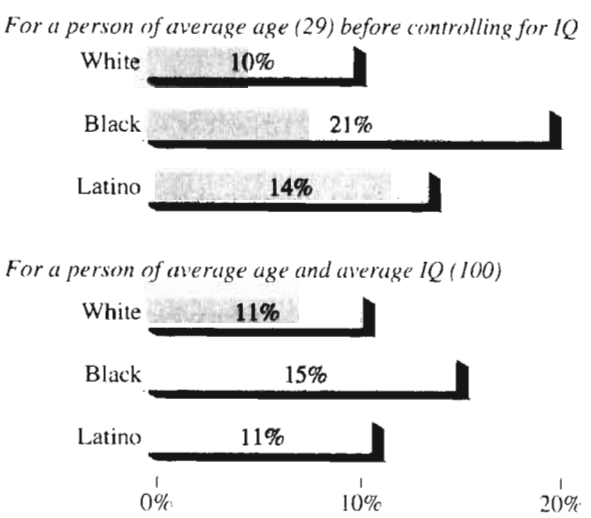
ETHNIC DIFFERENCES ON INDICATORS OF SOCIAL PROBLEMS

Ethnic differences in poverty persist, albeit somewhat reduced, after controlling for IQ. Let us continue with some of the other signs of social maladjustment that Part II assessed for whites alone, adding ethnic differences to the analysis. We will not try to cover each of the indicators in those eight chapters (Appendix 6 provides much of that detail), but it may be instructive to look at a few of the most important ones, seeing where IQ does, and does not, explain what is happening behind the scenes.

Unemployment and Labor Force Participation

Black unemployment has been higher than white unemployment for as long as records have been kept—more than twice as high in 1992, typical of the last twenty years.[18] Once again the NLSY tracks with the national statistics. Restricting the analysis to men who were not enrolled in school, 21 percent of blacks spent a month or more unemployed in 1989, more than twice the rate of whites (10 percent). The figure for Latinos was 14 percent. Controlling for cognitive ability reduces these percentages, but differently for blacks and Latinos. The difference between whites and Latinos disappears altogether, as the figure below shows; that between whites and blacks narrows but does not disappear. Black males with an IQ of 100 could expect a 15 percent chance of being unemployed for a month or more as of 1989, compared with an 11 percent chance for whites. Dropping out of the labor force is similarly

After controlling for IQ, the ethnic discrepancy in male unemployment shrinks by more than half for blacks and disappears for Latinos



related to IQ. Controlling for IQ shrinks the disparity between blacks and whites by 65 percent and the disparity between Latinos and whites by 73 percent.[19]

Scholars are discussing many possible explanations of the poorer job outcomes for black males, some of which draw on the historical experience of slavery, others on the nature of the urbanizing process following slavery, and still others on the structural shifts in the economy in the 1970s, but ethnic differences in IQ are not often included among the possibilities.[20] Racism and other historical legacies may explain why controlling for IQ does not eliminate differences in unemployment and dropping out of the labor force, but, if so, we would be left with no evident explanation of why such factors are not similarly impeding the equalization of education, occupational selection, or wages, once IQ is taken into account. With the facts in hand, we cannot distinguish between the role of the usual historical factors that people discuss and the possibility of ethnic differences in whatever other personal attributes besides IQ determine a person's ability to do well in the job market. We do not know whether ethnic groups differ on the average in these other ways, let alone why they do so if they do. But to the extent that there

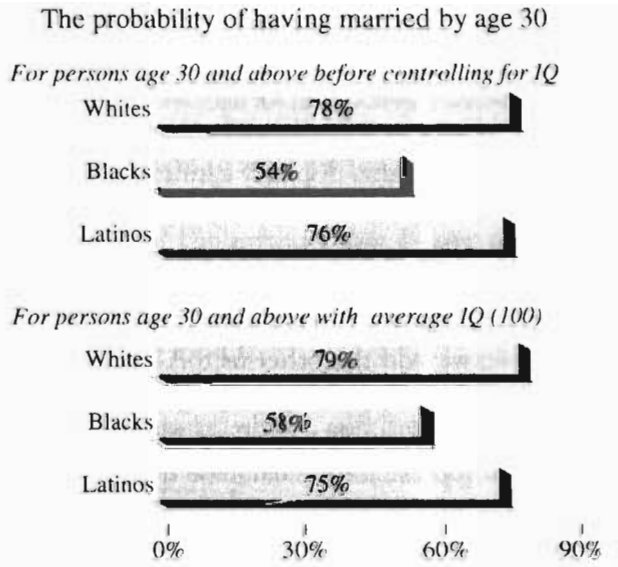
are such differences, controlling for IQ will not completely wash out the disparities in unemployment and labor force participation. We will not speculate further along these lines here.

Marriage

Historically, the black-white difference in marriage rates was small until the early 1960s and then widened. By 1991, only 38 percent of black women ages 15 to 44 were married, compared to 58 percent of white women.[21] In using the NLSY, we will limit the analysis to people who had turned 30 by the time of the 1990 interview. Among this group, 78 percent of whites had married before turning 30 compared to only 54 percent of blacks. The white and Latino marriage rates were only a few percentage points apart. When we add cognitive ability to the picture, not much changes. According to the figure below, only 8 percent of the black-white gap disappears after controlling for IQ, leaving a black with an IQ of 100 with a 58 percent chance of having married by his or her thirtieth birthday, compared to a 79 percent chance for a white with the same IQ.

The reasons for this large difference in black and white marriage have been the subject of intense debate that continues as we write. One

Controlling for IQ explains little of the large black-white difference in marriage rates



school of thought argues that structural unemployment has reduced the number of marriageable men for black women, but a growing body of information indicates that neither a shortage of black males nor socioeconomic deprivation explains the bulk of the black-white disparity in marriage.[22] As we have just demonstrated, neither does IQ explain much. For reasons that are yet to be fully understood, black America has taken a markedly different stance toward marriage than white and Latino America.

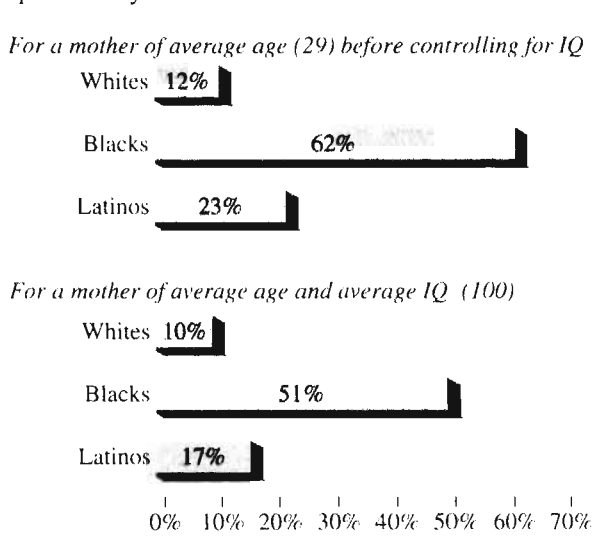
Illegitimacy

A significant difference between blacks and whites in illegitimate births goes back at least to the early part of this century. As with marriage, however, the ethnic gap has changed in the last three decades. In 1960, 24 percent of black children were illegitimate, compared to only 2 percent of white children—a huge proportional difference. But birth within marriage remained the norm for both races. By 1991, the figures on illegitimate births were 68 percent of all births for blacks compared to 39 percent for Latinos and 18 percent for non-Latino whites.[23] The proportional difference had shrunk, but the widening numerical difference between blacks and whites had led to a situation in which births within marriage were no longer the norm for blacks, while they remained the norm (though a deteriorating one) for whites.

The black-white disparity in the NLSY is consistent with the national statistics (although somewhat lower than the latest figures, because it encompasses births from the mid-1970s to 1990). As of the 1990 interview wave, the probabilities that a child of an NLSY woman would be born out of wedlock (controlling for age) were 62 percent for blacks, 23 percent for Latinos, and 12 percent for non-Latino whites. As far as we are able to determine, this disparity cannot be explained away, no matter what variables are entered into the equation. The figure below shows the usual first step, controlling for cognitive ability.

Controlling for IQ reduced the Latino-white difference by 44 percent but the black-white difference by only 20 percent. Nor does it change much when we add the other factors discussed in Chapter 8: socioeconomic background, poverty, coming from a broken home, or education. No matter how the data are sliced, black women in the NLSY (and in every other representative database that we know of) have a much higher proportion of children out of wedlock than either whites or Latinos. As we write, the debate over the ethnic disparity in illegitimacy remains as intense and as far from resolution as ever.[24] We can only add that ethnic differences in cognitive ability do not explain much of it either.

Controlling for IQ narrows the Latino-white difference in illegitimacy but leaves a large gap between blacks and whites

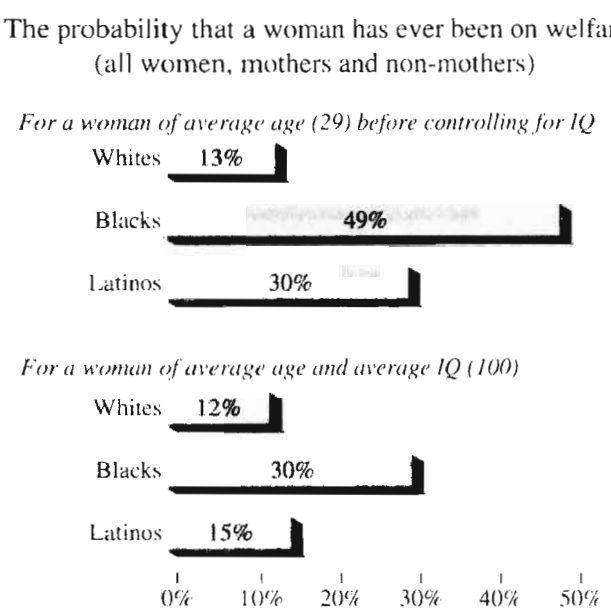


Welfare

As of 1991, about 21 percent of black women ages 15 to 44 were on AFDC nationwide, compared to 12 percent of Latino women and 4 percent of white women (including all women, mothers and nonmothers).[25] The NLSY permits us to ask a related question that extends back through time: How many of the NLSY women, ages 26 to 33 as of 1990, had *ever* been on welfare? The answer is that 49 percent of black women and 30 percent of all Latino women had been on welfare at one time or another, compared to 13 percent of white women.[26] The figure shows the effects of controlling for IQ.

Adding cognitive ability explains away much of the disparity in welfare recipiency among blacks, whites, and Latinos. In the case of Latinos, where 84 percent of the difference disappears, the remaining disparity with whites is about three percentage points. The disparity between blacks and whites—30 percent of black women receiving wel-

Controlling for IQ cuts the gap in black-white welfare rates by half and the Latino-white gap by 84 percent



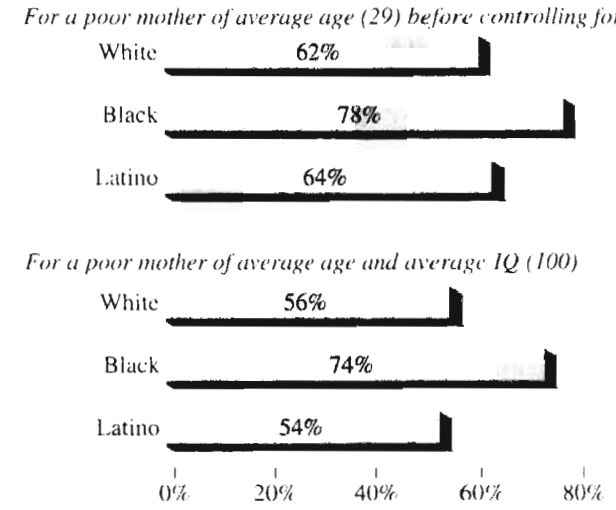
fare, compared to about 12 percent for whites—is still large but only half as large as the difference not adjusted for IQ.

This is as much as we are able to explain away. When we probe further, IQ does not do more to explain the black-white difference. For example, we know that poverty is a crucial factor in determining whether women go on welfare. We therefore explored whether IQ could explain the black-white difference in a particular group of women: those who had had children and had been below the poverty line in the year prior to birth. The results of the analysis are shown in the figure below. Among women who were poor in the year prior to birth, the black-white difference is slightly *larger* after controlling for IQ, not smaller. These data, like those on illegitimacy and marriage, lend support to the suggestion that blacks differ from whites or Latinos in their likelihood of being on welfare for reasons that transcend both poverty and IQ, for reasons that are another subject of continuing debate in the literature.[27]

Low-Birth-Weight Babies

Low birth weight, defined as infants weighing less than 5.5 pounds at birth, is predictive of many subsequent difficulties in the physical, social, and cognitive development of children. Historically, blacks have had much higher rates of low birth weight than either Latinos or whites. In the most recent reporting year (1991) for national data, almost fourteen percent of all black babies were low birth weight, compared to five percent of white babies and six percent of Latino babies.[28] In our analyses of the NLSY data, we focus on babies who were low birth weight relative to the length of gestation, excluding premature babies who were less than 5.5 pounds but were appropriate for gestational age using the standard pediatric definition.[29] Using unrounded data, the rate of low-birth-weight births for blacks (10 percent) was 2.9 times as high as for whites. The Latino rate was 1.5 times the white rate. The figure shows what happens after controlling for IQ. The black rate, given an IQ of 100, drops from 10 percent to 6 percent, substantially closing the gap with whites.[30] The Latino-white gap remains effectively unchanged.

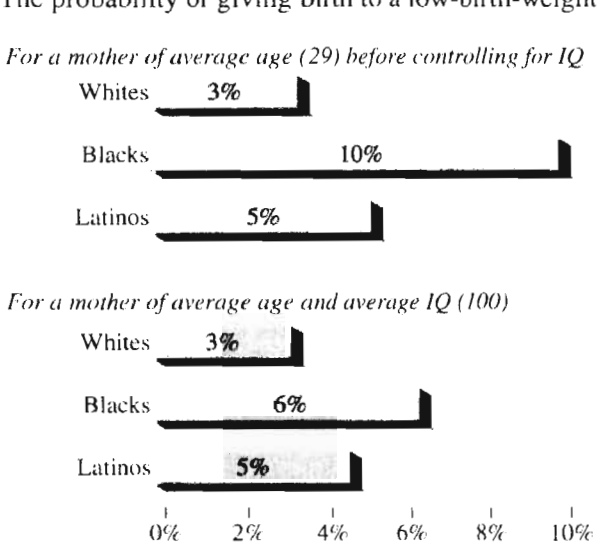
Even among poor mothers, controlling for IQ does not diminish the black-white disparity in welfare recipiency



Children Living in Poverty

In 1992, 47 percent of black children under the age of 18 were living under the poverty line. This extraordinarily high figure was nearly as bad for Latino children, with 40 percent under the poverty line. For

Controlling for IQ cuts the black-white disparity in low-birth-weight babies by half



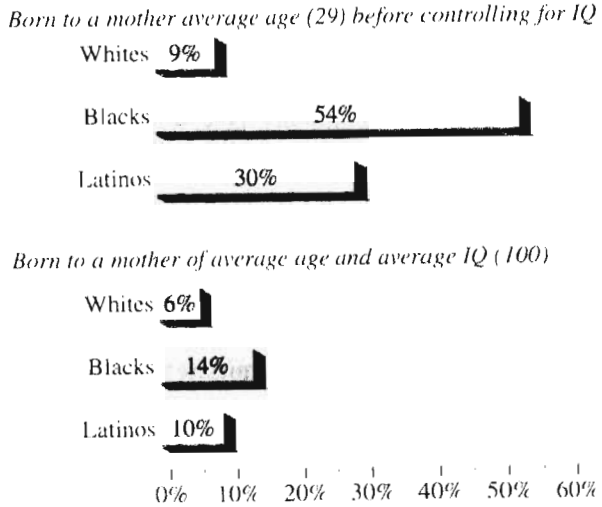
non-Latino whites, the proportion was about 14 percent.[31] In approaching this issue through the NLSY, we concentrated on very young children, identifying those who had lived in families with incomes below the poverty line throughout their first three years of life. The results, before and after controlling for IQ, are shown in the upper figure on the next page. Given a mother with average IQ and average age, the probability that a black child in the NLSY lived in poverty throughout his first three years was only 14 percent, compared to an uncorrected black average of 54 percent. The reduction for Latinos, from 30 percent to 10 percent, was also large. The proportional difference between minorities and whites remains large.[32]

The Child's Home Environment

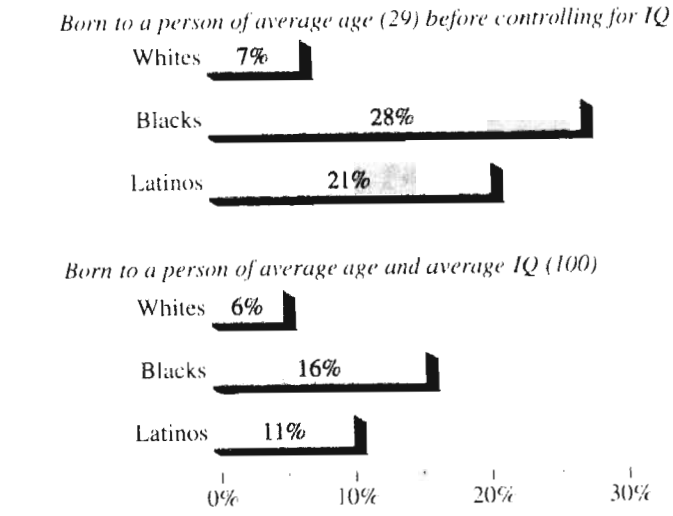
We now turn to the measure of the home environment, the HOME index, described in Chapter 10. For this and the several other indexes used in the assessment of NLSY children, we follow our practice in Chapter 10, focusing on children at the bottom of each scale, with bottom operationally defined as being in the bottom 10 percent.

The disparities in low HOME index scores between whites and minorities were large (see the lower figure on the next page). It was

Controlling for IQ reduces the discrepancy between minority and white children living in poverty by more than 80 percent



Controlling for IQ cuts the ethnic disparity in home environments by half for blacks and more than 60 percent for Latinos



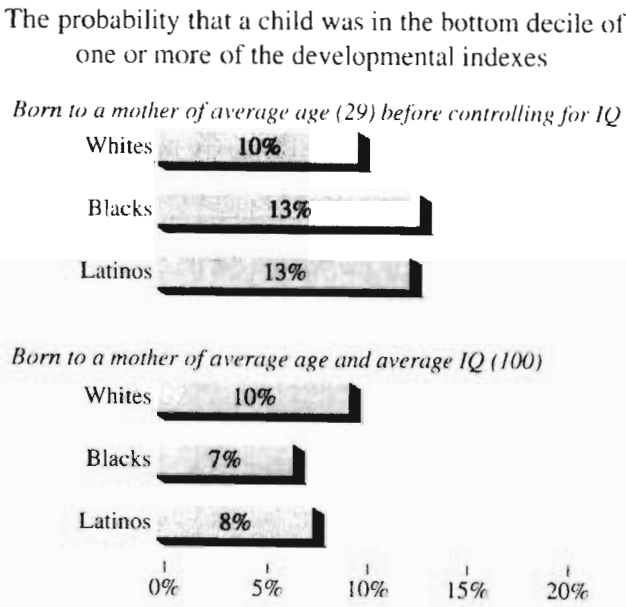
substantially reduced, by 52 percent for blacks and 64 percent for Latinos, but the black rate remained well over twice the white rate and the Latino rate close to twice the white rate.[33]

Indicators of the Child's Development

Details on the several indexes of child development presented in Chapter 10 may be found in Appendix 6. We summarize them here by showing the proportion of children who showed up in the bottom decile of *any* of the indexes.

As the figure below shows, the ethnic disparities were not great even before controlling for IQ, and they more than disappeared after controlling for IQ. We leave this finding as it stands, but it obviously raises

Controlling for IQ more than eliminates overall ethnic differences in the developmental indexes



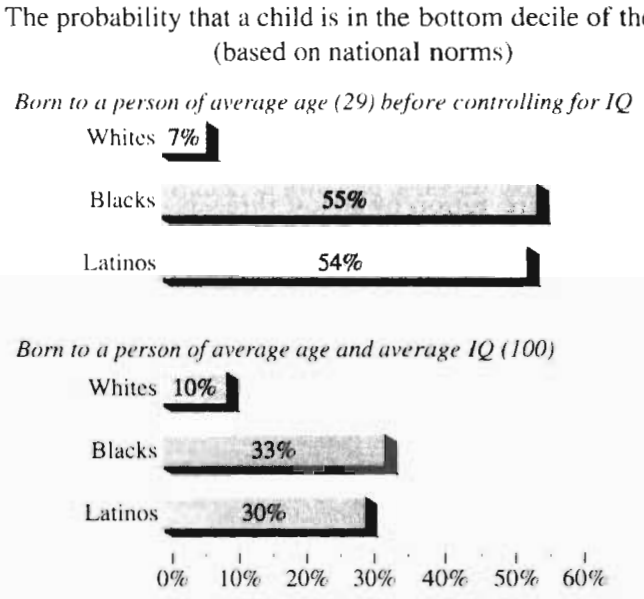
a number of issues. Since these indexes are based primarily on the mothers' assessments, it is possible that women of different ethnic groups use different reference points (as has been found on ethnic differences in other self-report measures).[34] It is also possible that the results may be

taken at face value and that minority children with mothers of similar age and IQ do better on developmental measures than white children, which could have important implications. Filling out this story lies beyond the scope of our work, but we hope it will be taken up by others.[35]

Intellectual Development

We will discuss this topic in more detail in Chapter 15 as we present the effects of differential fertility across ethnic groups. The figure below shows the children of NLSY mothers who scored in the bottom decile on the Peabody Picture Vocabulary Test (PPVT) *based on national norms*, not the bottom decile of children within the NLSY sample. Control-

Based on national norms, high percentages of minority children remain in the bottom decile of IQ after controlling for the mother's IQ



ling for the mother's IQ reduces ethnic disparities considerably while once again leaving a broad gap with whites—in this case, roughly an equal gap between whites and both blacks and Latinos. The point that stands out, however, is the extremely large proportion of minority NLSY children who were in the bottom decile of the PPVT—in effect, mean-

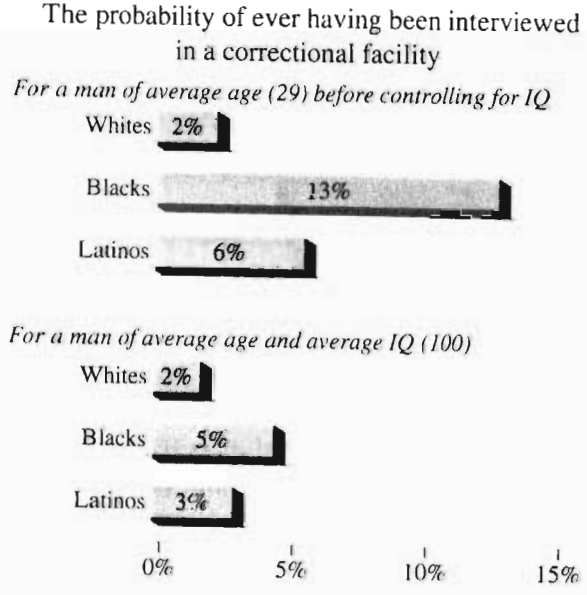
ing an IQ of 80 or lower—when national norms are applied. This is one of the reasons for concern about fertility that we discuss in Chapter 15.

Crime

In the national data, blacks are about 3.8 times more likely to be arrested relative to their numbers in the general population than whites (Latino and non-Latino whites are combined in this comparison).[36] Blacks are also disproportionately the victims of crime, especially violent crime. The ratio of black homicide victims to white as of 1990 was 7.7 to 1 for men and 4.8 to 1 for women.[37]

Sociologist Robert Gordon has analyzed black-white differences in crime and concluded that virtually all of the difference in the prevalence of black and white juvenile delinquents is explained by the IQ difference, independent of the effect of socioeconomic status.[38] The only reliable indicator from the NLSY that lets us compare criminal behavior across ethnic groups is the percentage of young men who were ever interviewed while incarcerated.[39] The figure below shows the standard comparison, before and after controlling for cognitive ability. Among white men, the proportion interviewed in a correctional facility after

Controlling for IQ cuts the black-white difference in incarceration by almost three-quarters

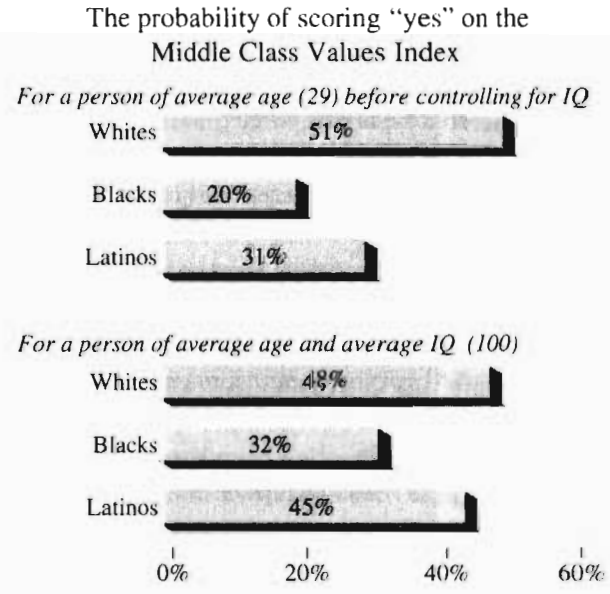


controlling for age was 2.4 percent; among black men, it was 13.1 percent. This large black-white difference was reduced by almost three-quarters when IQ was taken into account. The relationship of cognitive ability to criminal behavior among whites and blacks appears to be similar.[40] As in the case of other indicators, we are left with a nontrivial black-white difference even after controlling for IQ, but the magnitude of the difference shrinks dramatically.

The Middle Class Values Index

We concluded Part II with the Middle Class Values (MCV) Index, which scores a "yes" for those young adults in the NLSY who were still married to their first spouse, in the labor force if they were men, bearing their children within marriage if they were women, and staying out of jail, and scores a "no" for those who failed any of those criteria. Never-married people who met all the other criteria were excluded. The MCV Index, as unsophisticated as it is, has a serious purpose: It captures a set of behaviors that together typify (though obviously do not define) "solid citizens." Having many such citizens is important for the creation of peaceful and prosperous communities. The figure below shows what

The MCV Index, before and after controlling for IQ



happens when the MCV Index is applied to different ethnic groups, first adjusting only for age and then controlling for IQ as well. (In interpreting these data, bear in mind that large numbers of people of all ethnicities who did not score "yes" are leading virtuous and productive lives.) The ethnic disparities remain instructive. Before controlling for IQ, large disparities separate both Latinos and blacks from whites. But given average IQ, the Latino-white difference shrank to three percentage points. The difference between blacks and whites and Latinos remains substantial, though only about half as large as it was before controlling for IQ. This outcome is not surprising, given what we have already shown about ethnic differences on the indicators that go into the MCV Index, but it nonetheless points in a summary fashion to a continuing divergence between blacks and the rest of the American population in some basic social and economic behaviors.

A MORE REALISTIC VIEW OF ETHNIC DISPARITIES IN SOCIAL AND ECONOMIC INDICATORS

If one of America's goals is to rid itself of racism and institutional discrimination, then we should welcome the finding that a Latino and white of similar cognitive ability have the same chances of getting a bachelor's degree and working in a white-collar job. A black with the same cognitive ability has an even higher chance than either the Latino or white of having those good things happen. A Latino, black, and white of similar cognitive ability **earn annual wages** within a few hundred dollars of one another.

Some ethnic differences are not washed away by controlling either for intelligence or for any other variables that we examined. We leave those remaining differences unexplained and look forward to learning from our colleagues where the explanations lie. We urge only that they explore those explanations after they have extracted the role—often the large role—that cognitive ability plays.

Similarly, the evidence presented here should give everyone who writes and talks about ethnic inequalities reason to avoid flamboyant rhetoric about ethnic oppression. Racial and ethnic differences in this country are seen in a new light when cognitive ability is added to the picture. Awareness of these relationships is an essential first step in trying to construct an equitable America.

Chapter 15

The Demography of Intelligence

When people die, they are not replaced one for one by babies who will develop identical IQs. If the new babies grow up to have systematically higher or lower IQs than the people who die, the national distribution of intelligence changes. Mounting evidence indicates that demographic trends are exerting downward pressure on the distribution of cognitive ability in the United States and that the pressures are strong enough to have social consequences.

Throughout the West, modernization has brought falling birth rates. The rates fall faster for educated women than the uneducated. Because education is so closely linked with cognitive ability, this tends to produce a dysgenic effect, or a downward shift in the ability distribution. Furthermore, education leads women to have their babies later—which alone also produces additional dysgenic pressures.

The professional consensus is that the United States has experienced dysgenic pressures throughout either most of the century (the optimists) or all of the century (the pessimists). Women of all races and ethnic groups follow this pattern in similar fashion. There is some evidence that blacks and Latinos are experiencing even more severe dysgenic pressures than whites, which could lead to further divergence between whites and other groups in future generations.

The rules that currently govern immigration provide the other major source of dysgenic pressure. It appears that the mean IQ of immigrants in the 1980s works out to about 95. The low IQ may not be a problem; in the past, immigrants have sometimes shown large increases on such measures. But other evidence indicates that the self-selection process that used to attract the classic American immigrant—brave, hard working, imaginative, self-starting, and often of high IQ—has been changing, and with it the nature of some of the immigrant population.

Putting the pieces together, something worth worrying about is happening to the cognitive capital of the country. Improved health, education, and childhood interventions may hide the demographic effects, but that does not reduce

their importance. Whatever good things we can accomplish with changes in the environment would be that much more effective if they did not have to fight a demographic head wind.

So far, we have been treating the distribution of intelligence as a fixed entity. But as the population replenishes itself from generation to generation by birth and immigration, the people who pass from the scene are not going to be replaced, one for one, by other people with the same IQ scores. This is what we mean by the demography of intelligence. The question is not whether demographic processes in and of themselves can have an impact on the distribution of scores—that much is certain—but what and how big the impact is, compared to all the other forces pushing the distribution around. Mounting evidence indicates that demographic trends are exerting downward pressures on the distribution of cognitive ability in the United States and that the pressures are strong enough to have social consequences.

We will refer to this downward pressure as *dysgenesis*, borrowing a term from population biology. However, it is important once again not to be sidetracked by the role of genes versus the role of environment. Children resemble their parents in IQ, for whatever reason, and immigrants and their descendants may not duplicate the distribution of America's resident cognitive ability distribution. If women with low scores are reproducing more rapidly than women with high scores, the distribution of scores will, other things equal, decline, no matter whether the women with the low scores came by them through nature or nurture.[1] More generally, if population growth varies across the range of IQ scores, the next generation will have a different distribution of scores.[2] In trying to foresee changes in American life, what matters is *how* the distribution of intelligence is changing, more than *why*.

Our exploration of this issue will proceed in three stages. First, we will describe the state of knowledge about when and why dysgenesis occurs. Next, we will look at the present state of affairs regarding differential birth rates, differential age of childbearing, and immigration. Finally, we will summarize the shape of the future as best we can discern it and describe the magnitude of the stakes involved.

THE EVOLVING UNDERSTANDING OF DYSGENESIS

The understanding of dysgenesis has been a contest between pessimists and optimists. For many decades when people first began to think systematically about intelligence and reproduction in the late nineteenth century, all was pessimism. The fertility rate in England began to fall in the 1870s, and it did not take long for early students of demography to notice that fertility was declining most markedly at the upper levels of social status, where the people were presumed to be smarter.[3] The larger families were turning up disproportionately in the lower classes. Darwin himself had noted that even within the lower classes, the smaller families had the brighter, the more "prudent," people in them.

All that was needed to conclude that this pattern of reproduction was bad news for the genetic legacy was arithmetic, argued the British scholars around the turn of the twentieth century who wanted to raise the intelligence of the population through a new science that they called eugenics.[4] Their influence crossed the ocean to the United States, where the flood of immigrants from Russia, eastern Europe, and the Mediterranean raised a similar concern. Were those huddled masses bringing to our shores a biological inheritance inconsistent with the American way of life? Some American eugenicists thought so, and they said as much to the Congress when it enacted the Immigration Act of 1924, as we described in the Introduction.[5] Then came scientific enlightenment—the immigrants did not seem to be harming America's genetic legacy a bit—followed by the terrors of nazism and its perversion of eugenics that effectively wiped the idea from public discourse in the West. But at bottom, the Victorian eugenicists and their successors had detected a demographic pattern that seems to arise with great (though not universal) consistency around the world.

For this story, let us turn first to a phenomenon about which there is no serious controversy, the *demographic transition*. Throughout the world, the premodern period is characterized by a balance between high death rates and high birth rates in which the population remains more or less constant. Then modernization brings better hygiene, nutrition, and medicine, and death rates begin to fall. In the early phases of modernization, birth rates remain at their traditional levels, sustained by deeply embedded cultural and social traditions that encourage big fam-

ilies, and population grows swiftly. But culture and tradition eventually give way to the attractions of smaller families and the practical fact that when fewer children die, fewer children need to be born to achieve the same eventual state of affairs. Intrinsic birth rates begin to decline, and eventually the population reaches a slow- or no-growth state.[6]

The falling birth rate is a well known and widely studied feature of the demographic transition. What is less well known, but seems to be true among Western cultures that have passed through the demographic transition, is that declines in lifetime fertility occur disproportionately among educated women and women of higher social status (we will refer to such women as "privileged"), just as the Victorians thought.[7]

Why? One reason is that privileged women lose their reproductive advantage. In premodern times, privileged young women were better nourished, better rested, and had better medical care than the unprivileged. They married earlier and suffered fewer marital disruptions.[8] The net result was that, on average, they ended up with more surviving children than did unprivileged women. As modernization proceeds, these advantages narrow. Another reason is that modern societies provide greater opportunities for privileged women to be something other than full-time mothers. Marriage and reproduction are often deferred for education, for those women who have access to it. On the average, they spend more of their reproductive years in school because they do well in school, because their families support their schooling, or both. Negative correlations between fertility and educational status are likely to be the result.

Even after the school years, motherhood imposes greater cost in lost opportunities on a privileged woman than on an unprivileged one in the contemporary West.[9] A child complicates having a career, and may make a career impossible. Ironically, even monetary costs work against motherhood among privileged women. By our definition, privileged women have more money than deprived women, but for the privileged woman, a child entails expenses that can strain even a high income—from child care for the infant to the cost of moving to an expensive suburb that has a good school system when the child gets older. In planning for a baby—and privileged women tend to plan their babies carefully—such costs are not considered optional but what *must* be spent to raise a child properly. The cost of children is one more reason that privileged women bear few children and postpone the ones they do bear.[10]

Meanwhile, children are likely to impose few opportunity costs on a very poor woman; a "career" is not usually seen as a realistic option. Children continue to have the same attractions that have always led young women to find motherhood intrinsically rewarding. And for women near the poverty line in most countries in the contemporary West, a baby is either free or even profitable, depending on the specific terms of the welfare system in her country.

The Demographic Transition Elsewhere

The generalizations in the text may be stated with confidence about most communities in the West. Elsewhere, there is still much to be learned. Japan has passed through the demographic transition in that overall fertility has dropped, but reproduction has not shifted as markedly toward the lower end of the scale of privilege as in the Western democracies.[11] The reason may be that in Japan, as in other East Asian societies, social obligations that encourage childbearing among the educated may take precedence over the individualistic motives that might otherwise compete with parenthood. Similar considerations may apply to Islamic communities as well, where the demographic transition has been weak. The Mormons offer an American example of a weak demographic transition.[12] An account of the patterns of reproduction must consider cultural, personal, religious, and familial factors, as well as the more obvious social variables, such as the rising levels of education, women's employment, and public health.[13]

Whatever the reasons and whatever the variations from community to community, the reality of the demographic transition in the modern West is indisputable and so, it would seem, is the implication. If reproductive rates are correlated with income and educational levels, which are themselves correlated with intelligence, people with lower intelligence would presumably be outreproducing people with higher intelligence and thereby producing a dysgenic effect.[14] Can we find evidence that dysgenesis is actually happening?

The early studies from the United States, England, France, and Greece all seemed to confirm the reality of dysgenesis.[15] In the 1930s, the eminent psychometrician Raymond Cattell was predicting a loss of 1.0 to 1.5 IQ points per decade,[16] while others were publishing estimated losses of 2 to 4 IQ points per generation.[17] In 1951, another scholar gloomily predicted that "if this trend continues for less than a century,

England and America will be well on the way to becoming nations of near half-wits."[18] The main source of their pessimism was that the average IQ in large families was lower than in smaller families.

Then came a period of optimism. Its harbinger was Frederick Osborn's Eugenic Hypothesis, first stated in 1940, which foresaw a eugenic effect arising from greater equality of social and economic goods and wider availability of birth control.[19] In the late 1940s, data began to come in that seemed to confirm this more sanguine view. Surveys in Scotland found that Scottish school children were getting higher IQs, not lower ones, despite the familiar negative relationship between family size and IQ.[20] Examining this and other new studies, Cattell reconsidered his position, concluding that past estimates might not have adequately investigated the relationship between intelligence and marriage rates, which could have skewed their results.[21]

The new optimism got a boost in 1962 with the publication of "Intelligence and Family Size: A Paradox Resolved," in which the authors, using a large Minnesota sample, showed how it was possible to have both a negative relationship between IQ and family size and, at the same time, to find no dysgenic pattern for IQ.[22] The people who had no children, and whose fertilities were thus omitted from the earlier statistics, the authors suggested, came disproportionately from the lower IQ portion of the population. From the early 1960s through 1980, a series of studies were published showing the same radically changed picture: slowly rising or almost stable intelligence from generation to generation, despite the lower average IQs in the larger families.[23]

The optimism proved to be ephemeral. As scholars examined new data and reexamined the original analyses, they found that the optimistic results turned on factors that were ill understood or ignored at the time the studies were published. First, comparisons between successive generations tested with the same instrument (as in the Scottish studies) were contaminated by the Flynn effect, whereby IQ scores (though not necessarily cognitive ability itself) rise secularly over time (see Chapter 13). Second, the samples used in the most-cited optimistic studies published in the 1960s and 1970s were unrepresentative of the national population. Most of them came from nearly all-white populations of states in the upper Midwest.[24] Two of the important studies published during this period were difficult to interpret because they were based not only on whites but on males (estimating fertility among males poses numerous problems, and male fertility can be quite different from female fertility) and on samples that were restricted to the upper half of the ability distribution, thereby missing what was going on in the lower half.[25]

Apart from these technical problems, however, another feature of the studies yielding optimistic results in the 1960s and 1970s limited their applicability: They were based on the parents of the baby boomers, the children born between 1945 and about 1960. In 1982, demographer Daniel Vining, Jr., opened a new phase of the debate with the publication of his cautiously titled article, "On the Possibility of the Reemergence of a Dysgenic Trend with Respect to Intelligence in American Fertility Differentials."[26] Vining presented data from the National Longitudinal Survey cohorts selected in 1966 and 1968 (the predecessors of the much larger 1979 NLSY sample that we have used so extensively) supporting his hypothesis that people with higher intelligence tend to have fertility rates as high as or higher than anyone else's *in periods of rising fertility* but that in periods of falling birth rates, they tend to have lower fertility rates. The American fertility rate had been falling without a break since the late 1950s, as the baby boom subsided, and Vining suspected that dysgenesis was again underway.

Then two researchers from the University of Texas, Marian Van Court and Frank Bean, finding no evidence for any respite during the baby boom in a nationally representative sample, determined that the childless members of the sample were not disproportionately low IQ at all; on the contrary, they had slightly higher IQs than people with children. Van Court and Bean concluded that the United States had been experiencing an unbroken dysgenic effect since the early years of the century.[27]

Since then, all the news has been bad. Another study of the upper Midwest looked at the fertilities in the mid-1980s of a nearly all-white sample of people in Wisconsin who had been high school seniors as of 1957 and found a dysgenic effect corresponding to about 0.8 IQ point per generation.[28] A 1991 study based on a wholly different approach and using the NLSY suggests that 0.8 per generation may be an underestimate.[29] This study estimated the shifting ethnic makeup of the population, given the differing intrinsic birth rates of the various ethnic groups. Since the main ethnic groups differ in average IQ, a shift in America's ethnic makeup implies a change in the overall average IQ. Even disregarding the impact of differential fertility within ethnic groups, the shifting ethnic makeup by itself would lower the average American IQ

by 0.8 point per generation. Since the differential fertility within those ethnic groups is lowering the average score for each group itself (as we show later in the chapter), the 0.8 estimate is a lower bound of the overall population change.

To summarize, there is still uncertainty about whether the United States experienced a brief eugenic interlude after World War II. Van Court and Bean conclude it has been all downhill since the early part of the twentieth century; other researchers are unsure.[30] There is also uncertainty deriving from the Flynn effect. James Flynn has by now convinced everyone that IQ scores rise over time, more or less everywhere they are studied, but there remains little agreement about what that means. For those who believe that the increase in scores represents authentic gains in cognitive ability, the dysgenic effects may be largely swamped by overall gains in the general environment. For those who believe that the increases in scores are primarily due to increased test sophistication without affecting *g*, the Flynn effect is merely a statistical complication that must be taken into account whenever comparing IQ scores from different points in time or across different cultures.

But within the scholarly community, there is little doubt about differential fertility or about whether it is exerting downward pressure on cognitive ability. Further, the scholarly debate of the last fifty years has progressed: The margin of error has narrowed. Scientific progress has helped clarify the dysgenic effects without yet producing a precise calibration of exactly how much the distribution of cognitive ability is declining. This leads to our next topic, the current state of affairs.

DYSGENIC PRESSURES IN AMERICA IN THE EARLY 1990S

Foretelling the future about fertility is a hazardous business, and foretelling it in terms of IQ points per generation is more hazardous still. The unknowns are too many. Will the ranks of career women continue to expand? Or might our granddaughters lead a revival of the traditional family? How will the environmental aspects of cognitive development change (judging from what has happened to SAT scores, it could be for worse as well as better)?[31] Will the Flynn effect continue? Even if it does, what does it mean? No one has any idea how these countervailing forces might play out.

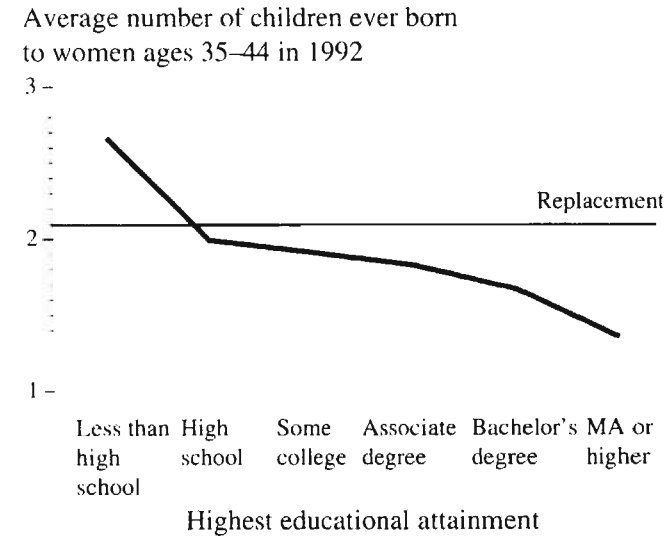
For all these reasons, we do not put much confidence in any specific predictions about what will happen to IQ scores decades from now. But

we can say with considerable confidence what is happening right now, and the news is worrisome.[32] There are three major factors to take into account: the number of children born to women at various IQ levels, the age at which they have them, and the cognitive ability of immigrants.

Cognitive Ability and Number of Children

Demographers often take a lifetime fertility of about 2.1 births as the dividing line between having enough children to replenish the parent generation and having too few.[33] Bear that in mind while examining the figure below showing the "completed fertility"—all the babies they have ever had—of American women who had virtually completed their childbearing years in 1992, broken down by their educational attain-

The higher the education, the fewer the babies



Source: Bachu 1993, Table 2.

ment. Overall, college graduates had 1.56 children, one child less than the average for women without a high school diploma. Let us consider the ratio of the two fertilities as a rough index of the degree to which fertility is tipped one way or the other with regard to education. A ratio greater than 1.0 says the tip is toward the lower educational levels. The actual ratio is 1.71, which can be read as 71 percent more births among high school dropouts than among women who graduated from

college. At least since the 1950s, the ratio in the United States has been between 1.5 and 1.85.[34]

What does this mean for IQ? We may compute an estimate by using what we know about the mean IQs of the NLSY women who reached various levels of education. Overall, these most recent data on American fertility (based on women ages 35 to 44 in 1992, when the survey was taken) implies that the overall average IQ of American mothers was a little less than 98.[35] This is consistent with the analyses of American fertility that suggest a decline of at least 0.8 point per generation.

This estimate is strengthened by using an altogether different slice of the national picture, based on the birth statistics for virtually all babies born in the United States in a given year, using the data compiled in *Vital Statistics* by the National Center for Health Statistics (NCHS). The most recent data available as we write, for 1991, provide modestly good news: The proportions of children born to better-educated women—and therefore higher-IQ women, on average—have been going up in the last decade. The proportion of babies born to women with sixteen or more years of school (usually indicating a college degree or better) rose from 4.8 percent in 1982 to 5.9 percent in 1991. The proportion of babies born to women with something more than a high school diploma rose from 34.2 percent to 38.2 percent—small changes but in the right direction. The bad news is that the proportion of children born to women with less than a high school education has risen slightly over the last decade, from 22 percent to 24 percent, attributable to an especially steep rise among white women since 1986.

In trying to use the educational information in *Vital Statistics* to estimate the mean IQ of mothers in 1991, it is essential to anticipate the eventual educational attainment of women who had babies while they were still of school age. After doing so, as described in the note,[36] the estimated average IQ of women who gave birth in 1991 was 98. Considering that census data and the *Vital Statistics* data come from different sources and take two different slices of the picture, the similarities are remarkable. The conclusion in both cases is that differential fertility is exerting downward pressure on IQ. At the end of the chapter, we show how much impact changes of this size may have on American society.

What of evidence about dysgenesis in the NLSY itself? As of 1990, the women of the NLSY, ages 25 to 33, still had many childbearing years ahead. Presumably the new births will be weighted toward more highly educated women with higher IQs. Therefore the current mean IQ of the mothers of the NLSY children will rise. Currently, however, it stands at less than 96.[37]

Cognitive Ability and Mother's Age

Population growth depends not just on the total number of children women have but on how old they are when they have them. The effect is dysgenic when a low-IQ group has babies at a younger age than a high-IQ group, even if the total number of children born in each group eventually is the same. Because this conclusion may not be intuitively obvious, think of a simplified example. Suppose that over several generations Group A and Group B average exactly the same number of children, but all the women in Group A always have their babies on their twentieth birthday and all the women in Group B have their children on their thirtieth birthday. The women in group A will produce three generations of children to every two produced by Group B. Something like this has been happening in the United States, as women of lower intelligence have babies younger than women of higher intelligence. The NLSY once again becomes the best source, because it provides age and education along with IQ scores.

The oldest women in the NLSY had reached the age of 33 in 1990, by which time the great majority of first births have taken place.[38] We can thus get a good idea of how age at first birth or average age at all births varies with cognitive ability, recognizing that a small minority of women, mostly highly educated and at the upper portion of the IQ distribution, will eventually nudge those results slightly.[39] We will not try to compensate for these missing data, because the brunt of our argument is that the timing of births has a dysgenic effect. The biases in the data, reported in the table below for women who were 30 or older, tend to *understate* the true magnitude of age differences by IQ.[40]

The average age at first birth was a few months past the 23d birthday. This varied widely, however, by cognitive class. Combining all the ethnic groups in the NLSY, women in the bottom 5 percent of intelligence have their first baby more than seven years younger than women in the top 5 percent. When these figures are computed for the average age for all births (not just the first birth, as in the table), women in the bottom 5 percent have their babies (or all of the ones they have had by their early thirties) at an average of five and a half years earlier. This gap will grow, not shrink, as the NLSY women complete their child-

Age at Childbearing	
Cognitive Class	Mean Age at First Birth
I Very bright	27.2
II Bright	25.5
III Normal	23.4
IV Dull	21.0
V Very dull	19.8
Overall average	23.1

bearing years. Even using the current figures, women in the bottom 5 percent of the IQ distribution will have about five generations for every four generations of the top 5 percent. A large and often ignored dysgenic pressure from differences in age at birth is at work.

ETHNIC DIFFERENCES IN FERTILITY

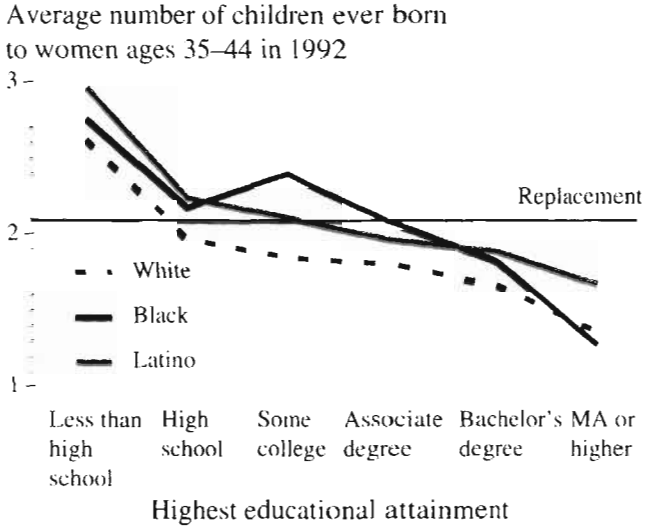
Whatever the ethnic differences in cognitive ability are now, they may change if ethnic groups differ in the extent to which their fertilities are dysgenic or not. In the long run, the vector of demographic trends in intelligence—converging or diverging across ethnic groups—could profoundly affect America's future.

Fertility Rates by Ethnicity

In the 1992 analysis of American fertility using the Current Population Survey (CPS) to which we referred for a national estimate of dysgenesis, women ages 35 to 44 had given birth to an average of 1.94 children: 1.89 for white women, 2.23 for black women, and 2.47 for Latino women.[41] Similar or larger ethnic differences have characterized fertility data for as long as such data have been available, and they have led to a widespread belief that something in black and Latino culture leads them to have larger numbers of children than whites do. We do not dispute that culture can influence family size—the Catholic tradition among Latinos may foster high overall birth rates, for example—but the trends for the three groups are similar once the role of educational level is held constant. Consider the figure below, based on the 1992 CPS study of fertility, again using women in the 35 to 44 age group who have nearly completed their childbearing years.

This figure represents almost total lifetime fertilities, and it tells a simple story. In all three groups of women, more education means lower

Fertility falls as educational level rises in similar fashion for black, white, and Latino women



Source: Bachu 1993, Table 2.

fertility. The two minority groups have higher overall fertility, but not by much when education is taken into account. Given the known relationship between IQ and educational attainment, fertility is also falling with rising IQ for each ethnic group. Indeed, if one tries to look into this relationship by assigning IQ equivalents based on the relationship of educational attainment and cognitive ability in the NLSY, it appears that after equating for IQ, black women at a given IQ level may have lower fertility rates than either white or Latino women.[42]

May we then conclude that whites, blacks, and Latinos are on a downhill slope together, neither converging nor diverging in IQ? No, for two reasons. The first is that each ethnic group has different proportions of women at different IQ levels. For example, black women with IQs of 90 and below probably have a fertility rate no higher than that of white women with the same IQs. But even so, only 15 percent of white women in the NLSY fall in the 90-and-below range, compared with 52 percent of black women. The relatively higher fertility rates of women with low IQs therefore have a larger impact on the black population as a whole than on the white. Even if two ethnic groups have

equal birth *rates* at a given IQ, one group may have a larger *proportion* of its babies than the other at that IQ. This is illustrated by the next table, which uses the NLSY to see what the next generation looks like so far, when the women of the NLSY had reached the ages of 25 to 33.

The Next Generation So Far, for Three Ethnic Groups in the NLSY

	As of 1990, the Percentage of Children Born to Women with:	
	IQs Less than 90	IQs Higher than 110
Whites	19	22
Blacks	69	2
Latinos	64	2
National population	33	15

Deciding whether the discrepancy between whites and both blacks and Latinos implies an increasing gap in cognitive ability would require extensive modeling involving many assumptions. On the face of it, the discrepancies are so dramatically large that the probability of further divergence seems substantial. Furthermore, insofar as whites have the highest proportion of college-educated women who are delaying childbirth, the gap between whites and the other minorities is more likely to increase than to diminish as the NLSY women complete their childbearing years.

Delayed Childbearing Across Ethnic Groups

The ages of the women in the NLSY ranged from 25 to 33 as of our last observation of them, meaning that more children remain to be born, a disproportionate number of whom will be born to women at the higher levels of cognitive ability. This prevented us from using the NLSY to make any estimate of the overall dysgenic effect. But the remaining childbearing years are less of a problem when comparing differentials among ethnic groups. The evidence suggests that better-educated women of all ethnic groups postpone childbearing, to similar degrees.[43] Based on this experience, the differentials as they exist among ethnic groups in the 25–33 age cohort will probably remain about the same through the rest of the NLSY women's childbearing years, though the means for each group will probably rise somewhat. Insofar as an artifact exists, it presumably acts to understate the eventual mean for whites, since whites have the largest proportion of women with college and advanced degrees, and therefore presumably the largest group of high-IQ women delaying childbirth.

Age at Birth by Ethnicity

The second potential source of divergence between ethnic groups lies in the ages at which women are having their children. For NLSY mothers, the average ages when they gave birth as of 1990 (when they were ages 25 to 33) were 24.3 for whites, 23.2 for Latinos, and 22.3 for blacks. Once again, these gaps may be expected to increase as the NLSY women complete their childbearing years. If these age differentials persist over time (and they have been found for as long as the statistics for the different groups have been available), they will produce increasing divergence in the mean cognitive ability of successive generations for the three groups. Evidence from other sources confirms the NLSY, finding an increasing gap between white and nonwhite (primarily black) women in when their reproductive lives begin, and also in their likelihood of remaining childless.[44]

Mothers and Children in the NLSY

As we leave this topic, we may see how these various forces have played out so far in the successive generations of the NLSY. The NLSY has been testing the children of its original subjects, which should eventually provide one of the cleanest estimates of dysgenic trends within ethnic groups. The version of an IQ measure that the NLSY uses is the Peabody Picture Vocabulary Test (PPVT), a highly reliable, *g*-loaded test that does not require that the child be able to read. It was normed in 1979 with a national sample of 4,200 children to a mean of 100 and a standard deviation of 15.

If we take the NLSY results at face value, American intelligence is plunging. The mean of the entire sample of NLSY children tested in 1986 and 1988 is only 92, more than half a standard deviation below the national mean. We cannot take these results at face value, however. The NLSY's sampling weights make the results "representative of the children of a nationally representative sample of women" who were of certain age ranges in the years the tests were given—which is subtly but importantly different from being a representative sample of American children.[45] But although it is not possible to interpret the overall children's mean with any confidence, it is possible to compare the children

of women in different ethnic groups. The results for children at least six years old and their mothers, shown in the table below, indicate that the gap between the children is larger than the gap separating the mothers,

Ethnic Differences in Test Scores in Two Generations

Ethnic Comparison	Gap Separating the Mothers in IQ Points	Gap Separating the Children in IQ Points
White-black	13.2	17.5
White-Latino	12.2	14.1

by more than 4 points in the case of blacks and whites, by almost two points in the case of whites and Latinos. There are technical reasons to hedge on any more specific interpretation of these data.[46] We may at least say that the results point in a worrisome direction.

Pulling these different views of the situation together, the data reveal demographic pressures for further ethnic divergence in IQ. We will not hazard a guess about the magnitude of ethnic divergence or its speed. Within another decade, assuming that the NLSY continues its testing program, guesses will not be necessary. When large numbers of the NLSY women approach the end of their childbearing years and their children have been tested after reaching an age when IQ scores are stable, we not only will be able to answer whether and how much ethnic groups diverged for that generation of Americans but be able to pin down answers to many of the other questions about dysgenic effects nationwide.

IMMIGRATION

Immigration is an even older American trip wire for impassioned debate than differential fertility, and the disputes continue to the present day.[49] The reason is not hard to find: America has more people flowing into it than any other country. About half of the world's migrants resettling in new countries are coming to America as we write.[50] The people already living here have always viewed this influx of newcomers with

Regression to the Mean to the Rescue?

Those who dismiss the importance of dysgenic trends have mistakenly latched onto the statistical phenomenon known as regression to the mean as a magic cure-all. The editorial page of the *New York Times*, no less, is on record with an assurance to its readers that because of regression to the mean, each successive generation of children of below-average IQ women will get closer to the average and therefore black and white scores will tend to converge.[47] Alas, it doesn't work that way. The results on the PPVT provide a concrete illustration.

Suppose that we recalculate the gap between the three ethnic groups in two successive generations, this time expressing them in terms of standard deviations based on the mothers' and childrens' own standard deviations, not on their place within the national distribution (as in the preceding table).

Regression to the Mean and Ethnic Differences in Test Scores in Two Generations

Ethnic Comparison	Gap Separating the Mothers in SDs	Gap Separating the Children in SDs
White-black	1.17	1.17
White-Latino	1.05	.93

Calculated in this way and shown in the table above, the gap between white and Latino children has shrunk somewhat compared to the gap separating their mothers. The gap between white and black children has at least grown no larger.[48] Why can we obtain this result and still show a growing gap in IQ points between the ethnic groups? The answer is that "mean" referred to in "regression to the mean" is *the population's own mean*. White children of dull white women will, on average, be closer to the mean for whites in *their* generation than their mothers were in *their* generation. A parallel statement applies to black children of dull black women. But this does not necessarily imply that the IQ scores of black and white children must be closer to each other than their mothers' IQ scores were. It is a slippery concept. Some people find it is helpful to remember that regression to the mean works both ways: If you start with a population of dull children and then find the IQs of their parents, you will find that the parents were closer to the mean (on average) than their children. Regression to the mean is a statistical phenomenon, not a biological one.

complicated reactions ranging from pride to alarm. John Higham and others have traced the crests and troughs of nativism and xenophobia, often laced with open racism, in our history.[51]

Recently the debate over immigration has intensified, as the large influx of immigrants in the 1980s, legal and illegal, has reopened all the old arguments. Those who favor open immigration policies point to the adaptability of earlier immigrant populations and their contribution to America's greatness, and remind us that the dire warnings of earlier anti-immigrationists were usually unfounded.[52] Anti-immigrationists instead emphasize the concentration within some immigrant groups of people who commit crimes, fail to work, drop out of school, and go on public assistance. They see limits in the American capacity for assimilating people from alien cultures and for finding productive work for them.[53]

It seems apparent that there are costs and benefits to any immigration policy and that no extreme view, pro or con, is likely to be correct. Beyond that truism, it is apparent that the normative "American" will undergo at least as large a change in the twenty-first century as he has since the original settlement. The nearly 100 percent of immigrants from northern and western Europe in the original settlement gave way to increasing fractions from Africa and from southern and eastern Europe throughout the nineteenth century, thence to a large majority from Asia and Latin America today. America was remade several times over by its immigrants before, and we trust the process will continue. By 2080, according to a typical estimate, America's population will be less than 50 percent non-Latino white, 15 percent black, 25 percent Latino, and over 10 percent Asian and other.[54] Multiculturalism of some sort is certain. Whether it will be a functioning multiculturalism or an unraveling one is the main question about immigration, and not one we can answer.

Our first objective is simply to bring to people's attention that the question is important. Legal immigration in the 1980s contributed 29 percent of the United States' net population increase, much more than at any earlier period in the postwar era.[55] If illegal immigration could be included, the figure would be significantly higher. Immigration does indeed make a difference to the future of the national distribution of intelligence. It may not make as much difference as births in terms of raw numbers, but there is also this consideration: Whereas policy can have only long-term effects on the cognitive distribution of births, it can have large immediate effects on the nature of the immigrant population.

There are few, if any, other domains where public policy could so directly mold the cognitive shape of things to come. Meanwhile, the nation's political ground rules have yet to accept that the intelligence of immigrants is a legitimate topic for policymakers to think about.

Ethnicity and IQ as They Apply to Immigration

In trying to estimate an envelope of what the effects on the cognitive distribution might be, a useful first step is to assume that immigrants to the United States have the mean IQ that has generally been found among persons of that ethnic group, then apply those numbers to the actual distribution of immigrants by ethnicity. Keeping in mind that we are hoping to do no more than establish a range of possibilities, we will begin by following Richard Lynn's computations based on a review of the international data and assign means of 105 to East Asians, 91 to Pacific populations, 84 to blacks, and 100 to whites.[56] We assign 91 to Latinos. We know of no data for Middle East or South Asian populations that permit even a rough estimate. They and an unclassifiable "other" component in the immigration statistics constitute about 11 percent of immigrants and are omitted from the analysis. The ethnic ancestry of legal immigrants in the 1980s breaks down as follows:[57]

Latino	41%
East and Southeast Asian	21%
Non-Latino white	11%
Black	9%
Filipino	7%
Middle East, South Asian, other	11%

Applying the assigned IQ means to this breakdown, the mean IQ of immigrants in the 1980s works out to about 95—essentially unchanged from the 1960s and the 1970s (when the same procedure yields estimates of 96 and 95 respectively). As the proportion of non-Latino whites dropped from 46 percent of immigrants in the 1960s to 11 percent in the 1990s, the percentage of East and Southeast Asians rose from 6 percent to 21 percent, two counterbalancing trends regarding IQ.

Modifying the estimates of ethnic IQs does not make much difference. Some would argue that the East Asian mean is too high. Suppose we drop it to 100. Some would argue that the Latino mean is too low. Suppose we increase it to 94. We could shift the black estimate up or

down by large amounts without affecting the overall mean very far. Fiddling with the numbers moves the overall estimated mean by only about a point or two for defensible sets of values. The basic statement is that about 57 percent of legal immigrants in the 1980s came from ethnic groups that have scores significantly below the white average, and in consequence the IQ mean for all immigrants is likely to be below 100.

How about the idea that people who are willing to pack up and move to a strange place in search of a better life are self-selected for desirable qualities such as initiative, determination, energy, and perhaps intelligence as well? Given this plausible expectation, why not assume that the mean for immigrants is significantly *higher* than average for their ethnic groups? Here, the NLSY provides a snapshot of the effects on the distribution of intelligence of the people coming across our borders, insofar as we may compare the IQs of those who were born abroad with those who were born in the United States.

Overall, the IQ of NLSY members who were born abroad was .4 standard deviation lower than the mean of those who were born in the United States, putting the average immigrant for this cohort at about the 34th centile of the native-born population. A breakdown of these results by ethnic groups reveals that different groups are making different contributions to this result. White immigrants have scores that put them a bit above the mean for the native-born American population (though somewhat lower than the mean for native-born American whites). Foreign-born blacks score about five IQ points higher than native-born blacks, for reasons we do not know. Latino immigrants have mean scores more than seven points lower than native-born Latinos and more than a standard deviation below the overall national native-born mean. The NLSY gives no information on the large immigrant population from the countries of East Asia and Vietnam, who might be significantly boosting the immigrant mean.

Even considered simply as cognitive test scores, these results must be interpreted very cautiously. Immigrants typically earn higher scores on tests as they become acculturated, even on tests designed to be "culture fair."[58] The extremely large gap between native-born and foreign-born Latino students seems likely to reflect additional effects of poor English. We do not know if this rise with acculturation is enough to counterbalance the overall .4 standard deviation disadvantage of a sample born elsewhere. Nonetheless, keeping all of these qualifications in mind, the kernel of evidence that must also be acknowledged is that Latino and black immigrants are, at least in the short run, putting some downward pressure on the distribution of intelligence.

Self-Selection Past and Present

Many readers will find these results counterintuitive—the concept of the high-achieving immigrant is deeply ingrained in Americans' view of our country—but a few moments reflection, plus some additional data, may make the results more understandable.[59]

Think back to the immigrant at the turn of the century. America was the Land of Opportunity—but that was all. There were no guarantees, no safety nets. One way or another, an immigrant had to make it on his own. Add to that the wrench of tearing himself and family away from a place where his people might have lived for centuries, the terrors of having to learn a new language and culture, often the prospect of working at jobs he had never tried before, a dozen other reasons for apprehension, and the United States had going for it a crackerjack self-selection mechanism for attracting immigrants who were brave, hard-working, imaginative, self-starting—and probably smart. Immigration can still select for those qualities, but it does not have to. Someone who comes here because his cousin offers him a job, a free airplane ticket, and a place to stay is *not* necessarily self-selected for those qualities. On the contrary, immigrating to America can be for that person a much easier option than staying where he is.

Economists have made considerable progress in understanding how the different types of immigration (and all the ones in between) have played out in practice. To begin with, it has been demonstrated beyond much doubt that immigrants as a whole have more steeply rising earnings than American natives of equal age and measured skills and that, after a relatively short adaptation period of ten to fifteen years, immigrants of equal age and education earn as much as natives.[60] Here is empirical support for the proposition that immigrants taken as a whole are indeed self-selected for qualities that lead to economic success, and one might expect cognitive ability to be among them.

But the experience of different immigrants at different times has varied drastically. Economist George Borjas has systematized the conditions under which immigrants will be self-selected from the upper and lower tails of the ability distribution. Suppose, he says, that you are living in a foreign country, considering whether to emigrate to America. Presumably a major consideration is your potential income in the United

States versus your income if you stay put. Borjas proposes that this calculation interacts with a person's earning potential. It makes sense for high-ability people to emigrate when they can reasonably think that they are being underrewarded in their home country, relative to their ability, and that the United States rewards the same level of ability more generously. It makes sense for low-ability people to emigrate when they can reasonably think that the United States not only pays better for the same work but protects them against poor labor market outcomes (in comparison to their birth country) with welfare payments and other entitlements.[61] In other words, the United States may be expected to draw high-ability workers from countries that have more extensive welfare states and less income inequality than the United States (such as Western Europe), and will draw low-ability workers from countries that have less extensive welfare states and higher income inequality (such as the poorer countries of the Third World).

Borjas used census data from 1970 and 1980 to examine the experience of immigrants from forty-one countries. In his analysis, he holds constant the individual immigrant's schooling, age, marital status, health, and the metropolitan area where the immigrant settled. By holding completed schooling constant, Borjas also factored out some of the influence of cognitive ability. But the educational systems in the non-European countries of origin (where we will focus our attention) are much less efficient at identifying talent than the American educational system; many bright immigrants have little formal education. We may think of the unmeasured residual that Borjas did not hold constant as a cluster of personal and cultural qualities, among which is some role for cognitive ability. With this in mind, the Borjas data reveal two important findings.

In the 1960s and 1970s, America became much more of a welfare state. Consistent with that, the earnings potential of the Latino immigrant group fell substantially from 1955 through 1980. Among the non-European countries, three of the four steepest declines in earnings potential were among immigrant groups from Colombia, the Dominican Republic, and Mexico, all large contributors to the Latin American immigrant population. Many of the other countries were not included in Borjas's forty-one countries, so we do not know whether they followed the same pattern. Among the Latin American and Latino-Caribbean nations, only the immigrant groups from Cuba, Brazil, and Panama had

improving potential by Borjas's measures. The 1980 Mexican wave of immigrants had an earnings potential about 15 percent lower than the wave that arrived in 1955. For the Dominican Republic and Colombia, the earnings potential of the 1980 wave was more than 30 percent lower than those who came in 1955, a decline that remains *after* holding education, marital status, age, and location constant.[62]

Similarly, the success of the early waves of West Indian blacks seems unlikely to repeat itself. In his book *Ethnic America*, Thomas Sowell described the successes of West Indian black immigrants, starting from early in the twentieth century, noting among other things that, by 1969, second-generation West Indian blacks had a higher mean income than whites.[63] His account has since become widely cited as evidence for everything from the inherent equality of black and white earning ability to the merits of unrestricted immigration. The Borjas data include three of the major contributors of black immigrants from that region: Jamaica, Haiti, and Trinidad/Tobago. The earnings potential of the immigrant cohorts from these countries in 1970 ranged from 31 to 34 percent less than American natives (after holding education, marital status, age, and location constant).[64] In 1980, the earnings potential from the most recent immigrant waves from these three countries ranged from 26 to 52 percent less than American natives. Immigrants from all three countries are on an extremely slow route to income equality, with Jamaicans and Haitians lagging behind everyone except the lowest-ranking Latin American countries. Borjas's study did not include immigrants from any countries in sub-Saharan Africa.

The results for European immigrants were also consistent with the theory. Borjas's overall appraisal of the data is worth quoting in full:

> The empirical analysis of the earnings of immigrants from 41 different countries using the 1970 and 1980 censuses shows that there are strong country-specific fixed effects in the (labor market) quality of foreign-born persons. In particular, persons from Western European countries do quite well in the United States, and their cohorts have exhibited a general *increase* in earnings (relative to their measured skills) over the postwar period. On the other hand, persons from less developed countries do not perform well in the U.S. labor market and their cohorts have exhibited a general *decrease* in earnings (relative to their measured skills) over the postwar period.[65]

These analyses should not obscure the energy and ability that we often see among immigrants, whether they are staffing the checkout counter at the corner convenience store or teaching classes in the nation's most advanced research centers. The observations of everyday life and the statistical generalizations we have just presented can both be true at the same time, however.

HOW IMPORTANT IS DYSGENIC PRESSURE?

Putting the pieces together—higher fertility and a faster generational cycle among the less intelligent and an immigrant population that is probably somewhat below the native-born average—the case is strong that something worth worrying about is happening to the cognitive capital of the country. How big is the effect? If we were to try to put it in terms of IQ points per generation, the usual metric for such analyses, it would be nearly impossible to make the total come out to less than one point per generation. It might be twice that. But we hope we have emphasized the complications enough to show why such estimates are only marginally useful. Even if an estimate is realistic regarding the current situation, it is impossible to predict how long it may be correct or when and how it may change. It may shrink or grow or remain stable. Demographers disagree about many things, but not that the further into the future we try to look, the more likely our forecasts are to be wrong.

This leads to the last issue that must be considered before it is fruitful to talk about specific demographic policies. So what if the mean IQ is dropping by a point or two per generation? One reason to worry is that the drop may be enlarging ethnic differences in cognitive ability at a time when the nation badly needs narrowing differences. Another reason to worry is that when the mean shifts a little, the size of the tails of the distribution changes a lot. For example, assuming a normal distribution, a three-point drop at the average would reduce the proportion of the population with IQs above 120 (currently the top decile) by 31 percent and the proportion with IQs above 135 (currently the top 1 percent) by 42 percent. The proportion of the population with IQs below 80 (currently the bottom decile) would rise by 41 percent and the proportion with IQs below 65 (currently the bottom 1 percent) would rise by 68 percent. Given the predictive power of IQ scores, particularly in the extremes of the distribution, changes this large would profoundly

alter many aspects of American life, none that we can think of to the good.

Suppose we select a subsample of the NLSY, different in only one respect from the complete sample: We randomly delete persons who have a mean IQ of more than 97, until we reach a sample that has a mean IQ of 97—a mere three points below the mean of the full sample.[66]

How different do the crucial social outcomes look? For some behaviors, not much changes. Marriage rates do not change. With a three-point decline at the average, divorce, unemployment, and dropout from the labor force rise only marginally. But the overall poverty rate rises by 11 percent and the proportion of children living in poverty throughout the first three years of their lives rises by 13 percent. The proportion of children born to single mothers rises by 8 percent. The proportion of men interviewed in jail rises by 13 percent. The proportion of children living with nonparental custodians, of women ever on welfare, and of people dropping out of high school all rise by 14 percent. The proportion of young men prevented from working by health problems increases by 18 percent.

This exercise assumed that everything else but IQ remained constant. In the real world, things would no doubt be more complicated. A cascade of secondary effects may make social conditions worse than we suggest or perhaps not so bad. But the overall point is that an apparently minor shift in IQ could produce important social outcomes. Three points in IQ seem to be nothing (and indeed, they *are* nothing in terms of understanding an individual's ability), but a population with an IQ mean that has slipped three points is likely to be importantly worse off. Furthermore, a three-point slide in the near-term future is well within the realm of possibility. The social phenomena that have been so worrisome for the past few decades may in some degree already reflect an ongoing dysgenic effect. It is worth worrying about, and worth trying to do something about.

At the same time, it is not impossible to imagine more hopeful prospects. After all, IQ scores are rising with the Flynn effect. The nation can spend more money more effectively on childhood interventions and improved education. Won't these tend to keep this three-point fall and its consequences from actually happening? They may, but whatever good things we can accomplish with changes in the environment would be that much more effective if they did not have to

How Would We Know That IQ Has Been Falling?

Can the United States really have been experiencing falling IQ? Would not we be able to see the consequences? Maybe we have. In 1938, Raymond Cattell, one of most illustrious psychometricians of his age, wrote an article for the *British Journal of Psychology*, "Some Changes in Social life in a Community with a Falling Intelligence Quotient."[67] The article was eerily prescient.

In education, Cattell predicted that academic standards would fall and the curriculum would shift toward less abstract subjects. He foresaw an increase in "delinquency against society"—crime and willful dependency (for example, having a child without being able to care for it) would be in this category. He was not sure whether this would lead to a slackening of moral codes or attempts at tighter government control over individual behavior. The response could go either way, he wrote.

He predicted that a complex modern society with a falling IQ would have to compensate people at the low end of IQ by a "systematized relaxation of moral standards, permitting more direct instinctive satisfactions."[68] In particular, he saw an expanding role for what he called "fantasy compensations." He saw the novel and the cinema as the contemporary means for satisfying it, but he added that "we have probably not seen the end of its development or begun to appreciate its damaging effects on 'reality thinking' habits concerned in other spheres of life"—a prediction hard to fault as one watches the use of TV in today's world and imagines the use of virtual reality helmets in tomorrow's.[69]

Turning to political and social life, he expected to see "the development of a larger 'social problem group' or at least of a group supported, supervised and patronized by extensive state social welfare work." This, he foresaw, would be "inimical to that human solidarity and potential equality of prestige which is essential to democracy."[70]

fight a demographic head wind. Perhaps, for example, making the environment better could keep the average IQ at 100, instead of falling to 97 because of the demographic pressures. But the same improved environment could raise the average to 103, if the demographic pressures would cease.

Suppose that downward pressure from demography stopped and maybe modestly turned around in the other direction—nothing dramatic, no eugenic surges in babies by high-IQ women or draconian measures to stop low-IQ women from having babies, just enough of a shift so that the winds were at least heading in the right direction. Then improvements in education and childhood interventions need not struggle to keep us from falling behind; they could bring real progress. Once again, we cannot predict exactly what *would* happen if the mean IQ rose to 103, for example, but we can describe what *does* happen to the statistics when the NLSY sample is altered so that its subjects have a mean of 103.[71]

For starters, the poverty rate falls by 25 percent. So does the proportion of males ever interviewed in jail. High school dropouts fall by 28 percent. Children living without their parents fall by 20 percent. Welfare recipiency, both temporary and chronic, falls by 18 percent. Children born out of wedlock drop by 15 percent. The incidence of low-weight births drops by 12 percent. Children in the bottom decile of home environments drop by 13 percent. Children who live in poverty for the first three years of their lives drop by 20 percent.

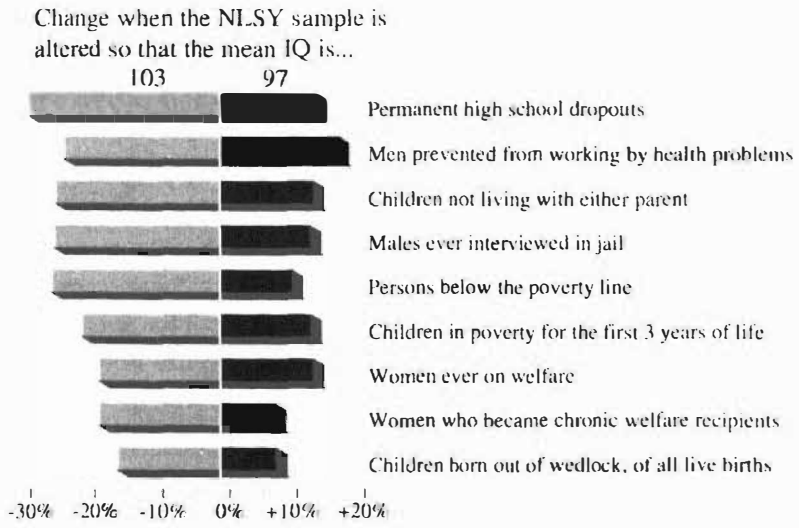
The stories of falling and rising IQ are not mirror images of each other, in part for technical reasons explained in the note and partly because the effects of above- and below-average IQ are often asymmetrical.[72] Once again, we must note that the real world is more complex than in our simplified exercise. But the basic implication is hard to dispute: With a rising average, the changes are positive rather than negative.

Consider the poverty rate for people in the NLSY as of 1989, for example. It stood at 11.0 percent.[73] The same sample, depleted of above-97 IQ people until the mean was 97, has a poverty rate of 12.2 percent. The same sample, depleted of below-103 IQ people until the mean was 103, has a poverty rate of 8.3 percent. This represents a swing of almost four percentage points—more than a third of the actual 1989 poverty problem as represented by the full NLSY sample. Suppose we cast this discussion in terms of the "swing." The figure below contains the indicators that show the biggest swing.

A swing from an average IQ of 97 to 103 in the NLSY reduces the proportion of people who never get a high school education by 43 percent, of persons below the poverty line by 36 percent, of children living in foster care or with nonparental relatives by 38 percent, of women ever on welfare by 31 percent. The list goes on, and shows substantial reductions for other indicators discussed in Part II that we have not included in the figure.

The nation is at a fork in the road. It will be moving somewhere within this range of possibilities in the decades to come. It is easy to un-

The swing in social problems that can result from small shifts in the mean IQ of a population



derstand the historical and social reasons why nobody wants to talk about the demography of intelligence. Our purpose has been to point out that the stakes are large and that continuing to pretend that there's nothing worth thinking about is as reckless as it is foolish. In Part IV, we offer some policies to point the country toward a brighter demographic future.