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Race, IQ, and Inequality Worldwide

# The <br> Global Bell Curve Race, IQ, and Inequality Worldwide RICHARD LYNN 



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To Joyce
For nothing this wide universe I call, Save thou, my rose...

Men...are masters of their fates:
The fault, dear Brutus, lies not in our stars, But in ourselves, that we are underlings...

William Shakespeare

Scientists must focus not on specific facts but on the regularities that tie them together.

Henri Poincaré La Science et l'Hypothese (1902)

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## Chapter 1

## Why are there Racial Inequalities?

1. Cultural Values
2. Structuralism
3. Human Capital
4. Intelligence, Earnings, and Socioeconomic Status
5. The Bell Curve
6. Reactions to The Bell Curve

In The Bell Curve Richard Herrnstein and Charles Murray (1994) showed that in the United States there is a socioeconomic hierarchy of race and intelligence. They showed that whites are at the top of this hierarchy with the highest average IQ (103) and the highest socioeconomic status and earnings. Hispanics come next with an average IQ of 89 and intermediate socioeconomic status and earnings. Blacks come last with the lowest average IQ of 85 and the lowest socioeconomic status and earnings. They argued that the racial socioeconomic hierarchy is largely determined by differences in intelligence.

The present book examines how far this thesis holds for other multiracial societies. In many countries throughout the world there are racial inequalities in earnings and socioeconomic status. We consider how far these too can be explained by racial differences in intelligence.

The existence of these inequalities has been extensively documented and discussed by historians, sociologists, anthropologists, economists, and psychologists, and various theories have been advanced to explain their causes. Curiously, the possibility that differences in intelligence might be responsible has never been examined. As the chapters of the present book unfold, we shall see that the Herrnstein-Murray thesis holds worldwide. As a tribute to their pioneering work, I have entitled it The Global Bell Curve.

In this introductory chapter we begin by outlining the principal theories that have been advanced to explain racial inequalities. These are the cultural values, structuralism, and human capital theories. We then examine the contribution of intelligence to earnings and socioeconomic status, summarize the intelligence theory of socioeconomic inequalities presented in The Bell Curve, and discuses the reactions to Herrnstein and Murray's analysis.

## 1. Cultural Values

The cultural values theory states that different groups have their own distinctive values that are passed down within the group from generation to generation. Cultural values, according to David Landes, a prominent exponent of the theory, can be defined as "the inner values and attitudes that guide a population" (Landes, 2000, p. 2). Some of these values, such as attaching importance to hard work, thrift, trust, and an orientation towards the future, are conducive to good educational attainment and the achievement of high earnings and socioeconomic status. Conversely, other values such as a happy-golucky attitude to life, a preference for leisure over work, a negativistic attitude towards education, and the like are conducive to educational and socioeconomic failure.

The prototype of cultural values theory was Max Weber's (1904) thesis that the Protestant ethic of the moral and religious imperative to work hard and achieve socioeconomic success was responsible for the acceleration of economic development in the Protestant countries of Northern Europe in the seventeenth and eighteen centuries, as contrasted with the less dynamic Catholic countries of southern Europe.

This general theory has been applied to racial differences in educational and socioeconomic achievement in the United States and
worldwide. In the 1950s, Rosen (1959) proposed that Jews and white Protestants in the United States had a strong "achievement syndrome" that accounted for their socioeconomic success, and that this "achievement syndrome" was weaker in blacks, Catholic Italians, and Catholic French-Canadians and explained their lesser educational and socioeconomic success. At the same time a somewhat similar theory was advanced by Wragley and Harris (1959) who argued that blacks and Native American Indians in the United States did not do well because they lacked "adaptive capacity" to succeed in an economically developed society. Jews and French Canadians possessed this "adaptive capacity" and this is the reason for their success. A few years later McClelland (1963) proposed that individuals and societies differ in the strength of their "achievement motivation" and this determines their economic success or failure.

With the economic successes of the free market East Asian economies of Japan, Singapore, South Korea, and Taiwan in the second half of the twentieth century a number of cultural values theorists proposed that these are attributable to possession of the right cultural values. Thus, Harrison (1992, p. 149) has argued that the key to these economic achievements lies in "the Confucian values of work, education, and merit, and the Taoist value of frugality."

Other cultural values militate against educational and socioeconomic achievement. In the 1960s, Oscar Lewis proposed the concepts of "the underclass" and its "culture of poverty." The underclass consists of a section of society that lacks the moral codes of personal responsibility and the obligation to work possessed by the rest of society. It has "a strong present-time orientation with little ability to delay gratification and plan for the future" (Lewis, 1961, p. xxvi). The underclass is characterised by poor educational attainment, dropping out of school, low socioeconomic status, crime, long-term unemployment, welfare dependency, drug dependence, and single motherhood. In the United States, blacks and Hispanics are proportionately over-represented in the underclass. This "culture of poverty" is passed down the generations. In the 1980s another sociologist reiterated this conceptualization of the underclass as "disproportionately black and Hispanic...what primarily defines them is their chronic lawlessness, drug use, out-of-wedlock births, non-work, welfare dependency, and school failure" (Magnet, 1987, p. 130). More recently, an American anthropologist has invoked
the "underclass culture" together with an "anti-school culture" and an "oppositional culture" to explain the poor educational attainment and socioeconomic status of blacks and Hispanics in the United States (Zhou, 1997).

There are some sociologists who acknowledge that there are racial differences in intelligence and that these are related to differences in educational and socioeconomic achievement, but believe that the intelligence differences can be explained by cultural values theory. One such is Li, a professor of sociology at the University of Saskatchewan, who has asserted

> different cultural groups have different sets of values, shaped in part by the past experience of the various ethnic groups and in part by their present conditions; these cultural values are believed to affect individual members' psychological composition, thus producing ethnic differences in cognitive perception, mental aptitude, and logical reasoning; since ethnic children are stratified by educational performance, and they also demonstrate disparities in many psychological tests of intelligence, aptitude, and cognitive ability, cultural values and orientations are deemed instrumental to educational achievements (Li, 1988, p. 25).

In other and simpler words, some ethnic and racial groups have values that develop the intelligence of their children, and this contributes to the children's attainment in school and the socioeconomic hierarchy. Unhappily for this theory, family values appear to have no effect on the intelligence of children. If they did, there would be a high correlation between the IQs of children reared in the same family. In fact, the correlation between the IQs of siblings is only 0.47 and is wholly explicable by their genetic similarity (Bouchard, 1993). The correlation between the IQs of adults who are genetically unrelated, adopted as children, and reared in the same families is zero, showing that family cultural values have no effect on IQs (Scarr and Weinberg, 1978). As the paper reporting this result was published in a leading American sociology journal, it might have been expected that sociologist Li would have known it and its devastating implications for his thesis that parents can affect the intelligence of their children by instilling appropriate cultural values.

Cultural values theory has been advanced to explain differences in earnings between nations (expressed as per capita income) as well
as within nations. For instance, Landes (2000, p. 2) writes that "if we learn anything from the history of economic development, it is that culture makes almost all the difference...the Japanese had a version of Weber's Protestant ethic and this made possible the Japanese economic miracle" (p.10). Landes asserts that the same strong ethic was responsible for the post World War II rapid economic development of the other Pacific Rim "miracle economies," but was lacking in Southeast Asia and Africa. Porter, another Harvard luminary, takes the same view: "the role of culture in economic progress is unquestioned; the investigation of a wide range of successful nations, including the United States, Japan, Italy, Hong Kong, Singapore, Chile, and Costa Rica, reveals wide and subtle cultural differences associated with improving economic circumstances" (Porter, 2000, p. 14) (many readers will think that the Harvard professor of business has cited a curious list of economically successful nations: the economic performance of Italy has been no better than the rest of western Europe during the last half century, and the performance of Chile and Costa Rica has been unimpressive).

The weakness of cultural values theory is that it is largely unquantified and has little or no predictive power. Weber's theory of the Protestant work ethic as responsible for the economic advance of the Protestant countries of Northern Europe in the seventeenth century has a certain plausibility, but has no long term predictive value. In the twentieth century Catholic Belgium, France, and Italy have done just as well economically as Protestant Britain, Sweden, and Denmark, and as mixed Catholic/Protestant Germany ( 37 and 45 percent, respectively), Switzerland (46 and 40 percent, respectively), and the Netherlands ( 33 and 23 percent, respectively). There is a similar problem with the proposed role of Confucianism in promoting the economic development of East Asia. Weber attributed the backwardness of China to the stultifying cultural values of Confucianism, but more recently the positive values of Confucianism in promoting the virtues of education, saving, and hard work have been invoked to explain the economic successes of the Chinese throughout the region (e.g. Redding, 1990; Li, 1992). As Jomo (1997, p. 237) has commented "this is ironic because as recently as the 1970s Western culturalists were blaming Confucianism for the economic backwardness of the Chinese."

## 2. Structuralism

Structuralism is the theory that racial socioeconomic hierarchies are perpetuated by discrimination from generation to generation by the race that holds political and economic power. Ogbu (1978, p. 357) is a prominent exponent of this theory:

The lower performance of blacks is not itself the central problem but an expression of a more fundamental one, namely caste barriers and the ideology that supports them. The elimination of caste barriers is the only lasting solution to the problem of academic retardation.
Zhu (1997, p. 74) is another sociologist who favors structuralism:
Society is a stratified system of inequality, in which different social categories have unequal access to wealth, power, and privilege. The ethnic hierarchy systematically limits access to resources, such as opportunities for jobs, housing, and education, resulting in persistent racial/ethnic disparities in levels of income, educational attainment, and occupational achievement.

Another sociologist who adopts this position is Steinberg (2000, p. 67): "it is not culture but racial and class hierarchy that is reproduced from generation to generation."

Structuralism relies heavily on discrimination to explain the perpetuation of racial inequalities: the racial and ethnic groups that have political and economic power in a country use this power to keep down other racial and ethnic groups. This has become known as institutional racism. Generally the race that has secured power is the Europeans, who have oppressed the blacks and Native American Indians throughout North and South America, the Aborigines in Australia, and the Maoris in New Zealand. Thus "there is strong evidence to indicate that the plight of many racial and ethnic groups is the result of structured inequality and racial oppression" (Li, 1988, p. 36). Discrimination is frequently assumed where some racial and ethnic groups do not do so well as others, but the theory is hard to prove because typically the groups that do poorly have lower intelligence and poorer educational qualifications than those that do well. In more sophisticated analyses, a number of sociologists and economists have demonstrated that some races and ethnic groups do poorly in socioeconomic status and earnings even when they are matched for education to majority groups that do better. They then assume that the reason minorities do not achieve so well
must be attributed to discrimination. However, this assumption is not fully convincing. Two groups that have the same amount of schooling do not necessarily have the same cognitive abilities or motivation for socioeconomic achievement.

## 3. Human Capital

Many economists explain individual, racial, and national differences in earnings and socioeconomic status as the result of differences in human capital. There is no precise definition among economists of human capital, but it is generally taken to mean the skills and aptitudes, and possibly may include the attitudes and health that contribute to efficient work, and which consequently command higher incomes. These skills are generally considered to be acquired through education and are measured by various measures of educational inputs, e.g., expenditures on education, primary or secondary rates of school enrolment, or years of education, and also by scores on tests of mathematics and science, and by literacy rates. Economists have shown that all of these are related to earnings within and between nations and argued that these differences in "human capital" are an important factor contributing to differences in earnings and wealth. For instance: "human capital, particularly that attained through education, has been emphasised as a critical determinant of economic progress" (Barro and Lee, 2001, p. 541); "it is well accepted that human capital is the source of long-run growth, as human capital engenders technological innovation (Zak and Park, 2002, p. 1); "human capital has taken a central role in the theory of economic growth, with formal education often considered the primary conduit for human capital accumulation" (Blackenau and Simpson, 2004, p. 601); "changes in growth rates between countries are assumed to be primarily due to changes in the rates of human capital accumulation" (Engelbrecht, 2003, p. S40).

The weakness of human capital theory is that it does not adequately analyse the reasons why some individuals and national populations obtain more education and acquire greater cognitive skills. The likely explanation is that both of these are largely determined by intelligence. The correlations between intelligence and years of education and educational attainment within nations typically lie between 0.6 and 0.7 , while the correlations across nations are even higher at between 0.80
and 0.89 (for a summary of these studies, see Lynn and Vanhanen, 2002, 2006). With such high correlations as these, the measures of educational attainment used by economists and shown to be related to earnings among individuals and per capita incomes between nations must be largely functions of intelligence. There are however a number of economists who have recognized that intelligence is a major determinant of educational attainment and earnings. Typically, they are uncomfortable with the term intelligence and prefer terms like cognitive ability (Cawley, Heckman, and Vytlactil, 2001) or intellectual capacity (Zax and Rees, 2002). Other economists who have demonstrated a relation between childhood IQ and adult earnings include Crouse (1979), Bishop (1989), Neal and Johnson (1996), Murnane et al. (2001) in the United States, and Zetterberg (2004) in Sweden. Zax and Rees (2002 p. 606) conclude that their results show "that earnings depend heavily on innate ability."

## 4. Intelligence, Earnings, and Socioeconomic Status

Intelligence theory states that intelligence is a major determinant of the earnings and socioeconomic status of individuals within societies, and of the per capita earnings and the wealth of nations. This theory was advanced in the nineteenth century by Francis Galton (1869) who proposed in his Hereditary Genius that people differ in intelligence, that these differences are largely inherited, which he argued is shown by their transmission in families from generation to generation, and that they are an important determinant of socioeconomic status. He maintained also that there are differences in intelligence between nations and races, and that these are responsible for differences in the level of civilization. He assessed the intelligence of the races by the numbers of geniuses they produced in relation to the size of their populations. He concluded that the Greeks of classical Athens were the most intelligent people, followed in descending order by the lowland Scots, the English, the Africans, and the Australian Aborigines. He argued that these differences in intelligence are largely responsible for the different achievements of these populations in building civilizations. Thus Galton proposed that differences in intelligence are a major determinant of inequalities in achievement between individuals and between nations and races. He did not, however, extend this thesis to racial differences within nations, which is the focus of this book.

With the development of the intelligence test in the twentieth
century, a number of studies were made in the United States and Europe of the relation between intelligence, subsequent earnings, and socioeconomic status. The methodology of these studies was to measure the intelligence of a sample in childhood or adolescence and earnings and socioeconomic status in adulthood. In the early 1970s these studies were synthesized by Jencks (1972) in his book Inequality. In this Jencks quantified Galton's theories by the use of American data, although he did not acknowledge any debt to Galton or even mention his work. Jencks documented data showing correlations between childhood IQ and educational attainment ( $\mathrm{r}=0.58$ ), between IQ and socioeconomic status ( $\mathrm{r}=0.52$ ), and between IQ and earnings ( $\mathrm{r}=0.35$ ). He also regarded IQs as determined early in childhood as a result of genetic and environmental factors. Thus, genetic factors affect educational attainment, socioeconomic status, and earnings. He estimated that there are genetic effects on socioeconomic status of between 0.140 and 0.218 . He also introduced the model of path analysis to explain the causal relationships between IQ and these variables. According to this model, the child's IQ is a determinant of educational attainment ( $\mathrm{r}=0.58$ ); educational attainment is a determinant of socioeconomic status ( $\mathrm{r}=0.65$ ), largely because educational credentials are needed to enter higher status occupations; and socioeconomic status is a determinant of earnings ( 0.44 ) because higher status occupations are better remunerated. A path model is therefore a causal chain in which genes are a determinant of IQ, which is a determinant of educational achievement, which in turn is a determinant of socioeconomic status and earnings.

Jencks' model has been confirmed by a number of subsequent studies. As Gottfredson (1997) has shown in detail and as Geary (2005, p. 317) concludes: "there is no debate regarding the finding that higher levels of intelligence are associated with more years of education and higher occupational status." We have summarized 29 of these studies in Lynn and Vanhanen (2006) and found that the correlations between childhood IQ and the earnings in adulthood of a man aged 30 and over range between 0.19 and 0.53 . In three of these studies, the positive correlations between childhood IQ and adult earnings were present among pairs of brothers who have been raised in the same family (Jencks, 1972; Murray, 1998; Waller, 1971). These have shown that the brother with the higher IQ in childhood has the greater earnings in adulthood, and therefore the effect holds independent of family environment. We also
summarized 21 studies in which the correlations between childhood IQ and socioeconomic status in adulthood range between 0.24 and 0.57 , with a median of 0.40 .

## 5. The Bell Curve

In 1994 Herrnstein and Murray produced their book The Bell Curve in which they extended the theory of intelligence as a determinant of earnings and socioeconomic status to the problem of race differences in the United States. Their conclusion was that the differences in earnings and socioeconomic status of blacks, Hispanics, and whites are largely due to differences in intelligence. The body of the The Bell Curve consisted of an examination a large American sample (the National Longitudinal Study of Youth) whose intelligence had been measured in late adolescence and whose socioeconomic status, earnings, and other characteristics had been recorded at an average age of 29 years. In their analysis of this data set and of previous studies they drew six important conclusions. First, they showed that among the whites, intelligence measured in adolescence was associated with earnings and socioeconomic status at an average age of 29 at a correlation of approximately 0.5 . This was not an original result but one that had been shown in a number of previous studies and was to be shown subsequently in further studies, so this conclusion was not controversial.

Second, Herrnstein and Murray extended the principle that intelligence is a determinant of earnings and socioeconomic status from individuals to races. They analysed the results for the three major American racial groups of whites, Hispanics, and blacks and found that whites had the highest average IQ (103), the greatest percentage in socioeconomic status category 1 (physicians, attorneys, chief executive officers, etc.), and the highest earnings. Hispanics came next with an IQ of 89 , a smaller percentage in socioeconomic status category 1 , and with somewhat lower earnings. Blacks had the lowest average IQ (85), a smaller percentage in socioeconomic status category 1 , and the lowest earnings. These results shown in Table 1.1

Third, Herrnstein and Murray addressed the problem of how far the lower socioeconomic status and earnings of blacks and Hispanics can be explained by their lower IQs. These analyses were confined to men and were conducted for socioeconomic status by matching whites,

Table 1.1. IQs, socioeconomic status, and earnings in the United States

|  | Blacks | Hispanics | Whites |
| :--- | :---: | :---: | :---: |
| IQ | 85 | 89 | 103 |
| SES 1 | $3 \%$ | $3 \%$ | $5 \%$ |
| Earnings | $\$ 20,994$ | $\$ 23,409$ | $\$ 27,372$ |

blacks, and Hispanics for IQ. First, they took all those with an IQ of 117 (the average IQ of those in SES 1), and looked at the percentages of those with IQs of 117 who were in SES 1. They found that blacks with an IQ of 117 were much more likely than whites to be in SES 1 ( 26 percent as compared with 10 percent), and Hispanics with an IQ of 117 were also more likely than whites to be in SES 1 ( 16 percent as compared with 10 percent) (p. 321). The apparent advantage of blacks and Hispanics for socioeconomic status did not, however, hold for earnings. For these Herrnstein and Murray (p. 321) matched whites, blacks, and Hispanics for IQ by taking all those with an IQ of 100 and examined their earnings. They found that whites earned slightly more than Hispanics, while Hispanics earned slightly more than blacks. The differences however were very small in so far as all three racial groups with IQs of 100 earned between $\$ 25,000$ and $\$ 25,600$ a year. These results are shown in Table 1.2.

Table 1.2. Race differences matched with IQs for socioeconomic status and earnings

|  | Blacks | Hispanics | Whites |
| :--- | :---: | :---: | :---: |
| IQ | 117 | 117 | 117 |
| SES 1 | $26 \%$ | $16 \%$ | $10 \%$ |
| IQ | 100 | 100 | 100 |
| Earnings | $\$ 25,001$ | $\$ 25,159$ | $\$ 25,546$ |

These were truly remarkable results because they showed that there is no discrimination against blacks and Hispanics for socioeconomic status. This is contrary to the widely held belief among sociologists, social anthropologists, economists, and some psychologists that the reason for the lower socioeconomic status of blacks and Hispanics is that whites discriminate against them. Contrary to this belief, it appeared that blacks and Hispanics have higher socioeconomic status than would be expected on the basis of their IQs. These results
were not peculiar to the study by Herrnstein and Murray but had previously been found by Gottfredson (1986, p. 404) who showed that blacks are over-represented, in relations to their intelligence, in the high status professions of medicine, engineering, and college teaching. For instance, she argued that if the lower bound cut off for qualifying as a physician is taken as an IQ of 112 , the black-white ratio with this IQ is about 0.05 , i.e. about 1 black for 20 whites. The actual black-white ratio for physicians is about 0.30 , i.e. about 1 black for 3 whites.

Herrnstein and Murray did not offer any explanation for these results. Part of the explanation for the over-representation of blacks in high socioeconomic status occupations is that blacks enter college and obtain more years of education than whites of the same intelligence level (Gottfredson,1986, p. 404). This is itself due partly to positive discrimination, through which blacks are admitted to colleges and professional schools with lower IQs than whites, so a higher proportion of them obtain the educational credentials to enter high socioeconomic status occupations. It may also be that blacks, and to a lesser extent Hispanics, gain an advantage from positive discrimination in employment. Corporations, law firms, universities, and the like are under pressure from affirmative action policies to employ blacks in senior positions, and they comply with this pressure to promote good public relations for their organizations.

The race differences in earnings found by Herrnstein and Murray are different. Here whites matched with blacks and Hispanics for IQ do have fractionally higher earnings The advantage of whites could be due in part to discrimination in their favor by other whites, or to values such as a stronger work ethic, as posited by cultural values theory, or to personality differences such as higher conscientiousness. However, there is almost no race difference in earnings once IQ is controlled, so the effect of these other factors is very small.

Fourth: the next point made in The Bell Curve was that intelligence is not only the major determinant of socioeconomic status and earnings, but is also a major determinant of educational attainment, long-term unemployment, welfare dependency, crime, out-of-wedlock births, and poverty. To show this they presented first the actual race differences in these phenomena and then the differences when the races were matched for IQ. Their results are shown in Table 1.3. First, for education, they
showed the percentages that had obtained a college bachelor's degree. Row 1 shows that a much higher percentage ( 27 percent) of whites had a degree than of blacks and Hispanics ( 11 percent and 10 percent). Row 2 gives the percentages of those with IQs of 114 (the average for college graduates) and shows that this was significantly greater for blacks ( 68 percent) than for whites and Hispanics ( 50 percent and 49 percent). This result confirms Gottfredson's (1986) finding that blacks enter college and obtain more years of education than whites of the same intelligence level. Rows 3 and 4 give similar analyses for the percentages in poverty. Row 3 shows a much higher percentage ( 26 percent) of blacks in poverty than of whites ( 7 percent) and Hispanics ( 18 percent). Row 4 gives the percentages of those with IQs of 100 in poverty and shows that the race differences shrink to about a third. However, there are still significant differences and blacks have about twice the percentage in poverty as whites ( 11 percent as compared with 6 percent), with Hispanics intermediate ( 9 percent). Rows 5 and 6 give results for the percentages that had been unemployed for more than one month. Row 5 shows that this was about twice as great among blacks ( 21 percent) as among whites ( 10 percent), with Hispanics intermediate ( 14 percent). Row 6 gives the percentages of those with IQs of 100 and shows that the race differences shrink to 15 percent for blacks and 11 percent for whites and Hispanics. Again, there are still significantly more blacks among those who have experienced unemployment (15 percent) as whites and Hispanics (11 percent). The principal reason that the unemployed tend to have low intelligence is that those with low intelligence are unable to acquire the vocational skills to secure employment.

Rows 7 and 8 give results for the percentages of women that had had illegitimate children and shows a much higher percentage ( 62 percent) among blacks than among Hispanics ( 23 percent) and whites (12 percent). When the races are matched for IQs the differences shrink although they remain substantial.

Rows 9 and 10 give race differences for the percentages of women who had ever been on welfare. Row 9 shows that this was much higher among blacks ( 49 percent) than among Hispanics ( 30 percent) and whites ( 13 percent). Row 10 shows the percentages of those with IQs of 100 who had ever been on welfare and shows that the race differences are reduced. However, there are still significant differences

Table 1.3. Race differences in education and other social outcomes and differences matched for IQs

|  | Social outcomes | Blacks | Hispanics | Whites |
| :--- | :--- | :---: | :---: | :---: |
| 1 | College degree | 11 | 10 | 27 |
| 2 | Matched for IQ | 68 | 49 | 50 |
| 3 | Pooverty | 26 | 18 | 7 |
| 4 | Matched for IQ | 11 | 9 | 6 |
| 5 | Unemployment | 21 | 14 | 10 |
| 6 | Matched for IQ | 15 | 11 | 11 |
| 7 | Illegitimacy | 62 | 23 | 12 |
| 8 | Matched for IQ | 51 | 17 | 10 |
| 9 | Welfare | 49 | 30 | 13 |
| 10 | Matched for IQ | 30 | 15 | 12 |
| 11 | Crime | 13 | 6 | 2 |
| 12 | Matched for IQ | 5 | 3 | 2 |

and blacks have twice as many welfare recipients as Hispanics (30 percent as against 15 percent), and almost three times as many welfare recipients as whites ( 30 percent as compared with 12 percent).

Rows 11 and 12 give race differences for the percentages of young men who had been incarcerated in prison. Row 11 shows that the percentage of blacks ( 13 percent) was approximately double that of Hispanics (6 percent), and approximately six times higher than of whites ( 2 percent). Row 12 shows once again that the race differences shrink to about a third when the races are matched for IQ. But again the race differences do not disappear. Blacks have nearly double the percentage in prison as Hispanics ( 5 percent as compared with 3 percent), and two and a half times as many as whites ( 5 percent as compared with 2 percent).

Fifth, Herrnstein and Murray showed there are race differences in fertility that are negatively related to differences in intelligence. White women with the highest average IQ have the fewest children (1.89) while blacks and Hispanics with lower average IQs have more children (2.35). This is consistent with the more general phenomenon that, irrespective of race, there is a virtually universal tendency for the better educated, the higher socioeconomic classes, and the more intelligent to have fewer children than the poorly educated, the lower socioeconomic classes, and the less intelligent. This is a worldwide trend that I have documented in Lynn (1996). The principal reason is that more intelligent women
control their fertility more effectively. The phenomenon is known as dysgenic fertility. and its implication is that the genotypic intelligence of the population is declining.

The final issue discussed in The Bell Curve was whether the race differences in intelligence are to some degree genetic. After presenting a twenty-page discussion of this question, Herrnstein and Murray concluded that "it seems highly likely to us that both genes and environment are involved" (p. 311). A full presentation of the evidence supporting this conclusion has been given by Jensen (1998) and in Lynn (2006) and will not be repeated here.

Five major conclusions can be drawn from the analyses presented in this section. First, for all the social phenomena there is a consistent racial hierarchy in which whites perform best in securing the highest socioeconomic status, earnings, and education, and lowest rates of poverty, unemployment, illegitimate births, welfare, and crime. Hispanics come next in this racial hierarchy, and blacks perform worst. Second, this racial hierarchy reflects differences in intelligence. Third, when the races are matched for intelligence, the race differences in earnings, socioeconomic status, and education virtually disappear. This shows that these differences cannot be due to blacks and Hispanics having different cultural values or to discrimination against them by whites, but are wholly explicable by IQ differences. Fourth, race differences in rates of poverty, unemployment, illegitimate births, welfare, and crime are substantially reduced when the races are matched for IQ, but they do not disappear. This shows that intelligence differences make a substantial contribution to race differences in these phenomena, but other factors are also operating. These could be cultural values or discrimination, and they could also be personality factors. Fifth, the United States is experiencing dysgenic fertility, the effect of which is that the genotypic intelligence of the population is declining.

## 6. Reactions to The Bell Curve

It might be expected that following Herrnstein and Murray's demonstration that racial differences in intelligence explain much of the differences in earnings, socioeconomic status, education, and other social phenomena, social scientists who had previously believed that these differences are due to different cultural values or to discrimination
by whites against minorities would have recognized that they were wrong and would have adopted the new paradigm. A few social scientists did recognize that The Bell Curve was right. For instance, Darity and Myers (1998, p. 53) state that controlling for IQ differences "virtually eliminates unexplained residual differences in earnings between blacks and whites" and they cite four independent studies by economists that all reached this conclusion. Johnson and Neal (1998, p. 491) have confirmed that "with two 27 -year-old men, one black and one white, both with college degrees and both with AFGT scores (IQs) equal to the sample mean, the black man's predicted earnings are only 7 percent lower than his white counterpart." Cavallo, El-Abbadi, and Heeb (1997) agreed. They calculated that the black-white difference in earnings is largely due to differences in IQ and that after controlling for IQ, black men earned 96 percent of the earnings of white men, while black women earned 15 percent more than white women. Raudenbush and Kasim (1998) reached a similar conclusion.

However, the history of science tells us that new theories that undermine cherished and strongly held beliefs are typically either ignored or viciously attacked. This has been the case with The Bell Curve. Most sociologists, social anthropologists, and historians simply ignored it and continued to debate whether cultural values theory or structuralism theory best explain racial differences in earnings, socioeconomic status, and other social phenomena. For instance, six years after the publication of The Bell Curve, Vermeulen and Perlmann (2000) (respectively a social anthropologist and director of research at the Institute of Racial Studies at the University of Amsterdam, and a sociologist at Bard College in the United States) edited a book with chapters on the socioeconomic successes or otherwise of blacks, Italians, Greeks, and Jews in the United States, of blacks, Spanish, Turks, Moroccans, and Indians in the Netherlands, and of blacks and mulattos in Brazil, without a single mention of The Bell Curve or of the differences in intelligence between these races.

In the same year Harrison and Huntington (2000), respectively a Harvard political scientist and historian, edited a book Culture Matters designed, according to the blurb on the back page, to promote the idea that "the principal reason why some ethnic groups are better off than others lies in cultural values that powerfully shape political, economic, and social performance." Only one of the twenty-two contributors
mentioned The Bell Curve. This conceded that "the test score gap between African-Americans and Euro-Americans is indeed important in explaining later occupational status and income" (Patterson, 2000, p. 206), but the remaining contributors ignored IQ and contended that these differences can be explained by culture. Many other social scientists attacked The Bell Curve but they were not able to refute the central thesis.

We are now ready to see how far the thesis of The Bell Curve that racial differences in intelligence are responsible for much of the differences in earnings, socioeconomic status, and a number of other social phenomena holds in other nations and regions of the world besides the United States.

## Chapter 2

## Africa

1. Composition of the Populations
2. The Indians
3. Race and Ethnic Differences in Intelligence
4. Intelligence of University Students
5. Educational attainment
6. Earnings
7. Socioeconomic Status
8. Poverty and Malnutrition
9. Crime
10. Infant Mortality
11. Fertility
12. Conclusions

TThe countries in Africa with significant multi-racial populations are South Africa and the East African countries of Kenya, Uganda, Tanzania, Mozambique, Zambia, and Zimbabwe. In all of these there are racial socioeconomic hierarchies in which whites are at the top, Indians in the middle, and blacks at the bottom. In addition South Africa has a sizeable group of coloreds, who are mixed race hybrids mainly of European and African descent and who are in the middle of the socioeconomic hierarchy roughly on a par with the Indians.

The first European to discover South Africa was Vasco da Gama in 1497. In 1651 the Dutchman Jan van Riebeeck established a settlement on the Cape. From the outset slaves were imported from other parts of Africa. In the early years some of the Dutchmen married Hottentot women, but in 1865 that was prohibited by law. Irregular liaisons continued and produced the "colored" community. The Dutch community grew, augmented by some British and Germans. In 1806 the British took control of the Cape. This led to tension between the Dutch Boers and the British, and in 1835 a number of the Boers opted to migrate northwards to settle new lands in the Transvaal in what became known as "the great Trek." At the turn of the century the British decided to annex the Transvaal to obtain the gold. This led to the Boer War of 1899-1902. In 1910 the Union of South Africa was established.

Apartheid was introduced in 1948. In 1949 racial intermarriage was made illegal, and in 1950 this was extended to all sexual relations. In 1950 the Group Areas Act established separate residential locations for the four races. In 1953 segregation was extended to all public amenities and schools, and this was extended to universities in 1959. In 1990 Nelson Mandela was released and segregation was ended in all public amenities and schools. In 1994 the first multi-racial elections were held.

The coast of East Africa was known in ancient times to Persians, Indians, and Arabs of present day Saudi Arabia and the Gulf States. It is recorded that Indian and Arab ships were trading along the coast of East Africa around 80 A.D. (Delf, 1963). From at least the tenth century Indians and Arabs established settlements on the islands of Zanzibar and Pemba and along the coast of the East African mainland. The objective of these settlements was to obtain ivory, and African slaves for transportation to Arabia, India, and elsewhere in South Asia. The Muslim King of Gaur in Bengal (1459-1474) is said to have had about 8,000 African slaves (Delf, 1963). In exchange for ivory and slaves they traded firearms, trinkets such as glass beads, and cotton cloth. In 1828 the Imam of Muscat, Seyyid Said bin Sultan, moved his capital to Zanzibar, where he built a substantial town, introduced the cultivation of the clove, and developed the port for the ivory and slave trade.

The British annexed Kenya, Uganda, and the northern part of Tanganyika (as Tanzania was then called) as colonies in the 1880s, and at about the same time Germany annexed the southern part of Tanganyika, known as German East Africa, and the Portuguese annexed

Mozambique. In 1918, the British took control of German East Africa through a United Nations mandate. These colonies were given independence in the 1960s, when Tanganyika was integrated with Zanzibar to form the independent republic of Tanzania. In 1964 the white government of Zimbabwe declared UDI (independence) and was subject to an international trade embargo. A settlement was reached in 1980 giving lawful independence.

## 1. Composition of the Populations

The racial composition of the populations of the six African countries is shown in Table 2.1. Throughout the twentieth century South Africa had the largest white and Indian minorities, although both of these diminished as a proportion of the population over the course of the century, principally as a result of the greater fertility of blacks. Zimbabwe had the next largest white minority at mid-century, but a lot of whites left in the second half of the century. Uganda had a small Indian minority until 1972, when Idi Amin expelled them and confiscated all foreign owned businesses and estates, after which the Europeans also left.

Table 2.1. Composition of the populations (percentages)

| Country | Year | Whites | Indians | Coloreds | Blacks |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Kenya | 1950 | 0.6 | 1.9 | - | 97.9 |
| S. Africa | 1904 | 21.6 | 2.4 | 8.6 | 67.4 |
| S. Africa | 1998 | 14.0 | 2.0 | 9.0 | 75.0 |
| Tanzania | 1950 | 0.1 | 0.7 | - | 99.2 |
| Uganda | 1950 | 0.2 | 1.2 | - | 98.6 |
| Zambia | 1950 | 0.9 | 0.1 | - | 99.0 |
| Zimbabwe | 1950 | 7.0 | 0.5 | - | 92.5 |
| Sources: Encyclopedia Britannica,1960; Ramsay, 2000. |  |  |  |  |  |
|  |  |  |  |  |  |

## 2.The Indians

The reason for the presence of sizeable Indian populations in South Africa and East Africa is that in the nineteenth century the European colonists needed laborers for manual work of various kinds. They found that blacks were unsuitable for this and so they brought over Indians to do the work. In South Africa Indians were brought over from the 1860s onwards principally to work in the sugar and cotton plantations in Natal. Initially they tried to employ blacks but they found that these did
not make satisfactory employees. Sir Harry Johnston, a British colonial administrator, explained the problem:

> These semi-tropical plantations brought about a fresh want-that of patient, cheap, agricultural laborers. Unhappily, the black man, though so strong in body and so unaspiring in ideals, has as a rule a strong aversion to continuous agricultural labor. His own needs are amply supplied by a few weeks' tillage scattered throughout the year; and even this is generally performed by the women of the tribe, the men being free to fight, hunt, fish, tend cattle, and loaf. Therefore the black men of Natal, though they made useful domestic servants and police, were of but little use in the plantations. (Johnston, 1930, p. 271).

Some two decades Leonard Thompson (1952, p. 5) observed "that a labor problem should have existed in Natal may at first sight seem inconceivable, but though there were a hundred thousand natives in Natal there were not enough laborers." More recently University of Toronto historian Rick Halpern (2004, p. 25) has written in similar vein: "the work routine at harvest time-necessitating around the clock operations-ran counter to indigenous conventions." It was to solve this problem that the European colonists hit on the solution of bringing in Indians from Calcutta and Madras as indentured laborers. About 150,000 were brought over between 1860 and 1914. The terms of the indentures were that they were required to work for their employers for five years at a stipulated wage. Once they had served their indentures, many of them left the sugar plantations, set up businesses and "formed a thriving class of petty traders" (Johnston, 1930, p. 271).

The same problem surfaced at the end of the nineteenth century in East Africa when the British in Kenya and the Germans in Tanganyika needed laborers to build the railroads. The first of these was built in Kenya between 1895-1903, running from the coastal port of Mombassa to the present capital Nairobi and on to Kisumi on Lake Victoria. The objective of the railroad was to transport goods from the interior to the coast and then overseas, and to carry goods to the interior. The British found that they could not get blacks to do the work of building railroads. The blacks "were content to live with little effort at subsistence level and did not want to work for whites" (K.I., 1960, p. 342). Many others have made the same observation. Thus, Vernon (1969, p. 177) has written that in Africa "work is generally leisurely and periodic, depending on the climate, the rhythms of nature and
local custom; regularity or an accurate sense of time are unimportant so that, to whites, the African seems indolent."

The Germans encountered the same problem in Tanganyika. Both they and the British in Kenya overcame this problem by bringing in Indians, principally from Gujarat and the Punjab, to build the railroads and for other public works, such as building and road construction. In 1902 Herbert Samuel, a British Member of Parliament, visited East Africa and wrote of his experience that "the progress of these portions of Africa would have been slow indeed, had it not been possible to draw upon our Asiatic possessions for unlimited supplies of subordinate labour with brain and hand" (Samuel, 1903, p. 395). In his history of the building of the Kenya railroad, Hill (1920, p. 255) has written "without the aid of Indian labour, artisans, and subordinate staff, the railroad would not have been built." When the building of the railroads had been completed, several thousand Indians stayed in both Kenya and Tanganyika, and some migrated into Uganda, and at the same time whites began to move into Kenya, Uganda, and Tanzania as farmers and colonial administrators.

When the building of the railroad in Kenya had been completed, 6,724 Indians opted to remain in the country where
some took up market gardening or became artisans, while the majority became traders, introduced trade goods to blacks and spread the use of money instead of barter...and played an invaluable part in establishing the economy of the country (S. M. C., 1960, p. 341).

In the early decades of the twentieth century a new wave of Indians migrated to East Africa. According to Floyd and Lillian Dotson, two American sociologists who were experts on East Africa, the first Indians to come to East Africa as indentured laborers were from a much lower socioeconomic status than the second wave of immigrants:

Indentured Indians were without exception miserably poor in India. Otherwise, they would never have been tempted into signing a long contract promising little except hard labor far from home. Some women were always included in indentured shipments but never in equal proportions. In any case, a normal family life was scarcely possible while the indentured worker was still under contract, forced as he was to live in barracks and do gang labor under highly regimented conditions (Dotson and Dotson, 1968, p. 27).

The second wave of Indian immigrants came from the middle socioeconomic strata of India. "Having paid his own fare, he had thereby proven that he could not have come from the very bottom of Indian society, as did most indentured workers" (Dotson and Dotson, 1968, p. 28). Most Indians in East Africa, according to the Dotsons, are descended from the second wave of immigrants and are therefore representative of the Indian middle socioeconomic class: "broadly speaking, neither the very top nor the very bottom emigrated" (Dotson and Dotson, 1968, p. 33).

A similar pattern of development took place in the German colony of Tanganyika (later renamed Tanzania). The Germans annexed this territory in 1885. They had the same unsatisfactory experience of the unreliability of African workers as the British had in Kenya and adopted the same solution of bringing in Indians to build the railroads from Dar es Salaam to Kigoma and from Tanga to Moshi. When the building of the railroads had been completed, several thousand Indians stayed in Tanganyika, and by 1913 the Indian population stood at 9,645 (Foster, Hitchcock, and Lyimo, 2000, p. 83). The Indians prospered, as they had in Kenya, so
by 1939 the Indian minority had a major stake in Tanganyika, owning ninety percent of urban property and eighty percent of the cotton and sisal industry. They were employed at lower levels of the civil service and there were also professionals such as doctors and lawyers (Foster, Hitchcock, and Lyimo, 2000, p. 84).
The Portuguese also had a similar experience of attempting without success to use blacks to build the railroad in their colony of Mozambique and they too adopted the solution of bringing in Indians to build the railroad from the port of Beira to Southern Rhodesia.

By the 1920s the Indians had established themselves in the middle sector of the socioeconomic hierarchy as small business people, shopkeepers, junior administrators, clerks, and skilled artisans, socially and economically above the blacks and below the whites. In the early 1930s, Lord Delamere who resided in Kenya wrote

All the vegetable growing for the towns is done by Indians, all the butchers with one or two exceptions are Indians, all the small country stores are kept by Indians, and most of the town shops, all
of the lower grade clerks are Indians, nearly all the carpentry and building work is done by Indians...by the mid-twenties a three class society had been established on racial lines with whites monopolizing export crop agriculture, the higher administrative posts and the professions, the Indians trade commerce and the middle reaches of the bureaucracy, and the blacks left with unskilled wage employment, small-holder farming, and the lower level posts in the administration; in the Second World War the whites and Indians still dominated business....(Dotson and Dotson, 1968, p. 31).
Even after independence and the attainment of political power by the blacks "the income structure to a large extent remained the same" (Bigsten, 1988, pp. 3-4).

The same racial hierarchy was present throughout the British colonies in East Africa:

The British developed a three-tiered civil service in which rank, salary and responsibility were drawn on racial lines. Civil servants were designated "European staff" and "Non European subordinate staff," who were almost entirely Asian; throughout the colonial period the Indians filled the middle ranks of the civil service, the military and police administrations, and the office staff in business; below them was the third group of office functionaries, those with less training and experience, who received the lowest pay and were nearly all blacks (Martani, 1975, pp. 185, 188).

The Indians occupied the middle socioeconomic class in Uganda and prospered because they "were familiar with a money economy and the skills that go with trading" (Foster, Hitchcock, and Lyimo, 2000, p. 86).

It was not only in the public administration that the Indians did well. In the private sector also the Indian community prospered throughout East Africa in the middle decades of the twentieth century. "By 1960 there were about 350 major contractors in East Africa and nearly all were Asian" (Gregory, 1993, p. 171). In Kenya the number of companies formed over the years 1961-1973 were 478 by Indians, 335 by whites, and 313 by blacks (Swainson, 1980). The Indians were particularly prominent in retail trade. In the 1960s "small as their numbers are in proportion to the total population, they control something like 75 percent of the retail business in Malawi, Zambia, and Rhodesia (Dotson and Dotson (1968, p. 3).

In Tanzania, by the 1920 s the Indians had achieved higher socioeconomic status and earnings than the blacks.

> The Indians became the most numerous artisan community and assumed a prominence in furniture making, metal-working, automechanics, and general construction; the proportion of skilled Indians was higher than that of skilled blacks; one of the main achievements of the Indian artisans was the construction of nearly all buildings (Gregory, 1993, pp. 162-167).

The Indians were "nearly all engaged in commerce or trade, most of the retail trade and a considerable amount of the wholesale trade being in their hands; they are also to be found as clerks, artisans, and skilled workers in a great variety of occupations" (Moffett, 1960, p. 783). By 1939, the Asian community owned over half of Tanzania's export-import trade, 80 percent of sisal production, the cotton industry, and transport services and 90 percent of town property (Kaplan, 1978, p. 45).

In Kenya, Uganda, and Tanzania the Indians also rapidly established themselves as a middle and skilled working class, economically and socially above the blacks. Thus in the early decades of the twentieth century "the numerous Sikhs, who had left the Punjab in most instances with only a peasant background, soon acquired a reputation as handymen adept at any manual work" (Gregory, 1993, p. 162). By the 1920s "there had emerged a three tiered structure stratified largely by race. The top layer consisted of a highly privileged planter aristocracy of whites. The bottom layer, the least privileged, comprised blacks. In between, occupying the middle-class position, were the Asian businessmen and skilled artisans" (Gregory, 1993, p. 3); "the Indians prospered and became prominent in the public, industrial, and professional sectors of society-very few were unskilled" (Helweg and Helweg, 1990, p. 18). The civil service was largely staffed by Indians, and the British colonial administration endeavored to recruit more blacks but "because of continuing deficiencies in African education and training they found that the Indians' skills and efficiency in many aspects of administration, and especially in any matter concerning accounts, very difficult to replace" (Gregory, 1993, p. 199). Some Indians set up businesses as moneylenders but they abandoned this profession because "most blacks did not repay their loans" (Gregory, 1993, p. 109) either because their businesses failed
or for other reasons. By the 1920s the British colonial administrators in Kenya became concerned about the growing economic power of the Indians. They decided to dispense with Indians in building the Nairobi Memorial Hall and gave the job to blacks, but "after several months of frustration, they were forced to hire Asian craftsmen" (King, 1977, p. 44). A British colonial official wrote in a confidential file that "as artisans the Indians are more reliable and continue to be employed in preference to blacks and at a higher wage" and "Asian wages as late as 1951 were three times that of blacks" (King, 1977, pp. 172-173).

In Kenya, Delf (1963, pp. 21, 23) has written of the Indians that "most of the retail trade was firmly in their hands" and socially and economically they were "about half way between European and African communities." Similarly, in Uganda in the 1930s "Indians were responsible for about 90 per cent of the total trade of the country" (Delf, 1963, p. 27).

Even after independence and the attainment of political power by the blacks "the income structure to a large extent remained the same" (Bigsten, 1988, pp. 3-4). After the East African colonies became independent in 1963-1964
> throughout East Africa the governments attempted to reduce the power of the Indian community but this created difficulties because they were not followed by the development of an African entrepreneurial class. There were problems when Indians who possessed the necessary skills were replaced by African political appointees whose competence in matters of business was not proven (Foster, Hitchcock, and Lyimo, 2000, p. 89).

## 3. Race and Ethnic Differences in Intelligence

Race differences in intelligence of Indians, coloreds (in South Africa), and blacks in the seven African countries are given in Table 2.2. All these differences are calculated in relation to a white IQ of 100. The bottom row gives the medians of 86 for Indians, 83 for coloreds and 69 for blacks. The median IQ of 69 for blacks is typical of sub-Saharan Africa. Two of the studies give substantially higher IQs, namely 89 for one of the studies from Kenya (row 5). This is so discordant in relation to the other five studies that lie between 63-76 that there must be some error in the figure. The explanation for the other high figure of 80 (row

Table 2.2. Intelligence of Indians, cloreds, and blacks in relation to 100 for whites

|  | Country | Age | N | Test | Indians | Coloreds | Blacks | Reference |
| :--- | :--- | ---: | ---: | :---: | :---: | :---: | :--- | :--- |
| 1 | Kenya | Adults | 205 | CPM | - | - | 69 | Boissiere et al., 1985 |
| 2 | Kenya | $6-10$ | 1,222 | CPM | - | - | 75 | Costenbader \& Ngari, 2000 |
| 3 | Kenya | $12-15$ | 85 | CPM/MH | - | - | 69 | Sternberg et al., 2001 |
| 4 | Kenya | 7 | 118 | CPM | - | - | 76 | Daley et al., 2003 |
| 5 | Kenya | 7 | 537 | CPM | - | - | 89 | Daley et al., 2003 |
| 6 | Kenya | 6 | 184 | KAB | - | - | 63 | Holding et al., 2004 |
| 7 | Mozambique | 20 | 149 | CPM | - | - | 64 | Kendall, 1976 |
| 8 | South Africa | $9-15$ | 87 | PM | - | - | 76 | MacCrone, 1928 |
| 9 | South Africa | $10-14$ | 17,251 | AAB | 77 | 83 | 65 | Fick, 1929 |
| 10 | South Africa | $12-14$ | 80 | KB | - | - | 68 | Dent, 1937 |
| 11 | South Africa | $6-13$ | 1,726 | DAM | - | - | 70 | Hunkin, 1950 |
| 12 | South Arica | $8-16$ | 1,008 | SPM | - | - | 75 | Notcutt, 1950 |
| 13 | South Africa | Adults | 703 | SPM | - | - | 64 | Notcutt, 1950 |
| 14 | South Africa | 13 | 210 | SPM | 84 | - | - | Schmidt, 1960 |
| 15 | South Africa | 18 | 284 | GFT | 88 | - | - | Taylor \& Radford, 1986 |
| 16 | South Arrica | $6-8$ | 600 | JSAIS | 86 | - | -- | Landman, 1988 |
| 17 | South Africa | Adults | 140 | WISC-R | - | - | 71 | Avenant, 1988 |
| 18 | South Africa | $5-13$ | 415 | DAM | - | - | 77 | Richter et al., 1989 |
| 19 | South Africa | 9 | 350 | SPM | - | - | 63 | Lynn \& Holmshaw, 1990 |
| 20 | South Africa | 13 | 1,561 | GSAT | - | 86 | -- | Claassen, 1990 |
| 21 | South Africa | 16 | 3,390 | SPM | 91 | 80 | 74 | Owen, 1992 |
| 22 | South Africa | $15-16$ | 3,212 | JAT | 85 | - | 68 | Lynn \& Owen, 1994 |
| 23 | South Africa | Adults | 153 | WAIS-R | - | - | 69 | Nell, 2000 |
| 24 | South Arica | 16 | 17 | SPM | - | - | 68 | Sonke, 2000 |
| 25 | South Africa | $14-17$ | 152 | WISC-R | - | - | 67 | Skuy et al., 2001 |
| 26 | South Africa | 17 | 100 | WCST | - | - | 64 | Skuy et al., 2001 |


|  | Country | Age | $\mathbf{N}$ | Test | Indians | Coloreds | Blacks | Reference |
| :--- | :--- | ---: | ---: | :---: | :---: | :---: | :---: | :--- |
| 27 | South Africa | $8-10$ | 806 | CPM | - | - | 67 | Jinabhai et al., 2004 |
| 28 | Tanzania | $13-17$ | 3,686 | SPM | 91 | - | 78 | Klingelhofer, 1967 |
| 29 | Tanzania | Adults | 179 | CPM | - | - | 65 | Boissiere et al., 1985 |
| 30 | Tanzania | $11-13$ | 458 | WCST | - | - | 72 | Sternberg et al., 2002 |
| 31 | Uganda | 12 | 50 | Various | - | - | 80 | Vernon, 1969 |
| 32 | Uganda | 11 | 2,019 | CPM | - | - | 73 | Heynman \& Jamison, 1980 |
| 33 | Zambia | 13 | 759 | SPM | - | - | 77 | MacArthur et al., 1964 |
| 34 | Zambia | Adults | 152 | SPM | - | - | 64 | Pons, 1974 |
| 35 | Zimbabwe | $12-14$ | 204 | WISC-R | - | - | 61 | Zindi, 1994 |
| 36 | Zimbabwe | $12-14$ | 204 | SPM | - | - | 70 | Zindi, 1994 |
|  | MEDIAN |  |  |  | 86 | 83 | 69 |  |

31) for Uganda is that the sample came from a selective secondary school and was described as "much superior to the East African population in general" (Vernon, 1969, p. 182).

The median intelligence of the Indians (IQ 86) is 17 IQ points higher than that of blacks (IQ 69). Other studies have confirmed this difference without giving figures. Thus, Schmidt (1960, p. 422) published a study of the intelligence of whites, Indians, and blacks in Natal and reported "The scores were highest for the European children and lowest for the Bantu, with the Indian pupils in the middle." Similarly, Weyl (1967, p. 207) reported a study in Zimbabwe in which the IQ of white children was approximately 100 and "the IQs of the Asian and colored children are much higher than those of the Bantu."

The IQ of 83 of the coloreds is almost exactly intermediate between that of whites (100) and blacks (69). This is what would be expected of a mixed race population assuming approximately equal contributions of the two parent populations.

The IQ of 86 of Indians is a little higher than the IQ of 82 based on 13 studies in India given in Lynn (2006). There may be two reasons for this. The first is that those who migrated to Africa may have been a little above the average, and the second may be that Indians in Africa enjoy a higher standard of living that may give their intelligence an environmental boost.

The higher intelligence of Indians than of blacks is confirmed by numerous observations. For instance, Klingelhofer, who carried out the study in Tanzania, observed that the students recorded their ages and that "it seems...likely that the ages reported by the Asian groups are reasonably accurate, since most Asian families are literate and follow the custom of observing birthdays so that a student could be expected to know and remember his date of birth." Among the African students this was not the case. A substantial number reported their age as "about 16 " or "approximately 18 " or "I think I was born in 1949," etc. (1967, p. 206). There is further corroboration of the low intelligence of sub-Saharan blacks from seven studies showing that they have smaller average brain size than Europeans. Details of these are given in Lynn (2006). The most authoritative study is that of Smith and Beals (1990) giving a brain size difference of 85 cc or about 7 percent. Brain size is significantly associated with intelligence at a correlation of approximately 0.4 (Vernon et al., 2000).

## 4. Intelligence of University Students

Twelve studies have been reported of the intelligence of African university students in South Africa. Some of these also give IQs of European students tested at the same time and three of them also give IQs for Indian students. In these studies whites obtain the highest IQs followed by the Indians, and the blacks obtain the lowest IQs. The studies are summarized in Table 2.3. Row 1 gives an IQ of 84 for African and 103 for European university students calculated in relation to American adult norms given in Raven, Court, and Raven (1994). Rows 2 and 3 show results for students on the Blox test and give the IQs of Africans in relation to South African European student norms of 100. Row 4 gives results for the WAIS-R for students with an average age of 25 years at the African universities of Fort Hare, Zululand, the North, and the Medical University of South Africa. The Verbal IQ was 78 and the Performance IQ 73, showing once again that the Africans have low IQs in all major cognitive abilities and disconfirming the claim sometimes made that Africans are handicapped in language tasks. Row 5 gives an IQ of 100 for science students at the University of the North. Row 6 gives an IQ of 77 for students at a less prestigious African university. Row 7 gives an IQ of 83 for students at the University of the Witwatersrand and the Rand Afrikaans University in Johannesburg. Row 8 gives an IQ of 82 for African students at the Venda University in the Northern Transvaal.

Table 2.3. IQs of university students in South Africa

|  | Test | N | Africans | Indians | Europeans | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | APM | 80 | 84 | - | 103 | Poortinga, 1971 |
| 2 | Blox | 97 | 72 | - | 100 |  <br> Foden, 1975 |
| 3 | Blox | 600 | 79 | - | 100 | Taylor \& Radford, 1986 |
| 4 | WISC-R | 63 | 75 | - | - | Avenant, 1988 |
| 5 | SPM | 147 | 100 | - | - | Zaaiman, 1998 |
| 6 | SPM | 30 | 77 | - | - | Grieve \& Vilioen, 2000 |
| 7 | SPM | 309 | 83 | - | 103 | Rushton \& Skuy, 2000 |
| 8 | SPM | 60 | 82 | - | 105 | Sonke, 2001 |
| 9 | SPM | 70 | 81 | - | - | Skuy et al., 2002 |
| 10 | SPM | 342 | 93 | 98 | 106 | Rushton et al., 2002 |
| 11 | APM | 294 | 99 | 102 | 113 | Rushton et al., 2003 |
| 12 | APM | 306 | 101 | 106 | 116 | Rushton et al., 2004 |

The comparison European group were at the University of Tilberg in the Netherlands. Row 9 gives an IQ of 81 for psychology students at the University of the Witwatersrand. Row 10 gives IQs of 93 for blacks, 98 for Indians, and 106 for whites for first year engineering students at the University of the Witwatersrand. Row 11 gives IQs of 99,102 , and 113 for a further sample of engineering students at the University of the Witwatersrand. Row 12 gives IQs of 101, 106, and 116 for a third sample of black, Indian, and white Witwatersrand engineering students. Thus, in these studies the IQs of students show the same rank order as in the general population samples summarized in Table 2.2.

## 5. Educational Attainment

By the 1960s, the great majority of children in South and East Africa attended primary schools. In Zimbabwe about 80 percent of children of primary school age attended schools and virtually all children of primary school age attended school in Zambia (Dotson and Dotson (1968, p. 83).

Race differences in educational attainment show the same gradient as for intelligence. Some data illustrating these differences in South Africa are given in Table 2.4. Row 1 gives the percentages who had only completed primary education in 1980, collected by the Central Statistical Service, and shows that this was lowest among whites, followed by Indians but, surprisingly, higher among coloreds than among blacks. Row 2 gives the percentages that had some secondary education for the same year and from the same source and shows that this was highest among whites ( 57 percent), followed by Indians ( 38 percent), coloreds

Table 2.4. Race differences in educational attainment in South Africa (percentages)

|  | Year | Measure | Whites | Indians | Coloreds | Blacks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1980 | Primary | 15 | 33 | 44 | 37 |
| 2 | 1980 | Secondary | 57 | 38 | 23 | 14 |
| 3 | 1980 | University | 4.2 | 0.26 | 0.15 | 0.05 |
| 4 | 1991 | Matric. | 23.4 | 19.2 | 4.8 | 2.8 |
| 5 | 1991 | University | 3.6 | 2.5 | 0.7 | 0.6 |
| 6 | 2004 | University | 29.8 | 14.9 | 4.9 | 5.2 |
| Sources. 1-3: Mickelson et al., 2001. 4: Census, 1991. 5: Richardson et al., 1996.6: www.SouthAfricaninfo.com.. |  |  |  |  |  |  |

(23 percent), and blacks (14 percent). Row 3, also for 1980, gives the percentages with university degrees and shows that this follows the same gradient as for secondary education, being highest among whites (4.2 percent), followed by Indians ( 0.26 percent), coloreds ( 0.15 percent), and blacks ( 0.05 percent). Row 4 gives the percentages that had passed the Matriculation examination taken by school leavers in the 1991 census. Row 5 gives the percentages enrolled in universities in 1991 and shows the same white-Indian-colored-blacks gradient. Row 6 gives the percentages aged 20 and over who have completed university and other forms of higher education. These results are consistent in showing that the whites achieve the best education followed by the Indians, coloreds, and blacks, but the differences between the coloreds and blacks is rather less than between the other races.

Racial differences in the mathematics test for 13-year-olds in the Third International Study have been given by Howie $(1997,2002)$ and are shown in Table 2.5. It will be seen that whites do best, Indians come next but are only marginally ahead of coloreds, while blacks performed worst.

## Table 2.5. Race differences in mathematics attainment

|  | Whites | Indians | Coloreds | Blacks |
| :--- | :---: | :---: | :---: | :---: |
| Number | 831 | 199 | 1,172 | 5,412 |
| Score | 373 | 341 | 339 | 254 |
| S. Error | 4.9 | 8.6 | 2.9 | 1.2 |

Studies in East Africa have confirmed the higher level of educational attainment of Indians as compared with blacks. Studies carried out in 1971 and 1980 in Tanzania by Armitage and Sabot (1991) showed that Indians had many more years of education than blacks. The results are summarized in Table 2.6. Row 1 gives years of education from a survey of approximately 1,000 manufacturing sector employees carried out in 1971 showing 8.3 years of schooling for Indians as compared with only 3.6 years for blacks. Row 2 give results from a survey of approximately 2,000 workers in Dar es Salaam carried out in 1980 and shows a similar difference ( 11.1 of schooling for Indians, 6.2 years for blacks). These differences reflect the higher socioeconomic status of the Indians. Europeans were not included in these surveys.

There are also differences in the examination attainments of blacks

Table 2.6. Education (number of years) of blacks and Indians in Tanzania

| Year | Blacks | Indians |
| :--- | :---: | :---: |
| 1971 | 3.6 | 8.3 |
| 1980 | 6.2 | 11.1 |

and Indians. Some of these have been given for Kenya and Tanzania for the mid-1980s by Armitage and Sabot (1991). The attainment measure is placement in the top and second divisions in the O (Ordinary) level examinations normally taken at the age of 16 in several academic subjects. The results are summarized in Table 2.7. Rows 1 and 2 show that in Kenya, Indians had higher percentages than blacks in the top two divisions. Rows 3 and 4 show that this is also the case in Tanzania. Conversely blacks had higher percentages than Indians in the bottom two divisions in both countries.

## Table 2.7. Examination attainment of blacks and Indians in East Africa (percentages)

|  | Country | Division | Blacks | Indians |
| :---: | :--- | :---: | :---: | :---: |
| $\mathbf{1}$ | Kenya | 1 | 12.2 | 40.0 |
| 2 | Kenya | 2 | 23.0 | 40.0 |
| 3 | Tanzania | 1 | 9.4 | 12.9 |
| 4 | Tanzania | 2 | 35.4 | 45.2 |

## 6. Earnings

Race differences in average annual earnings of the four racial and ethnic populations in South Africa for selected years from 1936 to 2000 are given in Table 2.8. It will be seen that the rank order of average earnings is consistent over the 64 -year period. Whites have had the highest earnings, followed by Indians and then by coloreds, and blacks have had the lowest earnings. The differentials have narrowed for whites as compared with the other races. Whites had average earnings about ten times those of blacks in 1936 and in 1946, but this advantage has shrunk progressively to slightly less than three times those of blacks in 1993. Indians had average earnings slightly more than double those of blacks in 1936, 1975, and 1985, but slightly less than double those of blacks in 1993.

The same differences in average earnings between blacks, whites,

Table 2.8. Race and etbnic differences in South Africa in earnings (1936-1946, £; 1995-2000, Rand)

|  | Year | Whites | Indians | Coloreds | Blacks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1936 | 129.6 | 27.6 | 18.8 | 12.8 |
| 2 | 1946 | 238.1 | 45.7 | 34.1 | 23.2 |
| 3 | 1995 | 103,000 | 71,000 | 32,000 | 23,000 |
| 4 | 2000 | 158,000 | 85,000 | 51,000 | 26,000 |
| Sources: rows 1 and 2: Reynders, 1963; rows 3 and 4: Earning and Spending in South Africa: Selected findings and comparisons from the income and expenditure surveys of October 1995 and October 2000. www.statssa.gov.za. |  |  |  |  |  |

and Indians have been present in Kenya. Table 2.9 gives the average incomes of the three groups from 1914 through 1971 provided by Bigsten (1988). The average incomes of the Indians and Europeans are expressed as multiples of those of blacks. Thus, row 1 shows that in 1914 the average income of the Indians was 26 times greater than that of blacks, while the average income of the Europeans was a remarkable 144 times greater than that of blacks. Rows 2 through 5 show the average incomes from 1927 through 1971. It will be seen that the income advantage of the Indians relative to that of the blacks barely changed over the period of a little over half a century. The income advantage of the Europeans however was greatly reduced by 1971 to less than a third of what it was in 1914. Nevertheless, even in 1971 the income of the Europeans was almost double that of Indians and 42 times greater than that of blacks.

There are similar differences in average earnings between blacks and Indians in Tanzania. Table 2.10 gives the results of the 1971 survey of approximately 1,000 manufacturing sector employees and of the

Table 2.9. Earnings of Indians and Europeans in Kenya expressed as multiples of earnings of blacks

| Year | Blacks | Indians | Europeans |
| :--- | :---: | :---: | :---: |
| 1914 | 1 | 26 | 144 |
| 1927 | 1 | 25 | 107 |
| 1946 | 1 | 22 | 84 |
| 1960 | 1 | 20 | 57 |
| 1971 | 1 | 24 | 42 |

1980 survey of approximately 2,000 workers in Dar es Salaam. In both surveys Indians earned substantially more than blacks. The earnings of Europeans were not reported.

Table 2.10. Earnings per month (Sh) of blacks and Indians in Tanzania

| Year | Blacks | Indians | Reference |
| :---: | :---: | :---: | :--- |
| 1971 | 273 | 829 | Armitage \& Sabot, 1991 |
| 1980 | 1584 | 668 | Armitage \& Sabot, 1991 |

## 7. Socioeconomic status

Race differences in socioeconomic status in South Africa in 1980 are given in Table 2.11. Row 1 gives the percentages working in the professions and shows that this was the highest among the whites ( $20 \%$ ), followed by Indians ( $10 \%$ ), coloreds ( $6 \%$ ), and blacks ( $4 \%$ ). Row 2 gives the percentages working as administrators and managers and shows the same gradient, being highest among the whites ( $5 \%$ ), followed by Indians ( $2.5 \%$ ), coloreds ( $0.2 \%$ ), and blacks ( $0.1 \%$ ).

Table 2.11. Race differences in socioeconomic status in South Africa in 1980 (percentages)

|  | Measure | Whites | Indians | Coloreds | Blacks | Reference |
| :--- | :--- | ---: | :---: | :---: | :---: | :--- |
| 1 | Professional | 20.0 | 10.0 | 6.0 | 4.0 | Mickelson et al., <br> 2001 |
| 2 | Administrators | 5.0 | 2.5 | 0.2 | 0.1 | Mickelson et al., <br> 2001 |

Socioeconomic status differences between blacks and Indians in Tanzania were shown by Armitage and Sabot (1991) in their 1971 survey of approximately 1,000 manufacturing sector employees. Table 2.12 gives the percentages blacks and Indians in four socioeconomic status categories. It will be seen that a remarkable 90 percent of Indians were working in white collar or skilled positions as compared with only 40 percent of blacks. Conversely, only 10 percent of Indians were working in semi-skilled or skilled positions as compared with 60 percent of blacks.

In Zimbabwe in the 1970s about half the blacks had full primary and two years of secondary education, while all whites had a full secondary
education (Parker, 1970). In the late 1990s unemployment was 37 percent among blacks and 6 percent among whites (Foster, Hitchcock, and Lyimo, 2000, p. 48).

Table 2.12. Socioeconomic status differences between blacks and Indians in Tanzania (percentages)

| Country | Blacks | Indians |
| :--- | :---: | :---: |
| White collar | 11 | 59 |
| Skilled | 29 | 31 |
| Semi-skilled | 40 | 9 |
| Unskilled | 20 | 1 |

## 8. Poverty and Malnutrition

In 1994 the South African Integrated Household Survey of approximately 3,156 children reported the percentages of the races that were living in poverty, defined as having less than 726 Rand per month, and that were malnourished, as determined by the prevalence of stunting (low stature). Stunting is defined as having height two or more standard deviations below the international reference standard mean. The results are given in Table 2.13. The same racial gradient is present. Whites have the lowest percentage living in poverty, followed by Indians and coloreds, while blacks have the highest percentage in poverty. Whites also have the lowest percentage of malnutrition (5.7 percent), followed by coloreds ( 17.6 percent), while blacks have the highest percentage ( 31.9 percent). The figure for Indians was not given in this study.

I have shown in detail that malnutrition adversely affects intelligence (Lynn, 1990). There is no doubt that the greater prevalence of malnutrition among the coloreds and the blacks will contribute to their lower intelligence. However, even among blacks fewer than a third are malnourished and this makes it doubtful whether it can fully explain the race differences in IQs. The race differences in the prevalence of malnutrition and intelligence can be understood as arising from genotype-environment correlation as described by Plomin (1994), through which those with high genotypic and phenotypic intelligence provide their children with good nutrition. This gives them a double advantage of good genes and a good environment and brings genotypic and phenotypic intelligence into positive correlation.

Table 2.13. Race differences in poverty and malnutrition in South Africa

| Measure | Whites | Indians | Coloreds | Blacks | Reference |
| :--- | :---: | :---: | :---: | :---: | :--- |
| Poverty | 12.0 | 21.0 | 34.0 | 52.0 |  <br> Orkin, 1997 |
| Malnutrition | 5.7 | - | 18.0 | 32.0 | Burgard, 2002 |

## 9. Crime

Race differences in homicide per 100,000 population in South Africa have been published by Lester (1989) and are given in Table 2.14. These show a similar gradient to that present for intelligence, socioeconomic status, and the like, with the lowest rate among whites, followed by Indians and much higher rates among coloreds and blacks. There is, however, a reversal of the usual sequence for coloreds and blacks, with consistently higher homicide rates among coloreds than among blacks.

## Table 2.14. Race differences in homicide per 100,000 population in South Africa

| Year | Whites | Indians | Coloreds | Blacks |
| :--- | :---: | :---: | :---: | :---: |
| 1978 | 3.8 | 4.4 | 26.5 | 23.9 |
| 1981 | 6.8 | 10.0 | 76.6 | 24.5 |
| 1984 | 5.8 | 9.9 | 58.0 | 34.5 |

## 10. Infant Mortality

Race differences in infant mortality per 1,000 live births in South Africa for 1945 and for 1987-1989 have been given by ChimereDan (1993) and are shown in Table 2.15. Infant mortality rates have fallen considerably during the half-century, as elsewhere in the world, as a result of medical advances particularly in the use of antibiotics. Nevertheless, there were considerable differences between the races and in both data sets the infant mortality rates follow the intelligence gradient of whites- Indians-coloreds-blacks.

## 11. Fertility

Race differences in fertility (Total Fertility Rates) in South Africa have been published by Kaufman (1997) for the years 1945 through 1989 and are shown for selected years in Table 2.16. The race

Table 2.15. Race differences in infant mortality per 1,000 live births

| Year | Whites | Indians | Coloreds | Blacks |
| :--- | :---: | :---: | :---: | :---: |
| 1945 | 40.3 | 82.5 | 151.0 | 190.0 |
| $1987-89$ | 7.9 | 14.4 | 33.4 | 61.0 |

differences show the typical pattern found in many parts of the world where fertility begins to decline first and remains low in the groups (be they social classes or races) with the highest intelligence because these are better able to use contraception efficiently. Thus, whites had the lowest fertility throughout the period. In 1945-1950 the fertility of the other three races was much the same. TRF of around 6 is regarded as "natural fertility," i.e. fertility uncontrolled by the use of contraception. By 1965-1970 the fertility of the Indians showed a significant decline, indicating that significant numbers were using contraception, but there was virtually no sign of the use of contraception among the coloreds and blacks. By 1987-1989 the fertility of all four races was well below 6 showing that some members of all races were using contraception. A 1987-1989 survey showed that the percentages using contraception

Table 2.16. Race differences in fertility (TFR) in South Africa

| Year | Whites | Indians | Coloreds | Blacks |
| :--- | :---: | :---: | :---: | :---: |
| $1945-50$ | 3.4 | 6.5 | 6.2 | 6.1 |
| $1965-70$ | 3.1 | 4.2 | 6.1 | 5.8 |
| $1987-89$ | 2.0 | 2.4 | 2.9 | 4.1 |

were whites (80), followed by Indians (70), coloreds (64), and blacks (50) (Chimere-Dan, 1993).Thus, in 1987-1989 both the use of contraception and the fertility rates of the races reflected their IQs. The use of contraception was highest among whites, followed by Indians and coloreds, and lowest among blacks, while the fertility rates showed the reverse gradient being lowest among whites, followed by Indians and coloreds, and highest among blacks.

## 12. Conclusions

The racial socioeconomic hierarchy throughout South and East Africa consists of Europeans at the top, Indians (together with coloreds in South Africa) in the middle, and blacks at the bottom. The Europeans
are at the top because when they colonized the countries they took ownership of most of the land, established businesses, and administered the civil service and police. Their position can be explained by structuralism, which maintains that races that hold power use it to sustain their own position and are able to do this for a number of generations. The position of the Indians (and coloreds in South Africa) in the middle of the socioeconomic hierarchies requires some explanation. In all these countries there are large majority indigenous African populations and small minority Indian populations. Despite being very small minorities and without political power, the Indians have higher IQs than the blacks, and higher educational attainment, socioeconomic status, and earnings. Why should this be? Some economists who have reported the higher earnings of the Indians surmise that this must be due to "the persistence of racial discrimination" (Armitage and Sabot, 1991, p. 92). Since blacks comprise 98 to 99 percent of the populations in East Africa, the proposed discrimination against them and in favor of Indians seems rather improbable. They report that Indians do much better in examinations than blacks in both Kenya and Tanzania, but they do not seem to be aware that examination performance is highly correlated with intelligence at a magnitude of around 0.7 . It does not seem to have occurred to them that Indians might have higher IQs than blacks.

The most reasonable explanation for the higher educational attainment, earnings, and socioeconomic status of Indians throughout South and East Africa (and coloreds in South Africa) is that they have substantially higher IQs than blacks. Some observers have reached this conclusion with regard to the Indians, although the term intelligence is never mentioned. In the 1950s the Jack Report setting out a socioeconomic plan for Nyasaland proposed that technical vocational education in craft skills should be provided for Indians "to fill a gap in the economy which blacks have not yet demonstrated their ability to fill" (Federation of Rhodesia and Nyasaland, 1959, p. 186). Floyd and Lillian Dotson are two American sociologists who carried out fieldwork in East Africa in the 1960s to try to discover why the Indians did so much better than the blacks. They concluded that few blacks ran shops successfully because

> this demands a knowledge of arithmetic and bookkeeping which would be completely beyond the average African. He does not know
prices or where to buy stock advantageously. He does not know in detail what each item costs him, and he doesn't bother to figure out a fixed mark-up item by item. For this reason, he often sells at a loss without realizing what he is doing. When business has been brisk, and he finds himself with an unusual amount of money, he is under the impression that he is rich. He does not fully realize that the larger proportion of what he has in hand is capital, not profit, and that it has to be re-invested if he is to stay in business (Dotson and Dotson, 1968, p. 81-82).

Several observers concluded that the blacks have character defects that prevent them from doing as well in socioeconomic status compared with Europeans and Indians. They have contrasted the strong work ethic of Europeans and Indians with the more relaxed work attitudes of the blacks. As early as 1897 Sir Harry Johnston who was appointed head of the British administration in Nyasaland wrote

I am all for Indianizing Central Africa and making these great wastelands the seats of thriving Indian colonies where something better than the rude agriculture of Africa can be practiced by a mixture of Indian thrift and industry (Johnston, 1897, p. 182).
Dotson and Dotson (1968, p. 44) observe that Johnston conceived of "Negro improvement" in both cultural and biological terms. If blacks should be "dashed by the blood of a superior race in the course of Indian colonization, well and good."

The Dotsons also concluded that the blacks had character defects that prevent them doing well in small businesses. They quote with approval an Indian informant who told them
when the African businessman makes a bit of money, he begins to think of himself as a big man. First of all, this leads to drink, since he is in a position, he thinks, to afford it. Secondly, he thinks of an additional wife or, if he is really making money, two or three.

The Dotsons concluded that "Culture and character structure have prevented the African from offering the Indian serious competition in retail trade" (Dotson and Dotson (1968, p. 82). What the Dotsons are describing here is the preference for "high time preference" described by Levin (1997, p. 78) i.e. the"immediate gratification" in preference to deferred gratification for long term advantages. This has been demonstrated in three studies in the Caribbean.

## Chapter 3

## Australia

1. Composition of the Population
2. Intelligence and Educational Attainment of Aborigines
3. Intelligence and Educational Attainment of Asians
4. Earnings
5. Socioeconomic Status
6. Unemployment
7. Crime
8. Fertility
9. Drug Abuse
10. Infant Mortality and Life Expectancy
11. Dysfunctional Personality
12. Self-Concept
13. Conclusions

The Aborigines are the indigenous people of Australia. They have long been recognized as a race in classical anthropology and are one of the seven major races in the taxonomy proposed by Coon, Garn, and Birdsell (1950). They have a distinctive profile of blood groups, about 73 percent of them having $O$ group as compared with a little fewer than 50 percent among Europeans; the remaining 27 percent are

A, and there are virtually none with the B group. Their distinctive racial identity has been confirmed by the genetic analysis made by CavalliSforza, Menozzi, and Piazza (1994) in which the Australian Aborigines together with the original New Guineans constitute a genetic "cluster." The reason that the Australian Aborigines and the original New Guineans are closely related genetically is that the ancestors of the Australian Aborigines migrated from New Guinea to Australia about 60,000 years ago (Bradshaw, 1997). Those who migrated split from those who remained in New Guinea and today inhabit the interior highlands. Also closely related to the Australian Aborigines are the now extinct Tasmanians. The last pure Tasmanian died in 1876, but there are still a few mixed race Tasmanians.

## 1. Composition of the Population

It has been estimated that before the Europeans arrived there were around 300,000 Aborigines in Australia. Their numbers were considerably reduced following the colonization of Australia by Europeans, partly as a result of diseases contracted from Europeans from which they lacked immunities, and partly as a result of Europeans killing them. In the second half of the twentieth century, the numbers of Aborigines in the censuses of 1961, 1971, and 1981 were recorded as approximately $106,000,139,000$, and 171,000 . The rapid increase in numbers has been a result of high birth rates and a reduction of infant and child mortality. In 1991 the Aborigines were about 1.2 percent of the population.

In the second half of the twentieth century there were three groups of Australian Aborigines. The first, comprising 34 percent in the 1986 census, lived on Government reserves principally in the north and center of Australia. The second group ( 42 percent) lived in large villages of 1,000 population to substantial towns of up to 100,000 inhabitants. The third group ( 24 percent) lived in larger towns and cities of more than 100,000 . Many of the second and third groups have some European ancestry, while those on the reservations are largely pure Aborigines. Children of the second and third groups typically attend schools with Europeans and virtually all of these speak English as their only language. 76.8 percent of Aborigines spoke English as their only language in the 1986 census.

Australia was largely peopled by British immigrants in the eighteenth and nineteenth centuries. A few Germans arrived in the second half of the nineteenth century. After the end of World War II the Australian governments believed that the population needed to be increased, particularly by Europeans. In 1947 the government authorized the acceptance of 170,000 refugees and migrants a year from Europe. During the next 20 years approximately 2 million European migrants entered the country, about 40 percent from Britain and about 60 percent from continental Europe, principally from Austria, Belgium, Greece, Italy, Malta, the Netherlands, and Spain.

In the late 1960s the assisted passages scheme was extended to migrants from Turkey, Southwest Asia, and the Middle East. In 1976 the first Indo-Chinese and Vietnamese boat people began to arrive in Australia, and in the 1980s a number of ethnic Chinese came because of the discriminatory policies directed against the Chinese in Malaysia by the Malay government. By the 2001 census there were approximately 170,000 Indo-Chinese in Australia, and ethnic Asians comprised approximately 4 percent of the population.

## 2. Intelligence and Educational Attainment of Aborigines

Several of the British explorers and early anthropologists who studied the Aborigines in the nineteenth century concluded that they had a low level of intelligence: "they are still but children in their mental development" (Wake, 1872, p. 80). Their languages lack numbers except for one and two: "two or a pair represent the extent of their numerals" (Crawfurd, 1863, p. 170). Their languages are also lacking in abstract concepts and are "poor in collective nouns" (Curr, 1886, p. 20), indicative of the inability to formulate general concepts that is one of the principal characteristics of intelligence. Their vocabulary is limited; for instance, they have no word for thumb (Kearins, 1988). Anthropologists in the twentieth century observed their primitive life-style. Thomas (1925, p. 295) described the Aborigine as "a nomad, who knows neither pottery nor metal work, has no domesticated animals, and he does not till the ground, depending for his sustenance on snakes and lizards, emus, grubs, and simple vegetable foods." Bleakley (1961, p. 78) observed that they did not store food for future consumption:

The Aborigine seems to have had no idea of conserving supplies against a hungry time.... Their main stone implements include the hafted stone axe and knife, and microliths (tiny flakes) mounted as barbs of spear-heads, teeth of saw-knives and so on. Weapons consist of clubs, spears, spear throwers, and the boomerang. Women use digging sticks to uproot yams and other roots (Cole, 1965, p .83).

They never invented or acquired the bow and arrow (Coon, 1962) and have no well-developed group hunting techniques (Gould, 1969). They never domesticated the dingo, the wild dog of Australia. The Aborigines did however make primitive drawings of the human form which survive in the Jinmiun rock shelter in the Northern Territories and which have been dated at about 58,000 years ago (Bradshaw, 1997; 1995, p. 603).

Diamond (1997, p. 309) attributes the failure of the Australian Aborigines to domesticate animals or to develop agriculture to "the lack of domesticable animals, the poverty of domesticable plants, and the difficult soils and climate," but on the same page he tells us that yams, taro, and arrowroot grow wild in northern Australia and could have been planted, and there are two indigenous wild grasses that could have been bred to produce cereals. The kangaroo and the dingo could have been domesticated by selective breeding for tameness over a number of generations. The climate of Australia is very varied and apart from the deserts of the central region is potentially suitable for the agriculture that was developed during the nineteenth and twentieth centuries by Europeans.

The Tasmanians had an even lower level of cultural development than the Aborigines of the Australian mainland. Captain William Bligh visited Tasmania in 1788 and described them as nomadic huntergatherers who "had some miserable wigwams, in which were nothing but a few kangaroo skins spread on the ground"; "they moved from one area to another, foraging as they went, seeking out berries and fruits and the seeds of various bushes. Apart from kelp, they rarely carried food of any kind with them," and "they usually went naked, but occasionally draped a kangaroo skin over their bodies" (Bowdler and Ryan, 1997, pp. 313-326). The Russian anthropologist Vladimir Kabo (1995, p. 603) has written that they are "the only society that persisted at the level of the late Paleolithic right up to the beginning of European colonization." They are the only known people who never discovered how
to make fire (Gott, 2002). They were sometimes able to obtain fire from spontaneous bush fires, but if these went out they had to wait for a new spontaneous bush fire or get it from a neighboring band. They never invented the device of hafting a sharp stone into a wooded shaft to make a spear or axe (Ryan, 1992).

The first attempt to estimate the intelligence of the Australian Aborigines was made by Galton (1869). On the basis of travelers' accounts of their accomplishments he estimated their intelligence was approximately three "grades" below that of the English. In Galton's metric, a grade was equivalent to 10.4 IQ points. Hence in terms of the IQ scale, he estimated the Australian Aborigine IQ at 68.8. Seventeen studies of the intelligence of Australian Aborigines assessed by intelligence tests have shown that this was a fairly accurate assessment. These studies are summarized in Table 3.1 and are in relation to a European mean IQ of 100. All these figures are adjusted for "Flynn Effects," i.e., the increase of intelligence of about 3 IQ points a decade that has taken place in economically developed nations from around 1930 to the end of the twentieth century. Row 1 shows the results of the first study giving an IQ of 66 obtained by Porteus with his Maze Test, a series of paper and pencil mazes of increasing complexity

Table 3.1. Studies of the intelligence of Australian Aborigines

| Age | N | Test | IQ | Reference |
| :---: | ---: | :---: | :--- | :--- |
| Adults | 56 | PM | 66 | Porteus, 1931 |
| Adults | 24 | PM | 59 | Piddington \& Piddington, 1932 |
| Adults | 268 | Various | 58 | Porteus, 1933a, 1933b |
| Adults | 31 | AA/PF | 69 | Fowler, 1940 |
| Adults | 87 | PM | 70 | Porteus \& Gregor, 1963 |
| 11 | 101 | QT | 58 | Hart, 1965 |
| Adults | 103 | PM | 74 | Porteus et al., 1967 |
| 5 | 24 | PPVT | 62 | De Lacey, 1971a, 1971b |
| $6-12$ | 40 | PPVT | 64 | De Lacey, 1971a, 1971b |
| Adults | 60 | CPM | 53 | Berry, 1971 |
| $3-4$ | 22 | PPVT | 64 | Nurcombe \& Moffit, 1973 |
| $6-14$ | 55 | PPVT | 52 | Dasen et al., 1973 |
| 9 | 458 | QT | 58 | McElwain \& Kearney, 1973 |
| 13 | 42 | SOT | 62 | Waldron \& Gallimore, 1973 |
| $6-10$ | 30 | PPVT | 59 | De Lacey, 1976 |
| 25 | 22 | CPM/ KB | 60 | Binnie-Dawson, 1984 |
| 4 | 55 | PPVT | 61 | Nurcombe et al., 1999 |

from which mental age is measured as the success rate of the average child of the corresponding chronological age. The Maze Test was later incorporated into the Wechsler tests and provides a measure of $g$ and of visualization. The mean mental age of his sample adults was 10.5 , the approximate equivalent of an IQ of 66. Subsequent studies give IQs in the range between 52 and 74 . The median IQ of the seventeen studies is 62 and represents the best estimate of the average intelligence of Australian Aborigines.

The low intelligence of Australian Aborigines has been confirmed by a study by Davidson (1974) showing that they have slow reaction times, which are correlated with intelligence. Further corroboration of the low intelligence of Australian Aborigines comes from 7 studies showing that they have smaller average brain size than Europeans. Details of these are given in Lynn (2006). The most authoritative study is that of Smith and Beals (1990) giving a brain size difference of 144 cc ., about 10 percent. Brain size is significantly associated with intelligence at a correlation of approximately 0.4 (Vernon et al., 2000).

Four studies have been made of the intelligence of AboriginalEuropean hybrids. The median IQ of these is 78, about midway between the IQ of Aborigines and Europeans. I have given more details of these studies in Lynn (2006).

The educational attainment of the Aborigines is consistent with their low intelligence. Some Australian social scientists have asserted that the poor performance of Aborigines on intelligence tests does not give a valid measure of their true abilities because the tests are biased. For instance, Guider (1991, p. 45) writes "culturally biased tests give a false indication of Aboriginal students' abilities." If this were so, Aborigines would be expected to do well in education and in the work place. This is not the case. Aborigines do poorly in education, consistent with their low intelligence, showing that their low cognitive abilities are not confined to their performance on intelligence tests. The educational attainment of Aborigines and Europeans calculated from the 1996 census by Gray, Hunter, and Schwab (2000) is shown in Table 3.2. This gives the proportions of Aborigines and Europeans having skilled vocational qualifications, bachelor degrees, and higher degrees, for males and females. At each level of qualification, fewer Aborigines have qualifications as compared with Europeans, and the higher the qualification, the lower the proportion of Aborigines. This is shown in the final column giving the ratio of Aborigines to Europeans for
the three kinds of qualification. The principal reason for this will be that the proportion of Aborigines to Europeans declines at the higher levels of intelligence required for university bachelor and higher degrees. For all three educational qualifications there is a higher proportion of Aboriginal females than males. The reason for this may be that Aboriginal females are better socialized. The same sex difference is present among African Americans in the United States and Africans in Britain.

## Table 3.2. Educational attainment of Australian Aborigines and Europeans in 1996 (percentages)

|  | Qualification | Sex | Aborigines | Europeans | Ratio |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1 | Skilled vocational | M | 16.3 | 23.8 | 0.68 |
| 2 | Skilled vocational | F | 3.3 | 4.1 | 0.81 |
| 3 | Bachelor degree | M | 2.6 | 10.1 | 0.26 |
| 4 | Bachelor degree | F | 4.3 | 11.4 | 0.38 |
| 5 | Higher degree | M | 0.3 | 2.4 | 0.13 |
| 6 | Higher degree | F | 0.4 | 1.4 | 0.29 |

The low intelligence of Australian Aborigines also appears in the proportion of them who are educationally backward and mentally retarded. In the 1970s, 5 percent of Aboriginal children were in special schools for the mentally retarded, compared with 2.8 percent of Europeans (Callan, 1986). In normal schools Aboriginal children are over-represented in classes for slow learners. In the 1970s over 60 percent of Aborigines in schools in Queensland and Western Australia, and 40 percent in New South Wales, were placed in classes for the backward (Callan, 1986), as compared with approximately 3 percent of European children. In Western Australia, the incidence of intellectual disability from 1953-2002 among Aborigines was 7.4 percent as compared with 3.5 percent for the total population (Glasson, Sullivan, Hussain, and Bittles, 2005).

By the 1970s 75 percent of Aborigines attended regular schools and some went into tertiary education, but as of 1976 no Aborigine had ever obtained a Ph.D. This must call into question the assertion frequently made that the full range of intelligence is present in all races.

In the years 2000 and 2003 the Australian Council for Educational Research carried out studies of the attainments of representative samples of Aboriginal and European 15 -year-olds in reading, mathematics, and science. The results of the 2000 study are given by De Bertoli and

Creswell (2004) and are shown in Table 3.3. The standard deviations were approximately 50 . The right hand column gives the AboriginalEuropean difference in standard deviation units ( $d$ ). The Aborigines and Europeans differ on intelligence by 38 IQ points, equivalent to $2.5 d$. Thus, Aborigines performed a bit better on these educational tests than would be expected from their IQs. Nevertheless, their performance on these educational tests was weak compared with that of African Americans in the United States, who score typically score about $0.8 d$ below Europeans.

## Table 3.3. Educational attainment of Australian Aborigines and Europeans in 1996

| Subject | Aborigines | Europeans | $\boldsymbol{d}$ |
| :--- | :---: | :---: | :---: |
| Reading | 440 | 531 | 1.82 |
| Math | 450 | 530 | 1.60 |
| Science | 445 | 525 | 1.60 |

## 3. Intelligence and Educational Attainment of Asians

An IQ of 89 for a sample of 111 South Asian immigrants in Australia tested with the Progressive Matrices has been given by De Lemos (1989). This figure is a little higher than the IQ of 84 of indigenous South Asians given in Lynn (2006). The higher IQs of the South Asian immigrants in Australia may be due to selective immigration of the more intelligent or the better environment in Australia.

A study of the intelligence (tested with the Progressive Matrices), educational attainment, and work motivation of 11 -year-old Chinese and Vietnamese immigrants in Australia, compared with a matched sample of Europeans, has been published by Dandy and Nettelbeck (2002). The results are summarized in Table 3.4. The IQ of the Chinese was 108 in relation to 1988 norms, but this needs adjusting downwards by 2 IQ points to allow for the Flynn effect. This corrected figure of 106 is virtually identical to the IQ of 105 of indigenous East Asians derived from numerous studies given in Lynn (2006). The authors do not give the IQ of the Vietnamese but say that this did not differ significantly from the Europeans, so a figure of 100 has been entered in the table. A number of Vietnamese emigrants have been ethnic Chinese, but the percentage of these in the sample is not given. The right hand column gives the number of hours of weekly homework of the Chinese,

Vietnamese, and Europeans and shows that the Chinese did the most homework followed by the Vietnamese, while the Europeans did the least. These differences are all statistically significant. The homework differences suggest that the Chinese and Vietnamese have a work motivation advantage over the Europeans. The mathematical abilities and language abilities of the three groups were assessed by teachers. Chinese and Vietnamese were assessed as having significantly higher mathematical abilities but not language abilities, unsurprisingly as the children had only been in Australia for an average of seven years and probably spoke their own languages at home.

Table 3.4. Intelligence and homework of Chinese and Vietnamese

| Group | $\mathbf{N}$ | $\mathbf{I Q}$ | Homework/Week |
| :--- | :---: | :---: | :---: |
| Chinese | 29 | 106 | 12.0 hours |
| Vietnamese | 56 | 100 | 8.5 hours |
| Europeans | 75 | 100 | 5.1 hours |

The educational attainment of East Asians is higher than that of native-born white Australians and of foreign-born Europeans from English speaking countries (mainly the UK and Ireland) and from Southeast Europe. Figures released by the Australian Department of Employment, Education, and Training for proportions of students enrolled in higher education in 1991 in relation to the numbers aged 17-64 in the population for six groups categorized by place of birth are given in Table 3.5. The proportions of the groups in higher education are expressed as odds ratios with the proportion for the total population set at 1.0. It will be seen that East Asians from Hong Kong (including a small number from Macao), who are all ethnic Chinese, are

## Table 3.5. Proportions of students enrolled in higher education (odds ratios)

| Group |  | OR |
| :--- | :--- | :---: |
| Europeans | Native | 1.11 |
| Europeans | Foreign-ES | 0.73 |
| Europeans | Foreign-SEE | 0.21 |
| East Asians | Hong Kong | 2.40 |
| East Asians | Malaysia | 1.94 |
| East Asians | Vietnam | 1.43 |

the most over-represented (2.40). East Asians from Malaysia (including a small number from Brunei), who are mainly ethnic Chinese, come next (1.94), followed by East Asians from Vietnam, who are also mainly ethnic Chinese (1.43). Native-born Europeans come next, followed by foreign-born Europeans from English speaking countries, and finally foreign-born Europeans from non-English speaking countries from Southeast Europe (Yugoslavia and Greece). The rank order of ethnic origin parallels almost exactly the IQs of these groups.

Performance in entrance examinations for tertiary education in 1999 obtained in a sample of immigrant 18-year-olds have been published by Marks, McMillan, and Hillman (2001) and are given in Table 3.6. It will be seen that East Asians do best by a large margin. These are followed by native English speakers from Britain, Ireland, etc., Central and South America, the Middle East and North Africa, Southern Europe (mainly Greeks), and finally by Aborigines. This rank order reflects almost exactly the IQs of indigenous populations given in Lynn (2006) but this is unrecognized by the authors of the report who write of the high scores obtained by the Asians "cultural factors are likely to be at work" (p. 60).

Table 3.6. Marks obtained by applicants for tertiary education (standard errors in parentheses)

| Group | Score__ | Group | Score |
| :--- | :---: | :--- | :---: |
| East Asia | $78.9(1.5)$ | South Europe | $65.7(1.5)$ |
| English Speaking | $68.8(1.1)$ | Pacific Islands | $65.4(4.3)$ |
| C. and S. America | $68.4(5.4)$ | Aborigines | $59.0(3.5)$ |
| M. East and N. Africa | $67.2(1.8)$ |  |  |

## 4. Earnings

Aborigines have much lower incomes than Europeans. Gregory and Daly (1997) have given figures for 1980 and 1990 from the census and expressed the incomes and earnings of Aboriginal men as a percentage of those of Europeans. Their figures are given in Table 3.7. Incomes are for all men and include unemployment benefits, while earnings are for employed men. It will be seen that the incomes of Aboriginal men improved over the 10 -year period from 50.5 percent to 55.5 percent of European men's incomes. The reason for this is that the Australian government raised the welfare benefits for Aborigines. The earnings of Aboriginal men also
improved over the 10 year period, from 65.2 percent to 66.7 percent of European men's earnings, but the improvement was marginal and less than for incomes. In the 1996 census the median weekly income of adults was $\$ 190$ for Aborigines and $\$ 292$ for Europeans.

Table 3.7. Incomes of Aboriginal men as percentages of Europeans

| Year | Group | Aborigines | Europeans |
| :---: | :---: | :---: | :---: |
| 1980 | All | 50.5 | 100 |
| 1990 | All | 55.5 | 100 |
| 1980 | Employed | 65.2 | 100 |
| 1990 | Employed | 66.7 | 100 |
| 1996 | All | 65.1 | 100 |

Because of their low incomes, a much higher percentage of Aborigines live in poverty than of Europeans. A survey carried out in 1973 found that 12.5 percent of the total populations and 40.3 percent of Aborigines were below the poverty line (Altman and Nieuwenhuysen, 1979).

## 5. Socioeconomic Status

The Aborigines who are employed "are characteristically found in low status occupations, primarily because of low levels of education and poor job skills. Most are in unskilled work" (Callan, 1986). In 2004 there were only 61 Aboriginal medical practitioners out of 44,144 , and 58 Aboriginal solicitors out of 15,666 .

## 6. Unemployment

The Aborigines have the high rate of unemployment typical of groups with low IQs. Unemployment rates of Aborigines and Europeans from 1981 through 1996 are given from census returns in Table 3.8. In the 1981 census the unemployment rate of Europeans in Australia (averaged across the eight states) was 6.1 percent, while for the Aborigines it was 25.1 percent. In the 1986 census the unemployment rate of Europeans was 9 percent, while for the Aborigines it was 35 percent. In 1991 the unemployment rate of Aborigines was 30.1 percent, 2.66 times greater than that of Europeans (Borland and Hunter, 2000). They theorize that the high rate of unemployment among the Aborigines may be caused by their high rate of crime, since employers are reluctant to employ those with criminal records
(especially if they are Aborigines). The same disparity was present in the 1996 census (Thompson, 2003).

Table 3.8. Unemployment rates of Aborigines and Europeans (percentages)

| Year | Aborigines | Europeans |
| :---: | :---: | :---: |
| 1981 | 25.1 | 6.1 |
| 1986 | 35.0 | 9.0 |
| 1991 | 30.1 | 11.3 |
| 1996 | 22.7 | 9.0 |

Unemployment of Aborigines and immigrants during 1985-88 measured as weeks unemployed over the four year period are shown in Table 3.9. The data are obtained from a survey of a representative sample of 4,445 individuals (Maani, 1994). Row 1 shows that Aborigines had by far the greatest unemployment at 39.8 weeks. Rows 2,3 , and 4 give unemployment rates for first generation immigrants. Row 2 shows that immigrants from English Speaking (ES) countries (mainly Britain and Ireland) had a very low rate of unemployment (0.13 weeks). Row 3 shows that immigrants from European Non-English Speaking (ENES) countries (mainly Greece and the former Yugoslavia) had a higher rate of unemployment ( 7.67 weeks), while row 4 shows that Asian immigrants had a still higher rate of unemployment (12.61 weeks). Rows 5,6 , and 7 give unemployment rates for second-generation immigrants. Row 5 shows that immigrants from English Speaking (ES) countries still had a very low rate of unemployment ( 1.75 weeks). Row 6 shows that immigrants from European Non-English Speaking (ENES) countries also had a low rate of unemployment ( 3.64 weeks), while row 7 shows that Asian immigrants had a very low rate of unemployment ( 0.06 weeks).

There are three particular points of interest in these unemployment data. First, first generation immigrants generally have higher rates of unemployment than second-generation immigrants, especially those from Non-English Speaking European and Asian countries, many of whom do not have a good command of English or qualifications. Many of the second-generation immigrants have acquired a good command of English and educational qualifications, so their unemployment rate is much lower. Second, the second-generation Asian immigrants have
almost negligible unemployment. The Asians are evidently the model minority in Australia, just as they are in the United States. Third, all immigrants and even first generation immigrants from Non-English Speaking European and Asian countries, many of whom do not have qualifications or a good command of English, have much lower rates of unemployment than Aborigines.

Table 3.9. Unemployment of Aborigines and immigrants, 1985-1988

|  | Group | Weeks Unemployed |
| :--- | :--- | :---: |
| 1 | Australian Aborigines | 39.80 |
| 2 | 1st generation immigrants-ES | 0.13 |
| 3 | 1st generation immigrants-ENES | 7.67 |
| 4 | 1st generation immigrants-Asian | 12.61 |
| 5 | 2nd generation immigrants-ES | 1.75 |
| 6 | 2nd generation immigrants-ENES | 3.64 |
| 7 | 2nd generation immigrants-Asian | 0.06 |

## 7. Crime

Australian Aborigines have much higher rates of crime than Europeans. It was shown by Wilson (1982) that in the 1970s the homicide rate among Aborigines was approximately 10 times greater and convictions for serious assault approximately five times greater than for whites. He considered that many serious assaults among the Aborigines are unreported and that the true incidence is between 10 to 15 times greater than among Europeans. In New South Wales during the years 1973-1976, the rate of imprisonment of Aborigine men was approximately 20 times that of Europeans, and of Aborigine women approximately 30 times greater than that of Europeans (Callan, 1986).

Data for 1986 show that Aborigines were over-represented in prison in all the eight Australian states by factors (odds ratios) ranging from 3.0 in the North Territory to 12.5 in South Australia, and by 9.7 for Australia as a whole (Cove, 1992). Further data for the early 1990s have been compiled by Broadhurst (1997). His results for imprisonment are given in Table 3.10. Row 1 shows that for juveniles the ratio of imprisonment was 48 times higher for Aborigines than for Europeans (he does not give the actual rates). Row 2 gives the actual rates of imprisonment for adults for 1992 and shows that this was 26 times higher for Aborigines than for Europeans.

Table 3.10. Imprisonment rates of Aborigines and Europeans per 1,000 population, 1990s

| Crime | Aborigines | Europeans | Ratio |
| :--- | :---: | :---: | :---: |
| Juveniles | - | - | 48 |
| Adults | 28.0 | 1.1 | 26 |

Broadhurst discusses the reasons why Aborigines have so much higher rates of imprisonment. He dismisses the idea that there could be any genetic reasons for this: "the hereditary thesis with its origins in phrenology is now fully discredited" (p. 413). He analyzes the possibility that there could be racial bias in police arrests or court convictions but finds that this is not the case because the police do not arrest Aborigines proportionately more than their crime rates warrant, and because Aborigines report much higher rates of assault by other Aborigines, as compared with Europeans. He concludes that "the key general cause of the disproportionate criminalization of Aborigines is universally perceived to be socioeconomic deprivation and consequential exclusion" and that "the underlying issues of unemployment, poverty, ill-health, dispossession, and disenfranchisement are the causes of the over-involvement of Aborigines in prison," and these are themselves "the product of indirect discrimination" (pp. 453-4). Thus it is the Europeans who are responsible for the high crime rates of the Aborigines.

## 8. Fertility

The fertility of Aborigines has been about double those of Australian Europeans. The Department of Health of Western Australia has published figures for women confined in the state in 1986 showing that the fertility rate per 1,000 women was 138.9 for Aborigines and 68.3 for Europeans. Aboriginal teenage fertility among 15-19-year-olds was 167 per 1,000 women as compared with 19.4 for Europeans.

## 9. Drug Abuse

Aborigines have high rates of alcoholism, tobacco consumption, and petrol sniffing. All these forms of drug abuse are characteristic of groups with low intelligence, largely because these are unaware of the dangers to their health (Yip, Mashhood, and Naude, 2005). High rates of alcohol abuse have frequently been reported. For instance, a study
found that 53 percent of Aboriginal men and 19 percent of Aboriginal women reported drinking nine or more standard drinks per drinking session compared with 4 percent (men) and 0.5 percent (women) of Europeans (Hunter, Hall, and Spargo, 1992). A survey carried out in the 1980s found that 71 percent of male and 76 percent of female Aborigines were cigarette smokers, compared with 39 percent of male and 42 percent of female Europeans (Hogg, 1995). Another study carried out at about the same time found that 50 percent of male and 49 percent of female Aborigines were cigarette smokers, compared with 28 percent of male and 20 percent of female Europeans (Perkins, Sanson-Fisher, and Blunden, 1994). The same study found that Aborigines were significantly more likely to have used marijuana, heroin, cocaine, and petrol sniffing.

## 10. Infant Mortality and Life Expectancy

Herrnstein and Murray showed in The Bell Curve that race differences in intelligence go some way to explaining differences in infant mortality. They found that the white mothers of infants who had died in the first year after leaving hospital had an IQ 6 points lower than the average. This confirmed an earlier study by Savage (1946) who also found that the mothers of infants who died had below average IQs. The likely principal reason for this is that less intelligent mothers make errors of various kinds and these occasionally result in their children's deaths.

It has also been shown that intelligence is related to adult mortality. This was first shown by O'Toole and Stankov (1992) in a study of 2,309 Australian National Servicemen. These were conscripted between 1965 and 1971 at the age of 18 into the military and intelligence tested. They were followed up in 1982, when they were aged between 22 and 40 , and it was found that 523 had died. These had an IQ 4 points lower than those who remained alive, a statistically highly significant difference. By far the largest cause of death was accidents of various kinds (389), of which motor vehicle accidents (217) were the most frequent.

A second study confirming the association between intelligence and life expectancy has been published by Whalley and Deary (2001). They took 2,230 babies born in Aberdeen (Scotland) in 1921, whose
intelligence was measured when they were 11 -years-old. When they were tracked in 1997 when it was found that the IQs of those who had died were 4.3 IQ points lower than of those who had survived. The difference was greater for women, among whom the survivors had an IQ 4.9 points higher than those who had died, than for men, among whom it was 3.6 IQ points higher. The reason for this sex difference was largely that the men who died in World War II had higher than average IQs. Further studies of this sample showing that childhood IQ predicts good or poor health over the life span has been published by Batty and Deary (2004).

There are three principal reasons why intelligence contributes to life expectancy. First, individuals with high intelligence have fewer accidents because they make fewer misjudgments. Conversely, those with lower IQs make more misjudgments. Some of these misjudgments result in accidents, and some of these are fatal. Second, intelligence is to some degree determined by early nutrition and health, so poor nutrition and health in infancy can affect both intelligence and life expectancy. Third, intelligent individuals look after themselves more effectively and take more care of their health by not smoking, avoiding excessive alcohol consumption, eating sensibly, not allowing themselves to become overweight, exercising, and consulting their doctors when they are unwell. For instance, in the United States about 15 percent fewer blacks than whites get themselves vaccinated against influenza with the result that more die from the disease (Ostye et al., 2003), and fewer blacks use seat belts so they have more serious automobile accidents, while East Asians use seat belts more than whites so they have fewer serious accidents (Lynn, 2002a).

In Australia, Aborigines have much poorer health than Australian Europeans, as would be expected from their lower IQs. Infant mortality rates of Aborigines have been about three times greater than those of Europeans, while life expectancy has been much lower. Some statistics showing these differences are given in Table 3.11. Row 1 shows that in 1976, the infant mortality rates per 1,000 infants were 51.6 for Aborigines and 13.0 for Europeans. By 1980, the rates were 33.1 and 10.2, respectively (Thompson, 1983), and by 1996 the rates had been substantially reduced to 12.7 and 5.0, respectively (Thompson, 2003). Life expectancy in New South Wales in 1978 is given in row 4 (Fraser, 1986). Generally in Australia life expectancy of Aborigines is between

15 to 20 years lower than that of Europeans, death rates for young Aborigines are 2.4 times higher than for Europeans, and hospitalization rates for Aborigines are at least double (Greig, Lewins, and White, 2003). Rows 5 and 6 give life expectancy in 1996 for men and women and show that life expectancy has increased for Aborigines and Europeans but remains substantially greater for Europeans (Thompson, 2003). The lower life expectancy of Aborigines is caused principally by their greater death rates from disease, including sexually transmitted diseases, heart disease and cancer caused by high rates of smoking, road accidents caused by alcohol abuse, homicide, poisoning, and drowning.

Table 3.11. Infant mortality per 1,000 population and life expectancy of Aborigines and Europeans

|  | Mortality | Year | Aborigines | Europeans |
| :---: | :--- | :---: | :---: | :---: |
| $\mathbf{1}$ | Infant mortality | 1976 | 51.6 | 13.0 |
| 2 | Infant mortality | 1980 | 33.1 | 10.2 |
| 3 | Infant mortality | 1996 | 12.7 | 5.0 |
| 4 | Life expectancy | 1978 | 53.0 | 73.0 |
| 5 | Life expectancy-M | 1996 | 57.0 | 75.0 |
| 6 | Life expectancy-F | 1996 | 64.0 | 81.0 |

## 11. Dysfunctional Personality

The low intelligence of Australian Aborigines goes some way to explaining their problems of coping in a European society, but they appear in addition to have dysfunctional personalities. These appear among Aboriginal children and young adolescents in their high rates of conduct disorder, and high rates of expulsion from schools for antisocial behavior. In New South Wales in the 1990s, Aborigines comprised 3 percent of the school population but 12 percent of those suspended and expelled (Gray, Hunter, and Schwab, 2000).

The high incidence of dysfunctional personality is also expressed in their high rates of crime, shown in section 7 , and in their high rates of alcohol abuse, their confident self-concept, and high incidence of domestic violence. Alcohol abuse is common among Aborigines. It is estimated that among men approximately 30 percent are heavy drinkers compared with 5 percent of Europeans, while among women 3 percent are heavy drinkers compared with 1 percent of Europeans. Callan, who reports these figures,
suggests that the "reasons are related back to the sense of powerlessness, low status, and lack of privilege in being a minority" (1986, p. 45).

## 12. Self-Concept

The self-concept is a person's perception of his own worth. It is also known as self-esteem. People with a strong self-concept (or high selfesteem) have a high opinion of themselves, their families, their social capacities, and their abilities. A strong self-concept is a characteristic of dysfunctional personality and anti-social personality disorder. Measures of the self-concept are divided into the six domains of family, self-acceptance, satisfaction with school, academic achievement, peer acceptance, and career. A study of secondary schools students by Purdie and McCrindle (2002) found that Australian Aborigines ( $\mathrm{n}=195$ ) had a stronger selfconcept than Europeans ( $\mathrm{n}=162$ ). The Aborigines had a higher rate of endorsement of questions like "I am happy with the sort of person I am" (self-acceptance), "I like the work we do at school" (satisfaction with school), "I get good marks in most of my work at school" (academic achievement), "I have many friends" (peer acceptance), and "I will be successful in what I do when I leave school" (career). These are remarkable results considering the reality of the low levels of achievement of the Aborigines in schools and employment. Similar results however have been found for African-Americans in the United States and Africans in Britain. A number of social scientists have proposed that the poor educational and occupational achievements of all these minorities are attributable to their weak self-concept and low self-esteem, but the evidence does not support this.

Domestic violence between husbands and wives is another characteristic of dysfunctional personality for which there is a high incidence among the Australian Aborigines. A study in Western Australia in 1994 found that Aboriginal women were 45 times more likely to experience violence from their husbands than Europeans (Donnan, 2001).

## 13. Conclusions

An Australian demographer has written:
In every conceivable comparison the Aborigines stand in stark contrast to the general Australian population. They have the highest growth rate, the highest birth rate, the highest death rate, the worst
health and housing, and the lowest educational, occupational, economic, social, and legal status of any identifiable section of the Australian population (Fraser, 1986, p. 204).

All this is indisputably correct. The life style of the Aborigines in central Australia has been graphically described by a German sociologist, Hans Schneider, who made a study of Aboriginal settlements in 1986. He observed that the Europeans had built houses for the Aborigines, but
the Aborigines do not accept these houses with the result that they are usually unoccupied. Many of them have been deserted, vandalized, or even destroyed. In order to prevent the Aborigines destroying their houses, these are now prefabricated out of steelplated units. Most of the inhabitants live in self-constructed shacks made from branches or sheets of corrugated iron, erected outside of and around the settlement. They have not accustomed themselves to garbage disposal with the result that the surrounding bush land is littered with old cans, bottles, tires, transistor radios, and batteries. Rusty car bodies and unauthorized garbage dumps can be seen everywhere.... The health, education and living standards are well below the Australian average. Almost all the inhabitants are unemployed and fully dependent on social security. They just sit around in a state of boredom and hopelessness. They do not send their children to school. The Aborigines have no problem operating machines or driving cars and tractors, but they have not learned how to service and repair them. Faulty machinery is simply left where it breaks down and transistor radios are thrown away when batteries are flat. Under the supervision of whites they are able to establish a plantation or cattle station and will work there, but as soon as this supervision and instruction is withdrawn the project collapses (Schneider, 1992, pp. 10-11).
The Australian Aborigines are a racial underclass with the same characteristics of the black underclass of the United States, Britain, and Brazil, but they are an even more serious social problem. They have much lower intelligence with an average IQ of 62 , as compared with approximately 85 of blacks in the United States and Britain, and they have worse rates of educational attainment, unemployment, crime, teenage motherhood, welfare dependency, alcoholism, and the other social pathologies of the underclass. In addition they have high fertility
that is about double that of Europeans, and although this is to some degree offset by their high mortality, their numbers are growing to the extent that they are approximately doubling every generation.

There can be little doubt that the syndrome of social pathologies of the Australian Aborigines has a genetic basis. Their shorter gestation times and typically small brain size that underlies their low intelligence, poor educational attainment, and low socioeconomic status cannot be explained by environmental deprivation or European racism. None of this is recognized or at least articulated by any of the Australian social scientists whose work is cited in this chapter. None of them even make any mention of the contribution of low intelligence and high psychopathic personality to the social pathology of the Aboriginal underclass. White Australian social scientists typically blame the problems of the Aborigines on white racism: "the view put forward most often is that white colonization and the evils it brought are to blame: alcoholism; racism; a lack of meaningful job opportunities; high rates of imprisonment" (Donnan, 2001, p. 9).

There is a striking contrast between the dire position of the Aborigines and the high IQ and mathematical abilities of recent Chinese immigrant children shown in Table 3.4. The high abilities of the Chinese immigrant children should not be surprising. The results are consistent with those of Chinese immigrant children in Britain, Canada, the Netherlands, and the United States.

## Сhapter 4

## Brazil

1. Composition of the Population
2. Race and Ethnic Differences in Intelligence
3. Educational Attainment
4. Socioeconomic Status and Earnings
5. The Japanese
6. Malnutrition
7. Life Expectancy and Mortality
8. Marriage
9. Fertility
10. Crime
11. Conclusions

TThe first European to discover Brazil was the Portuguese naval commander Pedro Alvares Cabral, who found the land in 1500 and declared it a Portuguese colony. It remained a Portuguese colony for a little over 300 years, during which time many Portuguese migrated to Brazil to seek their fortunes, at first principally by establishing sugar plantations and later from cotton and coffee. Brazil remained a colony of Portugal until 1823, when a white Portuguese named Dom Pedro declared independence and proclaimed himself emperor.

At the time the Portuguese discovered Brazil, they were already bringing Africans from West Africa to Portugal for use as slaves for domestic work. The first African slaves were sold in Lisbon in 1441 and a little over 1,000 were sold in the next two to three years. In the middle decades of the sixteenth century the Portuguese colonists in Brazil needed laborers for their sugar plantations and for this purpose they transported black Africans as slaves. The first of these arrived in 1538 and they continued to be transported for around three hundred years until the middle of the nineteenth century. The African slaves were obtained from Portuguese Guinea (now Ghana), the Congo, Angola, and Mozambique. Over the course of some three centuries it is estimated that a total of around 3 to 4 million African slaves were shipped to Brazil. The men were used largely to work in the sugar, cotton, and coffee plantations and for other agricultural work. The women were used principally as domestic servants. During the nineteenth century the majority of black slaves became free, either by running away or because their owners freed them. Slavery was abolished in Brazil in 1888.

Brazil is a multiracial society in which the principal racial and ethnic groups are Europeans (largely Portuguese but including significant numbers of Italian, German, and other European descent), Japanese, blacks, Native American Indians, and hybrids. The blacks in Brazil are known as Pretos (blacks) and the mulattos and other mixed race individuals as Pardos (browns), but as these terms will be unfamiliar to many readers the terms blacks and mulattos will be used. The offspring of whites and Native American Indians are known as Mestizos, as elsewhere in Latin America, but there are relatively few of these in Brazil, and in censuses and surveys they are included with mulattos.

Brazil has frequently been regarded as a racially egalitarian society in which there is no racial prejudice by whites against blacks, mulattos, mestizos, and Native American Indians. In the first half of the twentieth century this was not entirely correct. For instance, many of the higher class hotels only admitted whites. This and other forms of racial discrimination in public places were made illegal in 1951 following a well-publicized case in which a black North American dancer named Katherine Dunham was refused entry to the Hotel Esplanda in Sao Paulo. Nevertheless, the Brazilian sociologist Gilberto Freyre (1945, p. 9) claimed that "race relations in Brazil are probably the nearest
approach to paradise to be found anywhere in the world" and other social scientists asserted that Brazil had "a non-racist national culture in which 'racial democracy' flourished" (Winant, 1990, p. 174). Officials at UNESCO were impressed by this claim and in the 1950s sponsored a number of studies of Brazil in the belief that these would reveal the secret of a racially tolerant, unprejudiced, and egalitarian multiracial nation that would serve as a model for other societies, particularly the United States, in which whites were prejudiced against blacks and other non-white racial minorities and discriminated against them. The results of these researches were disappointing in so far as they "documented as never before the prevalence of racial discrimination" (Winant, 1990, p. 175) and found that "Afro-Brazilians remained overwhelmingly concentrated in the lowest economic strata and that negative attitudes to dark skin were widespread" (Lovell, 1999, p. 399). A number of others have noted a socioeconomic status hierarchy related to skin color in Brazil, e.g. "lighter skin carries prestige" (Banton, 1967, p. 265); "light skin carries higher status" (Foster, Hitchcock, and Lyimo, 2000, p. 32); "the higher a job rank is, the lighter the skin is likely to be" (Sansone, 2000, p. 152); "the Brazilian social structure is largely divided along racial lines" (Telles, 2004, p. 137).

As early as the 1940s the tendency of the three major racial groups in Brazil to live in segregated areas of towns and cities was noted by Pierson (1942) in a study of the city of Salvador in the northeast of the country. He found that skin color varied with the economic status of the neighborhood. The poorest areas of the city were mainly inhabited by blacks and dark skinned mulattos, while the more affluent areas were mainly inhabited by whites and light skinned mulattos. Fifty years later the same conclusion was reached by Telles (1992) for the whole of Brazil. He found that "moderate segregation is a fact of urban Brazilian life" and
residential segregation among color groups cannot be accounted for by socioeconomic status-moderate segregation along color lines occurs among members of the same income group. Segregation by color is greatest among the higher income groups who can choose where they live and is lower among the poor who have less choice. Segregation is not confined to whites and non-whites. There is significant segregation between blacks and mulattos...suggesting that mulattos also disdain blacks (pp. 194-195).

From the 1960s onwards a number of social scientists have shown that Brazil has a pronounced racial hierarchy in which whites are mainly at the top together with a small number of ethnic Japanese, and blacks and mulattos are largely at the bottom. Thus "general inequality has consistently followed race lines of informal segregation and discrimination" (Marx, 1998, p. 58) and "studies of inequalities in the labor market and social mobility showed that nearly one hundred years after the abolition of slavery, Afro-Brazilians were still clustered in the lowest economic class" (Lovell, 1994, p. 11). A social anthropologist has written that among wealthy Brazilians "mulattos and blacks are easily recognized, labeled, and treated as social inferiors" (Scheper-Hughes, 1992, p. 543).

Far from being a racially egalitarian society, extremes of racial social inequalities in Brazil are much greater than in the United States and Europe. Many whites have an affluent life style while many blacks and mulattos live in abject poverty in urban slums on the edge of cities known as favelas. Thus in Rio de Janeiro
> clustered on the hill and mountain sides that overlook the fashionable beaches and elegant shopping and high rise centers, the favelas are slums in which only a small proportion of households have electricity, running water, or sewage facilities. Juramento, for example, like most other favelas, is a self-contained realm of the very poor, with 30,000 residences and a dozen or so entry points. There is no glass in the windows of the shacks, no electricity or water, other than what can be tapped from the city supplies. There are no official street names, and no mail service, or telephones lines (Surratt and Inciardi, 1998, p. 258).

The disenchantment of blacks and mulattos with their disadvantaged position in Brazil was widely expressed on May 13, 1988, when celebrations were held throughout Brazil to commemorate the one hundredth anniversary of the abolition of slavery. Many of the blacks and mulattos considered that there was little to celebrate because they had not achieved economic and social equality with whites. To the contrary, they remained highly over-represented among the poorest strata of society. On the day of the celebrations, a number of blacks and mulattos mounted Descomemoracao ("discommemorations") with such themes as "One hundred years of lies," "One hundred years without abolition," "March in Protest of the Farce of Abolition," and "Discommemoration of the Centenary of Abolition."

## 1. Composition of the Population

From the early years of Portuguese colonization there was considerable miscegenation between white men and black and Native American Indian women. This has resulted in a large hybrid population of mulattos and mestizos, and in interbreeding between mulattos and mestizos. Most of the indigenous Native American Indian population was wiped out by disease and warfare, with the result that most of the mixed race are black-white hybrids or mulattos. For this reason the Portuguese term Pardos (browns) is often used interchangeably with mulattos in the writings of social scientists.

There is a relatively small population of ethnic Japanese in Brazil. The first of these came as immigrants in 1908, primarily to work as laborers on the coffee plantations in the southern region of Sao Paulo. The Brazilian government encouraged them to migrate because once the black slaves had been freed many of them would not work as agricultural laborers and because "many Sao Paulo plantation owners preferred Japanese immigrant labor over ex-slaves because they were considered to be more docile and amenable as workers than the newly freed slaves" (Dwyer and Lovell, 1990, p. 186). Or, as Masterson and Funada-Classen (2004, p. 24) put it "they believed that people of color were innately lazy and irresponsible." In the 1980 census there were shown to be 754,895 Asians in Brazil, almost all of them of Japanese descent.

The racial composition of the population has been documented in a series of censuses. The first of these was taken in 1872 and provided statistics on the numbers of the principal racial and ethnic groups. Further population censuses providing these statistics were taken in 1940, 1950, 1960, 1980, and 1991. The results have been summarized by Wood and Lovell (1992) and Lovell (1999) and given in Table 4.1. In the 1872 census three racial categories were used. These were Blanco (white), Pardo (brown or mulatto), and Preto (black). In the 1940 and later censuses a fourth category was added of Amarelo (yellow). These are Asians and are very largely ethnic Japanese. In the 2000 census the category of yellow was replaced by other, and included Native American Indians and unknowns.

The data set out in Table 4.1 show that the percentage of whites in the population increased from 38 percent in 1872 to 64 percent in 1940, and has then declined steadily to 54 percent in 2000. The increase in the number and proportion of whites from 1872 to 1940

Table 4.1. Percentages of races in Brazil censuses

| Race | $\mathbf{1 8 7 2}$ | $\mathbf{1 9 4 0}$ | $\mathbf{1 9 5 0}$ | $\mathbf{1 9 6 0}$ | $\mathbf{1 9 8 0}$ | 2000 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| White | 38 | 64 | 62 | 61 | 54 | 53 |
| Mulatto | 42 | 21 | 26 | 29 | 39 | 40 |
| Blacks | 20 | 15 | 11 | 9 | 6 | 6 |
| Asians | 0 | 0.6 | 0.6 | 0.7 | 0.7 | 1 |

was principally due to high rates of immigration, particularly from Portugal, Spain, and Italy, and also from Germany. Immigration of Europeans was encouraged by the government by the provision of subsidies. The objective was to increase the proportion of whites in the population. The decline in the proportion of whites from 1940 to 2000 was due to a reduction of immigration and to lower fertility, as compared with non-whites. The proportion of blacks has fallen steadily from 20 percent in 1972 to 6 percent in 2000. The reason for this is that large numbers of blacks have interbred with mulattos producing children classified as mulattos. From 1940 to 2000 the proportion of mulattos almost doubled from 21 percent to 40 percent. The proportion of Asians (almost entirely ethnic Japanese) in the population remained virtually steady from 0.6 of the population in 1940 to 0.7 percent by 1980 . In the 2000 census the figure increased to one percent because the category was widened to include Native American Indians and unknowns. It can be inferred that the numbers of Asians remained at about 0.7 percent in 2000 , and hence that the numbers of Native Americans was around 0.3 to 0.4 percent.

## 2. Race and Ethnic Differences in Intelligence

There are racial and ethnic differences in intelligence in Brazil that are summarized in Table 4.2. Row 1 gives the IQs for the four groups from a study of 10 -year-olds tested with the Progressive Matrices the Japanese, Europeans, mulattos, and blacks. The numbers in this study are given in row 2. The Japanese have the highest IQ at 99, followed by the Europeans (95), the mulattos (81), and the blacks (71). There have been two further studies of the intelligence of blacks in Brazil. Paine et al. (1992) found IQs of 70 for a sample of 1009 -year-olds on the Draw-a-Man Test and 64 for a sample of 88 adults on the Progressive Matrices. So far as it has proved possible to ascertain, there are no intelligence data for Native American Indians.

Table 4.2. Race and etbnic differences in intelligence

|  | Test | Japanese | European | Mulatto | Black | Reference |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | SPM | 99 | 95 | 81 | 71 | Fernandez, 2001 |
| 2 | (Numbers) | 186 | 735 | 718 | 223 | Fernandez, 2001 |
| 3 | DAM | - | - | - | 70 | Paine et al., 1992 |
| 4 | SPM | - | - | - | 64 | Paine et al. ,1992 |

## 3. Educational Attainment and Literacy

Racial and ethnic differences in educational attainment are given in Table 4.3. Rows 1 and 2 give data for 1950 from the census of that year showing the highest high school completion rates and the highest rates of literacy for Europeans followed by mulattos, and the lowest rates for blacks (Andrews, 1992). There are no data for the Japanese. Row 3 gives racial differences in the percentages that had obtained a university degree, found in the 1980 census, and shows the highest percentage among Japanese, followed by Europeans, mulattos, and blacks (Hanchard, 1994). Row 4 gives the percentages of literacy in 1991 showing the same racial hierarchy (Lovell, 1999). Rows 5 and 6 give the percentages that had completed high school found in the 1996 Demographic and Health Survey of 13,000 households and show the same racial gradient (Burgard, 2002). Row 7 gives the percentages of literacy in 1999 showing the racial hierarchy was still present. Row 8 gives the percentages of $25-64$-year-olds that had obtained a university degree, found in the 1996 National Household Survey. All the percentages rose considerably over the half century but the racial differentials remained with the highest percentage among Europeans, followed by mulattos, and the lowest percentage among blacks.

Table 4.3. Race and ethnic differences in educational attainment and literacy (percentages)

|  | Measure | Year | Japanese | Whites | Mulattos | Blacks |
| :--- | :--- | ---: | :---: | :---: | :---: | :---: |
| 1 | High school | 1950 | - | 4.9 | 0.5 | 0.2 |
| 2 | Literate | 1950 | - | 59.3 | 31.1 | 26.7 |
| 3 | Degree | 1980 | 10.0 | 6.4 | 1.9 | 1.0 |
| 4 | Literate | 1991 | - | 84.3 | 66.6 | 65.3 |
| 5 | High school-M | 1996 | - | 56.5 | 39.3 | 28.0 |
| 6 | High school-F | 1996 | - | 64.9 | 48.1 | 45.4 |
| 7 | Literate | 1999 | - | 91.7 | 80.4 | 79.0 |
| 8 | Degree | 1996 | - | 10.0 | 2.4 | 1.8 |

In 1995, 1997, and 1999 the Ministry of Education and Culture (2001) published the results of national tests of schoolchildren carried out by the National Institute for Educational Research (INEP). It was found that whites and Asians performed best (www.inep.gov.br).

At the start of the twenty-first century blacks and mulattos were about half the population of Brazil but were only 8 percent of university students. To remedy this situation several Brazilian states have required universities to introduce positive discrimination in an attempt to increase the numbers of blacks and mulattos. The first of these was Rio de Janeiro, which in 2002 required the State University of Rio to reserve 40 percent of its places for blacks and mulattos. It was found impossible to find sufficient numbers of blacks and mulattos who could pass the entrance examinations, so in 2003 the quota reserved for blacks and mulattos was reduced to 20 percent. In 2004 the University of Brazilia also set a quota of 20 percent of places for blacks and mulattos. The effect of these quotas was that a number of whites were rejected for universities and some of these claimed to be mulattos in the hope of securing admission under the less stringent admissions examinations. The universities countered the attempts of whites to gain places by this subterfuge by requiring applicants to submit their photographs with their applications and had these scrutinized by a commission to check that all those who claimed to be mulattos were genuine (Davidson, 2004).

## 4. Socioeconomic Status and Earnings

Racial and ethnic differences in socioeconomic status and earnings in Brazil reflect those in intelligence and education. They are shown in Table 4.4. Row 1 gives average monthly incomes of European, mulatto, and black men in Rio de Janeiro in 1960 in Cruzeiros dollars found in the 1960 census. Row 2 gives average monthly incomes of Japanese, European, mulatto, and black men in 1980 in Cruzeiros dollars (the incomes of the Japanese are given by Dwyer and Lovell, 1990). The Japanese have by far the highest incomes, followed by Europeans; the mulattos have average incomes slightly more than half of those of Europeans, while the average incomes of blacks are the lowest. Row 3 gives average monthly incomes of European, mulatto, and black men in Sao Paulo given in the 1991 census. The same racial disparities are
present with mulattos having average incomes slightly more than half of those of Europeans, while the average incomes of blacks are the lowest. The racial disparities decreased a little over the 31 year period. In 1960, mulattos had 55 percent of the earnings of whites and blacks had 47 percent of the earnings of whites. In 1991 these differentials had narrowed slightly to mulattos having 59 percent and blacks 57 percent of the earnings of whites. These incomes are much higher than those given in row 2 partly because of high inflation in the 1980s and partly because Sao Paulo is one of the most affluent cities in Brazil. The incomes of the Japanese were not recorded in the 1991 census.

The racial gradient in earnings produces different proportions living in poverty. Row 4 gives the percentages living in poverty found in a survey carried out in 1987 and shows that 24 percent of white families lived in poverty, mulattos had nearly double the percentage, and blacks had a slightly greater percentage than mulattos. The same racial differences are present in occupational status. Rows 5,6 , and 7 give the percentages in professional occupations found in the censuses of 1950, 1980, and 1991. In all three years Europeans had about twice the proportion in professional occupations as mulattos, while blacks had the lowest proportion. The proportions of the Japanese in professional occupations were not recorded in the censuses. Rows 8 and 9 give the percentages unemployed in the 1991 census for men and women. For both sexes unemployment was lowest among Europeans, intermediate among mulattos, and highest among blacks.

Table 4.4. Race and ethnic differences in earnings and socioeconomic status

|  | Measure | Japanese | Europeans | Mulattos | Blacks |
| :--- | :--- | :---: | :---: | ---: | :---: |
| 1 | Income, 1960 | - | 11,601 | 6,492 | 5,444 |
| 2 | Income, 1980 | 35,610 | 21,867 | 11,053 | 9,004 |
| 3 | Income, 1991 | - | 224,752 | 132,400 | 129,165 |
| 4 | Poverty, 1987 | - | $24 \%$ | $44 \%$ | $46 \%$ |
| 5 | Professionals, 1950 | - | $4.5 \%$ | $2.4 \%$ | $2.1 \%$ |
| 6 | Professionals, 1980 | - | $9.0 \%$ | $3.8 \%$ | $2.5 \%$ |
| 7 | Professionals, 1991 | - | $27.5 \%$ | $15.8 \%$ | $12.1 \%$ |
| 8 | Unemployment: M | - | $3.5 \%$ | $4.1 \%$ | $4.8 \%$ |
| 9 | Unemployment: F | - | $3.3 \%$ | $3.6 \%$ | $4.4 \%$ |
| Sources: 1: Marx, 1998; 2-3, 6-7: Lovell, $1993 ; 4-5: ~ A n d r e w s, ~$ <br> $1992 ; ~ 8-9: ~ P N A D, ~ 1997 ~$ |  |  |  |  |  |

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The racial and ethnic differences in education, earnings, and socioeconomic status in Brazil has been confirmed by Dressler, Baliero, and Santos (1998) in a study on a representative sample of 500 households in the city of Ribeirao Preto. They report correlations between light skin color with educational attainment of 0.33 , with income of 0.39 , and with occupational status of 0.35 . All the correlations are highly statistically significant.

## 5. The Japanese

Although the majority of Japanese immigrants to Brazil came initially to work as indentured farm laborers, they rapidly became upwardly mobile. Within a generation most of them became ownerfarmers. They prospered because "they were more than eight times as productive as their Brazilian counterparts," and by the 1990s "the Japanese dominated the fruit and vegetable markets of Sao Paulo, where they produced 70 percent of these products" (Masterson and FunadaClassen, 2004, pp. 131, 185). In the second half of the twentieth century "Japanese vertical mobility was rapid and most were able to rise into the middle class in both rural and urban areas" (Dwyer and Lovell, 1990, p. 188). It will be seen in Tables 4.3 and 4.4 that in the 1980 census the Japanese were found to have a greater proportion with university degrees than Europeans ( 10 percent as against 6.4 percent) and that in the state of Sao Paulo, where the great majority of the Japanese live, Japanese men aged 18 to 64 had much higher average earnings ( $\mathrm{Cz} 35,610$ ) than white men ( $\mathrm{Cz} 22,080$ ). Japanese earnings were thus 61 percent higher than those of whites. Dwyer and Lovell (1990, p. 188) believe that three factors contribute to the remarkable success of the Japanese. These are, "first, that they quickly learned the language, business practices, and legal system. Second, they placed a great deal of emphasis on education.... And finally, they were industrious" and had exceptionally strong qualities of "ambition, persistence, and deferred gratification." There is an implication that blacks and mulattos who have failed to rise in the social system must be lacking in these qualities and motivations, although the authors do not spell this out. They do not mention high intelligence as one of the factors contributing to the social success of the Japanese.

The successes of the Japanese in Brazil was corroborated by a report
that in 1988 they comprised 17 percent of the students at the University of Sao Paulo, one of Brazil's most prestigious universities, although they were only about 0.7 percent of the population. A physics professor at the university is reported as saying "The Japanese and all the Asian students are far more motivated and disciplined; they are always the brilliant ones, the top 20 students" (Yee, 1992, p. 97).

## 6. Prevalence of Malnutrition

Racial differences in the percentages that were malnourished as determined by the prevalence of stunting (low stature, defined as having height two or more standard deviations below the international reference standard mean) found in the 1996 Demographic and Health Survey of 13,000 households are given in Table 4.5. This shows that the prevalence of malnutrition was lowest among the Europeans, somewhat higher among the mulattos, and highest among the blacks. Malnutrition adversely affects intelligence (Lynn, 1990), and the greater prevalence of malnutrition among the mulattos and blacks will contribute to the differences in intelligence and educational attainment. However, the percentages of malnutrition are quite low even in the blacks at 17.6 percent and hence cannot account fully for the race differences in IQs. The race differences in the prevalence of malnutrition and intelligence can be understood as arising from genotype-environment correlation as described by Plomin (1994), through which those with high intelligence provide their children with good nutrition.

## Table 4.5. Race and ethnic differences in malnutrition

| Measure | Europeans | Mulattos | Blacks | Reference |
| :--- | :---: | :---: | :---: | :--- |
| Malnutrition | $9.7 \%$ | $14.6 \%$ | $17.6 \%$ | Burgard, 2002 |

## 7. Life Expectancy and Mortality

Europeans in Brazil have greater life expectancy than mulattos and blacks. This has been shown by Wood and Carvalho (1988) and by Lovell (1999) in analyses of the censuses from 1950 through 1991. The results are expressed in terms of life expectancy at birth and are shown in Table 4.6. Mulattos and blacks have been combined in these analyses to a single category of Afro-Brazilians. It will be seen that in all four censuses Afro-Brazilians have lower life expectancy than whites. Wood
and Carvalho show that these differences are present within income and educational categories, although the differentials are reduced. Most of these differences are due to higher infant mortality and child mortality among mulattos and blacks than among whites. The authors suggest that these differences may be due to discrimination. It is doubtful whether this can provide a full explanation. Intelligence is a significant determinant of life expectancy and differences in intelligence are likely to be partly responsible.

Table 4.6. Life expectancy at birth for whites and Afro-Brazilians

| Group | 1950 | 1960 | 1980 | 1991 |
| :--- | :--- | :--- | :--- | :--- |
| Whites | 47.5 | 54.7 | 66.1 | 70.8 |
| Afro-Brazilians | 40.1 | 44.7 | 59.4 | 64.0 |

The same race differences are also present in infant mortality. Table 4.7 shows figures for this per 1,000 births for 1977-1993 (de Pinto da Cunha, 2006). Infant mortality has declined for both groups but the differential has actually widened over this period.

Table 4.7. Infant mortality of whites and Afro-Brazilians

| Group | 1977 | 1987 | 1993 |
| :--- | :---: | :---: | :---: |
| Whites | 76 | 43 | 37 |
| Afro-Brazilians | 96 | 72 | 62 |

## 8. Marriage

Studies in the United States and Britain have found that whites have a greater propensity than blacks to marry. This is attributable to the greater propensity of whites to form long-term male-female pair bonds. This is expressed in higher rates of marriage and stable male-female cohabitation among whites, and conversely among blacks in lower rates of marriage and co-habitation and higher rates of single motherhood. The same differences are present in Brazil. Table 4.8 gives information provided by Andrews (1992) on these differences in regard to the proportions married from the censuses of 1980, 1950, and 1980. Notice that in all years whites had the highest proportion married, followed by mulattos, while blacks had the lowest proportion. Further data confirming these differences have been presented by Goldani (1990) from the 1984 Household

Survey. Among those aged 50, white women had been married for an average of 29 years, brown women for an average of 22 years, and black women for an average of 19 years. Among black women, 56 percent had lived more than half their adult lives without a husband, as compared with 48 percent of brown, and 42 percent of white. Thus the mulattos fall intermediate between the whites and the blacks but are closer to the blacks, as they do in earnings. Goldani (1990) has shown that the same racial gradient is present for single motherhood, where the percentages of single women who had had a child were 21 percent of blacks, 13 percent of mulattos, and 8 percent of whites. In the 2000 census, 11.7 percent of white families were headed by single mothers, 13.1 percent of mulatto, and 13.9 percent of blacks (Telles, 2004, p.164).

Table 4.8.Total fertility rates by race in Brazil

| Year | Whites | Mulattos | Blacks |
| :--- | :---: | :---: | :---: |
| 1940 | 6.0 | 6.3 | 5.5 |
| 1950 | 6.1 | 6.9 | 5.8 |
| 1960 | 6.2 | 6.9 | 5.8 |
| 1980 | 3.6 | 5.6 | 5.1 |
| 1984 | 3.0 | 4.4 | 4.3 |

## 9. Fertility

The fertility of whites, mulattos, and blacks has been calculated by Andrews (1992) from the 1940 through 1980 census data and from the 1984 Household Survey. The results (total fertility rates) are shown in Table 4.9. It will be seen that in all five years whites had lower fertility than mulattos. In 1940, 1950, and 1960, the lowest fertility was among blacks. In 1980 and 1984 fertility had become lowest among whites, but remained lower among blacks than among mulattos. The consistently lower fertility of blacks as compared with mulattos is the only exception to the gradient of whites-mulattosblacks that is present for all other social and economic phenomena. It has not proved possible to find a definitive explanation for this anomalous phenomenon. Probably the most important factor is higher infant mortality among blacks and that many blacks have not included babies that died in the first year of life on their census returns. A further factor may be the blacks' poorer health, which may

Table 4.9.Total fertility rates by race in Brazil

| Year | Whites | Mulattos | Blacks |
| :---: | :---: | :---: | :---: |
| 1940 | 6.0 | 6.3 | 5.5 |
| 1950 | 6.1 | 6.9 | 5.8 |
| 1960 | 6.2 | 6.9 | 5.8 |
| 1980 | 3.6 | 5.6 | 5.1 |
| 1984 | 3.0 | 4.4 | 4.3 |

reduce their fertility. The reduction in numbers of children in all three groups from 1960 onwards reflects the demographic transition to smaller family size that took place in the twentieth century throughout the world, except in sub-Saharan Africa. The greater reduction in numbers of children among whites as compared with mulattos and blacks reflects a virtually universal tendency for the better educated, the higher socioeconomic classes, and the more intelligent to reduce their family size to a greater extent than the poorly educated, the less intelligent, and the lower socioeconomic classes. The effect of this in Brazil has been that in 1980 and 1984 the fertility of the mulattos and blacks was about 50 percent higher than that of whites. This will inevitably lead to higher proportions of mulattos and blacks in the future population, extrapolating further the trend shown in Table 4.1.

## 10. Crime

There is a widespread perception in Brazil that blacks and mulattos commit crime more than whites. Thus, Caldeira (1996, p. 201) writes that "people of all classes stereotypically associate criminals with the poor, with black people, with migrants from northeast Brazil, with sons of single mothers, with consumers of drugs, with promiscuity, and with corticos (tenements), and favelas (shantytowns)." As blacks and mulattos migrated from the plantations to Rio de Janeiro in the nineteenth century, their high rate of crime led whites to establish a police force, one of whose primary functions was to protect whites against blacks and mulattos. Thus the police
confronted the task of controlling black slaves in an urban environment...in a context where slaves enjoyed a degree of freedom, anonymity, and distance from their masters, the need for efficient social control was the primary motive for the establishment of a standing police force in Rio de Janeiro (Mitchell and Wood, 1998, p. 1008).

There is a state of low intensity warfare between the police and mulattos and blacks in which "the police regard themselves as "waging war" against criminals. The stance places a premium on eliminating the criminal class...police regularly invade shanty towns in Rio de Janeiro to extract vengeance from suspected killers" (Mitchell and Wood, 1998, p. 1007). "The military police believe they have permission to kill when their victim is poor, black, and a thief" (Chevigny, 1993, p. 19).

Police violence against black and mulatto criminals and suspected criminals is far greater than in the United States. For instance, in 1991, the police killed 1,171 people, largely blacks and mulattos, in Sao Paulo, compared with 27 in New York City (Mitchell and Wood, 1998). In 1992, the military police used machine guns to quell a fight between gangs in the Carandiru prison in Sao Paulo and killed 111 largely mulatto and black prisoners. A further shocking killing took place a year later when the police shot and killed eight black and mulatto street children who were sleeping on the steps of the Church of the Candelaria in Rio de Janeiro. There are a number of gangs of black and mulatto homeless street children in Rio de Janeiro who have been abandoned by their parents or who have left home and manage to stay alive by street robberies. The police deal with this problem by going out at night in unofficial patrols and killing them. According to a report by the U.S. Department of State (1997) these nocturnal vigilante patrols are responsible for scores of deaths every year.

The repressive role of the police and the criminal justice system against criminal mulattos and blacks enjoys a measure of support from whites. In a study of attitudes towards crime and punishment, Alba Zaluar (1993) found a substantial majority of higher socioeconomic status whites supported the death penalty and forced labor during incarceration.

Statistics on race differences in crime indexed by rates of imprisonment are given by Telles (2004, p. 169) who reports that in Sao Paulo in 2000 blacks were 5.6 times over-represented in the prison population, while mulattos were 1.5 times over-represented, as compared with whites. Further statistics on race differences in crime were collected in the 1988 National Household Survey, a study of a representative sample of approximately 80,000 citizens. The survey asked the respondents whether they had been assaulted during the last year and if so, by whom. The results have been analyzed by Mitchell and Wood (1998), who calculated that compared with whites, mulattos were 1.2 times more likely to have been
assaulted and blacks 1.5 times more likely to have been assaulted. Most of the assaults were perpetrated by acquaintances or police. In regard to assault by acquaintances, mulattos were 1.2 times more likely to have been assaulted than whites, and blacks were 1.9 times more likely to have been assaulted. Because most people's acquaintances are of the same racial group as themselves, this indicates that assault rates are highest among blacks, lower among mulattos, and lowest among whites. In regard to assaults by police, blacks were 2.4 times more likely to have been assaulted than whites. There was no difference between mulattos and whites in the reported rates of assault by the police. The results suggest that police violence is much more strongly directed against blacks than against whites and mulattos.

Convictions for homicide in 2000 in Sao Paulo have been reported as 56.5 per 100,000 population for whites and 94.4 per 100,000 for blacks and Mulattos combined (Kilsztajn et al., 2000). The percentages of the races convicted of homicide for 2003 for the whole of Brazil have been given by Lopes (2006) and are shown in Table 4.10, together with their percentages in the population in 2000. It will be seen that the Asians have the lowest homicide rate at 0.4 percent drawn from 1 percent of the population; whites also have a relatively low homicide rate at 39.7 percent drawn from 53 percent of the population. Mulattos have a relatively high homicide rate at 49.9 percent for 40 percent of the population, while blacks have the highest homicide rate at 9.8 percent drawn from 6 percent of the population.

The high crime rates of blacks and mulattos in Brazil is a further instance of a well established pattern of race differences in crime in the United States, Britain, and internationally and is attributable partly to low intelligence.

The high rate of crime largely committed by impoverished blacks and mulattos against each other and against affluent whites and Asians has

Table 4.10. Percentages of races in population and convictions for homicide, 2003

| Race | \% Population | \% Homicide |
| :--- | :---: | :---: |
| White | 53 | 39.7 |
| Mulatto | 40 | 49.9 |
| Blacks | 6 | 9.8 |
| Asians | 1 | 0.4 |

led to extensive white flight and Japanese flight to safer environments in the United States and Japan. In 1993 an observer wrote
crime is so high that law-abiding citizens live behind bars, public parks are locked behind iron railings, and no-one stops at red traffic lights at night for fear of being attacked...many Brazilians are giving up on the self-styled land of the future and plotting escape. Those who have lost hope can be seen in the enormous queues for visas outside the US consulate in Rio. Consular officials estimate that between 2 m and 3 m Brazilians live in the US, most illegally...the Japanese consulate in Sao Paulo is packed with Nisei or Japanese descendants, returning to their homeland (Lamb, 1993, p. 10).

## 11. Race Differences in 2000

Surveys carried out in 2000 have been summarized by Penha-Lopes (2004). The results are shown in Table 4.11. Mulattos and blacks were combined in these surveys. Whites still had substantially more education than mulattos and blacks, and considerably higher earnings, while mulattos and blacks had substantially higher rates of infant and child mortality and poorer living conditions indexed by a lower percentage possessing running water in their homes.

In a second study, Leal (2006) has reported data on race differences in 2000 in a sample of 9,633 postpartum women in Rio de Janeiro. The results are summarized in Table 4.12. Here we see that blacks

Table 4.11. Race differences in 2000

| Measure | White | Black/Mulatto |
| :--- | :---: | :---: |
| Years education | 6.6 | 4.6 |
| Annual income-men | 1,054 | 617 |
| Annual income-women | 676 | 384 |
| Infant mortality per 1000 | 37.3 | 62.3 |
| Mortality 0-5 years | 45.7 | 76.1 |
| Running water-percent | 82.8 | 67.2 |

were the most over-represented among teenage mothers, those with less than four years of education, smokers while pregnant, and with syphilitic babies. Whites were under-represented, while mulattos were intermediate. The author attributes these differences to discrimination.

It will be seen that at the start of the twenty-first century little had changed in the racial socio-economic hierarchy.

Table 4.12 Race differences among mothers in Rio de Janeiro in 2000

| Measure | Whites | Mulattos | Blacks |
| :--- | ---: | :---: | :---: |
| Age $<20$ years | 16.3 | 22.3 | 24.5 |
| Education $<4$ years | 5.8 | 10.6 | 13.9 |
| Higher education | 13.1 | 2.8 | 1.3 |
| Smoked while pregnant | 10.3 | 14.9 | 18.5 |
| Baby syphilitic | 0.8 | 1.9 | 3.0 |

## 12. Conclusions

The social gradient in Brazil in which whites together with a small number of ethnic Japanese are at the top of the socioeconomic hierarchy, mulattos come next, and blacks do poorly in respect of earnings, education, socioeconomic status, health, and mortality is virtually universally attributed by social scientists to discrimination by whites against mulattos and blacks. Mitchell and Wood (1998, p. 175) in discussing this social gradient write of "the prevalence of discrimination." Andrews (1992, pp. 229-30) writes of the "existence of subtle, flexible forms of racial discrimination which effectively hinder black and brown people's access to social and economic advancement" and that "the causes of the differences consist of a complex of social, economic, demographic, political and cultural factors." Wood and Cavalho (1998, p. 151) in a discussion of the reasons for the higher rates of infant and child mortality among mulattos and blacks than among whites write
it is possible that non-white women are discriminated against in terms of access to health care or other services associated with proximate determinants of child mortality (maternal nutritional status; diet and feeding variables during pregnancy, and following birth; and child care, especially in response to illness).

They suggest that other factors might be that non-white children live in more hazardous areas of cities and that non-white mothers receive a poorer quality of education. In a discussion of the fact that male earnings in the 1980 census were approximately twice as high for whites as for mulattos and blacks, Webster and Lovell (1998, p. 137) propose that
these results "suggest the presence of discrimination in Brazil." The most recent sociologist to repeat the mantra is Telles: "racial discrimination differentially sorts blacks, browns, and whites into the hierarchical system" (2004, p. 171).

It is impossible to read the work of social scientists on the racial gradient of socioeconomic achievement in Brazil and not be struck by their failure to consider the achievements of the Japanese immigrants who, as we have seen, surpass whites in earnings to about the same degree as whites surpass mulattos and blacks. The only social scientists to comment on the high achievements of the Japanese are Dwyer and Lovell (1990) who attribute these partly to their industriousness, ambition, persistence, and ability to delay gratification. Apart from this, social scientists routinely ignore the achievements of the Japanese. It is difficult to avoid the conclusion that they realize that the successes of the Japanese are an embarrassment for their thesis that the failures of blacks and mulattos are attributable to discrimination against them by whites. It is impossible to demonstrate that discrimination plays any part in the poor performance of blacks and mulattos, although it is not improbable that it exists. None of the social scientists whose work has been cited make any mention of possible race differences in intelligence that might explain why mulattos and blacks perform so much more poorly than whites. The most straightforward explanation for the racial gradient in education, earnings, and socioeconomic status in Brazil is that these are largely determined by differences in intelligence. This explains why the Japanese do best, followed by Europeans, and then by mulattos, who have both white and black ancestry, while those who achieve least are the blacks.

## Chapter 5

## Britain

1. Racial Composition of the Population
2. Intelligence of Africans
3. Intelligence of South Asians
4. Intelligence of Chinese
5. Intelligence of Jews
6. Incidence of Mental Retardation
7. Educational Attainment
8. Earnings
9. Socioeconomic Status
10. Unemployment
11. Conduct Disorders and Crime
12. Health and Mortality
13. Single Teenage Mothers
14. Fertility
15. Personality Differences
16. Conclusions

There are five major ethnic and racial groups in Britain consisting of indigenous whites, Jews, blacks from Africa and from the West Indies known as Afro-Caribbeans, South Asians mainly from India, Pakistan, and Bangladesh, and Chinese from China, Hong Kong, and Singapore.

The Jews were permitted to settle in the 1650 s and by the nineteenth century had established a significant presence as bankers, among whom the Rothschilds were the leading family. By 1880 it has been estimated that there were around 60,000 Jews in Britain. In the period from 1880-1920 a number of Jews came to Britain from Russia to escape persecution, and their numbers increased to around 300,000 in 1920. Most of these settled in London and some in Glasgow. There was some further immigration of Jews (principally professionals and academics) to Britain in the 1930s and during World War II to escape persecution in Germany. Approximately 60,000 Jews entered Britain during this period.

The first blacks came to England in 1555 when five were brought from Ghana to London. The British slave trade began in 1563, but was on a small scale until the second half of the seventeenth century. The English slave traders picked up blacks from West Africa and transported them to the Caribbean to work as slaves, principally on sugar plantations, and to the southern American states, principally to work on cotton and tobacco plantations. A few of them were brought to England to work principally as domestic servants and also as court entertainers. From the late sixteenth century and increasingly in the seventeenth and eighteenth centuries it became fashionable for wealthy families to have one or two black servants. Their legal status was that of slaves and as such they were bought and sold. They were normally required to wear metal collars so that if they ran away they could be identified and returned to their owners (Fryer, 1984). In the 1770s and 1780s several hundred runaway American slaves came to England after the end of the American Revolutionary War. According to Fryer's Staying Power, a history of blacks in Britain, many of these became beggars on the streets of London. The government regarded them as a serious social problem. It set up a scheme to resettle them in Sierra Leone, and 350 of them were actually sent there.

From the seventeenth century a number of British writers asserted that blacks are less intelligent than Europeans. These included David Hume who wrote:

I am apt to suspect that Negroes, and in general all other species of men (for there are four or five different kinds) to be naturally inferior to whites. There never was a civilized nation of any other complexion than white, nor even any individual, either in action or speculation. No ingenious manufacture amongst them, no arts, no sciences (1753, p. 252).

The British outlawed the slave trade in 1807 and in 1833 abolished slavery throughout the empire. By the beginning of the twentieth century there were very few blacks in Britain, and the only significant black communities were in the ports of Liverpool and Cardiff. In 1919 there were race riots in these two cities. It was only after the end of World War II that large numbers of blacks and also Asians mainly from the Indian sub-Continent and Hong Kong settled in Britain and transformed it into a multiracial society. This was brought about though the British Nationality Act passed in 1948 by the Labour Government led by Prime Minister Clement Atlee. This act conferred British citizenship on the people of the British colonies and gave them the right to enter, settle, and work in Britain. At that time the British colonies consisted of India, much of Africa, most of the Caribbean, Hong Kong, Malaysia, and a number of other smaller territories. The act gave similar rights of entry and residence in Britain to citizens of the British Commonwealth, consisting of Canada, Australia, New Zealand, and South Africa. In May, 1948, within a few weeks of the act becoming law, the first shipload of blacks arrived in Britain from Jamaica. In the 1950s quite large numbers of blacks and Indians were entering and settling in Britain. Towards the end of the decade it was becoming apparent that while Indian immigrants adapted quite well to life in Britain, blacks were presenting problems. In 1958 the first of a number of race riots, in which blacks burned and looted shops, broke out in the Notting Hill district of London and in the city of Nottingham. In 1980 black race riots broke out in Bristol and in 1981 in the London district of Brixton and the Toxteth district of Liverpool. In 1985 there were more black race riots in the Handsworth district of Birmingham and again in London.

In 1962 an attempt was made to curtail immigration by the Commonwealth Immigration Act. This removed the right of entry to Britain of citizens of the Colonies and Commonwealth, except for parents, spouses, and children of those already in the country, and for those issued with employment vouchers certifying that no British citizens were available to do the job for which the voucher was issued. In 1963, 30,130 employment vouchers were issued and the numbers of these was gradually reduced until they reached 2,290 in 1972. It was believed that this would largely end immigration into Britain, but it soon became apparent that this was not happening. Large numbers of immigrants continued to enter the country, principally through family
reunification by which male immigrants were allowed to bring in their wives and dependent children, and also through illegal entry and as asylum seekers and refugees.

In the 1970s the problem of the poor performance of black children in school became so widespread that the Government set up a committee to inquire into its causes. In 1985 the committee published a report that included a paper by Mackintosh and Mascie-Taylor (1985), two professors at the University of Cambridge, in which they concluded that the low IQ of black children explained the differences in educational performance between the two groups.

## 1. Racial Composition of the Population

The non-European population in Britain is collectively known as "New Commonwealth" and consists largely of blacks from the former British colonies in the Caribbean and Africa, Indians, Pakistanis, and Bangladeshis from the Indian sub-continent, and Chinese, principally from Hong Kong, Malaysia, and Singapore. Figures for the growth in the numbers of these New Commonwealth immigrants are set out in Table 5.1. These statistics are derived from the censuses for 1951 through 2001. Coleman and Salt (1992) considered that they underestimate the actual numbers in the country because many non-Europeans are illegally resident and do not wish to disclose their presence by filling in census forms. They estimate that the figures understate the true numbers by around 20 percent.

Table 5.1. Numbers of non-Europeans in Britain, 1951-2001

| Year | Blacks | Indians | Pak./Ban. | Chinese |
| :---: | ---: | ---: | ---: | :---: |
| 1951 | 16,000 | 111,000 | 11,000 | - |
| 1961 | 172,000 | 157,000 | 31,000 | - |
| 1971 | 302,000 | 313,000 | 136,000 | - |
| 1991 | 890,000 | 840,000 | 640,000 | 157,000 |
| 2001 | $1,100,000$ | $1,100,000$ | $1,000,000$ | 209,000 |

The numbers of these groups in 1991 and 2001 expressed as percentages of the population are given in Table 5.2.

The figures for the growth of these non-European populations show that despite the attempt of the 1962 Immigration Act to prevent further primary immigration, the non-European populations continued

Table 5.2. Racial groups as percentages of the British population

| Year | Whites | Blacks | Indians | Pak./Ban. | Chinese |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1991 | 94.5 | 1.6 | 1.5 | 1.2 | 0.3 |
| 2001 | 92.4 | 2.1 | 1.9 | 1.4 | 0.4 |

to increase. Over the period 1961 to 1991 the numbers of all these populations increased approximately fivefold and their proportion in the population continued to increase in the next decade. The failure of the 1962 Act to halt the growth of the numbers of the immigrant population has been due to five factors. First, most immigrants are young adults who soon have children. Second, many immigrants enter Britain illegally or as visitors and never return. Third, they enter as spouses following arranged marriages. This is particularly the case with immigrants from the Indian sub-continent; many have family connections in India, Pakistan, and Bangladesh with whom they arrange marriages between a young person in Britain and one on the sub-continent in order to obtain entry to Britain. In a number of cases young Asian women in Britain have been taken to India, Pakistan, or Bangladesh and forced into marriage in order to get their husbands rights of entry to Britain. Fourth, they enter as asylum seekers. It is estimated that over the period 1989-97, 268,595 asylum seekers entered Britain, consisting principally of Africans from Angola, Ethiopia, Ghana, Nigeria, and Zaire, and South Asians from India and Pakistan. Most of these are either granted residence or remain in Britain without permission. Fifth, black and South Asian immigrants, although not the Chinese, have significantly higher fertility than whites.

## 2. Intelligence of Africans

The results of studies of the intelligence of Africans in Britain are given in Table 5.3. The IQs lie in the range between 73-94, except for the IQ of 104 in row 6 . This was derived from nine African children taken into institutions as infants because their mothers were unable to look after them. In the same study the IQs of mixed race children and white children also taken into institutions were measured, with the results that the mixed race had an IQ of $110(\mathrm{n}=15)$ and the whites an IQ of 104 ( $\mathrm{n}=36$ ). These results have been hailed by environmentalists as showing that when blacks and whites are raised in the same environment they have the same IQ, but they are so inconsistent with the other results in the table, and with those of Africans worldwide, which
invariably show that African children have IQs well below whites, that they probably have to be regarded as spurious. An even more remarkable feature of the results is that the mothers of these children were predominantly unskilled and had put them into institutions, and would probably have been of below average intelligence. There were only nine children in the sample, and possibly this is just a fluke result.

Taking the studies as a whole, the median IQ is 86 and is almost exactly the same as the average of 85 of Africans in the United States.

The IQ of 86 of blacks in Britain is much higher than that of 69 of blacks in sub-Saharan Africa shown in Chapter 2 and of around 70 in the Caribbean. There are two probable reasons for this. First, standards of living, nutrition, and health care are higher in Britain than in subSaharan Africa and in the Caribbean. These provide a better environment that improves intelligence. Second, blacks in Britain are first or second

Table 5.3. IQs of Africans in Britain

|  | Age | $\mathbf{N}$ | Test | IQ | Reference |
| :--- | :---: | ---: | :---: | ---: | :--- |
| 1 | 10 | 71 | SB | 88 | Houghton, 1966 |
| 2 | 11 | 476 | VR | 82 | ILEA, 1967 |
| 3 | $12-15$ | 174 | SPM/MH | 88 | Bhatnagar, 1970 |
| 4 | $5-15$ | 61 | WISC | 89 | McFie \& Thompson, 1970 |
| 5 | 11 | 394 | EPVT | 86 | Halsey, 1972 |
| 6 | $4-5$ | 9 | WPPSI | 104 | Tizard, 1972 |
| 7 | $5-10$ | 548 | EPVT | 86 | Payne, 1974 |
| 8 | 10 | 143 | NV5 | 73 | Yule et al., 1975 |
| 9 | 10 | 201 | NV5 | 82 | Yule et al., 1975 |
| 10 | $5-10$ | 548 | EPVT | 86 | Little, 1975 |
| 11 | 10 | 66 | VR | 85 | Black Peoples, 1978 |
| 12 | 7 | 139 | EPVT | 78 | Phillips, 1979 |
| 13 | 15 | 12,530 | Reading | 86 | Mabey, 1981 |
| 14 | 12 | 149 | Vocabulary | 85 | Pumfrey, 1983 |
| 15 | $8-12$ | 205 | NFER | 87 | Scarr et al., 1983 |
| 16 | 10 | 88 | CEFT | 90 | Bagley et al., 1983 |
| 17 | 4 | 106 | WPPSI | 87 | Blatchford et al., 1985 |
| 18 | 11 | 74 | NFER | 89 | Mackintosh \& Mascie-Taylor, 1985 |
| 19 | 10 | 125 | NFER | 94 | Mackintosh \& Mascie-Taylor, 1985 |
| 20 | 14 | 250 | NFER | 88 | Maughan \& Rutter, 1986 |
| 21 | $7-15$ | 88 | AH | 92 | West et al., 1992 |
| 22 | $65-75$ | 248 | MMSE | 89 | Stewart et al., 2002 |
|  | Median |  |  | 86 |  |

generation immigrants, and these probably have higher average intelligence than the populations from which they migrated. This is likely because to migrate from sub-Saharan Africa or the West Indies to Britain probably requires a higher than average level of intelligence needed to find the money and organize the journey. Blacks in the Caribbean and Africa with their average IQ of about 70 have the mental ability of the average European 11-year-old. The problems of migration would be quite difficult for those with IQs at this level, and it seems likely that most of the migrants would have higher IQs than this.

Evidence that in Britain immigration from the Caribbean has been selective for intelligence is provided by studies showing that the proportion of white ancestry in blacks in Jamaica, from which most British blacks have come, is 6.8 percent (Parra, Marcini, and Akey, 1998), whereas the proportion of white ancestry found in a sample of blacks in Britain is approximately 13 percent (Jobling, 2006). This figure is derived from autosomal markers. It is confirmed by white male ancestry of 26 percent (indicated by the presence of Y chromosomes inherited from white men) and by white female ancestry of 1-2 percent (indicated by the presence of mitochondrial DNA inherited from white women). This shows what has long been suspected-that mating between white men and black women was much commoner than mating between white women and black men.

There is considerable evidence that the proportion of white ancestry in blacks is a determinant of their IQs. This can be inferred from the association between light skin color and intelligence (Lynn, 2002). In addition, studies in the United States have found that blacks in the northern states whose ancestors migrated from the south have higher IQs than those who have remained in the south. This was first shown by Montagu (1945) and has been confirmed by Kaufman and Doppelt (1976) who found in an analysis of the WISC-R standardization data that blacks in the southern states had a mean IQ of 83 compared with 89 for blacks from the remainder of the United States.

There is also evidence suggesting that immigration from Africa has been selective for intelligence. A report from the Office of Population Censuses and Surveys (2000) found that approximately a quarter of African immigrants had university degrees and a higher proportion were employed in professional occupations, while among indigenous whites approximately 12 percent had university degrees.

## 3. Intelligence of South Asians

The South Asians in Britain come largely from India, Pakistan, and Bangladesh. The results of the studies of their intelligence are given in Table 5.4. Rows 10 through 12 give results from a study in which Pakistani, Indian, and Bangladeshi children attending the same schools obtained IQs of 93, 92, and 92, and therefore there were no IQ differences between these three groups from the Indian subContinent. These IQs are relative to 100 for white children attending the same schools and are likely to be somewhat inflated because seven percent of white children, mainly middle class with higher IQs, attend private schools, and white middle class parents who send their children to state schools typically tend to avoid sending them to schools with large numbers of immigrants. The effect of this will have been that the IQs of the South Asians will be inflated relative to national norms. There are no national norms for the tests used, so the amount by which the IQs are inflated cannot be determined but is probably around five IQ points.

The median of the twelve studies of IQs of South Asians in Britain is an IQ of 92 . The range is quite large, from 83 to 97 . One reason for this considerable range is that the IQs increase with length of residence in Britain. This is shown in the studies in rows 6 and 7 which give non-verbal reasoning IQs of 83 for Asian children resident for fewer than 4 years in Britain and 97 for those resident in Britain for four or

## Table 5.4. IQs of South Asians

|  | Ethnicity | Age | N | Test | IQ | Reference |
| :--- | :--- | ---: | ---: | :---: | :--- | :--- |
| $\mathbf{1}$ | Indian | 11 | 43 | VR | 87 | ILEA, 1967 |
| 2 | Pakistani | $9-10$ | 173 | CPM | 93 | Dickenson et al., 1975 |
| 3 | Indian | 10 | 149 | VR | 91 | Black Peoples, 1978 |
| 4 | Indian | 11 | 173 | NFER | 94 | Scarr et al., , 983 |
| 5 | Pakistani | 11 | 32 | NFER | 89 | Scarr et al., 1983 |
| 6 | S. Asians | 11 | 37 | NFER | 83 | Mackintosh et al., 1985 |
| 7 | S. Asians | 11 | 25 | NFER | 97 | Mackintosh et al., 1985 |
| 8 | Pakistani | 10 | 91 | BAS | 93 | Mackintosh et al., 1985 |
| 9 | Indian | 10 | 170 | BAS | 96 | Mackintosh et al., 1985 |
| 10 | Pakistani | $7-15$ | 560 | AH | 93 | West et al., 1992 |
| $\mathbf{1 1}$ | Indian | $7-15$ | 330 | AH | 92 | West et al., 1992 |
| 12 | Bangladeshi | $7-11$ | 177 | AH | 92 | West et al., 1992 |
|  | Median |  |  |  | 92 |  |

more years, indicating a gain of 14 IQ points arising from residence in Britain. It is interesting to note that the IQ of 83 of Indian children resident for fewer than four years in Britain is almost the same as the IQ of 82 for Indians in India given in Lynn (2006). These IQ gains may be due to a variety of factors. Recent immigrants will have had difficulty in speaking and understanding English, and this will have impaired their performance even on non-verbal tests because of difficulty in understanding the instructions given in English. In addition, those who had been born in Britain may have benefited from better nutrition and education than comparable children received in their own countries.

The somewhat higher IQ of South Asians in Britain than in South Asia may also be partly due to immigrants having higher average intelligence than those in the Indian sub-Continent. This is suggested by a report from the Office of Population Censuses and Surveys (2000) that found that approximately 15 percent of Indians had university degrees as compared with approximately 12 percent among indigenous whites. There is no discernable difference between the IQs of Indian, Pakistani, and Bangladeshi children. This is particularly evident in the study summarized in rows 10 through 12 that gives virtually identical IQs for children of these three origins attending the same schools.

The racial differences in intelligence cannot be explained by differences in nutrition, which is the major environmental determinant of intelligence. This is evident from a study by Rona and Chinn (1987) of a representative sample of 13,073 that found no differences between whites, blacks, and Asians in weight or height.

## 4. Intelligence of Chinese

It has only proved possible to find one study of the intelligence of the Chinese in Britain. This study was published by the Inner London Education Authority (1987) for the years 1985 and 1986. The study reported results for a verbal reasoning test taken by all 11 -year-olds attending state schools and numbering approximately 15,000 . The data were not given as average IQs but as the percentages of the races in the top 22 percent and in the bottom 22 percent. To calculate the rank order of the races the percentage in the bottom 22 percent has been subtracted from the percentage in the top 22 percent. For instance, the Chinese had
29.4 in the top 22 percent and 21.4 in the bottom 22 percent, giving them a score of +8.0 . Table 5.5 gives the results for all the major racial groups in rank order. The report also gave average scores obtained in the O level and CSE (Certificate of Secondary Education) examinations in academic subjects (math, English, science, etc.) taken by the same children at the age of 16 . These are shown in column 4 of Table 5.5. It will be seen that the race differences in IQs are fairly but not entirely consistent with the scores in the O level and CSE. The Indians obtained a lower IQ than the whites, consistent with the results in Table 5.4, but they performed better in the O level and CSE examinations.

Four conclusions can be drawn from the results. First, the Bangladeshis performed poorly on both the verbal IQ test and the O level and CSE examinations. The reason for this is that many of these children were recent immigrants who did not speak English (the higher IQ of Bangladeshis reported a few years later by West et al. [1992] was on a non-verbal test for a sample in the town of Peterborough who had learned English and become assimilated). Little value can be attached to these results except that they explain why Bangladeshis tend to do poorly. Second, the Chinese performed best on IQ and in the O level and CSE examinations. The IQ of the Chinese can be estimated roughly as follows. The difference between the whites and the Chinese in Table 5.5 is 2.7 , and this is approximately one third of the difference of 8.2 between the whites and the Indians plus Pakistanis. The IQ difference of the whites and the Indians plus Pakistanis is 10 IQ points, shown in Table 5.4. Hence the difference between the whites and the Chinese is approximately one third of this, namely 3.3 IQ points. The Chinese advantage of 3.3 IQ points is closely similar to the white-Chinese IQ difference found in numerous studies in China, Hong Kong, Taiwan, Brazil, and the United States. Third, the African children performed better than the Caribbeans and whites on educational attainment. Probably the main reason for this is that African immigrants have higher educational attainment and socioeconomic status than these two groups in this sample (see Table 5.15 below). It should be noted, however, that the sample consisted of children at state schools in Inner London. Whites in Inner London are typically the very rich, who normally send their children to private schools, or the poor, who have IQs below the average of the total white population. Hence, the IQs of the whites in this sample will be below average
by an unknown amount. Fourth, the Caribbean blacks performed poorly on both the verbal IQ test and the O level and CSE examinations, consistent with numerous other studies.

Table 5.5. Race differences in IQs and O level/CSE examinations (1985-1986)

| Group | $\mathbf{N}$ | IQ | O level/CSE |
| :--- | ---: | ---: | :---: |
| Chinese | 626 | 8.4 | 21.2 |
| White | 18,670 | 5.7 | 15.0 |
| Indian | 785 | -0.1 | 23.5 |
| African | 812 | -1.5 | 18.4 |
| Pakistani | 486 | -4.8 | 21.0 |
| Caribbean | 5,630 | -17.9 | 13.7 |
| Bangladeshi | 868 | -46.9 | 11.1 |

## 5. Intelligence of Jews

The intelligence and educational attainment of the Jews in Britain is based on three studies that are summarized in Table 5.6. Rows 1 through 3 give the results of a study carried out in the mid-1920s in London. Children aged 8-14 were tested in three schools in which Jewish and gentile children were present in approximately equal numbers. The children were tested for general intelligence with the Northumberland Test, a largely verbal test. The Jewish children obtained a mean IQ of 110.5. The children were also tested on arithmetic and reading and obtained an arithmetic quotient of 110.6 and a reading quotient of 113.0. These are both are very close to their IQ and show, as in many other studies, that differences in educational attainment are largely due to intelligence. Row 4 gives an IQ of 113 obtained on a reasoning test for Jewish children attending two schools together with gentile children in two schools in the East End of London. The East End was a lower socioeconomic community, so the gentile children were probably a little below average. Typically the IQ gap between lower class and middle class children is about 10 IQ points, suggesting that the IQ of the Jewish sample in relation to a socially representative sample of gentile children would have been approximately $108-110$. Row 5 gives an IQ of 111 for a sample of 90710 -year-old Jewish children in the city of Glasgow. These children were found to have a mean IQ of 117.8 on the Moray House Test, a verbal comprehension and verbal reasoning test, compared
with an IQ of 100 of non-Jewish gentile children (number not given) tested at the same time in the same city. The unusually high IQ of the Jewish children is this study is explained by the intelligence of non-Jewish children in Scotland being somewhat depressed as compared with that in Great Britain as a whole, as shown in detail in Lynn (1979). The intelligence of non-Jewish children in Glasgow was at this time more depressed than that in the rest of Scotland. The extensive data presented by Vernon (1951) on mean IQs in different regions of Great Britain put the mean IQ in Glasgow at 93.7 in relation to 100 for the country as a whole. To compare the mean IQ of Jewish children in Glasgow with that of British non-Jewish gentiles we have therefore to subtract 6.3 IQ points from their score, giving them a mean IQ of 111.5. This brings the mean IQ of the Jewish in Glasgow obtained in this study closely into line with results of the two London studies given in rows 2 and 3.

Row 6 gives an IQ of 107.7 for a sample of 39 Jewish children in the British National Cohort Study (NCS) of all babies born in the week 3-9th March, 1958 and tested for various cognitive abilities at the ages of 7, 11 , and 16 years. The IQ of 107.7 is the average of these results. Row 7 gives a mean Jewish IQ of 108.5 derived from the British 1946 national cohort study of all babies born in the first week of March of that year. The sample was intelligence tested at the age of 8 years. Although the sample sizes are small in the studies shown in rows 6 and 7 , the higher Jewish IQ is statistically significant. The average IQ of the six studies is 110.2 and is regarded as the best reading for the IQ of Jews in Britain in relation to white gentiles.

Jews have higher socioeconomic status than gentiles and higher

Table 5.6. IQs and educational attainment of Jews in Britain

|  | Age | N. Jews | N. Gentiles | Test | IQ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $8-14$ | 1081 | 813 | IQ | 110.5 |
| 2 | $8-14$ | 1081 | 813 | Arith. | 110.6 |
| 3 | $8-14$ | 1081 | 813 | English | 113.0 |
| 4 | $6-14$ | 303 | 221 | IQ | 113.0 |
| 5 | 10 | 907 | - | IQ | 111.5 |
| 6 | $11-16$ | 39 | 11,101 | IQ | 107.7 |
| 7 | 8 | 22 | 3,350 | IQ | 108.5 |

Sources: rows 1-3: Davies \& Hughes, 1927; row 4: Winch, 1930; row 5: Vincent, 1966; Rows 6-7: Lynn \& Longley, 2006.
proportions in the professions. For instance, a study by Krause (1969) of the London district of Edgware found that 57 percent of Jewish men worked in professional or managerial occupations, compared with 39 percent of gentiles. He also reported that about three percent of university students were Jews, although Jews were only approximately 0.5 percent of the population.

## 6. Incidence of Mental Retardation

From 1970 studies began to appear of the incidence of mental retardation in the indigenous British population and in the racial and ethnic minorities. Mental retardation is partly caused by a variety of factors such as birth injuries, recessive genes responsible for Fragile X syndrome and other conditions, and chromosomal defects such as that responsible for Down's syndrome. These would not be expected to differ between the races. Mental retardation is also partly the tail end of the normal distribution of intelligence and the incidence of this would be expected to be greater among the ethnic minorities because these have a lower mean IQ and hence a greater proportion at the low end of the distribution. The results of the studies of race differences in the incidence of mental retardation in Britain are summarized in Table 5.7. Row 1 gives the results from a national survey of the incidence of mental retardation among school students in England carried out in 1970 and shows that this was 3.5 times greater among black children as among whites but only about two thirds as great among South Asians (comprising Indians, Pakistanis, and Bangladeshis). The greater incidence among the blacks than among whites is expected because the mean IQ is lower, the distribution is shifted downwards, and there is a greater proportion among those with very low intelligence who constitute the mentally retarded. The lower incidence of mental retardation among the South Asians is unexpected and difficult to explain. The author of the study attributes the greater incidence of mental retardation among the blacks to the use of culture biased tests and to "low teacher expectations, teacher stereotyping, and culture bias, and to low self-esteem and self-concept in a hostile society" (Townsend, 1971, p. 89). It is difficult to understand how any of these can be responsible for mental retardation. Contrary to the last of these suggestions, it has been repeatedly found in reviews by Stone (1981), Milner (1983), and Verkuyten (1994) that blacks in Britain have as high or higher self-esteem than whites.

Row 2 gives the results of a study of the incidence of mental retardation in black and white school students in primary and secondary schools in England and Wales from a survey carried out by the government Department for Education and Science in 1972 (Tomlinson, 1981). The results showed that the incidence of mental retardation was 4.4 times greater among black school students as among whites, a rather greater difference than that found in row 1 . The government has not collected statistics of race differences in the incidence of mental retardation since 1972. Row 3 gives the percentages in remedial math classes in a sample of 1607 drawn from 22 secondary schools (Scarr et al., 1983). These differences are what would be expected from the different mean IQs of the three groups.

## Table 5.7. Incidence of mental retardation and backwardness (percentages)

|  | Date | Condition | Whites | Blacks | S. Asians |
| :---: | :---: | :--- | :---: | ---: | :---: |
| 1 | 1970 | Retardation | 0.68 | 2.33 | 0.40 |
| 2 | 1972 | Retardation | 0.66 | 2.90 | - |
| 3 | 1980 | Backwardness | 8.00 | 19.00 | 12.00 |

## 7. Educational Attainment

Racial differences in educational attainment have been collected for all children at the ages of 7,11 , and 14 years attending state schools in England in 2003. This testing is carried out under the direction of the Government Department for Education and Skills (DfES). The children were tested in reading, writing, and arithmetic at the age of 7 at the end of their first year of school, and in English, mathematics, and science at the ages of 11 and 14. In addition to all the children attending state schools, approximately 7 percent of children attend independent schools and about half of these participated voluntarily in the assessment. Children attending these independent schools come largely from affluent white families and perform well in educational tests, so the exclusion of some of them is likely to have reduced the attainment scores of the whites by a small but negligible amount. On the basis of their performance in the tests, the children were graded into levels $2,3,4$, and 5 . The DfES has released the results as percentages of the racial and ethnic groups passing at levels 4 and 5. These are shown for the 7 -year-olds in Table 5.8. The racial and ethnic groups are placed in rank order. It will be seen that the
rank orders are wholly consistent for the three subjects, with Chinese performing best followed by whites, mixed, Asians, and finally by blacks. It is instructive to note the magnitude of the Chinese-white differences as compared with the black-white differences. The Chinese-white difference averages 5.3 percentage points, while the black-white difference averages 7.3 percentage points. Tests of reading, writing, and arithmetic for 7 -yearolds are largely tests of intelligence, so it can be inferred that the Chinese advantage over whites is around 73 percent of the white advantage over blacks. We saw in Table 5.3 the black-white IQ difference is 14 IQ points. It can therefore be inferred that the Chinese advantage over whites is around 10 IQ points.

## Table 5.8. Race differences in educational attainment at age 7 (percentage passes)

| Group | Reading | Writing | Arithmetic |
| :--- | :---: | :---: | :---: |
| Chinese | 90 | 88 | 96 |
| Whites | 85 | 82 | 91 |
| Mixed | 85 | 82 | 91 |
| Asians | 80 | 78 | 86 |
| Blacks | 78 | 74 | 84 |

The percentages of the racial and ethnic groups passing at levels 4 and 5 among 11 - and 14 -year-olds are shown in Table 5.9. The racial and ethnic groups are placed in rank order. It will be seen that the rank orders are the same as for the 7 -year-olds and are consistent for English, mathematics, and science, except that at age 11 the mixed group performed fractionally better than the whites. If we examine the magnitude of the Chinese-white differences as compared with the black-white differences we see that they are similar to those

Table 5.9. Race differences in educational attainment (percentage passes)

|  | Age 11 |  |  | Age 14 |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Group | English | Math | Science | English | Math | Science |
| Chinese | 82 | 88 | 90 | 80 | 90 | 82 |
| Whites | 76 | 73 | 87 | 70 | 72 | 70 |
| Mixed | 77 | 72 | 87 | 69 | 69 | 67 |
| Asians | 69 | 67 | 79 | 66 | 66 | 59 |
| Blacks | 68 | 60 | 77 | 56 | 54 | 51 |

among 7 -year-olds. The Chinese-white difference averages 10.6 percentage points, while the black-white difference averages 13.1 percentage points. Thus the Chinese-white difference is approximately 80 percent of the black-white difference, suggesting an IQ difference of 11 IQ points.

More detailed data for racial differences in educational attainment have been collected for all children at the age of 11 years attending state schools in England in 2004. The children were tested in English, mathematics, and science (as in 2003 shown in Table 5.9) under a program known as Key Stage 2 and carried out under the direction of the Government Department for Education and Skills (DfES). On the basis of their performance in the tests, the children were graded into levels 2 , 3,4 , and 5 and the DfES has released the results as percentages of the racial and ethnic groups passing at levels 4 and 5. These are shown in Table 5.10. The racial and ethnic groups are placed in rank order. We see that the rank orders are wholly consistent for English, mathematics, and science. The Jewish children do best in all three subjects. Second come the Chinese and third, the whites. Next come the South Asians. These are disaggregated into the Indians, Pakistanis, Bangladeshis, and Other Asians (from Iraq, Iran, Thailand, etc.). It will be seen that the Indians do considerably better than the Pakistanis, Bangladeshis, and

Table 5.10. Race differences in educational attainment for 11-yearolds (percentage passes)

| Group | $\mathbf{N}$ | English | Math | Science |
| :--- | ---: | :---: | :---: | :---: |
| Jews | 905 | 92 | 91 | 95 |
| Chinese | 1,938 | 81 | 89 | 89 |
| Whites | 489,887 | 78 | 74 | 87 |
| South Asians | 38,721 | 74 | 69 | 79 |
| Indian | 12,725 | 83 | 80 | 87 |
| Pakistani | 16,307 | 68 | 61 | 72 |
| Bangladeshi | 5,979 | 71 | 66 | 77 |
| Other Asian | 3,710 | 75 | 77 | 82 |
| Blacks | 21,575 | 70 | 63 | 77 |
| Caribbean | 8,739 | 70 | 61 | 78 |
| African | 10,617 | 69 | 64 | 75 |
| Other Blacks | 2,219 | 71 | 64 | 80 |
| Others | 4,804 | 66 | 70 | 76 |
| Unclassified | 18,530 | 71 | 68 | 81 |
| Total | 592,163 | 77 | 73 | 86 |

Other Asians. At the bottom of the table come the blacks. These are disaggregated into the Caribbeans, Africans, and Others, but there is very little difference between the three black categories.

Race differences in the educational attainment of 16 -year-olds have also been recorded by the Department for Educational and Skills from 1989 through 2004 (DfES, 2005). The measure is the percentage of the racial groups who achieve 5 or more grade A-C passes in the subjects (mathematics, English, physics, history, etc.) taken in the public General Certificate of Secondary Education (GCSE) examination, normally taken at the age of 16 . Performance for each subject is graded $A$ to $G$ and the DfES scored the results as $A=7, B=6, C=5 \ldots \mathrm{G}=1$ for each subject taken and summed these scores to produce a total. The most academically able students normally take nine subjects giving a maximum total score of 63 . The results are given in table 5.11. A limitation of the study is that it only gives results for students in state schools. It did not include those in fee paying independent schools that comprise about seven percent of the school student population and are largely used by the higher socioeconomic status whites. The students attending these perform much better than those in the state schools in GCSE examinations. The effect of this will be that the true scores of the whites will have been a little higher than those given in Table 5.11.

It will be seen that the educational attainment of the racial groups in Britain is broadly but not wholly consistent with their intelligence levels. The Chinese obtained the best results by a considerable margin in the four years for which their performance was recorded. This is consistent with their high IQ. Next come the Indians and the indigenous whites who achieved equally in 1988, but the Indians performed

Table 5.11. Race differences in educational attainment in the GCSE examinations in England, 1988-2004

| Group | $\mathbf{1 9 8 8}$ | $\mathbf{1 9 9 2}$ | $\mathbf{1 9 9 6}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Chinese | - | 46 | - | 70 | 75 | 74 |
| Indian | 24 | 38 | 48 | 60 | 64 | 67 |
| White | 24 | 37 | 45 | 50 | 51 | 52 |
| Pakistani | 20 | 26 | 23 | 29 | 42 | 45 |
| Bangladeshi | 20 | 14 | 25 | 29 | 45 | 48 |
| Black-African | - | - | - | - | 41 | 43 |
| Black-Caribbean | 20 | 23 | 23 | 39 | 32 | 36 |

progressively better in later years. The Indians do not have as high an IQ as the whites, so their better performance in the GCSE examinations should probably be attributed to stronger work motivation. Below the indigenous whites and the Indians come the Pakistanis and Bangladeshis, who improved their position relative to whites over the 16 years as they became more fluent in English. Probably the reason for the poorer performance of the Pakistanis and Bangladeshis is that many of them did not speak English as their first language and this handicapped their educational attainment. The Pakistanis and Bangladeshis arrived later in Britain than the Indians. This is apparent from Table 5.1, which shows that in 1951 the number of Pakistanis and Bangladeshis was only one tenth the number of Indians, while by 1991 their numbers were about three quarters of that of Indians. The Pakistanis and Bangladeshis have therefore had less time to learn English, so that although they had about the same non-verbal IQs as Indians they have done less well in educational attainment and in employment (see below). The African blacks and the Caribbean blacks do consistently worst. The performance of the Caribbean blacks has deteriorated over these years in so far as all the other groups more than doubled their scores, while only the Caribbean blacks failed to achieve this. The reason for the better performance of African blacks than of Caribbean blacks is that the immigration of African blacks has been more selective for intelligence. Many of them are doctors, nurses, and other professionals, who have frequently been educated in Britain and stayed on.

Race differences in the percentages of 17 - and 18 -year-olds obtaining top scores of 26-30 in the A-level examinations for 1990, have been published by Taylor (1993) and for those applying for university for 1996-2000 by Leslie (2005). These examinations are normally taken in three or four subjects, each of which is graded from A to E , and which are scored as $\mathrm{A}=10, \mathrm{~B}=8$, etc. Hence a student who obtains grade A in three subjects is awarded a score of 30 . The results are shown in Table 5.12. Columns 2 and 3 give Taylor's results (1993) for men and women separately, and column 4 gives Leslie's (2005) results. It will be seen that in 1990 the whites had the greatest percentage of those obtaining top scores, followed by the Chinese, Indians, Bangladeshis, Pakistanis, and finally by the blacks. The rank order is the same for men and women. In 1996-2000 (column 4) the
rank order is the same except that the Chinese do best. It is not clear why the Chinese overtook the whites in the 1996-2000 results. The figure for blacks in column 4 is the average of Caribbeans (1.7) and Africans (2.8).

Table 5.12. Race differences in educational attainment in A level examination scores

| Group | Men | Women | M \& W |
| :--- | :---: | :---: | :---: |
| White | 17.7 | 13.0 | 13.8 |
| Chinese | 14.9 | 10.4 | 16.8 |
| Indian | 13.7 | 10.2 | 11.3 |
| Bangladeshi | 11.2 | 8.2 | 6.6 |
| Pakistani | 8.4 | 5.7 | 6.1 |
| Blacks | 2.8 | 2.0 | 2.3 |

The percentages of the racial groups with university degrees found in the 1991 census are shown for men and women in Table 5.13. These percentages follow broadly the GCSE scores given in Table 5.11 and A level examination scores given in Table 5.12. The Chinese have by far the greatest percentage with degrees, consistent with their highest scores in the GCSE and A level examinations. Next come the Indians, followed by the indigenous whites, the Pakistanis, and Bangladeshis, and finally by the blacks who have the lowest scores in the GCSE and A level examinations, and the lowest percentages of university graduates. There are also race differences in the quality

Table 5.13. Race differences with university degrees (percentages)

|  | Year | Sex | White | Black | Indian | Pak./Ban. | Chinese |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1991 | M | 10 | 4 | 15 | 8 | 22 |
| 2 | 1991 | F | 8 | 3 | 19 | 5 | 17 |

of university degrees. In Britain around 14 percent of students are awarded "firsts" (i.e., best results or magna cum laude) in their final university examinations. The percentages of those who obtained "firsts" in 2006 were Whites ( $15 \%$ ); Chinese ( $12 \%$ ); Indians ( $7 \%$ ); Pakistanis and Bangladeshis (4.5\%); blacks (3.5\%) (Tahir, 2007, p.4). The rank order is same as for intelligence, except that the Chinese did not perform quite as well as the indigenous whites. Probably the
explanation for this is that the most of the Chinese do science subjects in which it is harder to get a "first"

## 8. Earnings

The results of three surveys of the earnings of the racial populations in Britain are summarized in Table 5.14. Row 1 gives the results of the Fourth National Survey of Ethnic Minorities, a study of a representative sample of 5,196 ethnic minority adults and 2,867 white adults carried out in 1994. The figures are the average weekly earnings of employed men. Row 2 gives the results of the Family Resources Survey, a survey of 50,000 households carried out in 1995 and are the median weekly earnings of employed men. The results of both surveys have been described by Berthoud (1998). Both studies are consistent in showing that the Chinese have the highest earnings followed in descending order by whites, Indians, blacks, and Pakistanis and Bangladeshis. Row 3 gives the results of a survey carried out by the T.U.C. (Trades Union Congress, 2002) showing the same rank order of average male earnings, except that results were not given for Chinese. All three studies show that the gradient of earnings runs parallel to that of intelligence except for the low earnings of the Pakistanis and Bangladeshis, which is attributable to the lack of knowledge of English of many of them.

Table 5.14. Average weekly earnings of racial groups (£)

|  | Year | White | Black | Indian | Pak./Ban. | Chinese |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1994 | 331 | 311 | 317 | 220 | 368 |
| 2 | 1995 | 309 | 268 | 279 | 230 | 342 |
| 3 | 2001 | 332 | 225 | 327 | 182 | - |

## 9. Socioeconomic Status

Race differences in socioeconomic status for 1987-93 have been given by Model and Lapido (1996) and are shown in Table 5.15. The data are for men and women working in London measured by the International Socioeconomic Index of Occupational Status (ISIE), calculated from the Labor Force Survey of 1987-93. Row 1 gives ISIE scores for men and shows that this is highest for native-born whites. South Asians come next; these are followed by foreign-born Africans, many of whom migrated to Britain as professionals and therefore earn quite well. Cross

Table 5.15. Race differences in socioeconomic status, 1987-1993

|  | SES | N. Born <br> White | N. B. Afro- <br> Caribbean | F. B. Afro- <br> Caribbean | F. Born <br> African | South <br> Asian | Chinese |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | M | 47.4 | 41.9 | 37.0 | 46.2 | 46.6 | 45.6 |
| 2 | F | 46.9 | 46.2 | 38.1 | 40.5 | 42.2 | 46.0 |

(1994) has reported that 26 percent of African born blacks in Britain have some college education, compared with 13.4 percent of white Britons. East Asians come next; these are all foreign-born, most of them do not have professional qualifications, and many of them run Chinese restaurants, so they do not score particularly highly. Native-born Afro-Caribbeans and foreign born Afro-Caribbeans come last, consistent with their lowest IQs. Row 2 shows ISIE scores for women. Once again, native-born whites score highest. Native-born Afro-Caribbean women come next and do much better than male Afro-Caribbeans. This is consistent with American studies showing that in the United States black women do better in socioeconomic status than black men. Sowell (1994) has asserted that this is because black women are more intelligent than black men, but this is not the case.

At least part of the explanation is probably that whites discriminate against black men in employment but not against black women. East Asian foreign-born women do only fractionally less well than native-born white and Afro-Caribbean women. South Asian, foreign-born African and AfroCaribbean women do poorly, consistent with their low IQs. The standard deviation of these scores is 16 , showing that the differences in standard deviation units are not so pronounced as the IQ differences.

Table 5.16 gives further data for race differences in socioeconomic status of employees found in two surveys carried out in 1982 and 1994 by the Policy Studies Institute (Modood and Berthoud, 1997). Rows 1 through 4 give results for 1982 . Rows 1 and 2 give the percentages of men and women working in professional and senior managerial occupations and shows that this was highest for whites, followed by Indians, Pakistanis, and Bangladeshis, and lowest for blacks. Rows 3 and 4 give the percentages of men and women working in semi-skilled and unskilled manual occupations and shows that this was lowest for whites, followed by blacks, and highest for Indians and Pakistanis. No results were published for Chinese.

Rows 5 through 8 give results for 1994. Rows 5 and 6 give the percentages of men and women working in professional and senior managerial
occupations and show that this was highest for the Chinese, followed by Indians, and lowest for Pakistanis together with Bangladeshis and blacks. Rows 7 and 8 give the percentages of men and women working in semi-skilled and unskilled manual occupations and show that for men (row 7) this was lowest for whites, followed by Chinese, Indians, blacks, and highest for Pakistanis and Bangladeshis. For women (row 8) this was lowest for Chinese, followed by whites, blacks, Pakistanis and Bangladeshis, and highest for Indians. The large percentages of Pakistanis and Bangladeshis in the semi-skilled and unskilled manual occupations are due to continued immigration from Pakistan and Bangladesh.

Table 5.16 Race differences in socioeconomic status (percentages)

|  | SES | Year | Sex | White | Black | Indian | Pak./Ban. | Chinese |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Prof | 1982 | M | 19 | 5 | 11 | 10 | - |
| 2 | Prof | 1982 | F | 7 | 1 | 5 | - | - |
| 3 | Manual | 1982 | M | 16 | 35 | 41 | 56 | - |
| 4 | Manual | 1982 | F | 32 | 43 | 51 | - | - |
| 5 | Prof | 1994 | M | 30 | 11 | 19 | 11 | 41 |
| 6 | Prof | 1994 | F | 21 | 4 | 3 | 7 | 38 |
| 7 | Manual | 1994 | M | 18 | 32 | 29 | 51 | 28 |
| 8 | Manual | 1994 | F | 18 | 19 | 35 | 29 | 7 |

A study of the percentages of the races in university faculty in 2005 published by Sanders (2005, p. 10) is summarized in Table 5.17. Row 1 gives the percentages of the races in the population in 2001 . Row 2 gives the percentages of the races who were professors in the old universities and shows whites over-represented, Asians about 26 percent under-represented, and blacks about 85 percent under-represented. Row 3 gives the percentages of the races that were principal lecturers in the new universities (newly created and less prestigious institutions) and shows broadly similar differences although these are a little less pronounced. The differences mirror intelligence differences.

Table 5.17. Race differences in university faculty (percentages)

|  | Universities | Whites | Asians | Blacks |
| :---: | :--- | :---: | :---: | :---: |
| 1 | Percent population | 92.4 | 3.4 | 2.1 |
| 2 | Old universities | 95.8 | 2.5 | 0.3 |
| 3 | New universities | 94.8 | 2.7 | 0.8 |

## 10. Unemployment

Unemployment rates of racial minorities differ substantially. Rates for Chinese are slightly below those for whites, those for Indians are slightly higher, and those for blacks, Pakistanis, and Bangladeshis are much higher. Unemployment rates expressed as percentages of the population for 1991 for men and women combined aged 16-64 (men) and aged 16-59 (women) are given in row 1 of Table 5.18. Rows 2 and 3 give percentages of unemployment among 16-34-year-olds found in the 1994 survey carried out by the Policy Studies Institute. The authors did not give figures for the Chinese. These results confirm those in row 1 in so far as they show that the rates of unemployment were lowest among whites followed by Indians. They were much higher among blacks and higher still among Pakistanis and Bangladeshis.

Row 4 gives racial differences in unemployment found in the 2001 census. The data were obtained from religion rather than race as such, but correspond approximately to race in so far as whites are Christians, Hindus are Indians, and Pakistanis and Bangladeshis are Muslims. Blacks do not appear as a separate category because they are largely Christians. The figures are quite consistent with those in rows 1,2 , and 3 in that whites and Indians have much lower rates

## Table 5.18. Race differences in unemployment (percentages)

|  | Year | Sex | White | Black | Indian | Pak./Ban. | Chinese | Jews |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1991 | M/F | 11 | 15 | 13 | 29 | 10 | - |
| 2 | 1994 | M | 15 | 34 | 20 | 37 | - | - |
| 3 | 1994 | F | 13 | 24 | 15 | 43 | - | - |
| 4 | 2001 | M/F | 4.3 | - | 5.4 | 14.6 | - | 3.8 |

Sources: 1: Owen, 1997; 2-3: Modood \& Berthoud, 1997; 4: 2001 census.
of unemployment than do Pakistanis and Bangladeshis. The Jews have the lowest rate of unemployment. These racial differences in unemployment followed closely the differences in IQs. The high rate of unemployment among the Pakistanis and Bangladeshis reflects to a considerable extent the recent arrival of large numbers of these immigrants who are unable to speak English.

## 11. Conduct Disorders and Crime

Race differences in conduct disorders in children are shown in Table 5.19 expressed as Odds Ratios with whites set at 1.0. Row 1 gives results for 292 black and 1311 white children and adolescents referred for psychiatric problems to the Maudsley hospital in London and show the proportion with conduct disorders were significantly greater among the blacks (whites had proportionately more emotional disorders). Rows 2 and 3 give behavior problems assessed by teachers of black and white 3 - 5 -year-olds and show that black boys ( $\mathrm{n}=44$ ) have 3.9 times the scores of white boys ( $\mathrm{n}=79$ ), while black girls ( $\mathrm{n}=46$ ) have 2.3 times the scores of white girls ( $\mathrm{n}=70$ ). These children all attended the same inner city schools in London. Children with conduct disorders are at risk of being expelled or excluded from school. Row 4 gives race differences in exclusions from English schools collected by the Government Department for Education and Employment for the school year 1993/4. It will be seen that black children are excluded from schools 4.4 times as frequently as white, South Asian children a little less frequently, and Chinese children about one fifth as frequently.

Table 5.19. Race differences in conduct disorders in children (odds ratios)

|  | Sex | White | Black | Chinese | S. Asian |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | M/F | 1.0 | 1.4 | - | - |
| 2 | M | 1.0 | 3.9 | - | - |
| 3 | F | 1.0 | 2.3 | - | - |
| 4 | M/F | 1.0 | 4.4 | 0.18 | 0.92 |

Sources: 1: Goodman \& Richards, 1995; 2-3: Tizard et al., 1988; 4: Gillborn and Gipps, 1996.

The race differences in conduct disorders in children are consistent with the crime rates among adults. Blacks have by far the greatest crime rates; Chinese have low crime rates; while South Asians from the Indian sub-Continent have crime rates about the same as those of whites. Statistics showing these differences are given in Table 5.20. Row 1 gives rates of imprisonment of men aged 16-39 in England and Wales per 1,000 population expressed as odds ratios with the rate for whites set at 1.00 . It shows that blacks had approximately six times the crime rate of whites, while the Indians, Pakistanis, and Bangladeshis (combined as

South Asians in this study) had slightly lower crime rates than whites. Rows 2 and 3 give age-adjusted rates of imprisonment expressed as odds ratios with the rate for the total population set at 1.00 . The ratios are given separately for men and women. The odds ratio for whites is slightly lower than the national average for both men and women. The odds ratio for black men is far greater at 7.2 , while for black women it is even greater at 12.19. The principal reason for the very high percentage of black women in prison is that they are used as "mules" by black men for smuggling drugs into Britain. A significant number of these are detected and sentenced to terms of imprisonment. Indian men are in prison at the same rate as white men, while Indian women have a lower rate of imprisonment than white women. Pakistani and Bangladeshi men are significantly over-represented in prison, but the women are under-represented. Chinese men and women are both substantially under-represented in prison.

Table 5.20. Race differences in crime (odds ratios)

|  | Year | Sex | White | Black | Indian | Pak./Ban. | Chinese |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1993 | M | 1.00 | 6.10 | 0.87 | 0.87 | - |
| 2 | 1995 | M | 0.88 | 7.12 | 0.87 | 1.42 | 0.66 |
| 3 | 1995 | F | 0.80 | 12.19 | 0.60 | 0.50 | 0.66 |

Sources: 1: Smith, 1997; 2-3: Home Office, 1998.
A number of social scientists have suggested that the race differences in crime conviction rates are caused or exacerbated by prejudice, ethnic bias, and racism in the police and the courts. For instance, Rutter, Giller, and Hagell (1998) have reviewed the evidence on race differences in convictions and conclude: "there are substantial differences in the rates of crime among ethnic groups. These differences are exaggerated by small (but cumulative) biases in the ways in which judicial processing takes place...." (p. 246). If racism is present, it is difficult to understand why the conviction rates of Indians, Pakistanis, and Chinese are lower than those of Europeans, because many Europeans are prejudiced against these.

## 12. Health and Infant Mortality

There are race differences in health and mortality that are summarized in Table 5.21. Row 1 gives rates of a long-standing illness found
in the 1991 census for England and Wales calculated by Nazroo (1997). The figures are age and sex standardized and calculated as odds ratios in relation to a white rate of 1.00 . Thus, blacks have 1.24 times the rate of whites, Chinese have only 0.78 times the rate of whites while blacks, Indians, and Pakistanis together with Bangladeshis have significantly higher rates than whites. Row 2 gives rates of infant mortality in 19821985 and again shows the lowest rate among whites, while blacks, Indians, and Pakistanis together with Bangladeshis have significantly higher rates than whites (Balarajan and Raleigh, 1990). No data were given for Chinese in this study.

Table 5.21. Race differences in bealth (odds ratios) and infant mortality per 1,000 live births

|  |  | White | Black | Chinese | Indian | Pak./Ban. |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | Illness | 1.00 | 1.24 | 0.78 | 1.27 | 1.43 |
| 2 | Infant Mortality | 9.7 | 11.1 | - | 10.2 | 12.6 |

## 13. Single Teenage Mothers

Race differences in the percentages of teenagers who were single mothers are shown in Table 5.22. Row 1 gives these figures from the Child Health and Education Study of 14,906 children born in 1970 and followed up in 1980. It will be seen that single teenage mothers were almost four times more prevalent among blacks than among whites, and much lower among South Asians. Row 2 gives results from a survey of teenage births carried out in 1994. The results are broadly similar, with black single teenage mothers being three and a half times more prevalent than whites. However, the prevalence of single teenage motherhood among South Asians was rather higher and the same as that of whites at 6 percent in this study.

Table 5.22. Race differences in single teenage mothers (percentages)

|  | Year | White | Black | S. Asian | Reference |
| :---: | :---: | :---: | :---: | :---: | :--- |
| 1 | 1980 | 7 | 27 | 2 | Brewer \& Haslum, 1986 |
| 2 | 1994 | 6 | 21 | 6 | Modood \& Berthoud, 1997 |

## 14. Fertility

Figures for race differences in total fertility rates (TFR) are given for 1988 by Coleman and Salt (1992) and are shown in row 1 of Table 5.23. The TFR for whites was 1.8 . The fertility of blacks at 2.8 is about 50 percent greater than that of whites, while that of Indians (4.3) is more than double, and that of Pakistanis and Bangladeshis (6.1) more than triple. However, the fertility of the Chinese at 1.3 is only about two thirds that of whites. Total fertility rates by the country of birth of mother in 1991 and 2001 in England and Wales taken from the censuses of these years are given in rows 2 and 3 . The fertility of blacks and Indians is about 50 percent greater than that of whites, while that of Pakistanis and Bangladeshis is still higher. These statistics omit non-Europeans born in Britain.

Table 5.23. Race differences in fertility (TFR)

|  | Year | White | Black | Chinese | Indian | Pak./Ban. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1988 | 1.8 | 2.8 | 1.3 | 4.3 | 6.1 |
| 2 | 1991 | 1.8 | 2.7 | - | 2.5 | 5.0 |
| 3 | 2001 | 1.6 | 2.2 | - | 2.3 | 4.3 |

## 15. Personality Differences

It may well be that in addition to IQ there are personality differences that contribute to race differences in achievement and other behaviors. Direct evidence for this has been reported by Ones and Anderson (2002) in a study of race differences among university students in personality measured by the Occupational Personality Questionnaire. This provides measures of a number of personality traits including achievement motivation and competitiveness. Their results are presented as $d \mathrm{~s}$ in relation to zero for whites and are shown in Table 5.24 . It will be seen that there are no differences between blacks and whites, but Chinese and South Asians scored considerably higher than whites on achievement motivation and a little higher on competitiveness.

Table 5.24 Race differences in personality

| N/Trait | Whites | Blacks | Chinese | S. Asians |
| :--- | :---: | :---: | :---: | :---: |
| N | 324 | 56 | 30 | 47 |
| Ach. Motivation | 0 | 02 | 69 | 0.35 |
| Competitiveness | 0 | 07 | 19 | 0.15 |

## 16. Conclusions

The racial hierarchy in Britain follows the IQ gradient. Jews have the highest IQs and are the most successful economically, with the lowest rate of unemployment and the highest proportion among college students and in professional and managerial occupations. The Chinese also do well with a high IQ, excellent educational attainment, and high earnings together with low rates of unemployment and crime. The Indians are a bit of an anomaly because their IQ is somewhat lower than that of whites, but they have good educational attainment and socioeconomic status, earnings only a little lower than those of whites, together with low rates of crime and single teenage mothers. The Pakistanis and Bangladeshis are a social problem group with low IQs, poor educational attainment, low earnings, high unemployment, and a high rate of crime among the men (but not among the women). These social problems are attributable to many of them being recent immigrants and having a poor command of English. Their educational performance has improved as they have begun to assimilate, and it is reasonable to expect that when they acquire fluency in English their social status will improve further. The Afro-Caribbeans and the Africans are at the bottom of the socioeconomic hierarchy with low IQs, poor educational attainment, low earnings, and high unemployment, together with high rates of crime and single teenage mothers. There is no sign of improvement in their position during the period from the 1970s to the present. In fact, their performance in GCSE examination worsened over the years 1988-2004 in so far as in 1988 they scored 4 points below whites, and the gap increased steadily so that by 2004 they scored 16 points below whites. The racial hierarchy in Britain is similar to that in Canada, the United States, and a number of other countries, where blacks have the lowest IQ and are the principal social problem group, while Jews and East Asians (Chinese and Japanese) are the model minorities who perform better than whites.

## Chapter 6

## Canada

1. Composition of the Population
2. Race and Ethnic Differences in Intelligence
3. Educational Attainment
4. Earnings
5. Socioeconomic Status
6. Unemployment
7. Crime
8. Life Expectancy and Infant Mortality
9. Fertility
10. Conclusions

Canada was first settled by the Native American Indians and the CInuit, formerly known as the Eskimos, whose ancestors crossed the Bering Straits from northeast Siberia at some time in prehistory. The Inuit inhabited the far north of the country and the Native American Indians the remainder. The Native American Indians and the Inuit are genetically and anthropologically two distinct races (Cavalli-Sforza, Menozzi, and Piazza, 1994). The Inuit are more cold adapted with flattened noses to prevent frostbite, stocky bodies, and short limbs, the epicanthic eyefold, and pale skins. The Native American Indians have quite prominent
noses, brown and reddish skins, and longer limbs. When the Europeans arrived in Canada they found the Native American Indians and the Inuit living as hunter-gatherers.

The first European to find Canada is believed to be Leif Ericsson from Norway, who reached Nova Scotia around 1000 AD. John Cabot rediscovered the east coast in 1497. In 1608, the French established a colony called New France in the region of what is now Quebec. In the second half of the seventeenth century, it had become a department of France and had a population of approximately 10,000 . By the 1730 s, it is estimated that the city of Quebec had a population of approximately 9,000 and Montreal of 6,000 . The French and British fought the Seven Years' War between 1756 and 1763. This was won by the British who at the treaty of Paris took control of French Canada, made it a British colony, and governed it from Quebec. The French population at this time was approximately 70,000 . In 1791, the British split Canada into two administrative colonies, Lower Canada and Upper Canada. Lower Canada was Quebec and retained its French culture and language, while Upper Canada was Ontario and began to be settled by the British. In 1840, the British joined the two colonies with a single legislature and governor. In 1867, a federal state was established consisting of Quebec, Ontario, New Brunswick, and Nova Scotia. These were subsequently joined by more provinces in the west (Manitoba, Saskatchewan, Alberta, British Columbia, Yukon, and the Northwest Territories) as these became settled by Europeans and, on the Pacific Coast, by Chinese and a smaller number of Japanese.

## 1. Race and Ethnic Composition of the Population

Until the second half of the nineteenth century, the population consisted almost entirely of the Native American Indians and Inuit, and the ethnic French and British.

The British and French brought in some blacks as slaves as early as 1628. It is estimated that there were around 50,000 blacks in Canada when the British abolished slavery in 1833 throughout the empire. Segregated schools for blacks and Europeans were established in Ontario in 1849, and not desegregated until 1965.

From around 1850 , immigrants began to settle from a number of European countries, notably Germany, the Netherlands, Italy, Poland,

Scandinavia, and Russia. The first Chinese entered British Columbia in 1858 to work as laborers. In the next forty years, more came to work in coalmines, as gold prospectors, to clear the forests, build roads, and to construct the transcontinental Canadian-Pacific Railroad that was begun in 1880 and completed in 1885.

In the first half of the twentieth century, there were restrictions on the immigration of non-Europeans. In 1962, the Canadian government lifted these and in 1968 introduced a points system that favored applicants for immigration with educational and professional qualifications. In the 1960 s and 1970 s approximately 300,000 immigrants entered the country from India and Pakistan, about 100,000 from the West Indies, and about 60,000 from Africa. A number of these had university degrees and professional qualifications. They mainly settled in the major cities. By 1979, a survey in Toronto found that more than half the children in the schools did not speak English in their homes (Head, 1984).

The racial and ethnic composition of the population found in the 1981 and 2001 censuses is shown in Table 6.1. It will be seen that the Europeans fell from 95 percent to 90 percent, while the percentages of Chinese and blacks increased as a result of immigration. The South Asians in the 1981 census consisted of Arabs ( 0.25 percent), and Indians and Pakistanis ( 0.82 percent). There were also small numbers of Japanese ( 0.17 percent), North Africans ( 0.4 percent), and Pacific Islanders ( 0.04 percent). Jews were found to be 1 percent of the population in the 1973 Mobility Study and 0.9 percent of the population in the 1989 General Social Survey.

The 2001 census showed the Inuit numbered around 50,000 while the Native American Indians numbered around 560,000 . The two groups are normally combined in surveys of racial and ethnic differences in education, socioeconomic status, and earnings. There were

Table 6.1. Composition of the population (percentages)

| Group | $\mathbf{1 9 8 1}$ | 2001 |
| :--- | ---: | ---: |
| European | 95.0 | 90.0 |
| Black | 0.2 | 2.0 |
| Chinese | 1.4 | 3.7 |
| Jews | 1.0 | 1.0 |
| Native American | 1.7 | 3.4 |
| South Asian | 1.1 | - |

also approximately 308,000 Metis of mixed Native American Indian and European ancestry.

## 2. Intelligence

The intelligence of Canadians was assessed by Prifitera et al. (1998) in a standardization of the WISC-111 on a representative sample of $2,2006-16$-year-olds, and was found to be the same as that of white Americans in the United States, i.e., 100. As the population was 95 percent European, this is a very close estimate of the intelligence of Europeans in Canada and is the standard in terms of which the intelligence of the other racial groups has been assessed.

Studies of the intelligence of Native American Indians in Canada are summarized in Table 6.2. There is a problem with some of these studies because some Native Americans have spoken and still speak their native languages as their first language and English as their second language. These children are inevitably handicapped in taking verbal tests in English and the low IQs they have frequently obtained cannot be regarded as valid. Hence, verbal IQs have only been entered for studies in which the Native Americans spoke English as their first language. The intelligence of the Native Americans began to be studied in Canada in the 1920s. Row 1 gives an IQ of 91 for Native American primary school children obtained from the DAM (Draw a Man) test, a test of accuracy and detail in drawing a picture of a man.

Row 2 gives an unusually low IQ of 76 for a sample of Canadian
Table 6.2. IQs of Native American Indians in Canada

|  | Age | N | Test | IQ | Reference |
| :--- | :---: | :---: | :---: | :--- | :--- |
| 1 | $6-11$ | 58 | DAM | 91 | Eels, 1933 |
| 2 | $6-14$ | 124 | CF | 76 | Gaddes et al., 1968 |
| 3 | $6-14$ | 124 | DAM | 88 | Gaddes et al., 1968 |
| 4 | 11 | 86 | SPM | 85 | Wiltshire \& Gray, 1969 |
| 5 | 11 | 86 | DAM | 95 | Wiltshire \& Gray, 1969 |
| 6 | 11 | 50 | Various | 82 | Vernon, 1969 |
| 7 | $11-14$ | 60 | WISC | 75 | Schubert \& Cropley, 1972 |
| 8 | $6-15$ | 60 | WISC | 88 | Schubert \& Cropley, 1972 |
| 9 | $5-6$ | 30 | BTBC | 86 | Mickelson \& Galloway, 1973 |
| 10 | $12-14$ | 137 | SPM | 94 | Bowd, 1973 |
| 11 | $5-11$ | 111 | CPM | 92 | Cropley \& Cardey, 1975 |
| 12 | $6-13$ | 177 | WISC-R | 82 | Seyfort et al., 1980 |

Native American school students. Row 3 gives an IQ of 88 for the same sample obtained on the DAM. Rows 4 gives an IQ of 85 for a sample of school students. Row 5 gives an IQ of 95 for the same sample obtained on the DAM. These results show that Native American children get higher IQs on the DAM than on reasoning abilities, perhaps because the DAM involves visual memory which is relatively strong in Native Americans. Row 6 gives an IQ of 82 calculated as the average of 82 for reasoning ability assessed by a matrices test, 75 for verbal ability assessed by vocabulary, and 97 for visualization assessed by Kohs Blocks.

Row 7 gives an IQ of 75 obtained on the non-verbal performance scale of the WISC for Native American children living on a reservation in northern Saskatchewan. They spoke Cree at home and obtained a verbal IQ of 60 that is considered invalid. Row 8 gives an IQ of 88 for Native American children in central Saskatchewan who spoke English at home. Their IQs are substantially higher than those given in row 7, but they still did not do so well on verbal IQ (86) as on visualization (92). Row 9 gives an IQ of 86 for Native American children in Vancouver compared with white children attending the same schools. The authors state that all the Native American children spoke English in their homes.

Row 10 gives an IQ of 94 for Native American children in western Canada compared with white children in Calgary. The IQ is for $g$ derived principally from the Progressive Matrices. Rows 11 and 12 give IQs of 92 and 82 for two further samples of school children. So far as it has proved possible to ascertain, no studies have been published of the intelligence of Native Americans in Canada since 1980. The median of the 12 studies is an IQ of 87 . This is almost exactly the same as the median of 86 of the studies of Native American Indians in the United States.

Studies of the IQ of the Inuit who inhabit the far north of Canada are given in Table 6.3. The median IQ of the studies is 91 . Details of the studies are provided in Lynn (2006).

Studies of the intelligence of the Chinese and Japanese in Canada are summarized in Table 6.4. Rows 1 and 2 give IQs of 104 and 95 for early studies of Japanese and Chinese in Vancouver. Row 3 gives an IQ of 101 for a later study of Chinese in Vancouver. Rows 4 and 5 give results of two further studies of Chinese in Canada with IQs of 101 and 103. The median IQ of the nine studies is 101 and the mean 100.8 , so 101 is adopted as the IQ of Chinese in Canada. It is a little lower than

## Table 6.3. IQs of Inuit

|  | Age | N | Test | IQ | Reference |
| :--- | :---: | :---: | :---: | :--- | :--- |
| 1 | $6-11$ | 469 | DAM | 89 | Eels, 1933 |
| 2 | $6-11$ | 105 | DAM | 92 | Eels, 1933 |
| 3 | $6-9$ | 174 | CPM | 94 | MacArthur, 1965 |
| 4 | $10-15$ | 326 | SPM | 84 | MacArthur, 1965 |
| 5 | 25 | 122 | CPM | 78 | Berry, 1966 |
| 6 | Adults | 186 | CPMT | 93 | Kunce et al., 1967 |
| 7 | 10 | 87 | SPM | 91 | MacArthur, 1967 |
| 8 | 11 | 50 | MVK | 90 | Vernon, 1969 |
| 9 | $6-12$ | 380 | WISC | 91 | Kaplan et al., 1973 |
| 10 | $9-12$ | 69 | CPM | 96 | Taylor \& Skanes, 1976a |
| 11 | 7 | 22 | WPPSI | 93 | Taylor \& Skanes, 1976b |
| 12 | $7-10$ | 63 | CPM | 95 | Taylor \& Skanes, 1977 |
| 13 | $7-14$ | 366 | WISC-R | 91 | Wilgosh et al., 1986 |
| 14 | 5 | 110 | CPM | 92 | Wright et al., 1996 |

the median IQ of 105 of East Asians in their indigenous habitats of China, Japan, Hong Kong, South Korea, and Singapore. Possibly the reason for this is that the Chinese and Japanese who immigrated to Canada were of a little below average intelligence. According to Vernon (1982, p. 390)
it is well established that the original Chinese immigrants were of poor peasant stock and in many investigations it is stated that they were low in socioeconomic status...the original Japanese also came as peasants.
These Chinese and Japanese immigrants came principally to do unskilled agricultural work and to work in the mines, so it seems probable that this employment would appeal predominantly to the less able in China and Japan. Their descendants would have inherited their slightly depressed IQs.

Table 6.4. Intelligence of Chinese and Japanese in Canada

|  | Ethnicity | Age | $\mathbf{N}$ | Test | IQ | Reference |
| :--- | :--- | ---: | ---: | :---: | ---: | :--- |
| 1 | Japanese | $6-12$ | 274 | Pintner | 104 | Sandiford \& Kerr, 1926 |
| 2 | Chinese | $6-12$ | 224 | Pintner | 95 | Sandiford \& Kerr, 1926 |
| 3 | Chinese | $6-8$ | 40 | WISC | 101 | Peters \& Ellis, 1970 |
| 4 | Chinese | $6-8$ | 85 | WISC | 101 | Kline \& Lee, 1972 |
| 5 | Chinese | 15 | 182 | DAT | 103 | Vernon, 1984 |

It has proved possible to find two studies of the intelligence of Jews in Canada. The results are given in Table 6.5. Row 1 gives the results of the first study carried out by Wendt and Burwell (1964) in the early 1960s in three schools, two of which were Jewish, while the third was mixed Jewish and Gentile. The children were tested with the WISC and obtained a Full Scale IQ of 111.1, a verbal IQ of 113.1 and a performance (non-verbal and to some degree spatial-visualization) IQ of 107.8. These results need adjustment for the secular rise of IQs known as the Flynn effect, which has found that Full Scale IQs have been increasing at 3 IQ points a decade, verbal IQs at two IQ points a decade and performance IQs at four IQ points a decade (Flynn, 1984). The WISC standardization sample was obtained in 1949, and the adjusted results are a Full Scale IQ of 107.1, a verbal IQ of 108.1, and a performance IQ of 104.8. These high figures are closely similar to the IQs of Jews in the United States and in Britain, where the mean IQ of Jews is about 110. This Canadian study also confirms a number of American studies finding that Jews have higher verbal than non-verbal IQs.

The second study was carried out by Majoribanks (1972). He compared 100 Jewish boys aged 11 years with 100 Protestant white gentile boys and 100 white French Canadians. His results are shown in row 2 of Table 6.5. In relation to the combined scores of the two gentile groups set at 100, the Jewish boys obtained a non-verbal reasoning IQ of 108, a verbal IQ of 119, a spatial IQ of 101, and a numerical IQ of 115. To calculate a general IQ, these have been averaged to give a figure of 110.5 . The two studies can be averaged to give an IQ of 109 for Jews in Canada. Both studies show the high verbal-low spatial ability profile that has also been found among Jews in the United States.

## Table 6.5. Intelligence of Jews in Canada

|  | IQ | Reas | Verb | Spatial | Number | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| 1 | 107 | - | 111 | 103 | - | Wendt \& Burwell, 1964 |
| 2 | 109 | 108 | 119 | 101 | 115 | Majoribanks, 1972 |

There appear to have been only two studies of the intelligence of blacks in Canada. They are summarized in Table 6.6. Both studies were carried out on samples of blacks living in Ontario and compared with whites attending the same schools ( $\mathrm{n}=211$ in the first study). The blacks had been settled in the region for several generations. In the first study,
blacks obtained a mean IQ of 81 . The second study found an IQ of 78 for "full blooded" blacks, and 93 for mixed race mulattos. This confirms a number of studies finding that mixed race blacks obtain higher IQs than pure blacks (see Lynn, 2002). The author of these studies describes the blacks as not overtly discriminated against. In addition to attending the same schools as whites, they attended the same churches, and were allowed sit together with whites in buses, restaurants, and other public places. The results of the three studies are averaged to give an IQ of 84 for blacks in Canada.

## Table 6.6. Intelligence of blacks in Canada

|  |  | Age | N | Test | IQ | Reference |
| :--- | :--- | ---: | ---: | :---: | :---: | :--- |
| 1 | Blacks | $5-15$ | 162 | PP | 81 | Tanser, 1939 |
| 2 | Blacks | $7-12$ | 46 | PP | 78 | Tanser, 1941 |
| 3 | Mulattos | $7-12$ | 55 | PP | 93 | Tanser, 1941 |

The IQs obtained by the six major racial and ethnic groups in Canada are summarized in Table 6.7. We shall see that the IQ gradient predicts the gradients in education, earnings, and socioeconomic status.

Table 6.7. IQs of races in Canada

| Group | IQ | Group | IQ |
| :--- | :---: | :--- | :---: |
| Jews | 109 | Inuits | 91 |
| Chinese | 101 | Native Americans | 87 |
| Whites | 100 | Blacks | 84 |

## 3.Educational Attainment.

Racial and ethnic differences in educational attainment are shown in Table 6.8. Row 1 gives the percentages that were illiterate found in the 1921 census. The British had the fewest (1 percent) illiterate reflecting their higher educational and socioeconomic status in Canada at this time. Next come the Jews ( 7 percent) showing that even at this early date the Jews were relatively well educated. They were followed closely by the French ( 8 percent), who have consistently performed at a lower level than the British until the end of the twentieth century. The blacks had the same ( 8 percent) percentage of illiterates. Then come the other Europeans (14 percent) reflecting the immigration of large numbers of illiterate Italians (19 percent), Poles ( 20 percent), and Ukrainians ( 30 percent) in the last
decades of the nineteenth century and early decades of the twentieth century. Finally, the Chinese had by far the highest percentage of illiteracy ( 27 percent), reflecting the low socioeconomic status of the Chinese at this time due to their arrival to do unskilled laboring and agricultural work (the Chinese in these tables include small numbers of Japanese, Koreans, Indochinese, and East Indians).

Row 2 gives the percentages that were illiterate found in the 1931 census. As in 1921, the British had the fewest (1 percent) illiterate reflecting their continued high educational and socioeconomic status in Canada at this time. Once again, Jews ( 4 percent) came next, followed closely by the French ( 6 percent). The blacks had the same ( 8 percent) percentage of illiterates as in 1921. The other Europeans also had 8 percent illiteracy, a significantly lower percentage than their 14 percent in 1921. The Chinese still had by far the highest percentage of illiteracy ( 15 percent) reflecting their continued low socioeconomic status, although their illiteracy rate had come down considerably from the 27 percent in 1921.

Rows 3 through 6 give percentages of the racial and ethnic groups who had reached 10th grade of secondary school found in the censuses of 1951, 1961, 1971, and 1981. Row 3 gives the data for 1951 and shows that the British had the greatest percentage ( 55 percent), followed closely by the Jews ( 53 percent). There is a considerable drop to the other Europeans ( 35 percent), the Chinese ( 31 percent), and the French ( 30 percent). These are followed by a much greater drop to the Native American Indians who had only 6 percent with 10th grade education.

Row 4 gives the data for 1961 and shows that the Jews had marginally overtaken the British to become the group with the highest percentage ( 64 percent) with 10 th grade education. The British came second with 63 percent. The Chinese came third with 45 percent, somewhat ahead of the French ( 38 percent). The other Europeans came next at 31 percent, a little lower than the 35 percent of 1951, reflecting post World War II immigration of substantial numbers of illiterate Poles ( 40 percent) and Ukrainians ( 38 percent). Once again the Native American Indians had by far the fewest with 10th grade education at only 9 percent.

Row 5 gives the data for 1971. It shows that the Jews were again the group with the highest percentage ( 80 percent) with 10th grade education. The British came second with 77 percent. The Chinese had

Table 6.8. Race and ethnic differences in educational attainment

|  | Measure | Year | Jews | Chinese | British | French | European | Native <br> American | Black |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Illiterate \% | 1921 | 7 | 27 | 1 | 8 | 14 | - | 8 |
| 2 | Illiterate \% | 1931 | 4 | 15 | 1 | 6 | 8 | - | 8 |
| 3 | 10th grade \% | 1951 | 53 | 31 | 55 | 30 | 35 | 6 | - |
| 4 | 10th grade \% | 1961 | 64 | 45 | 63 | 38 | 31 | 9 | - |
| 5 | 10 $0^{\text {th }}$ grade \% | 1971 | 80 | 75 | 77 | 59 | 58 | 38 | - |
| 6 | 10th grade \% | 1981 | 85 | 80 | 84 | 77 | 72 | 55 | 88 |
| 7 | Years-NB | 1981 | 13.5 | 13.1 | 11.7 | 11.1 | 11.9 | - | 11.8 |
| 8 | Years-FB | 1981 | 12.7 | 11.9 | 12.7 | 12.4 | 10.7 | - | 12.4 |
| 9 | Years-M | 1991 | 15.0 | 14.7 | 12.3 | 11.7 | 12.4 | 9.5 | 12.8 |
| 10 | Years-W | 1991 | 14.6 | 14.6 | 12.6 | 12.2 | 12.5 | 10.4 | 13.0 |
| $S$ |  |  |  |  |  |  |  |  |  | grade education at 38 percent.

 had considerably improved their educational standing as compared sue!pui ueכ!., the British. There followed quite a large drop to the French at 59 percent improved their position to 75 percent and were only fractionally behind
Sources: rows 1-6: Herberg, 1990b; rows 7-8: Li, 1988; rows 9-10: Sweetman \& Dicks, 2000.

Row 6 gives the data for 1981. Once again the Jews were the group with the highest percentage ( 85 percent) with 10th grade education, followed by the British with 84 percent, and the Chinese at 80 percent. The French came next at 77 percent followed by the other Europeans at 72 percent. The Native American Indians had again considerably improved their educational standing as compared with previous decades, but remained with by far the fewest with 10 th grade education at 55 percent.

Rows 7 and 8 give the average years of education given in the 1981 census, broken down by the native born (NB) and the foreign born (FB). Among the native born, the Jews had the most years of education (13.5 years), followed by the Chinese ( 13.1 years), reflecting the steady improvement of the Chinese who were settled in Canada for at least a generation. Next come the other Europeans (11.9 years), the British ( 11.7 years), the blacks ( 11.8 years), and the French ( 11.1 years). The figures for the foreign born are a little different. The foreign born Jews, Chinese, and other Europeans had fewer years of education than the native born, while the foreign born British, French, and blacks had more years of education than the native born. These differences reflect different patterns of immigration, with somewhat less educated Jewish, Chinese, and other Europeans entering Canada as compared with the native born, and the reverse for British, French, and blacks.

Rows 9 and 10 give the average years of education given in the 1991 census, separately for men (row 9) and women (row 10). Among the men, the Jews once again had the most years of education ( 15.0 years), followed by the Chinese ( 14.6 years), reflecting the continued improvement in the socioeconomic status of the Chinese. Next come the blacks (12.8 years) reflecting substantial immigration of those with strong educational qualifications. Then come the other Europeans ( 12.4 years) and the British ( 12.3 years), followed by the French (11.7 years). The Native American Indians had significantly less average education at 10.4 years reflecting the continued disadvantage of this group.

Table 6.9 gives racial and ethnic differences in the percentages with any kind of tertiary, college, or university education found in the censuses of 1951 through 2001. Row 1 gives the data for 1951. It shows that Jews had the greatest percentage ( 13 percent) with some tertiary education, followed by the British (11 percent). The Chinese, consisting

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of mainly of Chinese but including Japanese, Korean, Indochinese, and East Indians ( 5 percent) had much lower percentages, as did the French ( 4 percent) and other Europeans ( 5 percent). The Native American Indians had under 0.5 percent.

Table 6.9. Race and ethnic differences with tertiary education (percentages)

|  | Year | Jews | Chinese | British | French | European | Black |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1951 | 13 | 5 | 11 | 4 | 5 | - |
| 2 | 1961 | 15 | 9 | 8 | 5 | 5 | - |
| 3 | 1971 | 40 | 42 | 29 | 23 | 26 | - |
| 4 | 1981 | 53 | 44 | 38 | 29 | 34 | 41 |
| 5 | 1981 | 32 | 21 | 10 | 8 | 9 | 11 |
| 6 | 1991 | 55 | 38 | 12 | 13 | 15 | 13 |

Sources: 1951-1981: Herberg, 1990a and b; 1981: Li, 1988; 1991: McMullin, 2004.

Row 2, gives the data for 1961. It shows that again the Jews had the highest percentage ( 9 percent), but now the Chinese ranked next ( 9 percent), slightly ahead of the British ( 8 percent). The French ( 5 percent) and other Europeans ( 5 percent) were still under-represented, and the Native Americans again had less than 0.5 percent.

Row 3 gives the data for 1971 and shows that the Chinese had the greatest percentage ( 42 percent) with some tertiary education, closely followed by the Jews ( 40 percent); the British came next ( 29 percent), followed by the other Europeans ( 26 percent) and the French ( 23 percent). The Native Americans had made a considerable advance with 11 percent, but still had by far the lowest percentage.

In 1981, shown in row 4, the Jews had overtaken the Chinese with 53 percent as compared with 44 percent. The British came next ( 38 percent) followed by the other Europeans ( 34 percent) and the French ( 29 percent). The Native Americans had made a further advance to 23 percent, but remained with the lowest percentage. 1981 was the first year in which Latin Americans and blacks were listed. Both had quite high percentages of 41 percent for the blacks and 37 percent for the Latin Americans. This was due to Canadian immigration policy introduced in 1968, allowing immigrants with good educational qualifications priority for entering the country.

Row 5 gives the percentages with university degrees in 1981. The figures are lower than those in row 4 because they exclude those with other forms of tertiary education. However, the rank order of the racial and ethnic groups remains the same. Row 6 gives the percentages of those aged 25-34 with university degrees in 1991. Once again the Jews had by far the highest percentage with university degrees ( 55 percent) followed by Chinese ( 38 percent). The British, other Europeans, the French, and blacks had about the same percentages of $12-15$ percent. Once again, the Native Americans had by far the smallest percentage at only 2 percent.

Race differences in the educational attainment of high school students in Ontario in 1994 are shown in Table 6.10. The Ontario school system streamlines students into three groups: basic, where students are 2 years behind when they are in grade 8 ; general for students of average abilities; and advanced for students who achieve over 70 percent in both English and in math. It will be seen that Koreans, Jews, and Chinese have the highest percentages in the advanced streams and the lowest percentages in the basic streams. Whites (these are Anglos and other Northwest Europeans) perform about average. The worst performing groups are the South Asians, Portuguese, and the three groups of blacks.

Table 6.10. Race and ethnic differences in education

| Group | Advanced | Basic | Group | Advanced | Basic |
| :--- | :---: | :---: | :--- | :---: | :---: |
| Korean | 44 | 15 | Portuguese | 16 | 33 |
| Jewish | 42 | 13 | Canadian blacks | 16 | 35 |
| Chinese | 41 | 12 | Hispanic | 13 | 38 |
| Whites | 26 | 25 | African blacks | 13 | 39 |
| Iranian | 25 | 30 | Caribbean blacks | 9 | 32 |
| Tamil | 19 | 22 |  |  |  |
| Source: The Toronto Star, Feb 11th, 1995. |  |  |  |  |  |
|  |  |  |  |  |  |

## 4. Earnings

Racial and ethnic annual earnings of the employed labor force for men and women combined obtained from census returns for 1941 through 2001 are given in Table 6.11. Row 1 gives the average earnings for 1941 and shows that the British had the highest average earnings ( $\$ 1,515$ ), reflecting the dominant position of the British in Canada at this time. The Jews came next ( $\$ 1,327$ ), followed by a substantial drop to the other Europeans (Germans, Italian, Dutch, Scandinavians, and

Poles) $(\$ 1,115)$ and the French $(\$ 1,007)$. There is a further substantial drop to the Chinese (\$931), and the Native American Indians (together with the Inuit) had the lowest average earnings at $\$ 802$.

Row 2 gives the average earnings in 1951 and shows that the Jews had overtaken the British as the group with the highest average earnings ( $\$ 2,619$ as compared with $\$ 2,481$ ). Other Europeans (Germans, Italian, Dutch, Scandinavians, Ukrainians, and Poles) came next at $\$ 2,232$ followed by the French ( $\$ 2,150$ ). The Chinese had improved their position $(\$ 2,100)$ and were only fractionally behind the French. The Native American Indians (together with the Inuit) continued to have much the lowest average earnings at $\$ 1,404$.

Row 3 gives the average earnings in 1961 and shows that the Jews increased their lead as the highest earning group $(\$ 7,426)$ with a substantial lead over the British $(\$ 4,852)$. The Chinese had improved their position ( $\$ 3,895$ ) and came third, fractionally ahead of the French $(\$ 3,872)$ and the other Europeans $(\$ 3,319)$. No figure is given for the Native American Indians.

Row 4 gives the average earnings in 1971 and shows that the Jews retained their lead as the highest earning group $(\$ 12,368)$ with a substantial lead over the British $(\$ 8,500)$. The other Europeans come next $(\$ 7,846)$, followed by the French $(\$ 7,307)$, and finally by the Chinese $(\$ 6,668)$. These fluctuations reflect new waves of immigrants who sometimes arrive impoverished and bring down the average for the group.

Row 5 gives the average earnings in 1981 and shows that the Jews continued to retain their lead as the highest earning group ( $\$ 21,349$ ) with a substantial lead over the British $(\$ 15,100)$. The French $(\$ 13,831)$ still had significantly lower average earnings than the British, and other Europeans were fractionally lower ( $\$ 13,167$ ). The Chinese had earnings only marginally lower $(\$ 13,292)$ than the French and other Europeans. Blacks make their first appearance as a result of substantial immigration in the 1970s and had earnings only fractionally below $(\$ 13,029)$ the French, other Europeans, and Chinese, reflecting the admission of large numbers with professional qualifications. The Native American Indians once again had the lowest average earnings $(\$ 9,032)$ at about 75 percent of those of Europeans and Chinese.

Rows 7 and 8 give the average earnings in 1991 and 2001 and show the same gradient in which Jews continued to have by far the highest earnings, followed by British and Chinese; and then somewhat below these

Table 6.11. Race and etbnic differences in annual earnings, 1941-2001

|  | Year | Jews | Chinese | British | French | European | Native American | Black | Southeast Asian |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1941 | 1,327 | 931 | 1,515 | 1,007 | 1,115 | 802 | - | - |
| 2 | 1951 | 2,619 | 2,100 | 2,481 | 2,150 | 2,232 | 1,404 | - | - |
| 3 | 1961 | 7,426 | 3,895 | 4,852 | 3,872 | 3,319 | - | - | - |
| 4 | 1971 | 12,368 | 6,668 | 8,500 | 7,307 | 7,846 | - | - | - |
| 5 | 1981 | 21,349 | 13,292 | 15,100 | 13,831 | 13,367 | 9,032 | 13,029 | - |
| 6 | 1991 | 50,100 | 34,570 | 34,660 | 31,615 | 33,100 | 27,535 | 28,495 | 35,615 |
| 7 | 2001 | 73,928 | 40,817 | 43,398 | - | - | 32,176 | 35,100 | 34,100 |

are the first figures that differentiate the Inuit from the Metis and Native American Indians and show that the Inuit had higher earnings consistent with their marginally higher IQs. The earnings of the Metis (mixed race Inuit and Native American Indian) fall midway between the two.

Table 6.12. Annual earnings of Inuit and Native Americans, 1986

| Year | Inuit | Metis | Native American |
| :---: | :---: | :---: | :---: |
| 1986 | 32,450 | - | 20,226 |
| 2001 | 36,152 | 34,778 | 32,176 |
| Sources: Gerber 1990-2001; Statistics Canada. |  |  |  |

Table 6.13 gives racial and ethnic differences in percentages living in poverty as found in a sample of more than 80,000 individuals in a sub-sample in the census of 1991 and in the census of 1996 (Kazemipur and Halli, 2000, 2001). These figures are for those born in Canada. There is a broad inverse correspondence between the percentages of the racial and ethnic groups living in poverty and the average incomes. In 1991, the groups with the lowest percentage in poverty are the Chinese and the Europeans, who have the highest incomes. The South

Table 6.13. Race and ethnic differences in poverty (percentages)

|  | Chinese | European | Hispanic | Native <br> American | South Asian | Blacks | Jews |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1991 | 13.9 | 14.6 | 39.5 | 23.9 | 23.1 | 36.1 | 13.9 |
| 1996 | 24.6 | 19.3 | - | - | 30.1 | 49.0 | 12.2 |

Asians have quite a high percentage ( 23.1 percent) in poverty considering their high average income, reflecting the substantial numbers of impoverished refugees. The Native American Indians have the next highest percentage ( 23.9 percent) in poverty, consistent with their low average incomes. The blacks and Hispanics have much the highest percentages in poverty at 36.1 percent and 39.5 percent, respectively. In 1996, the poverty rates have increased as a result of economic recession and a rise in unemployment, but the differences between the groups are much the same. The group with the lowest percentage in poverty is the Jews. Next are the British and the Chinese, followed by the South Asians. The blacks have by far the highest percentage in
poverty at 49.0 percent (this figure is the average of 55.8 percent for Africans and 42.5 percent for Caribbeans).

## 5. Socioeconomic Status

The classical work on racial and ethnic differences in socioeconomic status in Canada is Porter's (1965) The Vertical Mosaic. In this, he calculated the percentage over-representation or under-representation of six racial and ethnic groups in the professions, unskilled occupations, and other intermediate occupational categories, found in the censuses of 1931, 1951, and 1961. A fuller analysis of racial and ethnic differences in the proportions in the professions, clerical and sales, and personal service in the censuses of 1921 through 1981 has been presented by Herberg (1990a, 1990b). His results are given for the professions in Table 6.14. Row 1 gives the percentages in the professions in 1921 and shows that the British had by far the highest percentage ( 12 percent), reflecting the dominant position of the British in Canada at this time. The French had 5 percent in the professions, well below the British, and reflecting the underperformance of the French in all indices of education and socioeconomic status in the early and middle decades of the twentieth century. The Jews also had 5 percent in the professions. Other Europeans (Germans, Italian, Dutch, Scandinavians) were almost the same at 4 percent. The Native American Indians (together with the Inuit) were under-represented at 2 percent. The Chinese were the most under-represented in the professions at 1 percent, reflecting their initial low status after immigrating to work as laborers.

In the 1931 and 1941, we see that the British retained their hegemonic position ( 11 percent and 10 percent) but the French had narrowed the gap ( 9 percent and 8 percent). The Jews had also improved their position to 7 percent. The Native American Indians (together with the Inuit) had lost ground ( 1 percent and 0 percent). The Chinese had made a little progress from 1 percent in 1931 to 2 percent in 1941, but were still doing poorly.

The 1951 census saw a dramatic shift in the relative positions of the racial and ethnic groups. The Jews were by far the most over-represented group in the professions ( 45 percent) and the Chinese were next ( 24 percent). The British had lost their hitherto dominant position (19 percent). The French were still behind at 14 percent. The Native American Indians remained at the bottom at two percent. The censuses of 1961, 1971, and

1981 saw a continuation of these trends. The Jews continued to be by far the most over-represented group in the professions and the Chinese were next. The British continued to be third and the French continued to be fourth. The other Europeans came next. The Native American Indians gained some ground but remained at the bottom, except in 1981 when they were marginally ahead of the other Europeans ( 19 percent and 18 percent respectively). The under-representation of the other Europeans reflects the immigration of numbers of Greeks, Portuguese, and Italians without professional qualifications. The 1981 census gives the first figure for blacks of 12 percent reflecting the immigration of large numbers of the professionally qualified.

Table 6.14. Race and ethnic percentages in the professions, 1921-1991

|  | Year | Jews | Chinese | British | French | European | Native <br> American | Black |
| :--- | :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1921 | 5 | 1 | 12 | 5 | 4 | 2 | - |
| 2 | 1931 | 7 | 1 | 11 | 9 | 4 | 1 | - |
| 3 | 1941 | 7 | 2 | 10 | 8 | 4 | 0 | - |
| 4 | 1951 | 45 | 24 | 19 | 14 | 5 | 2 | - |
| 5 | 1961 | 48 | 30 | 23 | 17 | 14 | 3 | - |
| 6 | 1971 | 32 | 28 | 21 | 16 | 15 | 12 | - |
| 7 | 1981 | 45 | 26 | 26 | 24 | 18 | 19 | 27 |

## 6. Unemployment

It has only proved possible to find race differences in rates of unemployment for blacks and whites (Model et al., 1999) and for Native American Indians (Borland and Hunter, 2000). These are shown for men and women combined in Table 6.15. It will be seen that the unemployment rates of blacks and whites are consistent with their intelligence levels. The Native American Indians have a much higher rate partly because many of them are isolated on reservations and possibly partly because of personality characteristics that make them antipathetic to work.

Table 6.15. Race and ethnic percentages in unemployment

| Year | Black | Native American | White | Chinese |
| :---: | :---: | :---: | :---: | :---: |
| 1991 | 12.1 | 19.4 | 7.4 | - |
| 2001 | 11.5 | 22.2 | 7.4 | 8.4 |

## 7. Crime

Race differences in crime rates are given in Table 6.16. The figures are for admissions to prison in 1992 in Ontario, expressed per 1,000 of the population (Ontario, 1996).

The Chinese have the lowest crime rates at 3.5 per 1,000 , only half that of whites ( 7.1 per 1,000 ). The South Asians have the next lowest rate at about two thirds that of whites. The Native American Indians have much higher crime rates (19.9) at more than two and a half times that of whites. The blacks have by far the greatest crime rates (36.9) at more than seven times that of whites. The seven-fold over-representation of blacks in crime in Ontario is almost exactly the same as that in Britain and the United States. The low crime rates of the Chinese are also found in both Britain and the United States.

Table 6.16. Race differences in crime (per 1,000 population)

| Year | Sex | White | Black | Indian | South Asian | Chinese |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1992 | M/F | 7.1 | 36.9 | 19.9 | 4.6 | 3.5 |

## 8. Infant Mortality and Life Expectancy

Race differences in infant mortality and life expectancy for Europeans and Native Americans have been published by Trovato (2001) and are shown in Table 6.17. It will be seen that infant mortality is lower for Europeans than for Native Americans while life expectancy is greater. Trovato (2001, p. 82) notes that these differences are due to higher Native American death rates from disease, violence, and accidents.

Table 6.17. Infant mortality and life expectancy of Europeans and Native American Indians

| Measure | Year | Sex | Europeans | Native Americans |
| :--- | :---: | :---: | :---: | :---: |
| Infant mortality | 1981 | M \& F | 11.3 | 21.8 |
| Infant mortality | 1991 | M \& F | 7.1 | 12.3 |
| Life expectancy | 1981 | Men | 71.9 | 62.4 |
| Life expectancy | 1981 | Women | 78.9 | 68.9 |
| Life expectancy | 1991 | Men | 74.6 | 66.9 |
| Life expectancy | 1991 | Women | 80.9 | 4.0 |

## 9. Fertility

The fertility of all Canadians, Native American Indians, and Inuit for 1986 through 1996 is given in Table 6.18. It will be seen that the fertility (expressed as number of children per woman) has been consistently lower for all Canadians than for Native American Indians and Inuit throughout the period. The differential narrowed towards the end of the twentieth century, but the fertility of Native American Indians remained approaching double that of all Canadians of whom approximately 90 percent were Europeans.

Table 6.18. Fertility of all Canadians, Native American Indians and Inuit

| Year | Canadians | Native Americans | Inuit |
| :--- | :---: | :---: | :---: |
| 1968 | 2.5 | 6.0 | 8.1 |
| 1978 | 1.8 | 3.9 | 4.2 |
| 1988 | 1.8 | 3.1 | - |
| 1996 | 1.8 | 3.0 | - |
| Source: Statistics Canada. |  |  |  |

## 10. Conclusions

Racial and ethnic differences in educational attainment, earnings, and socioeconomic status in the twentieth century in Canada can be understood as determined by four factors: discrimination by dominant groups against minorities, their time of arrival in the country, their intelligence, and their cultural values. Discrimination by dominant groups against minorities is the explanation favored by Canadian sociologists such as Herberg (1990a), Lambert and Taylor (1984), and Li (1988) for the racial and ethnic differences, but this cannot be convincingly established.

The British and French were the first to settle in Canada and were able to establish themselves in business, the professions, and the social structure. Hence in 1931, the British and French had more education, higher average earnings, and greater proportions in the professions, as compared with other Europeans, Chinese, and Jews who were relatively recent immigrants and had not had time to establish themselves. The general picture over the period 1931-1981 is that the position of the British and French at the top of the socioeconomic hierarchy gradually
weakened over the course of the century. By 1981 and 1991 the Jews were the most successful group and the Chinese had achieved parity with the Europeans.

Throughout the twentieth century, the French achieved less well than the British, with fewer years of education, a lower proportion of graduates, lower average earnings, and a lower proportion in the professions. The reason for this has not been satisfactorily explained. Canadian sociologists assert that the British have held the power in Canada and have used it to keep the French down. Thus, Wallace Lambert and Donald Taylor, professors of Social Psychology at McGill University in Montreal, have written that French Canadians have not, relative to English Canadians, "made it occupationally or economically" and that this is because "those with power advantages (the British) have simply learned well how to keep the advantages, and their social class cushion makes keeping power easy for them" (Lambert and Taylor, 1984, p. 204-205).

In similar vein Peter Li (1988, p. 136), a professor of Sociology at the University of Saskatchewan, has written, "the French systematically have less education and lower earnings, and these findings confirm the general conclusion about the unfavorable opportunity facing the French." These contentions that the British have prevented the French from advancing in the socioeconomic hierarchy make no kind of sense. The French live largely in Quebec where they have comprised approximately 80 percent of the population and have been largely independent from the power of the British for some three centuries. The French in Quebec are far and away the majority group, with their own language, culture, schools, and universities. According to sociological ethnic discrimination theory, the French in Quebec should have used their majority position to keep down the British and would be the hegemonic group. There has been nothing to stop the French getting themselves more education and achieving higher earnings, but for some reason that is unclear they failed to do so.

Nevertheless, by 1991 the census of that year showed that the French Canadians had greatly improved their position. They had virtually exactly the same proportion working in the professions as the British Canadians ( 14.0 percent and 14.2 percent, respectively) and only fractionally more working in unskilled occupations ( 72.0 percent and 69.4 percent, respectively) (Table 5.7). This indicates that whatever
handicapped them in the earlier decades of the twentieth century no longer did so by the end of the century. It has not proved possible to find any studies on the intelligence of French Canadians. They may or may not have or have had lower IQs than the British. Perhaps Rosen (1959) was right that Roman Catholic French Canadians used to have a weaker "achievement syndrome" and this was responsible for their previous lower educational and socioeconomic attainment, but in recent years their "achievement syndrome" has grown stronger or that of the British grown weaker.

The Chinese have done well in Canada. They entered the country initially to do unskilled work, and in 1921, a much higher proportion of them were illiterate compared with other racial and ethnic groups. In the first half of the twentieth century, they were under-represented in the professions, and over-represented among the unskilled. At this time they were subject to racial discrimination of various kinds including segregated schooling, exclusion from many hotels, clubs, and restaurants, and disenfranchisement. However, by 1981 they had higher educational attainment and qualifications than the British, French, and other Europeans, as high a proportion in the professions as the British ( 26 percent) and a higher proportion in the professions than other racial and ethnic groups except Jews. By 1991, Chinese men still had significantly lower average earnings than British, but their earnings were approximately the same as those of other Europeans and higher than those of the French. And by 1991, Chinese women were earning more than any other group except Jews. Possibly this may be because European men dislike Chinese men and discriminate against them in employment, but do not dislike Chinese women. By 1991, the Chinese had a slightly lower percentage than the Europeans living in poverty. Taking the results as a whole, by the end of the twentieth century the Chinese were doing as well in Canada as the Europeans. The success of the Chinese is difficult for discrimination theorists to explain, but is consistent with their having a marginally higher IQ than Europeans.

In the early twentieth century, the blacks had a high rate of illiteracy ( 8 percent). At this time they were a small proportion of the population and were largely descendants of slaves who had been brought to Canada or migrated to Canada from the United States in the eighteenth and nineteenth centuries. Their IQ was 84 and was virtually identical to that of blacks in the United States. In the second
half of the twentieth century quite large numbers of blacks entered Canada from the Caribbean and Africa as economic migrants and refugees. Their educational attainment and qualifications and their proportion in the professions were about same as those of the British and French. Black men had somewhat lower average earnings than Europeans, but black women had somewhat higher average earnings. This could be due to discrimination by European men who dislike working with black men but not with black women. Blacks also had a greater proportion living in poverty in 1991: 36.1 percent as compared with 14.6 percent for Europeans. The principal reason for this is that many blacks came to Canada as refugees and have not established themselves in the country. There is likely a wide range of intelligence among the blacks in Canada. A number of them have good educational credentials and professional qualifications and are working in the professions. Others are unskilled immigrants from the Caribbean and Africa and probably have IQs in the range between 65-80 typical of these regions. This would explain the high percentage of them both in professional occupations and living in poverty.

The Native American Indians are the least successful racial group in Canada, with less education, a far lower percentage with university degrees, average earnings about 25 percent lower than those of the Canadian British, and poorer health as indexed by higher rates of infant mortality and lower life expectancy. The failure of the Native American Indians to thrive in Canada is typically explained by social scientists as resulting from oppression by Europeans. For instance, Edward Herberg, a professor of sociology at the University of Toronto, has written that they are "subordinated by systematic racial discrimination" (Herberg, 1990, p. 218). Trovato (2001, p. 82) is another Canadian sociologist who documents the poorer health and higher death rates of the Native American Indians and asks, "Why do Canadian Indians suffer disproportionate relative risks of premature death from suicide and homicide?" He suggests "a prolonged history of prejudice and discrimination" (p. 67) and "differential levels of poverty, social disorganization, and substance abuse may account for part of the phenomenon" and then adds "poor health habits." He does not explain how Europeans can be responsible for Native American Indians failing to take such good care of their health, having greater substance abuse, and killing each other more frequently. No sociologists mention their low IQ, which
undoubtedly contributes to their low attainments, socioeconomic status, poor health, and higher death rates.

The Jews have been the most successful ethnic group in Canada, as they have in the United States. In the early decades of the twentieth century they were impoverished, but by 1981 they had the most education, the highest percentage with university degrees, the greatest proportion in the professions, and the highest average earnings of all racial and ethnic groups. The success of the Jews is difficult for discrimination theorists to explain. The Canadian sociologist Peter Li who holds the discrimination theory of race differences in earnings and socioeconomic status has written that "the income advantage enjoyed by Jews and those of West European origin, except the French, is probably due to their historical position in which they already enjoyed an advantage over other groups" (Li, 1988, p. 138). This is not convincing. Most of the Jews arrived in Canada between 1880 and 1914 as impoverished refugees fleeing persecution in Russia and Poland. When they arrived in Canada they could not speak English or French, were for the most part penniless, and were at the bottom of the earnings and socioeconomic status hierarchy. The British possessed the wealth and held the powerful positions in most of Canada, and the French were the established dominant ethnic group in Quebec. The Europeans discriminated against Jews to some degree by excluding them from clubs and associations, as they did in the United States and Europe. Yet by 1951 the Canadian Jews had a far greater proportion in professional occupations than the British ( 45 percent as compared with 19 percent), and they maintained this advantage in successive censuses of 1961, 1971, and 1981. They have also had higher average earnings from 1951 through 1991. The high IQ of Canadian Jews of 109 must be a major factor in their over-representation in the professions and their high average earnings. It may or may not be surprising that this is not mentioned by Canadian sociologists such as Li (1988) and Herberg (1990a and 1990b) in their analyses of the success of the Jews in Canada. We should not discount the possibility that Jews may have strong achievement motivation and that this has also contributed to their success, as proposed by Rosen (1959).

## Chapter 7

## The Caribbean

1. The Racial Hierarchy
2. Race Differences in Intelligence
3. Cuba
4. Dominican Republic
5. Grenada
6. Haiti
7. Jamaica
8. Martinique
9. Puerto Rico
10. Trinidad and Tobago
11. Delay of Gratification
12. Conclusions

The Caribbean islands were first inhabited by Native American Indians who were known as Caribs. The first European to discover them was Christopher Columbus in 1492. He declared them Spanish colonies, and Spaniards began to settle in the islands from the early 1500 s. Many of the Native American Indians died from diseases to which they had no immunities, and the Spanish exterminated almost all of those who survived. The Spanish set up sugar plantations and imported
slaves from Africa to do the manual work, principally of cutting sugar cane. Female African slaves were largely employed as domestics.

Between 1500 and 1660 the islands remained Spanish colonies, but in 1660 the British expelled the Spanish from Jamaica and took control of the island. In the eighteenth and nineteenth centuries Britain gained control of most of the islands, which became known collectively as the British West Indies. The French retained Martinique and Guadeloupe, the Dutch retained the Netherlands Antilles, and the Spanish retained Cuba and Puerto Rico. The British prohibited the slave trade in 1807. The effect of this that was by British law Africans could no longer be transported as slaves to the Caribbean colonies, the United States, or Latin America. The British abolished slavery throughout their empire in 1833. The British West Indian colonies were given independence in the 1960s.

## 1. The Racial Hierarchy

Throughout the West Indies there was interbreeding between white men slave owners and black female slaves. This produced a mixed race mulatto population. Generally in the West Indies the African slaves outnumbered the whites by around fifteen to one, and by the beginning of the nineteenth century the numbers of mulattos had grown to about the same number as the whites. The mulattos have typically occupied a social position intermediate between whites and blacks: "brown (mixed race) slaves were positioned in privileged occupations in the hierarchy of the slave plantation economy, usually as slave artisans" (Robotham, 2000, p. 8). This may have been because the Europeans preferred mixed race mulattos and possibly because they were generally found to be more intelligent than the blacks and more competent in skilled artisan work.

After the abolition of slavery in 1833 the European estate and plantations owners found that many of the former African slaves were unwilling to work for wages as day laborers and were unreliable employees. Thomas Atwood, the chief judge in Dominica and later in the Bahamas, described the problem that "it is difficult to make them work: it is sometimes absolutely necessary to have recourse to measures that appear cruel, in order to oblige them to labour" (Fryer, 1984, p. 164).

These "measures that appear cruel" were floggings, but after the abolition of slavery this was no longer permitted. To solve the problem of securing a reliable supply of labor, the plantation owners brought
in a number of Indians from the Indian subcontinent and also some Portuguese and Chinese, who were found to be more reliable laborers than the blacks: "In Jamaica, Grenada, Guyana, and Trinidad, many exslaves rapidly quit the plantations to establish villages where they could live and cultivate subsistence crops without interference from white management and their allies. To replace this lost labor, the planters in these countries used government revenues to import Chinese, Portuguese, and Indians under onerous indentures" (Smith, 1984, p. 138). In Guyana "the planters were faced with an acute problem, as were those in several of the islands, as the freed slaves refused to work in the plantations... the answer was found in indentured labor from India" (Hanley, 1975, p. 136). Under the terms of the indentures laborers were required to work for their employers for a period of three to five years at a stipulated wage. After this they were free to leave and generally did so.

Hence by the middle of the nineteenth century there had emerged five ethnic and racial groups in the West Indies consisting of Europeans, Africans, mulattos, Indians, and Chinese.

The problem that the European estate owners in the West Indies found with attempting to employ Africans after the abolition of slavery was also encountered by the British in South and East Africa in the second half of the nineteenth century, and the same solution of bringing in Indians from India was adopted. The same problem was encountered in Brazil and the southern United States. In Brazil, European plantation owners brought in Japanese as indentured workers to overcome this problem. In Louisiana, plantation owners found that "African American workers proved increasingly restless, mobile, and, in the eyes of their former masters, unreliable, and unsuited for sugar plantations" (Halpern, 2004, p. 20) and they brought in Italians as a solution to this problem.

The racial hierarchy and the intelligence and personality characteristics of the races in the West Indies were described in the mid-nineteenth century by Anthony Trollope, the British novelist, who visited Trinidad, Barbados, Jamaica, and Guyana, and subsequently wrote up his impressions in his book The West Indies and the Spanish Main (Trollope, 1859/1985). At the time Trollope visited the West Indies, there were already small numbers of Chinese and Indians from the Indian sub-Continent. Trollope explains that these were brought over as indentured workers because once the blacks had been freed
from slavery it was difficult or impossible to get them to work reliably for wages (p. 70).

Trollope described the characteristics of the five racial groups. He judged the Europeans to be the most intelligent, the mulattos, Chinese, and Indians came next, while the blacks were the least intelligent. He describes the mulattos-"those who are of mixed race, be it in what proportion it may, between white European and black African" (p. 56) as higher in the socioeconomic hierarchy than the blacks: "they are to be met at the Governor's table; they sit in the House of Assembly; they have forced themselves forward and must be recognized as being in the van" (p. 57). He noted that it was the mulattos who ran most of the shops: "Let any stranger go through the shops and stores of Kingston, and see how many of them are either owned or worked by men of color; let him go into the House of Assembly, and see how large a proportion of their debates is carried on by men of color; how large a portion of the public service is carried on by them" (p.60); "they make money and enjoy it; they practice as statesmen, as lawyers, and as doctors" (p. 62). He observed that there were different amounts of white and black ancestry among the mulattos: "the various gradations of colored blood range from all but perfect white to all but perfect black; and the dispositions and capabilities are equally various" (p. 60). He noted that the intelligence of the mulattos was related to their skin color, which itself reflected the amount of white ancestry. Thus, if one wished to assess the amount of white ancestry "the speech and the intelligence would afford the sources of information on which most reliance could be placed" (p.60). He also considered that "the Chinese and the Coolies (Indians) greatly excel the Negro in intelligence" (p. 58).

The racial socioeconomic hierarchy described by Trollope in the 1850s has changed little right up to the twenty-first century. Europeans have continued at the top together with some rich Chinese; mulattos and Indians occupy intermediate positions, while blacks are largely at the bottom. West Indians have a finely graded sense of racial distinctions. The term Mulattos is generally used for those who have one white and one black parent. Those who are one quarter black and three quarters white are designated Quadroons, while those who are one-eighth black and seven-eighths white are termed Octoroons. In the 1950s Smith carried out fieldwork on the racial hierarchy and wrote of "the high status whites, mid-status browns, and low status blacks throughout the

West Indies" (1965, p. 276). A few years later, Lowenthal wrote that "class distinctions are mainly seen in racial terms; color in the sense of physical appearance carries extraordinary weight. West Indians conceive differences in appearance in terms of social segmentation" and "race and color are shorthand designations of class" (1972, p. 93, 134). Similarly, "racially distinguished population categories are still the largest and most basic divisions of Caribbean societies" (Smith, 1984, p. 139). In Barbados, "the economic elite is comprised of local whites" (Robotham, 2000, p. 10); "lighter skinned elites and darker colored lower income groups in general typify Caribbean societies" (Howard, 2001, p. 50). And

> in the color-class system, there is a clear hierarchy of social grading, and for the most part, these divisions are strongly reflected in skin color, with those of high standing being white, and those with black skins generally occupying the lowest levels of the social spectrum (Potter, Barker, Conway, and Clark, 2004, p. 196).

Throughout the West Indies the Chinese have typically prospered and entered the middle class: "Jews, Portuguese, Chinese, and Syrians fill gaps within West Indian economic and social structure left vacant or taken over from Creoles; these dominate many aspects of Caribbean commerce" (Lowenthal 1972, p. 193); "the economic success of the Chinese in the former British colonies propelled them firmly into the middle class"(Kent, 2003, p. 125); "the Chinese in the British and Dutch Caribbean are largely recognized as a successful upper-middle class, their members based not only in the traditional retail grocery trades, but in the import, service, manufacturing, and professional sectors" (Pan, 1998, p. 51).

In general Indians have done a little better than blacks: "originally, the new migrants from India were regarded by all as merely "coolies" at the foot of the social ladder, but eventually they, too, would rise into middle class positions" (Oxaal, 1975, p. 28). However, the socioeconomic advantage of the Indians over the blacks is not so pronounced as in South Africa and East Africa, where the Indians do much better than the Africans. The probable explanation for this has been provided by Dotson and Dotson (1968, p. 27) who noted that the life of the indentured Indians who came to the West Indies was arduous and appealed only to the lowest strata of Indian society. For this reason
it is likely that their intelligence was somewhat below the average in India and closer to that of the average African.

## 2. Race Differences in Intelligence

Studies of intelligence in the Caribbean are summarized in Table 7.1. Row 1 gives an IQ of 80 for children in Barbados; this figure has been calculated from the IQ of 83 of well-nourished children and 68 of malnourished children reported in the study, weighted by the results of a 1968 survey finding a prevalence of the moderate and severe malnutrition in preschool children in Barbados of 16.5 percent (Galler, Ramsay, Solimano, et al., 1983). Rows 2 gives an IQ of 67 for 3 -year-old African children in Dominica. The low IQ of these infants suggests that poor education is not a factor responsible for the low IQs of Africans in the Caribbean. Rows 3 gives an IQ of 67 as the mean of samples of young African adults (IQ, 73) and 60 plus year olds (IQ, 61) in Dominica. Rows 4 through 10 give IQs from seven studies of the IQ in Jamaica in the range of $60-75$ with a median of 67 . Row 11 gives an IQ of 75 for children in Curacao in the Netherlands Antilles, whose population is 85 percent African and Creole (mixed AfricanEuropean). Row 12 gives an IQ of 60 for 4 -year-olds in St Lucia and row 13 an IQ of 70 for children in St. Vincent. The median of the studies of intelligence of Africans in the Caribbean is an IQ of 71. This is slightly higher than the median IQ of 67 of Africans in sub-Saharan Africa. The explanation for this may be that Africans in the Caribbean have some admixture of genes from Europeans. It has been estimated that the proportion of European genes in the African population of Jamaica is 6.8 percent (Parra, Marcini, and Akey, 1998).

## 3. Cuba

The Spanish began to colonize Cuba in 1515 . They killed the Native American Indians and from 1522 brought in slaves from Africa to work on the sugar plantations to do the manual work of cutting sugar cane. Tobacco plantations were also established. The Spanish abolished slavery in 1886. Cuba remained a Spanish colony until 1899, when a rebellion took place and independence was declared. Universal suffrage was introduced for men in 1901 and for women in 1934. In 1959 Fidel Castro seized power and introduced socialism, and many middle and professional
class whites fled the island and established a colony in Miami.
By the beginning of the twentieth century the population of Cuba consisted of Europeans of largely Spanish descent, mulattos, blacks, and a small number of Chinese. The proportions of the races in the census returns of 1953 and 1981, and for 1995 estimated by the American Central Intelligence Agency are shown in Table 7.2. The 1953 census also found 0.3 percent East Asian, mainly ethnic Chinese. The figures are based on self-identification. A number of observers have asserted that many of those who identify themselves as white have some black ancestry: "many of those classified as white have some Negro blood although they may not be Negroid in appearance" (J. P. A., 1960); it has even been said that only about 5 percent of the population has pure white ancestry (de la Fuente, 2001, p. 40). It will be seen that from 1953 to 1981 the proportion of whites declined by seven percent while that of mixed race mulattos increased by the same amount. In 1995 the percentages of whites had declined considerably to 37 percent. The decline in the numbers of whites has been largely due to the emigration of many middle class whites to the United States following Castro's accession to power in 1959 and expropriation of the assets of middle class whites. There may also have been an increased willingness of mulattos to identify themselves as such.

## Table 7.1. IQs of Africans in the Caribbean

|  | Country | Age | N | Test | IQ | Reference |
| :--- | :--- | :---: | ---: | :---: | :---: | :--- |
| 1 | Barbados | $9-15$ | 207 | WISC-R | 80 | Galler et al., 1986 |
| 2 | Dominica | 3 | 64 | PPVT | 67 | Wein \& Stevenson, 1972 |
| 3 | Dominica | $20-70$ | 725 | CPM | 67 | Meisenberg et al., 2005 |
| 4 | Jamaica | 11 | 1,730 | MH | 72 | Manley, 1963 |
| 5 | Jamaica | 11 | 50 | V,M,KB | 75 | Vernon, 1969 |
| 6 | Jamaica | $5-12$ | 71 | WISC | 60 | Hertzig et al., 1972 |
| 7 | Jamaica | 10 | 128 | CEFT | 75 | Bagley et al., 1983 |
| 8 | Jamaica | 15 | 31 | WISC-R | 67 | Grantham-McGregor <br> et al., 1994a |
| 9 | Jamaica | 25 | 54 | PPVT | 60 | Grantham-McGregor <br> et al., 1994b |
| 10 | Jamaica | $9-10$ | 30 | PPVT | 71 | Simeon \& Grantham- <br> McGregor, 1989 |
| $\mathbf{1 1}$ | N. Antilles | 10 | 96 | SPM | 75 | van der Vijfeiken,1997 |
| $\mathbf{1 2}$ | St. Lucia | 4 | 60 | PPVT | 60 | Murray, 1983 |
| 13 | St. Vincent | $8-11$ | 174 | CPM | 70 | Durbrow et al., 2002 |

Table 7.2. Population of Cuba in 1953, 1981, and 1995 (percentages)

| Year | Black | Mulatto | White | Chinese |
| :---: | :---: | :---: | :---: | :---: |
| 1953 | 12 | 15 | 73 | 0.3 |
| 1981 | 12 | 22 | 66 | - |
| 1995 | 11 | 51 | 37 | - |

Europeans controlled the island until the abolition of slavery in 1886. Since then they have continued to hold most of the wealth, have had higher social status, and occupied most of the professional and administrative positions. European racial prejudice and discrimination against blacks and mulattos was strong in the first half of the twentieth century. Whites had exclusive use of their own clubs and beaches and the smarter restaurants and hotels. In 1937 an African American Congressman, Arthur Mitchell, was refused admission to one of the best hotels in Havana. Public schools were open to all, but many whites sent their children to private schools that were largely or exclusively white. Nevertheless, the socioeconomic status of blacks and mulattos improved during the first half of the twentieth century. This is shown in Table 7.3, which gives the proportions of blacks (including mulattos) and whites in professional occupations shown in successive censuses from 1899 through 1943. The indices have been constructed and are given by de la Fuente (2001, p. 116) as the percentage in professional occupations divided by the percentage in the working population. Thus, blacks have been under-represented in the professions throughout the period but they have gained ground steadily. Conversely, whites have been over-represented in the professions throughout the period but this has been steadily reduced.

From 1959 Fidel Castro dedicated himself to attempting to eliminate racial differences and improve the status of blacks by outlawing discrimination and by nationalizing private schools previously attended almost entirely by whites. The census of 1981, the results of which are summarized in Table 7.4, showed that some progress had been made in this direction. Row 1 shows that a higher percentage of blacks had graduated from high school than either whites or mulattos. This result may be surprising, and caution is required in accepting it because it is based on respondents' answers to questions on the census forms and studies in the United States have shown that blacks are more likely than whites to give false replies that represent themselves in a favorable light
(Lynn, 2003a). Row 2 gives results from the census showing that about 25 percent more whites had obtained university degrees, as compared with blacks and mulattos. Row 3 shows that whites were somewhat overrepresented in the professional and administrative occupations. Some of this improvement in the position of mulattos and blacks was achieved by the large-scale exodus of many white professionals to the United States.

Despite some progress in their socioeconomic status, blacks remained over-represented in the poorest sections of society. In the army in the 1970s, "blacks were concentrated among enlisted troops and under-represented in the officer corps" (Adams, 2004, p. 180). In the 1980s and 1990s there was still "a concentration of blacks in dilapidated housing in poor neighborhoods; blacks remained under-represented in managerial positions but over-represented in menial jobs; blacks were over-represented in the prison population; and blacks and mulatto women make up a high percentage of prostitutes" (Mesa-Lago, 2002, pp. 871-872). Whites remain "prejudiced" against blacks or, alternatively, realistic in their perception of blacks. A survey carried out in Havana in 1995 by the Cuban Centro de Antropologia found that 58 percent of whites believed that blacks are less intelligent than whites, 69 percent believed that blacks did not have the same "decency," and 68 percent opposed racial intermarriage (de la Fuente, 2001). Whites regard blacks as "more aggressive" and "prone to criminal behavior," which in fact they are, because blacks "are greatly over-represented among those in prison" (Aguirre and Silva, 2001, p. 321).

The Chinese were initially brought to Cuba in the second half of the nineteenth century to work as laborers in the sugarcane fields. They have generally been successful:
during the twentieth century, Cuba's Chinese had moved into a variety of urban service and retailing businesses and most were firmly entrenched in the middle and lower middle classes; by the late 1940s, Havana's Chinatown bustled with a wide range of

Table 7.3. Proportions of blacks and whites in professional occupations in Cuba, 1899-1943

|  | 1899 | 1907 | 1919 | 1931 | 1943 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Black | 19 | 26 | 40 | 48 | 58 |
| White | 129 | 129 | 131 | 128 | 110 |


#### Abstract

commercial activities run by Chinese; small businesses included laundries, retail shops, three theatres, nine hotels, and three pharmacies; by the 1950s, the Chinese had achieved considerable commercial success and they controlled some 3,500 small retail businesses (Kent, 2003, p. 130).


However, after the revolution of 1959 small businesses were expropriated and nationalized, and many of the Chinese emigrated, principally to the United States.

In 1990 a survey of a representative sample of 392 Cubans in the United States was carried out in which skin color and socioeconomic status were assessed. Skin color was measured on a five-category scale from very light to very dark, and occupations were scored from $0-$ 100 on an occupational prestige scale. The results are given in Table 7.5 and showed a significant positive linear relationship between light skin color and higher socioeconomic status. The authors of the study assert that the results show "that many darker-skinned Latinos continue to experience more discrimination in the labor market than their lighter skinned counterpart" (Espino and Franz, 2002, p. 620). They were probably unaware that skin color is related to IQ (Lynn, 2002).

Despite Castro's apparently determined efforts to eradicate discrimination and prejudice against blacks, Europeans have continued to perform better than blacks in the educational and socioeconomic hierarchies. In 1994 there was a riot in Havana during which blacks and mulattos demanded more equality. Adams (2004, p. 169) has written of "the indignities blacks encounter daily; racial discrimination is a popular theme in the songs by young, black rap artists." Since the communist revolution Cuba has been governed by a Council of Ministers consisting of 39 members of which, in the year

Table 7.4. Percentages of white, mulatto, and black high school graduates, university graduates, and those in professional and administrative occupations in Cuba, 1981

|  | Attainment | Year | White | Mulatto | Black | Reference |
| :--- | :--- | :---: | :---: | :---: | ---: | :--- |
| 1 | High school | 1981 | 9.9 | 9.6 | 11.2 | de la Fuente, 2001 |
| 2 | University | 1981 | 4.4 | 3.2 | 3.4 | de la Fuente, 2001 |
| 3 | Prof./Admin. | 1981 | 35.0 | 29.2 | 31.6 | de la Fuente, 2001 |

2000, only one was black (Adams, 2004, p. 171). Blacks were also under-represented on other bodies including the Politburo and the Council of State.

In May 2000, Castro made a televised speech in which he "acknowledged the most visible and enduring deficiency of race relations in socialist Cuba: the under-representation of black Cubans among the leadership of a political process now entering its fifth decade" (Adams, 2004, p. 168). Forty years after Castro assumed power, two authorities on Cuba wrote,

> Whiteness is highly valued and seems to be one of the primary dimensions of status by which the overall evaluation of a person's social position is reached. Even though the prevailing ideology of the state tirelessly declares that skin color and other morphological characteristics do not matter, few blacks are found at the top echelons of the bureaucratic structure, the communist party, and industry...research suggests that racial prejudice and discrimination are still rampant in Cuba (Aguirre and Silva, 2001, p. 312).

European Cubans also do better than black Cubans in the United States. A study of the earnings and education of white and black Cuban male immigrants in the United States has been made by Zavodny (2003). Analyzing data from the 1980 and 1990 censuses and the 1994-2000 Current Population Survey she reports that among those who were employed, white and mulatto men ( 87 percent of the sample) earned 15 percent more than blacks. Whites and mulattos also had more education at all levels than blacks. For instance, fewer whites and mulattos than blacks had less than high school graduate level ( 34 percent compared with 47 percent). Conversely, more whites and mulattos were college graduates ( 22 percent of whites compared with 14 percent of blacks). She attributes the lower earnings of blacks to less education and discrimination.

Table 7.5. Skin color and socioeconomic status among Cubans

| Skin color | $\mathbf{N}$ | SES |
| :--- | ---: | :---: |
| Very light | 89 | 34.13 |
| Light | 192 | 32.14 |
| Medium | 88 | 28.88 |
| Dark | 23 | 26.90 |

## 4. Dominican Republic

The Dominican Republic is the eastern half of the island of Hispaniola that was discovered and declared a Spanish colony by Christopher Columbus in 1492. The Spanish began to colonize the island from 1500. Most of Native American Indians inhabitants died from diseases or were killed, but a few were absorbed by the blacks that were brought in as slaves from Africa to work the sugar plantations. In the seventeenth century the island became a French colony. In 1804 the blacks rebelled against French rule, established a republic, and massacred most of the whites. In 1844 the island was divided into two, the eastern half becoming the Dominican Republic and the western half Haiti. In the Dominican Republic, a number of whites survived, and over the next decades there were some white immigrants. A social anthropologist has written that by the end of the nineteenth century "the racial factor acted as one of the main determinants of social status...white somatic norm image was dominant in regard to social prestige, as in all multi-racial societies of the Caribbean" (Hoetink, 1990, pp. 117-119).

At the end of the twentieth century 16 percent of the population of the Dominican Republic was white, 73 percent of mixed race and 11 percent black (World Factbook, 2000). A British social anthropologist who carried out fieldwork in the country has written that "Dominican society has been characterized by a light-skinned elite and a mulatto majority since the seventeenth century" while among mulattos "lighter skin color allows a greater chance of social mobility than for dark skinned Dominicans" (Howard, 2001, p. 58). A study by Sidanius, Pena, and Sawyer (2001) surveyed a sample of 234 inhabitants of the capital city, Santo Domingo, in 1999, in which they were asked to assess the relationship between color and socioeconomic status. The results were that "whites were perceived to have the highest level of social status, with progressively darker racial categories receiving lower social status ratings" (p. 838). They describe the country as a "pigmentocracy" in which skin color is the major determinant of social status.

From the beginning of the twentieth century a number of Chinese arrived in the Dominican Republic and within a few years "many Chinese immigrants established small businesses and manufacturing enterprises" (Howard, 2001, p. 23).

## 5. Grenada

The population in 1946 consisted of 73 percent blacks, 21 percent mulattos, 5 percent East Indian, and 1 percent white. Race differences in social status were studied in 1952-1953 by Smith (1965, p. 276) who described the racial hierarchy consisting of "a white elite, most of whom own land," a "larger brown upper middle class, next in rank, who dominated Grenadian commerce, official councils and committees, certain clubs, and other organizations," and a "lower or peasant class" of blacks and some Indians. He found that there was a correlation of 0.73 between social status and light skin color.

## 6. Haiti

Haiti is the western half of the island of the original Spanish colony of Hispaniola. The population consists of 95 percent blacks and 5 percent mulattos. Despite their minority status, mulattos enjoy higher economic and social status. In the mid-1960s Lowenthal (1967, p. 613) wrote of "the colored elite." It is said that in Haiti "a rich Negro is a mulatto" (Halevi, 1987, p. 227), while according to a social anthropologist "blackness and other "Negro" physical traits have persistently been associated with lower social status" (Smaje, 2000, p. 197). Because Haiti has been an independent republic governed by blacks for two centuries, there is no reason to expect that mulattos would have higher socioeconomic status than blacks. There have been no white rulers whose racism can have held down the blacks or the achievements of this republic. Yet at the end of the twentieth century Haiti was the poorest country in the Caribbean with a per capita income of $\$ 1,383$. Remarkably, its neighbor the Dominican Republic whose population is 16 percent white, 73 percent mulatto and 11 percent black has a per capita income more than three times greater at $\$ 4,598$ (real GDP at PPP, 1998). Haiti also has much higher fertility than the Dominican Republic at 6.4 TFR as compared with 3.3 TFR, and much higher infant mortality at 105 per 1,000 births as compared with 43 (1998 figures). Both of these are indicative of a low IQ population.

Nothing is known of the intelligence of the population of Haiti. However, there is a study of the math abilities of second generation Haitian immigrant school students in Florida compared with second generation Cubans and Nicaraguans. The students were tested in 1992 and 1995 and on both occasions the Haitians scored significantly lower
than the other two groups. The Cubans scored significantly higher than the Nicaraguans (Rodriguez, 2000). The differences can be explained by the racial compositions of the populations. The Cubans performed best (whites, 66 percent; mulattos, 22 percent; blacks, 12 percent). The Nicaraguans came next (whites, 17 percent; mestizos, 69 percent; blacks, 9 percent). The Haitians (mulattos, 5 percent; blacks, 95 percent) performed worst.

## 7. Jamaica

Christopher Columbus declared Jamaica a Spanish colony in 1494. The Spanish exterminated the Native American Indian Arawak inhabitants and imported slaves from Africa to work in the sugar plantations. In 1660 the British expelled the Spanish and took control of the island. The British plantation owners introduced coffee as a major crop. By the early eighteenth century a social hierarchy had emerged with whites at the top, mixed race mulattos in the middle, and blacks at the bottom: "brown slaves were positioned in privileged occupations in the hierarchy of the slave plantation economy, usually as slave artisans" (Robotham, 2000, p. 8).

After the abolition of slavery in 1833 a number of Indians and Chinese were brought in to work in the plantations. In the 1881 census whites were 2.4 percent of the population, blacks were 76.5 percent, mulattos 18.9 percent, and Indians 1.9 percent. About the same proportions were present at the end of the twentieth century when the population consisted of 3 percent whites, 76 percent blacks, 15 percent mulattos, and 3 percent East Indian and Afro-East Indian, and 1 percent Chinese (Philips, 1996).

The racial hierarchy in Jamaica has frequently been observed. In the 1930s Curti, Marshall, and Steggarda (1935, p. 137) noted "it is the browns, especially the lighter ones, who have the most chance to enter higher professions, and the blacks as a class do the most menial work." Kerr (1952, p. 61) noted that the Europeans "although numerically minute, have always been socially dominant and remain so." Philip Vernon (1969, p. 164) who carried out some intelligence testing in Jamaica in the 1960 s, wrote that the mixed race mulattos "are of the utmost importance as constituting the bulk of the middle classes who provide most of the country's commercial and professional leadership;
lightness of color is one of the major criteria of social class." In 19681969, Foner (1973) carried out a study of race and social structure in Jamaica and concluded that "occupational and status differences closely parallel educational and color distinctions; the middle and upper classes are still predominantly white or colored, and the lower classes are overwhelmingly black" (p. 32). More recently a Jamaican anthropologist, Don Robotham (2000, p. 9) has written "the hierarchy was White, Brown, and Black based on the color of one's skin." And a Jamaican sociologist writes, "the economy is dominated by the White, Jewish, Arab, Chinese and East Indian population" (Smith, 2003, p. 712).

There is a small population of Chinese in Jamaica, whose numbers have been estimated at between 5,000 and 22,500. In the second half of the twentieth century "they controlled the retail grocery trade and were prominent in the civil service and the professions" and were "among the best educated and wealthiest of Jamaicans"(Kent, 2003, p. 125).

An early study of race differences in intelligence in Jamaica was carried out in the 1920s by Davenport and Steggerda (1929). They selected 80 children and 80 adult samples of Europeans, mixed race mulattos, and blacks, and administered a number of cognitive tests. The blacks performed best on the tests of musical rhythm, as has been found in several studies in the United States summarized in Lynn (2006). In general, the Europeans performed best on the cognitive tests, followed by the mixed race Mulattos, while the blacks performed least well. The mean scores on the tests were given but not the standard deviations, so it is not possible to calculate the race differences as IQs.

A study of the intelligence of racial hybrids with differing amounts of Caucasian ancestry in Jamaica has been made by Grinder, Spotts, and Curti (1964). They administered the Draw-a-Man test to a representative sample of $9417-10$-year-olds and assessed their skin color as light ( $\mathrm{N}=106$ ), mixed ( $\mathrm{N}=197$ ), and dark ( $\mathrm{N}=638$ ). The lightness of the skin color provides a rough approximation of the amount of white ancestry. They reported that the scores were very low in comparison to United States norms but did not give figures from which IQs in relation to American norms could be calculated. It is possible from the data they presented to calculate IQs for their three groups in relation to an IQ set at 100 for the total sample. The resulting IQs are 104.5 for the light group, 101.0 for the mixed and, 98.0 for the dark. There is a statistically significant association between skin color and IQ. Thus, the amount of Caucasian ancestry is apparently a
determinant of the IQ, as would be expected if whites are genetically higher than blacks for intelligence.

Statistics for the racial hierarchy in Jamaica have been published from census returns by Clark (1975) and are shown in Table 7.6. The general trend is for socio-economic status expressed in education, literary, occupational status, and income to be highest among whites followed by Chinese, Mulattos, East Indians, and finally by blacks. Row 1 gives race differences for men and women in the percentage with secondary education in the 1943 census, and row 2 the percentage literate. Rows 3,4 , and 5 give the differences found in the 1960 census for men in the percentage in professional and managerial occupations, manual and service occupations, and with incomes above $\$ 500$ a year.

Table 7.6. The racial bierarchy in Jamaica

| Measure | Year | Whites | Chinese | Mulattos | Indians | Blacks |
| :--- | ---: | :---: | :---: | :---: | ---: | ---: |
| Secondary education | 1943 | 53.8 | 9.7 | 9.6 | 1.6 | 0.9 |
| Literacy | 1943 | 96.4 | 86.1 | 86.2 | 51.4 | 71.8 |
| Prof./managerial \% | 1960 | 42.5 | 20.4 | 7.0 | 6.8 | 4.0 |
| Manual/service \% | 1960 | 16.8 | 12.2 | 26.8 | 24.8 | 33.7 |
| Income $\$ 500+\%$ | 1960 | 36 | 28 | 15 | 13 | 6 |

## 8. Martinique

Martinique was a French colony until 1946 when it became part of France and the inhabitants were permitted to move to France. Fish has described the population as blanc (white), mulatre (colored, mulatto), noir (black), and coolies (Indians). "Among the blancs, the bekes, descended from the original French colonists, control the great majority of the economy; the coolies are the descendants of Indians (south Asians) who came to Martinique as laborers following the abolition of slavery" (Fish, 2000, p. 129). The reason the French estate owners brought the Indians to the island was that they had the same experience as the British in the Caribbean of finding that the blacks would not work reliably after slavery had been abolished. They adopted the same solution of bringing in Indians.

The French sociologist Kovats-Beaudoux (2002) has also documented the racial hierarchy in her book White Creoles of Martinique: Dominant Minority. The title says it all.

## 9. Puerto Rico

Like the other Caribbean islands, American Indians inhabited Puerto Rico when it was discovered by Christopher Columbus in 1493 and declared a Spanish colony. Spaniards began to settle the island in the sixteenth century and enslaved the American Indians for work in the gold mines, but the American Indians were resistant to this kind of work and either fled to other islands or died, and by 1582 they were extinct. The Spanish settlers then brought in African slaves to work in the gold mines and in sugar and tobacco plantations. Puerto Rico was ceded to the United States in 1898. The population consists almost entirely of whites descended from the Spanish colonists, blacks descended from former slaves from Africa, and mulattos with mixed black-white ancestry. In the 1940 census 76.5 percent of the population identified themselves as white, but it is generally considered that many of these have some black ancestry. The remaining 23.5 percent identified themselves as black or mulatto.

Intelligence in relation to color has been reported by Green (1972) in a sample of 1100 adults in Puerto Rico tested on a Spanish version of the Wechsler Adult Intelligence Scale. He found that the IQ of the light skinned was 8 IQ points higher than that of the dark skinned. The lighter skinned group had more years of education and higher socioeconomic status. Hall (2002) has carried out a study of 187 20-year-olds on the island of attitudes to skin color in which people were asked to assess the characteristics of those with five skin colors ranging from "very light" through "light," "medium," "dark," and "very dark." Responses were scored 5 for "very light" through 1 for "very dark." One of the questions asked was "The skin color of smart Puerto Ricans is...." 47 percent of the sample endorsed "very light" and 34 percent endorsed "light," and the average score was 4.14. 8.5 percent considered that the skin color of smart Puerto Ricans is "darkest" or "dark." The study shows that the general population of Puerto Rico is aware that there is an intelligence gradient corresponding to a light-dark skin color gradient.

A social hierarchy based on color has several times been observed. "In Puerto Rico the prosperous classes tend to be lighter skinned" according to Lehmann (1991, p.102); and "the uppermost in status are those whose heritage most approximates to that of the light skinned colonists" (Hall, 2002, p. 1530). Among Puerto Ricans in the United States it has been
shown in the 1980 and 1990 censuses that blacks earned 9 percent less than whites (Darity, Hamilton, and Dietrich, 2002).

The social hierarchy of color was shown in a study of 1,798 Puerto Ricans carried out in 1994 (Lansdale and Oropesa, 2005). The sample was divided by skin color into very light, light, medium, and dark. The results showed the familiar gradient in which lighter skin is associated with higher socioeconomic status. The results are summarized in Table 7.7. Row 1 gives the numbers in each group. Row 2 shows that more of the light skinned had some college education than of the dark skinned. Row 3 shows that mean family earnings were about 50 percent higher in the light skinned than in the dark skinned. Row 4 shows that (contrary to expectation) subjective stress is slightly greater in the light skinned than in the dark skinned. The authors adhere to the standard sociological discrimination explanation for these differences-"the argument is that blacks with relatively dark skin experience more discrimination than lighter skinned blacks" (p.389). If this is so, the dark skinned might be expected to experience more subjective stress than the light skinned. They do not comment on the anomaly that this is not the case.

## Table 7.7. The social hierarchy of skin color in Puerto Ricans

| Skin color | Very light | Light | Medium | Dark |
| :--- | :---: | :---: | :---: | :---: |
| Number | 743 | 589 | 329 | 137 |
| College-educated | 26.1 | 23.9 | 21.8 | 22.8 |
| Income | 20,526 | 16,151 | 14,407 | 14,170 |
| Stress | 2.1 | 2.1 | 2.0 | 1.9 |

## 10.Trinidad and Tobago

Christopher Columbus claimed Trinidad and Tobago as Spanish colonies in 1498. The Spanish brought Africans to the islands to work as slaves in the sugar and rice plantations. The British took control of Trinidad in 1797 and of Tobago in 1814. The two islands remained British colonies until 1962, when they were united and became independent. After the abolition of slavery throughout the British colonies, Indians were brought in from the Indian sub-continent to do the agricultural work performed hitherto by African slaves. Many of the Indians continued to work in agriculture up to the end of the twentieth century. A few Chinese also migrated to the islands during the nineteenth century.

The composition of the population of Trinidad and Tobago from 1803 to 1990 is shown in Table 7.8. The reason for the increase in the proportion of Indians from 1960 to 1990 lies in their higher fertility.

Primary schools were established in the islands in the mid-nineteenth century. The secondary Collegiate School for Protestants was founded in 1859 and a secondary Catholic College for was founded in 1863. In 1870, 82 percent of the pupils were white and 19 percent were colored in the Collegiate School, while 79 percent of the pupils were white and 21 percent were colored in the Catholic College. There were no blacks in either school (Wood, 1968). This shows the racial socioeconomic hierarchy present at this time.

As in other Caribbean countries, there has continued to be a socioeconomic hierarchy of race. "The class-color correlates of the West Indian social structure are real: skin color determines social class" (Lewis, 1968, p. 20).

The nineteenth century bequeathed a three tiered hierarchy...whites for the most part occupied the dominant position economically and politically, there was a brown (mixed European and African) middle stratum, and at the bottom was the black descended majority (Crichlow, 1998, p. 63).
And
the traditional colonial social pyramid consisted of the English and French white elites at the top, generally socially and occupationally aloof from a developing brown skinned middle class, who were in turn at a social and cultural distance from the masses of the black Afro-Trinidadians (Oxaal, 1975, p. 28).

The Chinese have done well in Trinidad and Tobago, as they have throughout the Caribbean. Already in the mid-nineteenth century they were prospering in market gardening and the retail trade. In the 1850s they were described as "the best gardeners in the colony, responsible for supplying the local markets with most of their vegetables" (Lai, 2003, p. 190), while
in the 1970 s, when the Chinese represented a scanty one percent of the population, they represented about 10 percent of the business elite; they were members of some of the islands' most exclusive social clubs; Black Power advocates viewed the Chinese
as members of the nation's ruling elite, along with whites (Kent, 2003, p. 126).

Statistics showing the racial hierarchy in Trinidad are given in Table 7.9. Rows 1 and 2 give figures for the intelligence of the five ethnic and racial groups investigated in the early 1970s by Nedd and Gruenfeld (1976) and the numbers of each group in the study. The authors administered the G-EFT (Group Embedded Figures Test) to 14-15-year-olds selected from secondary schools as representative samples of the ethnic and racial groups. The EFT was designed to measure "field dependence" and consists of the ability to discern a simple design embedded in a complex figure. It is a measure of visualization ability. Scores on the test are correlated at 0.38 with the performance subtests of the WPPSI (Kojima, 1978).The authors do not report standard deviations, so it is not possible to calculate the scores as IQs. Nevertheless, the scores are informative in so far as they show that Europeans and Chinese score virtually the same, and so also do the blacks and Indians, while the mixed race group score mid-way between the Europeans and Chinese on the one hand, and the blacks and Indians on the other. The finding that the blacks and Indians score the same is unusual because Indians typically have higher IQs than blacks. Thus, Indians in India have an average IQ of 82 and Africans in sub-Saharan Africa an average IQ of 67 (Lynn, 2006). In South Africa, East Africa, and Britain, Indians have substantially higher average IQs than sub-Saharan Africans. There are two probable explanations for this anomaly. First, only Indians from the lowest social strata migrated to the West Indies in the nineteenth century to work as indentured laborers, because the work was highly unattractive and only the most impoverished opted for it. These were likely below the average Indian intelligence. Second, many of the blacks in Trinidad have some

## Table 7.8. Population of Trinidad and Tobago (percentages)

| Year | Whites | Indians | Mulattos | Blacks | Chinese |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1803 | 8 | 0 | 18 | 74 | 0 |
| 1960 | 2 | 36 | 16 | 43 | 1 |
| 1990 | 1 | 44 | 14 | 40 | 1 |

Sources: 1803: Wood, 1968; 1960: census; 1900: Gafar, 1998.

European ancestry, which has raised their intelligence above that of Africans in sub-Saharan Africa.

Rows 3 through 8 give educational and socioeconomic data reported by Harewood (1971). Rows 3, 4, and 5 give figures for racial and ethnic differences in education analyzed from the 1960 census. Information for the Chinese was not given in this report. Row 3 gives the percentages of those who had had no education and shows this was negligible at 0.2 percent among Europeans, about the same for the mixed race and blacks ( 3.6 and 2.5 percent, respectively) and much greater among the Indians at 26.1 percent. The reason for the much higher rate among the Indians is that many of them worked in agriculture in rural villages where there were no schools, whereas the mixed race and blacks live more in towns. Row 4 gives the percentages that had completed high school and obtained a school certificate and shows a much higher proportion of Europeans ( 30 percent), followed by mixed race at 9.0 percent, with blacks and Indians having the lowest percentages at 3.6 and 3.0 percent, respectively. Row 5 gives the percentages that had completed university and obtained a degree, and shows the same racial gradient as that of the completed secondary education.

Row 6 shows the percentages of each racial group employed as professionals. The same racial gradient is present, with Europeans

Table 7.9. Race and etbnic differences in Trinidad and Tobago in intelligence, educational attainment, professional status, and earnings

|  | Measure | Europeans | Chinese | Mixed | Blacks | Indians |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | Intelligence: scores | 5.3 | 5.2 | 4.7 | 4.1 | 4.1 |
| 2 | Intelligence: numbers | 45 | 49 | 405 | 368 | 498 |
| 3 | No Education, 1960 | $0.2 \%$ | - | $3.6 \%$ | $2.5 \%$ | $26.1 \%$ |
| 4 | Completed high school | $30.0 \%$ | - | $9.0 \%$ | $3.6 \%$ | $3.0 \%$ |
| 5 | University degree | $23.3 \%$ | - | $1.0 \%$ | $0.3 \%$ | $0.4 \%$ |
| 6 | Professionals | $40.6 \%$ | - | $6.7 \%$ | $4.7 \%$ | $5.6 \%$ |
| 7 | Income: men | $\$ 500$ | - | $\$ 113$ | $\$ 104$ | $\$ 77$ |
| 8 | Income: women | $\$ 176$ | - | $\$ 81$ | $\$ 38$ | $\$ 42$ |
| 9 | Business elite | $53 \%$ | $9 \%$ | $25 \%$ | $4 \%$ | $9 \%$ |
| 10 | Poverty, 1995 | - | - | - | $25 \%$ | $17 \%$ |

Sources: rows 1-2: Nedd \& Gruenfeld, 1976; rows 3-9: Harewood, 1971; row 10: Gafar, 1998.
having by far the greatest proportion at 40.6 percent, followed by the mixed race at 6.7 percent, while blacks and Indians have the fewest at 4.7 percent and 5.6 percent, respectively. Rows 7 and 8 give median monthly incomes of men and women paid employees and again show that Europeans have by far the highest incomes, followed by the mixed race, while blacks and Indians have the lowest average incomes. Row 9 shows the percentages of each racial group among a sample of 233 of the business elite found in a study in 1971 by Camejo (2001). Comparing these the percentages with the percentages in the population in the 1960 census, it will be seen that the Europeans were economically the most successful, comprising 2 percent of the population and 53 percent of the business elite. The Chinese come next, 1 percent of the population and 9 percent of the business elite. These are followed by the mixed race with 16 percent of the population and 25 percent of the business elite. The Indians come next with 36 percent of the population and 9 percent of the business elite. The blacks were economically the least successful, comprising 43 percent of the population but only 4 percent of the business elite. It will be seen that the statistics for educational and occupational attainment and for incomes follow closely the IQs of the four racial and ethnic groups. Row 10 gives the results of a 1995 survey that found 25 percent of blacks and 17 percent Indians living in poverty.

## 11. Delay of Gratification

Three studies investigated race differences in "delay of gratification" in the Caribbean. The first study to demonstrate differences between blacks and whites in the delay of gratification was carried out by Mischel (1958, 1961a, 1961b) in Trinidad. He offered black and white children the choice between being given a small candy bar now or a larger one in a week's time. He found that black children were much more likely to ask for the small candy now. This difference has been confirmed in a study by Green $(1964,1972)$ who repeated the experiment on black and white children in Trinidad and found the same difference. A third study was carried out by Vernon (1969) who gave a delay of gratification test to black 11-year-old boys in Jamaica and found that they had a stronger preference for instant gratification than whites. Among economists, the preference for instant gratification is known by
the more neutral term "a high time preference" that Levin (1997, p. 78) suggests is more common among blacks. Levin writes that "low high time preference individuals will endure deprivation today for benefits in the far future" and the experience of the Caribbean suggests that this characteristic is stronger among Europeans, Chinese and Indians that it among blacks.

## 12. Conclusions

How to explain the European-Chinese-mulatto-Indian-black racial hierarchy that is present throughout the Caribbean? One of the theories of the under-performance of blacks is that they have low self-esteem. This theory has been investigated by Smith (2003) on a sample of Jamaican blacks aged 15-37. His result was surprising in so far as he found that they scored well above American whites on the Rosenberg Self-esteem Scale. The mean score for American whites is 15 with a maximum of 30 , while the Jamaican blacks obtained a mean score of 19.8 .

The standard sociological explanation for the racial hierarchy is that Europeans control the societies and discriminate against the other races and hold them down. This is implausible for three reasons. First, Europeans are typically only 1 or 2 percent of the population and it is hardly possible for such a tiny element to subordinate the vast majority of the people. Second, the Chinese have done as well as the Europeans, despite their humble origins as indentured laborers. Third, the mulattos everywhere do better than the blacks.

The most straightforward explanation for the racial hierarchy is that it is sustained by differences in intelligence. We have seen direct evidence for this in studies of the relation between race, light skin color, and intelligence in Jamaica, Puerto Rico, and Trinidad. The same relationship is present throughout Latin America, in South Africa, Britain, and the United States. It is likely that the racial differences in intelligence are compounded with personality differences observed by several writers, such that blacks have a stronger preference for instant gratification than Europeans and a correspondingly weaker motivation to work for long-term goals.

## Сhapter 8

## Hawaii

1. Composition of the Population
2. Chinese and Japanese
3. Race and Ethnic Differences in Intelligence
4. Intelligence of Racial Hybrids
5. Educational Attainment
6. Mental Retardation and Educational Backwardness
7. Earnings
8. Socioeconomic Status
9. Crime
10. Infant Mortality and Life Expectancy
11. Fertility
12. Illegitimacy
13. Race Differences in Kauai
14. Conclusions

The Hawaiian Islands were first colonized about 750 AD by Polynesians who had initially come from the Indonesian archipelago and gradually spread throughout the Pacific islands. The first European to find the group of islands was Captain James Cook, who discovered them in 1778 , and was killed by the islanders in 1779. At the time of their discovery, the Hawaiians had no written language, metals, pottery,
or domestic animals. They made implements, weapons, and utensils of stone, wood, shell, and bone (Dy, 1960). The islands were annexed by the United States as a colony in 1890, and became the 50th state of the United States in 1959.

Europeans migrated to Hawaii in the nineteenth century and established plantations principally for growing and processing sugar, and also for producing pineapples, coffee, rice, and livestock. From 1852, immigrants were then brought in from a number of locations to work in the plantations. The principal immigrants were Polynesians from the South Pacific islands, Portuguese from the Azores, Japanese, Chinese, Koreans, and Filipinos. The Polynesians "proved disappointing both as laborers and prospective citizens, so that most of them were returned to their homes"(Dy, 1960, p. 272). Normally, immigrants came on fiveyear contracts, after which they were free to return home or find other employment. In 1900-1901 about 5,000 largely black Puerto Ricans came to Hawaii. Race relations in Hawaii have been harmonious: "intermarriage is very common; there is no segregation on the islands of any kind and no housing area where there is a barrier to home ownership" (Dy, 1960, p. 267).

## 1. Racial Composition of the Population

The racial composition of the population shown in the censuses of 1910, 1930, and 1950 are shown in Table 8.1. Subsequent censuses have not recorded ethnicity or race, but estimates have been given for 1970 by Vernon (1982), for 1986 by the Office of the Attorney General (1987), and for 2000 by the Hawaiian government. It will be seen that the four largest racial groups are the Europeans, who include the Portuguese,

Table 8.1. Racial composition of the population in Hawaii

| Group | 1910 | 1930 | 1950 | 1970 | 1986 | 2000 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| European | 20.4 | 20.0 | 23.0 | 38.3 | 33.0 | 22.0 |
| Japanese | 41.5 | 37.9 | 36.9 | 28.3 | 24.9 | 16.4 |
| Chinese | 11.3 | 7.4 | 6.5 | 6.8 | 5.8 | 3.1 |
| Korean | 2.4 | 1.8 | 1.4 | - | 1.9 | - |
| Filipino | 1.2 | 17.1 | 12.2 | 12.2 | 13.9 | 11.7 |
| Black | 0.4 | 0.2 | 0.5 | 1.0 | 1.8 | - |
| Puerto Rican | 2.5 | 1.8 | 1.9 | - | - | - |
| Hawaiian | 20.1 | 13.8 | 17.2 | - | 12.2 | 22.8 |

the East Asians, who are predominantly Japanese, the Filipinos, and the native Hawaiians, who include part Hawaiians. Over the century the native Hawaiians and the blacks have increased their proportion in the population as a result of their higher birth rates.

## 2. Chinese and Japanese

The Chinese and Japanese have done well in Hawaii. The Chinese were the first to rise in the socioeconomic hierarchy, while the Japanese followed them in the second half of the twentieth century. Thus, writing of the Chinese, Chang (2003, p. 294) has noted that "Colonists recognized the hardworking nature and diligence of Chinese farm laborers... in the past 150 years, the Chinese have made important contributions to Hawaiian society; they achieved higher socioeconomic status than all other ethnic groups." By the end of the nineteenth century,

> the Chinese in Honolulu had gained practical control of all business in laundry, tailoring, restaurants, and retailing. When these services were taken over by the Japanese in the early twentieth century, the Chinese had already established dominant positions in whitecollar occupations, such as federal government services, real estate, insurance, banking, and education (Chang, 2003, p. 294).

## 3. Race and Ethnic Differences in Intelligence

As early as 1920, it was recognized that the Chinese in Hawaii were at least as intelligent as Europeans. In that year Cho Wang (1920, p. 101) of Cornell University, wrote "according to the mental measurements of the Board of Education of the Hawaiian Islands, the average Chinese child is just as able as the American." Subsequent published studies were to confirm this observation. Studies of the intelligence of the five major racial and ethnic groups in Hawaii are summarized in Table 8.2. Row 1 shows the results of the first study carried out in the early 1920s that found that the ethnic Chinese obtained an IQ of 99 on the non-verbal Pintner Test in comparison with 100 for Europeans in the United States. On a test of word knowledge the Chinese obtained an IQ of 95. This was the first of a number of studies showing that Chinese and Japanese immigrants in Hawaii, like those in the continental United States, obtain higher IQs on non-verbal than on verbal tests. This appears to be partly

Table 8.2. Race and etbnic differences in intelligence in Hawaii

|  | Age | $\mathbf{N}$ | Test | East <br> Asians | Europeans | Filipinos | Hawaiians | Puerto Ricans | Portuguese | Reference |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| 1 | $9-13$ | 513 | Pintner | 99 | - | - | - | - | - | Symonds,1924 <br> 2 |
| $9-14$ | - | Binet | 93 | - | - | 89 | - | 88 | Porteus $\&$ <br> Babcock, 1926 |  |
| 3 | $9-14$ | 938 | P. Mazes | 101 | 99 | 98 | 100 | - |  |  <br> Babcock, 1926 |
| 4 | $7-12$ | 770 | P. Mazes | 103 | - | - | - | - | - | Porteus, 1930 |
| 5 | $10-14$ | 8,185 | NV | 101 | 100 | 89 | 86 | 75 | 91 | Smith, 1942 |
| 6 | $10-14$ | 8,185 | Verbal | 90 | 100 | 83 | 79 | 80 | 87 | Smith, 1942 |
| 7 | $16-18$ | 1,747 | ACPT | 97 | 100 | 78 | - | - | - | Livesay, 1942 |
| 8 | $16-18$ | 683 | SCAT-V | 104 | 100 | 89 | 85 | - | - | Stewart et <br> al., 1967 |
| 9 | $16-18$ | 683 | SCAT-Q | 110 | 100 | 95 | 90 | - | - | Stewart et <br> al., 1967 |
| 10 | - | - | Med-V | 94 | 100 | 95 | 85 | 80 | 92 |  |
| 11 | - | - | Med-NV | 103 | 100 | 83 | 90 | 75 | 88 |  |

because many of them spoke Chinese or Japanese at home, and partly because they have this innate pattern of abilities. Row 2 gives the results of another early study using the Binet Test, in which the Japanese scored higher (93) than the Native Hawaiians (89) and the Portuguese (88). All the IQs are likely depressed from their true values because the Binet is largely verbal and many of these children will have had imperfect command of English. Row 3 gives the results of another study from the 1920s using the Porteus Maze Test on boys, in which the East Asians scored fractionally higher (101) than Europeans in the United States (99); the Hawaiians, who included part-Hawaiians, performed atypically well (101), as did the Filipinos (98), while the Portuguese (92) scored the lowest. Row 4 gives the results of another study from the 1920s using the Porteus Maze Test, in which the East Asians scored fractionally higher (103) that the Europeans.

Rows 5 and 6 give IQs assessed by tests of non-verbal reasoning and of spoken and written English for racial and ethnic groups in Hawaii obtained in two surveys carried out in 1924 and 1938. The results for the two years have been combined and are given for nonverbal IQ and for written English (the results for spoken English are closely similar to those for written English). These figures have been calculated in relation to 100 (sd of 15) for Europeans. In row 5, it will be seen that the East Asians (consisting mainly of ethnic Japanese with some Chinese and Koreans) have a mean non-verbal IQ of 101 followed by Europeans at 100, Portuguese at 91, Filipinos at 89, native Hawaiians at 86, and Puerto Ricans at 75 . Row 6 shows that the East Asians obtained a written English IQ of 90 and performed well below the Europeans, confirming numerous studies showing that East Asians are weaker than Europeans on verbal abilities than on non-verbal abilities. Portuguese, Filipinos, and Hawaiians also scored worse on written English than on non-verbal IQ. In the case of Hawaiians this will have been partly because they spoke Hawaiian as their first language. Puerto Ricans, however, scored somewhat better on written English than on non-verbal IQ.

Row 7 gives the results of a study of high school seniors carried out in 1935 and tested with the verbal American Council Psychological Test. IQs have been calculated in relation to a mean of 100 for Hawaiian Europeans. The East Asians (97) scored a little below the Europeans, while the Filipinos scored much lower at 78.

Rows 8 and 9 give verbal and quantitative (mathematical) IQs obtained for high school seniors tested in grade 10 and retested in grade 12 on the SCAT (School and College Aptitude Tests). The scores are presented as IQs in relation to 100 for Europeans. The East Asians obtained the highest IQs at 104 verbal and 110 quantitative. The Filipinos performed less well at 89 and 95 , while the Hawaiians performed lowest at 85 and 90.

The median verbal and non-verbal IQs of the races in Hawaii are summarized in rows 10 and 11 . We see that the East Asians have their typical pattern of strong non-verbal IQs and weaker verbal IQs, as compared with Europeans. Filipinos, native Hawaiians, and Portuguese obtain consistently lower IQs than East Asians and Europeans, while Puerto Ricans obtain lower verbal and non-verbal IQs than any of the other groups.

Some further studies of race differences in intelligence in Hawaii were published after 1970. Morton, Stout, and Fischer (1976) obtained IQs of all 4 through 6 grade children in public elementary schools and examined these in relation to race and socioeconomic status. They reported that "Filipinos and Hawaiians score low, while Orientals and Europeans are high" (p. 14), but they do not divulge the IQs. They also measured socioeconomic status and school quality assessed by the experience and salaries of teachers and showed that when these are controlled, race differences in intelligence are greatly reduced. From this, they concluded that it is not race as such that determines IQs but the associated variables of socioeconomic status and school quality, and therefore "it is unlikely that racial differences in Hawaii are to any appreciable extent genetic" (p.19). This conclusion is known as "the sociologists' fallacy" because it fails to recognize that race differences in intelligence are a strong determinant of race differences in socioeconomic status and school quality. The main reason that school quality is associated with children's IQs is probably that experienced and well-qualified teachers are attracted to schools in middle class areas because the working conditions are better. In the mid-1980s Nagoshi and Johnson (1986) carried out a further study of race differences in intelligence in Hawaii. They reported that the g loading of the tests obtained by children was highly correlated with educational and occupational attainments of the parents, but they too failed to divulge the IQs.

## 4. Intelligence of Racial Hybrids

IQs of children with one Native Hawaiian and one European parent, and with one Native Hawaiian and one Chinese parent, were obtained by Smith (1942) in his studies carried out in Honolulu in 1924 and 1938. The IQs are summarized in Table 8.3. The IQs of the two hybrid groups are slightly higher than the average of the two parent races. The average IQ of the Europeans and Hawaiians is 90.5 , while the IQ of the children is 93 . Similarly, the average IQ of the Chinese and Hawaiians is 90 , while the IQ of the children is 91 . The slightly higher than expected IQs of the children of the mixed race parents may be a hybrid vigor or heterosis effect that is frequently present in crosses between two strains. The same phenomenon has been found in Hawaii in a study of the children of Asian-European parents, whose IQs were 4 IQ points higher than those of the children of Asians and Europeans (Nagoshi and Johnson, 1986). In this study all three sets of parents had the same education and socioeconomic status, suggesting that this is a genetic effect.

Table 8.3. IQs of Europeans, Chinese, Hawaiians, and racial hybrids

| Group | $\mathbf{N}$ | IQ |
| :--- | ---: | ---: |
| European | 1,110 | 100 |
| Chinese | 2,704 | 99 |
| European-Hawaiian | 842 | 93 |
| Chinese-Hawaiian | 751 | 91 |
| Hawaiian | 621 | 81 |

## 5. Racial Differences in Educational Attainment

Studies of the educational attainment of the major racial groups in Hawaii are summarized in Table 8.4. Row 1 gives results from the mathematics concepts subtest of the Stanford Achievement Test administered to a large sample of grade 4 ten-year-olds in 1982 and 1983 (Brandon et al., 1987). The results are expressed as "math quotients" based on a European mean quotient of 100 and sd of 15 . It will be seen that the racial and ethnic differences are closely similar to those for nonverbal IQs. The East Asians (largely ethnic Japanese) performed best at 106, higher than the Europeans at 100, while the Filipinos at 95 and the native Hawaiians at 92 performed significantly worse. Row 2 gives results on the mathematics subtest of the Stanford Test of Academic

Table 8.4. Race differences in educational attainment in Hawaii

|  | Age | $\mathbf{N}$ | Subject | East Asians | Europeans | Filipinos | Hawaiians |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 10 | 16,508 | Math | 106 | 100 | 95 | 92 |
| 2 | 16 | 14,900 | Math | 107 | 100 | 93 | 89 |
| 3 | $9-16$ | 15,044 | Science | 101 | 100 | 90 | 88 |
| 4 | $25+$ | - | Graduates | $6 \%$ | - | $0.3 \%$ | $2.4 \%$ |

Skills for grade 10 sixteen-year-olds administered in 1982 and 1983 (Brandon et al., 1987). The results are closely similar to those of the ten-year-olds. The scores are again expressed as "math quotients" based on a European mean quotient of 100 and sd of 15 . The East Asians performed best at 107, then the Europeans at 100, while the Filipinos at 93 and the native Hawaiians at 89 performed significantly worse. No results were given for the Portuguese or Puerto Ricans in this study.

Row 3 gives results for the science sub-test of the Stanford Achievement Test administered to grades 3 through 12 in 1993-1994 (Greenfield, 1996). The results are expressed as "science quotients" based on a European quotient of 100 and sd of 15 . The racial and ethnic differences show the same pattern as in non-verbal IQs and math. However, the East Asians have only a marginal advantage in science (101) over the Europeans at 100, although the Filipinos at 90 and the native Hawaiians at 88 perform significantly worse.

Row 4 gives the percentages of graduates among those aged 25 and over recorded in the 1950 census (Chang, 2003). The East Asians had the highest percentage ( 6 percent) but among these, the Chinese figure was 9 percent and the Japanese figure was 3 percent, showing again that at this time the Chinese had achieved higher socioeconomic status than the Japanese. The native Hawaiians came next with 2.4 percent, and the Filipinos had many fewer graduates at only 0.3 percent.

## 6. Mental retardation and educational backwardness

Race differences in the rates of mental retardation and educational backwardness are shown in Table 8.5. Row 1 gives the percentage rates of mental retardation among adults in Hawaii in the 1920s, reported by Porteus and Babcock (1926). These rates are broadly consistent with the IQs in so far as the East Asians have by far the lowest rate ( 0.084 ), the rates of the Filipinos ( 0.20 ), native Hawaiians ( 0.50 ), and Portuguese (0.66) are rather higher, while the Puerto Ricans had a much higher

Table 8.5. Race and ethnic differences in rates of mental retardation and educational backwardness (percentages)

|  | Condition | East <br> Asians | Europeans | Filipinos | Hawaiians | Puerto <br> Ricans | Portuguese |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Ment Ret | 0.084 | - | 0.50 | 0.20 | 1.66 | 0.66 |
| 2 | Ment Ret | 0.4 | 0 | 3.60 | 2.80 | - | 8.70 |
| 3 | Backward | 2.4 | 0 | 9.40 | 13.9 | - | 21.70 |

rate at 1.66. The rate of mental retardation is related to the mean IQ of the population because it is partly the extreme low end of the normal distribution of intelligence, so that populations with a low mean have greater proportions of retarded. Mental retardation is also partly caused by a number of other factors including environmental insults, notably anoxia during birth, single adverse genes (e.g., for phenylkenonuria, microcephaly), and chromosome disorders, of which the most common is Down's syndrome.

Rows 2 and 3 give the percentage rates of mental retardation and educational backwardness among 10 -year-olds in Kauai in the 1960s reported by Werner et al. (1971). The mentally retarded were defined as being in classes or institutions for the mentally retarded. The percentages are higher than those in row 1 because the definition of mental retardation was broader. Row 3 gives the percentage rates of the educationally backward defined as being in grades below their chronological age. The percentage rates of mental retardation and educational backwardness of the races are in the same rank order as for intelligence, with Anglos and Japanese having the lowest rates of mental retardation and educational backwardness, the Filipinos and Hawaiians having higher rates, and the Portuguese having the highest rate. These differences are probably largely explained as being the tail ends of the normal distribution of intelligence, so that in the Anglos and Japanese the whole distribution is shifted up, producing few at the low end with educational backwardness and mental retardation, while in the Portuguese the whole distribution is shifted down, producing large numbers at the low end with educational backwardness and mental retardation.

## 7. Earnings

Median incomes for the major racial groups in 1980 are given in Table 8.6.

Table 8.6. Race and ethnic differences in incomes in 1980

| Chinese | Japanese | Europeans | Part-Hawaiian | Filipinos | Hawaiian |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 23,859 | 23,209 | 20,823 | 16,445 | 16,361 | 11,997 |
| Source: US Bureau of the Census. |  |  |  |  |  |

We see that the Chinese and Japanese had the highest incomes followed by the Europeans and the Part-Hawaiians, while the Filipinos and Hawaiians had the lowest incomes.

## 8. Socioeconomic Status

It has been noted by Greenfield (1996, p. 922)
in Hawaii, Filipinos and Hawaiians tend to occupy the lower socioeconomic strata; they are over-represented in the service and blue-collar occupations and under-represented in the professions and state government, whereas the reverse is true for Japanese and Caucasians.
It has not proved possible to find recent data confirming this. The only data for racial differences in socioeconomic status it has proved possible to find are for 1924 reported by Murdock (1925) based on a sample of 350 children attending public schools. The socioeconomic status of the fathers was scored on a five-point scale from $1-5$, with 1 representing unskilled and farm workers and 5 representing professional and managerial occupations. The results are shown in Table 8.7. It will be seen that the Europeans had comfortably the highest average socioeconomic status. However, even by this relatively early date the East Asians had higher average socioeconomic status than any of the other groups. The Portuguese came next, possibly securing an advantage from being European. These are followed in descending order by the Hawaiians, the Puerto Ricans, and the Filipinos.

Table 8.7. Race differences in socioeconomic status

| Europeans | East Asians | Portuguese | Hawaiians | Puerto Ricans | Filipinos |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3.84 | 2.80 | 2.62 | 2.22 | 1.85 | 1.50 |

## 9. Crime

There are marked racial differences in crime rates in Hawaii. Crime is lowest in the East Asians and highest among the Puerto Ricans, with Europeans, Filipinos, Hawaiians, and Portuguese intermediate.

These differences were present in the 1920s and 1930s and are shown in Table 8.8. Row 1 gives jail inmates per 1,000 population in the mid-1920s and shows the crime rate among Puerto Ricans more than 10 times greater than among the East Asians (Porteus and Babcock, 1926). Row 2 gives the juvenile convictions per 1,000 for the year 1930 and shows the same race differences (Vernon, 1982). The juvenile convictions rates are higher because crime is greater among adolescents, and because the rates for adults are for serious crimes meriting a jail sentence. The much lower rate of crime among East Asians than among Europeans cannot be explained by differences in intelligence, since these two groups have approximately the same IQ. The difference is probably attributable to greater psychopathic personality among Europeans.

Table 8.8. Crime rates per 1,000 population

| Year | East <br> Asians | Europeans | Filipinos | Hawaiians | Portuguese | Puerto <br> Ricans |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1924 | 0.75 | - | 7.08 | 3.57 | 1.53 | 9.32 |
| 1930 | 2.57 | 12.50 | 16.64 | 17.01 | - | 28.10 |

Crime rates in 1986 are given in Table 8.9 obtained from the report of the Office of the Attorney General (1987). The data are presented for the percentages of the racial groups in the populations and their percentages of total arrests (excluding traffic violations), and arrests for murder and drug offences. The race differences are quite similar to those found in the first half of the twentieth century shown in Table 8.8. The East Asians have the lowest crime rate. They were 32.5 percent of the population, but only 9 percent of total arrests, 8.1 percent of arrests for murder, and 10.5 percent arrests for drug offences. Europeans and Filipinos come next for total arrests, which were slightly greater than

Table 8.9. Crime rates in 1986

|  | East <br> Asians | Europeans | Filipinos | Hawaiians | Blacks | Samoans |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
| Population \% | 32.5 | 33.0 | 13.9 | 12.0 | 1.8 | 1.5 |
| Total arrests \% | 9.0 | 34.5 | 12.3 | 23.4 | 4.0 | 4.7 |
| Murder arrests \% | 8.1 | 13.5 | 54.0 | 13.5 | - | 16.2 |
| Drug arrests \% | 10.5 | 45.5 | 8.6 | 16.9 | 6.2 | 2.2 |

their percentage in the population. Hawaiians, blacks, and Samoans are all considerably over-represented among those arrested, in relation to their percentage in the population.

## 10. Infant Mortality and Life expectancy

Infant mortality rates per 1,000 population of the races in Hawaii have been published by the Hawaii Department of Health (1990) for 1979 to 1998 and are shown in Table 8.10. It will be seen that the rates are highly associated with IQs, being lowest in East Asians and whites, somewhat higher in Filipinos and Hispanics (these are Portuguese and Puerto Ricans), higher again in Hawaiians, and highest among blacks.

Table 8.10. Infant mortality per 1,000 population, 1979-1988

| Group | Infant mortality | Group | Infant mortality |
| :--- | :---: | :---: | :---: |
| Blacks | 11.5 | Hispanics | 7.5 |
| Hawaiians | 9.5 | Whites | 6.8 |
| Filipinos | 7.7 | East Asians | 6.7 |

Race differences in life expectancy from 1910 through 1990 are shown in Table 8.11. It will be seen that from 1910-1930 Europeans had the highest life expectancy followed by East Asians, but from 1940, East Asians had the highest life expectancy followed Europeans. In 1980 and 1990 Filipinos overtook Europeans in life expectancy. From 1930, Native Hawaiians have had the lowest life expectancy.

## Table 8.11. Life expectancy

| Year | Whites | East Asians | Filipinos | Hawaiians |
| :--- | :---: | :---: | :---: | :---: |
| 1910 | 54.83 | 51.75 | - | 32.58 |
| 1920 | 56.45 | 52.17 | 28.12 | 33.56 |
| 1930 | 61.90 | 60.07 | 46.14 | 41.87 |
| 1940 | 64.03 | 65.80 | 56.85 | 51.78 |
| 1950 | 69.21 | 71.16 | 69.05 | 62.45 |
| 1960 | 72.80 | 74.90 | 71.53 | 64.60 |
| 1970 | 73.24 | 76.77 | 72.61 | 67.62 |
| 1980 | 75.79 | 81.78 | 79.32 | 71.83 |
| 1990 | 75.53 | 82.49 | 78.94 | 74.27 |

Source: Hawaii State Department of Business, Economic Development, and Tourism, 2003.

## 11. Fertility

Race differences in fertility are published by the Hawaiian Department of Health and expressed as crude rates per 1,000 for 1980 through 2001 are shown in Table 8.12. It will be seen that the race differences in fertility are negatively associated with IQs in so far as they are higher in the Filipinos and Hispanics, and lower in the more intelligent East Asians and Europeans.

## Table 8.12. Fertility per 1,000 population

| Year | Europeans | East Asians | Filipinos | Hawaiians |
| :--- | :---: | :---: | :---: | :---: |
| 1980 | 21.1 | 10.5 | 23.3 | 22.6 |
| 1990 | 20.5 | 10.6 | 22.4 | 23.7 |
| 2001 | 12.7 | 9.0 | 16.7 | 19.0 |

## 12. Illegitimacy

Race differences in illegitimacy in 1988 have been published by the Hawaiian Department of Health, expressed as rates per 1,000 live births, and are shown in Table 8.13.

Table 8.13. Race differences in illegitimacy in 1988

| Ethnicity | Illegitimacy | Ethnicity | Illegitimacy |
| :--- | :---: | :--- | :---: |
| Chinese | 65.0 | Filipinos | 221.0 |
| Korean | 95.1 | Portuguese | 298.6 |
| Japanese | 112.0 | Samoan | 301.7 |
| Europeans | 137.2 | Puerto Rican | 434.4 |
| Blacks | 157.7 | Hawaiian | 435.6 |

## 13. Race Differences in Kauai

Kauai is the most westerly of the Hawaiian Islands. From 1835, European settlers established sugar plantations on the islands and brought in Portuguese, Japanese, Chinese, Filipinos, and Puerto Ricans to work as laborers. The Portuguese were peasants from the Azores and not representative of Portugal. By the mid-twentieth century the island had a population of approximately 30,000 , and the largest ethnic groups were the Japanese, Filipinos, and native Hawaiians. In 1955, Werner and her colleagues began a longitudinal study of all babies born in Kauai in that year. There were 800 of these babies, and they were first tested at the age of 2 years, when they were given the Cattell Infant Intelligence Test
and the Vineland Social Maturity Scale, which measures such things as doing up buttons, washing hands, and helping at little household tasks. The children were tested again at the age 10 years when they were given the Primary Mental Abilities Test.

The results of the study have been published by Werner, Bierman, and French (1971) and by Werner and Smith (1977) and are summarized in Table 8.14. Rows 1, 2, and 3 give results for children at the age of two. Row 1 gives the numbers tested. Row 2 gives the IQs on the Cattell Infant Intelligence Test and shows that the Japanese with an IQ of 103 had a higher IQ than any of the other groups. The race differences are statistically significant. Row 3 gives the means on Vineland Social Maturity Scale on which the race differences are quite small and not statistically significant.

Rows 4 through 9 give results for children at the age of ten. Row 4 gives the overall IQ on the Primary Mental Abilities Test, which is obtained by averaging the IQs on the five subtests. It will be seen that the Anglos (so called to differentiate them from the Portuguese) obtained the highest IQ (112). The explanation for this is that the small numbers of Anglos on the island were predominantly middle class professionals and managers. Next come the Japanese with an IQ of 108, followed in descending order by the Filipinos (101), Hawaiians (99), and Portuguese (96). It should be noted that, according to Flynn (1991, p. 33), the norms of the test had been obtained 33.5 years earlier, and the IQs of all the groups in Kauai will have been inflated. Flynn estimated that the magnitude of the inflation will have been 10 IQ points, so the true IQ of the Anglos, compared with continental American norms, will have been 102 for the Anglos, 98 for the Japanese, and so on. This may well be about right. If this is so, the IQ of the Japanese in Kauai will have been lower than that of the Japanese of Japan, whose IQ is approximately 5 points higher than that of Europeans. The likely reason for this is that emigrating to Kauai to work as laborers on sugar plantations would probably not have been an attractive prospect for the Japanese and was likely taken up by those with somewhat below average IQs who were not doing well in Japan.

Rows 5 through 9 give IQs for each of the five sub-tests of the Primary Mental Abilities Test. The race differences are quite consistent on all the subtests and are all statistically significant, except for Perceptual Speed, on which the differences are a little smaller than on the other abilities. There
is some evidence for the typical relatively stronger spatial and reasoning abilities of the Japanese, as compared with their verbal abilities. Thus, the Japanese scored two IQ points lower than the Anglos on spatial ability and three IQ points lower on reasoning ability, while their verbal ability was eight IQ points lower than that of the Anglos.

Table 8.14. Race and ethnic differences in intelligence in Kauai

|  | Age | Measure | Japanese | Filipinos | Hawaiians | Portuguese | Anglo |
| :---: | :---: | :--- | :--- | ---: | ---: | ---: | ---: |
| 1 | 2 | Number | 253 | 138 | 180 | 46 | 18 |
| 2 | 2 | Cattell IQ | 103 | 95 | 96 | 99 | 98 |
| 3 | 2 | Vineland SM | 118 | 115 | 115 | 116 | 115 |
| 4 | 10 | IQ | 108 | 101 | 99 | 96 | 112 |
| 5 | 10 | Verbal IQ | 107 | 98 | 98 | 95 | 115 |
| 6 | 10 | Spatial | 105 | 99 | 97 | 91 | 107 |
| 7 | 10 | Reasoning | 112 | 104 | 101 | 96 | 115 |
| 8 | 10 | Perceptual Sp. | 105 | 100 | 99 | 97 | 105 |
| 9 | 10 | Numerical | 106 | 100 | 98 | 96 | 101 |

The cohort was tested again at the approximate ages of 15 and 18 on verbal and mathematical abilities. The numbers tested are somewhat reduced, and no results were given for the Anglos, of whom there were only two in the public schools from which the samples were obtained. Unhappily, the means were not given for the racial groups as a whole but were only given broken down by socioeconomic status into three classes. The percentages in the socioeconomic classes were not given, so the means for the total samples of each race cannot be calculated. The means for the racial groups matched for socioeconomic status will have reduced the differences. Nevertheless, the differences in the scores are quite large. Table 8.15 gives the means for the middle

Table 8.15. Race and etbnic differences in verbal and mathematical abilities in Kauai

|  | Age | Measure | Japanese | Filipinos | Hawaiians | Portuguese | SD |
| :---: | :---: | :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | 15 | Number | 179 | 91 | 96 | 38 | - |
| 2 | 15 | Verbal | 53.9 | 44.1 | 36.6 | 42.6 | 23.8 |
| 3 | 15 | Math | 60.3 | 34.4 | 39.8 | 39.8 | 27.5 |
| 4 | 18 | Number | 156 | 79 | 73 | 33 | - |
| 5 | 18 | Verbal | 52.3 | 33.8 | 38.6 | 30.1 | 23.7 |
| 6 | 18 | Math | 66.1 | 34.0 | 43.8 | 43.5 | 28.5 |

socioeconomic status groups. This shows that the Japanese continued to score significantly higher than the other three groups. The right hand column gives the sd of the total sample from which it is possible to calculate the approximate differences between the groups in sd units (d). For instance, among the 18 -year-olds the difference between the Japanese and the Filipinos is $0.78 d$ on the verbal test, and $1.13 d$ on the mathematics test. As usual, the Japanese do particularly well in mathematics.

## 14. Conclusions

The racial hierarchy of intelligence in the Hawaiian islands consists of Europeans and East Asians (Chinese, Japanese, and Koreans) at the top, and Portuguese, Filipinos, Hawaiians, and Puerto Ricans at the bottom. The explanation for the lower IQ of the Portuguese than of the largely Anglo-Europeans is probably that the IQ in Portugal (95) is a little lower that in Northern Europe (100), and that the Portuguese in Hawaii were largely recruited from the Azores and were likely of lower intelligence than in Portugal. The East Asians in Hawaii have the usual pattern of lower verbal IQs and higher spatial IQs than Europeans. If these are averaged, the two groups can be regarded as having approximately the same IQ.

The Hawaiian Islands provide a further interesting example of how different racial groups become differentiated in socioeconomic status in accordance with their intelligence. This process has been described by Werner, Bierman, and French (1971, p. 10):

The Caucasians, the Chinese, and the Koreans have been the most mobile socially, followed closely by the Japanese, who are predominant in the middle classes of the islands. The Portuguese, Puerto Ricans, and Filipinos have been the least socially mobile; together with the Hawaiians and part-Hawaiians, they are found predominantly in the lower and lower-middle classes.
The Chinese, Japanese, and Koreans, most of whose ancestors came to the Hawaiian islands as poor laborers in the nineteenth century, have prospered and by the second half of the twentieth century have become, together with the Europeans, the socioeconomic elite. Why should this be? Sen-dou Chang (2003, p. 298), a professor of geography at the University of Hawaii suggests, "the rapid transition from manual
laborers to professional workers in a few decades can be attributed to the high value placed on education." It might be supposed that someone at the University of Hawaii would have told him that the Chinese, Japanese, and Koreans have higher IQs than the less successful Portuguese, Puerto Ricans, Hawaiians, and Filipinos and that this goes a long way to explaining why they have been more successful. Four sociologists at the University of Hawaii have written a book Sociology of Hawaii in which they document the race differences in earnings and crime, but they make no mention of the race differences in intelligence (Crane, Okinaka, Mejer, and Blasi, 1992). It might be thought that at least one of them would have known of the differences in intelligence and the relevance of these to sociological differences, but if so he preferred to keep quiet about them. Werner and her colleagues were well aware of these race differences in intelligence in their study of Kauai because they found it themselves, but they refrained from pointing this out.

Although the East Asians and the Europeans have approximately the same intelligence, the East Asians are more the model minority in so far as they have higher educational attainment and much lower rates of crime and illegitimacy than Europeans. This suggests that East Asians possess some personality factor that contributes to their being well socialized. Some evidence supporting this has been reported by Sloggett, Gallimore, and Kubany (1970) in a study that found Japanese highest on "Need for Achievement," followed by Filipinos, while Hawaiians were lowest. In Hawaii the race differences in intelligence, and possibly also personality differences are the key to the differences in earnings, and the rates of crime, infant mortality, life expectancy, fertility, and illegitimacy.

## Chapter 9

## Latin America

1. Race and Socioeconomic Status
2. Chinese and Japanese
3. Race Differences in Intelligence
4. Bolivia
5. Chile
6. Colombia
7. Ecuador
8. Guatemala
9. Guyana
10. Mexico
11. Nicaragua
12. Paraguay
13. Peru
14. Surinam
15. Conclusions

The Portuguese and Spanish colonized Latin America in the sixteenth century. The Portuguese colonized Brazil, while the Spanish colonized the remainder of Latin America from Argentina in the south to Mexico in the north, except for the former French, British, and Dutch colonies of Guyana. In this chapter we deal with

Spanish Latin America. Chapter 4 is devoted to the former Portuguese colony of Brazil.

## 1. Race and Socioeconomic Status

Throughout Spanish Latin America there are three major racial groups consisting of Europeans mainly of Spanish descent, Native American Indians, and mixed race Mestizos produced from Spanish men interbreeding with the Native American Indian women. In some Latin American countries there are also some African populations whose ancestors were brought over as slaves, and many of these have interbred with Europeans to produce hybrid mulattos. By far the greatest numbers of these are in Brazil (see Chapter 4), but there are small black and mulatto populations in Columbia and Peru. Most of the countries of Latin America have small ethnic Chinese and Japanese populations.

Throughout Latin America there are racial socioeconomic hierarchies that are differentiated socially and economically by skin color. Europeans, generally termed Blancos, have the lightest skin color and highest status, while the others known collectively as Morenos, have darker skin color and lower status. The morenos are themselves subdivided into the Native American Indians and the Africans who have the darkest skin color and the lowest status. Intermediate in the socioeconomic hierarchy are the mixed race European and Native American Indian Mestizos, whose skin color is darker than that of the Europeans, but lighter than that of the Native American Indians and the Africans. Black-Indian hybrids are generally known as Zambos.

This racial gradient has been noted by numerous sociologists and anthropologists. Thus, "Hispanic culture is dominated, socioeconomically and politically, by blancos. Many aspects of Latin culture-from beauty ideals to stereotypes about intelligence and criminality to the correlation between light skin color and higher social class-serve to legitimize and reinforce the stigmatization of morenos" (Uhlmann, Dasgupta, Elgueta, Greenwald, and Swanson, 2002, p. 200); "Latin American society is fundamentally pigmentocratic, characterized by a social spectrum with taller, lighter-skinned, European-blooded elites at one end; shorter, darker, Indian-blooded masses at the other end" (Chua, 2002, p. 57); "poverty among Latin America's indigenous
population is pervasive and severe" (Patrinos, 1994, p. 57); and, as the British social anthropologist Peter Wade has written:

Whites are at the top, Indians and blacks at the bottom, and positions in the middle are defined by various criteria of status, among which color and descent are very important (Wade, 1997, p. 29).

He adds
stereotypes of blacks all over Latin America commonly include ideas about the supposed laziness, happy-go-lucky attitudes, disorganized family life, taste for music and dance, and so on...many scholars have noted patterns of flexibility in family organization all over the Americas-cohabitation rather than marriage was often a feature (Wade, 1997, p. 77).

## 2. Chinese and Japanese

Many Latin American countries have small ethnic Chinese and Japanese populations. Most of these migrated to various Latin American countries in the nineteenth and early twentieth centuries to work as laborers on sugar plantations or, in Peru, shoveling guano. In the last quarter of the twentieth century the largest of the Chinese populations were in Peru (about 120,000), Brazil (about 30,000), Panama (about 25,000 ), and Mexico (about 15,000 ) (Kent, 2003, p. 124). The largest of the Japanese populations were in Brazil (about 1,250,000), Peru (about 50,000 ), and Mexico (about 15,000 ). The precise figures are difficult to assess because ethnic Chinese and Japanese may not register their ethnicity in population surveys, and there has been some intermarriage between the ethnic Chinese and Japanese and other peoples, so people are uncertain about their ethnicity.

The Chinese and Japanese have generally prospered in Latin America. They arrived as impoverished laborers, but they have risen in the socioeconomic hierarchy and typically run businesses or have entered the professions. As Robert Kent, professor of geography at the university of Akron, explains:

The Chinese population in Latin America and the Caribbean nations has been small, and their percentage in the population has rarely exceeded one percent. However, in some nations their impact has far exceeded their limited numbers. In many of these small economies,

Chinese filled key niches, especially in small-scale retailing. As subsequent generations assimilated, the descendants of early immigrants moved into professional occupations and government services in appreciable numbers (Kent, 2003, p. 135).

For instance, in Panama in the 1940s, when their population numbers are estimated to have been less than 3,000 , they are reported to have dominated the retail grocery trade; in Panama city the later decades of the twentieth century found the Chinese to some extent abandoning their emphasis on commerce and moving into professional occupations (Kent, 2003, p. 134).

## 3. Race Differences in Intelligence

Racial differences in intelligence in Latin America are summarized in Table 9.1. I have given details of the studies and the references in Lynn (2006). There are many gaps in the table. Nevertheless, the general pattern of the IQs can easily be discerned from the medians given in

Table 9.1. Studies of race differences in intelligence in Latin America

| Country | European | Mestizo | Native <br> American | East-Asian | References |
| :--- | :---: | :---: | :---: | :---: | :--- |
| Argentina | 93 | - | - | - | Rimoldi, 1948 |
| Argentina | 98 | - | - | - | Raven et al., 1998 |
| Brazil | 95 | - | - | 99 | Fernandez, 2001 |
| Chile | 99 | - | - | - | Broer, 1996 |
| Colombia | 95 | - | - | - | Ardila et al., 2000 |
| Colombia | - | - | 84 | - | Ginsburg et al., 1997 |
| Ecuador | - | - | 89 | - | Dodge, 1969 |
|  |  |  |  |  | Fierro-Benitez <br> et al., 1989 |
| Ecuador | - | - | 88 | - | Proctor et al., 2000 |
| Ecuador | - | - | 80 | - | - |
| Ccuador | - | - | 91 | - | Johnter et al., 1998 |
| Guatemala | - | - | 79 | - | Modiano, 1962 1967 |
| Mexico | - | - | 87 | - | Laosa et al., 1974 |
| Mexico | - | - | 92 | - | Lynn et al., 2005 |
| Mexico | 98 | 94 | 83 | - | Raven et al., 1995 |
| Peru | - | - | 87 | - | Llanos, 1974 |
| Peru | - | - | 85 | - | Risso, 1961 |
| Uruguay | 96 | - | - | - | 99 |
| Median | 96 | 94 | 87 | 99 |  |

the bottom row. Europeans have an IQ of 96, only fractionally below that of 100 of Europeans in Europe and North America. Mestizos have an IQ of 94, while Native American Indians have an IQ of 87. The IQ of the mestizos is intermediate between that of the Europeans and that of the Native American Indians, as would be expected of a mixed race that inherits a mix of genes from the two parent races. The only study of the intelligence of East Asians in Latin America is that of the Japanese in Brazil, where their IQ of 99 is fractionally higher than that of Europeans.

## 4. Bolivia

The territory of the present state of Bolivia was part of the Inca Empire before the Spanish conquest in the sixteenth century. The Spaniards reduced many of the Native American Indians to serfdom and tied them to the land to work as agricultural laborers on the Spanish estates, while they forced others to work in the silver mines, which were Spain's principal source of wealth in the Americas. In 1780-1782 the Native American Indians rebelled and tried to drive out or exterminate the Europeans, but the rebellion failed. The territory remained a Spanish colony until 1825, when independence was proclaimed and the name Bolivia adopted. In the nineteenth century the silver mines were exhausted, but rich deposits of tin were found and mined by Native American Indians. In 1952, there was a revolution in which the Native American Indians were freed from serfdom, given ownership of the land, and secured substantial political power.

There is the same racial hierarchy in Bolivia as there is throughout Latin America, in which Europeans occupy the higher socioeconomic positions, mestizos occupy the intermediate positions, while Native American Indians are at the bottom of the socioeconomic hierarchy. Thus, the Encyclopedia Britannica (1960, vol. 3, p. 819) informs us that "broadly speaking, the whites are landowners and government officials, the mestizos are tradesmen, skilled workers, and minor civil servants, and the Indians are laborers." In the mid-1980s an American sociologist described the social situation up to the mid-twentieth century as follows:

The rural Spanish elite ruled the Indian countryside with an iron hand, backed by force of arms. Differences between Spaniards
and Native American Indians are vast. At one pole are illiterate monolingual Aymara Indians, heirs to an ancient Amerindian culture, and at the other pole are Spanish speakers, heirs to a literate cosmopolitan culture with long-standing relations with Europe and at least a nodding acquaintance with science and technology (Kelley, 1988, p. 401).

In the early 1990s, Wood and Patrinos (1994, p. 55) made a similar point: "the population of Spanish descent dominates the country economically, culturally, and politically while the monolingual indigenous speakers are at the bottom." The monolingual indigenous speakers are the Native American Indians, who speak only the indigenous languages of Quechua and Aymara. The Europeans speak Spanish, while most of the mestizos are bilingual in Spanish and their indigenous language.

Racial statistics for Bolivia are given in Table 9.2. Row 1 gives the percentages of the population showing 15 percent are European, nearly all of whom are of Spanish descent, 31 percent are mestizos, and 54 percent Native American Indians. Rows 2 through 4 give the results of a survey carried out in 1966 of a representative sample of 675 Indians and mestizos and 421 whites (Kelley, 1988). Row 2 shows that Europeans had an average of 4.5 years of education which is certainly low, but more than three times greater than the average of 1.2 years of Indians. Row 3 gives scores on an index of socioeconomic status with standard deviations in brackets and shows that Europeans scored approximately

Table 9.2. Race differences in Bolivia

|  | Measure | Year | European | Mestizo | Native <br> Americans |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1 | Population: percent | 1990 | 15 | 31 | 54 |
| 2 | Years education | 1966 | 4.5 | - | 1.2 |
| 3 | Socioeconomic status | 1966 | $41(19)$ | - | $16(29)$ |
| 4 | Standard of living | 1966 | $61(24)$ | - | $40(24)$ |
| 5 | Years education | 1989 | 9.7 | 6.5 | 0.4 |
| 6 | No education: percent | 1989 | 2.8 | 11.0 | 77.9 |
| 7 | Income per month | 1989 | 591 | - | 359 |
| 8 | Poverty: percent | 1989 | 11.0 | 77.9 | 82.5 |
| 9 | Sick-injured: percent | 1989 | 14.3 | 20.5 | 38.8 |
| 10 | Child mortality: percent | 1989 | 4.0 | 9.0 | 17.0 |
| 11 | Fertility | 1989 | 3.6 | 4.5 | 6.0 |
| 12 | Children living | 1989 | 3.1 | 3.6 | 4.3 |

one standard deviation higher than Indians (about the same as the IQ difference). Row 4 gives scores on an index of standard of living (standard deviations in brackets) and shows that Europeans again scored approximately one standard deviation higher than Indians.

Rows 5 through 12 give the results of a survey carried out in 1989 by the Instituto Nacional de Estadistica. The sample consisted of 37,864 individuals, but was confined to towns with more than 10,000 inhabitants. This will underestimate the widespread impoverishment of the Native American Indians, many of whom live in the country as subsistence farmers. The sample was divided on the basis of the language they spoke into Spanish-speaking Europeans, bilinguals (largely mestizos), and monolingual indigenous language speakers (largely Native American Indians). The results of the survey have been summarized by Wood and Patrinos (1994) and Psacharopoulos and Patrinos (1994).

Row 5 gives the average years of education of the three groups and shows that Europeans had the most schooling at 9.7 years, mestizos came next with an average of 6.5 years, while Native American Indians had virtually no education, with an average of only 0.4 years. Row 6 confirms these differences by giving the percentages with no education and shows that this was 2.8 among Europeans, 11.0 among mestizos, and as high as 77.9 among Native American Indians. In addition to their minimal schooling, it has been reported by Patrinos and Psacharopoulos (1992) that Native American Indian children who do attend school are more likely to repeat grades than Europeans and mestizos. This suggests that they have lower IQs.

Row 7 gives average male earnings per month in Bolivianos (the Bolivian currency) per month and shows that Europeans had average earnings approaching double those of mestizos and Native American Indians, who are combined. Row 8 gives the percentages of the three groups living below the poverty line defined as having less than the equivalent of US $\$ 60$ per month and showing a higher percentage of Native American Indians ( 82.5 percent) in poverty as compared with Europeans ( 51.8 percent) and mestizos ( 67.5 percent).

Rows 9 and 10 give figures for race differences in health. Row 9 gives the percentages of the three groups that had been sick or injured in the past 30 days and shows that these were highest in Native American Indians with a remarkable 38.8 percent, lower in mestizos ( 20.5 percent), and lowest in the Europeans ( 14.3 percent). Row 10
gives the percentages of child mortality up to the age of 5 years in the three groups, and shows that this was lowest in the Europeans at 4 percent, twice as high in the mestizos ( 9 percent), and twice as high again (17 percent) in the Native American Indians.

Row 11 gives the average numbers of children born in the three groups. This was highest in Native American Indians at 6.0, indicating natural fertility and the absence of any form of birth control. Fertility was lower in the mestizos at 4.5 and lowest in the Europeans at 3.6. Row 12 gives the numbers of living children at the time of the survey and again shows that this was highest in Native American Indians at 4.3, lower in the mestizos at 3.6, and lowest in the Europeans at 3.1. The race differences in the numbers of children born is greater than for the numbers of children living because child mortality is greater among the mestizos and Native American Indians than among the Europeans.

In 1997, the Bolivian Ministry of Education administered a national survey of educational attainment in math and Spanish to samples of children in grades 3 and 6 (approximately 9 - and 13-year-olds) in primary schools. There were approximately 11,000 in each grade. The results have been given by McEwan (2004) and are shown in Table 9.3. This gives mean scores for Native American Indian children expressed as educational quotients in relation to 100 for Europeans. It will be seen that the Native American Indian children did less well than the European at both ages and in both math and Spanish.

## Table 9.3. Race differences in math and Spanish in Bolivia (EQs)

| Grade | Subject | Europeans | Native Americans |
| :---: | :--- | :---: | :---: |
| 3 | Math | 100 | 96 |
| 3 | Spanish | 100 | 95 |
| 6 | Math | 100 | 96 |
| 6 | Spanish | 100 | 95 |

## 5. Chile

In the 1992 census, approximately ten percent of the population identified themselves as speakers of Mapudugan, the indigenous language. These can be identified as Native American Indians, although many of these are mixed race with some European ancestry. The remaining 90 percent spoke Spanish and are largely European, although a number of these are also mixed race with some Native American Indian ancestry.

In 1997, the Chilean Ministry of Education administered a national survey of educational attainment in math and Spanish to almost all children in grade 8 (approximately 14 -year-olds, numbering 163,061). In 1999, the Ministry of Education administered a similar national survey of educational attainment in math and Spanish to almost all children in grade 4 (approximately 10 -year-olds, numbering 196,167 ). The results have been given by McEwan (2004) and are shown in Table 9.4. This gives mean scores for Native American Indian children expressed as educational quotients in relation to 100 for Europeans. We see that the Native American Indian did less well than the Europeans at both ages and in both math and Spanish.

## Table 9.4. Race differences in math and Spanish in Cbile

| Grade | Subject | Europeans | Native Americans |
| :---: | :--- | :---: | :---: |
| 4 | Math | 100 | 94 |
| 4 | Spanish | 100 | 94 |
| 8 | Math | 100 | 93 |
| 8 | Spanish | 100 | 94 |

## 6. Colombia

The population in the 1990 s consisted of about 20 percent European, 68 percent mestizos and mulattos, seven percent Native American Indian, and five percent black. The blacks were brought over as slaves to work in the gold and silver mines. According to the Encyclopedia Britannica (1960, 6, p. 37) "the men of wealth and position in all sections of society are generally white." In the early 1970s a study by Solaun and Kronus (1973) calculated the percentages of the three racial groups (aggregating the Native American Indians and the blacks) in the top socioeconomic class and among lawyers. The results are shown in Table 9.5. It will be seen that Europeans, while being only 20 percent of the population, were disproportionately over-represented in the top socioeconomic class ( 76.1 percent) and among lawyers ( 66.1 percent).

Table 9.5. Race differences in Colombia

|  | Europeans | Mestizos | Native Americans \& Blacks |
| :--- | :---: | :---: | :---: |
| Population \% | 20.0 | 68.0 | 12.0 |
| SES-1 \% | 76.1 | 21.7 | 2.2 |
| Lawyers \% | 66.1 | 29.1 | 4.8 |

Nothing had changed by the end of the twentieth century when the social anthropologist Peter Wade (1997, p. 36) wrote, "blacks and Indians are at the bottom of the ladder" which represents a hierarchy of wealth, education, civilization, and race.

## 7. Ecuador

The population of Ecuador in the mid-1990s was 5 percent European, 40 percent mestizo, 40 percent Native American Indian, and 5 percent black. In the mid-twentieth century,
the white population is found predominantly in the main cities; most of the Mestizos also live in cities and towns, where they work as shopkeepers, clerks, and artisans; most of the aboriginal peoples live in the highlands, where they form the majority of the working force on farms, on cattle ranches, in construction jobs, in factories, and in city homes as servants (J. J., 1960, p. 942).

In the 1960s, "whites and mestizos were at the top of the class structure" while "Mestizos often looked down on the blacks" (Whitten, 1965, p. 202).

Race differences in education and earnings have been published by Garcia-Aracil and Winter (2006) obtained from a survey carried out in 1999. The sample numbering 25,980 and covering the age range 12-65 was divided into non-indigenous and indigenous on the basis of whether they spoke Spanish or an indigenous language. Europeans who speak Spanish were all classified as non-indigenous, and most Native American Indians were classified as indigenous, although some speak Spanish and will have been inappropriately classified as non-indigenous. Mestizos, who work in towns, virtually all speak Spanish and were therefore classified as non-indigenous. The effect of this is some blurring of the European-mestizo-Native American Indian groups, but the results are sufficiently instructive to be shown in Table 9.6. Row 1 shows that non-indigenous men had an average of 8.2 years of education, while indigenous men had an average of 5.0 years. Row 2 shows an even greater disparity for women. Rows 3 and 4 show similar differences between indigenous and non-indigenous for literacy for men and women. Rows 5 and 6 give differences in average monthly earnings (dollars) and show that non-indigenous men and women had almost double the average monthly earnings of the indigenous. Row 7 shows
that the percentage of the indigenous living in poverty was almost twice as great as among the non-indigenous. Because the indigenous have less education than the non-indigenous, the authors believe

> most of the earnings differential between the indigenous and the non-indigenous comes from differences in years of education completed...hence, equalizing educational opportunities for indigenous groups will likely reduce the earnings differential between the indigenous and the non-indigenous population groups (p. 303).

## Table 9.6. Race differences in Ecuador

|  | Measure | Non-indigenous | Indigenous |
| :--- | :--- | :---: | :---: |
| 1 | Years education: m | 8.2 | 5.0 |
| 2 | Years education: w | 8.1 | 3.8 |
| 3 | Percent literate: m | 87.3 | 65.3 |
| 4 | Percent literate: w | 85.0 | 48.4 |
| 5 | Earnings: m | 148.0 | 80.8 |
| 6 | Earnings: w | 50.4 | 26.9 |
| 7 | Percent poverty | 46.1 | 84.3 |

## 8. Guatemala

The indigenous people of Guatemala are the Maya, one of the Native American Indian peoples who developed an early civilization. The Spanish conquered the Maya in the sixteenth century, took possession of most of the land, and forced many of the Native American Indians to work as serfs on their plantations. Others retreated into the less fertile highlands and continued their life-style as subsistence farmers. The racial socioeconomic hierarchy has been described by Smith (1996, p. 60):

Guatemalans of predominantly European ancestry clearly remain Guatemala's ruling class; middle and lower class Ladinos' (Mestizos) class position is intermediate between Guatemala's elites and Maya Indians; the class position of most Ladinos is that of salaried workers and petty bureaucrats, which puts them in the middle, rather than the lower, rungs of the class system. Lower positions are reserved for Indian peasants and artisans.... Lighter and more Europeanized Ladinos are more highly valued by other Ladinos, especially as marriage partners, than darker, more Mayan individuals.

In 1990, 3 percent of the population was European, 42 percent mestizos, and 55 percent Native American Indians. Racial statistics for IQs, education, and socioeconomic status are given in Table 9.7. Row 1 gives an IQ of 79 for a sample of 256 Native American Indian 6-12-year-olds tested with the DAM (Draw a Man) Test. Rows 2 through 15 give the results of a social survey carried out in 1989 by the Instituto Nacional de Eatadistica and summarized by Steele (1994). Rows 2 and 3 give the years of education for men and women and show that for both sexes the Europeans had the most education ( 9.8 and 7.9 years), followed by the mestizos ( 4.5 years for men and 4.0 years for women), while Native American Indians had much less schooling at 1.8 years for men and 0.9 years for women. Rows 4 and 5 give the percentages without any education and shows the same racial gradient.

Rows 6 and 7 give the percentages of mestizos and Native American Indians with secondary education and show many more mestizos (Europeans were not given as a separate group, but were included with mestizos in the data shown in rows 6 and 7 , and 9 through 15).

Table 9.7. Race differences in Guatemala

|  | Measure | Year | European | Mestizo | Native <br> Americans |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1 | IQ | 1965 | - | - | 79 |
| 2 | Years education: men | 1989 | 9.8 | 4.5 | 1.8 |
| 3 | Years education: women | 1989 | 7.9 | 4.0 | 0.9 |
| 4 | Education: men none \% | 1989 | 0 | 22 | 50 |
| 5 | Education: women none \% | 1989 | 0 | 30 | 72 |
| 6 | Secondary educ: men \% | 1989 | - | 17 | 2 |
| 7 | Secondary educ: women \% | 1989 | - | 17 | 1 |
| 8 | Income per month-quetzales | 1989 | 238 | 111 | 34 |
| 9 | Poverty \% | 1989 | - | 54 | 87 |
| 10 | Extreme poverty \% | 1989 | - | 25 | 61 |
| 11 | Professional | 1989 | - | 7.9 | 1.3 |
| 12 | Admministrative | 1989 | - | 3.9 | 0.7 |
| 13 | Office workers | 1989 | - | 5.1 | 0.5 |
| 14 | Artisans | 1989 | - | 18.2 | 14.7 |
| 15 | Agriculture | 1989 | - | 35.2 | 67.6 |
| 16 | Fertility | 1989 | 2.6 | 2.8 | 3.1 |
| 17 | Child mortality | 1985 | - | 120 | 142 |
| S |  |  |  |  |  |

Sources: row 1: Johnson et al., 1967; rows 2-7, 9-16: Steele (1994); rows 8 and 17: Psacharopoulos \& Patrinos, $1994 .$.

Row 8 gives average earnings per month in Quetzales (the Guatemalan currency) for Europeans, mestizos, and for Native American Indians. We see that Europeans had more than double the average earnings of mestizos, who in turn had more than three times the average earnings of Native American Indians. Row 9 gives the percentages of the two groups living below the poverty line defined as having less than the equivalent of US $\$ 60$ per month and shows a higher percentage among the Native American Indians ( 87 percent) than among the Europeans and mestizos ( 54 percent). Row 10 gives the percentages of the two groups living in extreme poverty defined as having less than the equivalent of US $\$ 30$ per month and again shows a higher percentage among the Native American Indians ( 61 percent) than among the mestizos ( 25 percent).

Rows 11 through 15 give racial differences in socioeconomic status. Europeans and mestizos are about six times over-represented in professional, administrative, and office occupations. Europeans and mestizos are slightly over-represented among artisans, while Native American Indians strongly are over-represented among agricultural workers.

Row 16 gives racial differences in fertility as the average numbers of living children and shows that this was highest in Native American Indians at 3.1 , lower in the mestizos at 2.8 and lowest in the Europeans at 2.6. Row 17 gives racial differences in child mortality under 5 years of age and shows that this was $120 / 1,000$ for mestizos and $142 / 1,000$ for Native American Indians.

## 9. Guyana

Blacks were brought to Guyana as slaves, and after the abolition of slavery East Indians, Chinese, and Portuguese from Madeira were brought in as indentured laborers. Anthony Trollope visited Guyana in 1859 and described the characteristics of the races
the Coolies (Indians) and the Chinamen have an aptitude for putting money together, and when a man has this aptitude he will work as long as good wages can be earned; the Negroes as a class do not have this aptitude, consequently they lie in the sun and eat yams. There is another race who have been and now are of the greatest benefit to this colony. These are the Portuguese, and they thrive wonderfully. At almost every corner of two streets in Georgetown there is to be seen a small shop, and these shops are,

I think without exception, kept by Portuguese who all reached the colony in absolute poverty (Trollope, 1985, p.144).

A survey carried out in Guyana in 1995 provided statistics for the racial percentages of the population and the percentages in poverty (Gafar, 1998). The results are given in Table 9.8. The East Indians were evidently doing best with the lowest percentage in poverty, followed by the blacks, and the mixed race many of which are of Native Amerindianblack ancestry (Zambos). The Native Amerindians were evidently doing worst with as many as 87 percent living in poverty. The Portuguese are now a tiny percentage of the population and this survey does not give data for them.

## Table 9.8. Population and poverty in Guyana (percentages)

|  | Native Americans | Blacks | Mixed | East Indians |
| :--- | :---: | :---: | :---: | :---: |
| Population | 10 | 37 | 46 | 46 |
| Poverty | 87 | 43 | 45 | 34 |

## 10. Mexico

Mexico was the seat of the Native American Indian Aztec civilization. The Aztecs were defeated by the Spanish led by Hernan Cortes between 1519 and 1521. The Spanish claimed the territory as a colony and appointed a Spanish governor. In the sixteenth century, the Spanish began to settle in Mexico, took possession of the land, and interbred with American Indian women, producing the mestizos (also known as Ladinos). In 1823, the Mexicans rebelled against Spanish rule and declared a republic. By the eighteenth century, there had emerged the three major racial groups of Europeans, mestizos, and Native American Indians, and these were ordered in the socioeconomic hierarchy typical of Latin America. This has been described by Gabbert (2004, p. 72) who writes of "the rigid work hierarchy of the haciendas" owned and run by Spaniards, and "where qualified jobs were reserved for the mestizos and simple, poorly paid tasks imposed on the Indians."

This racial socioeconomic hierarchy persisted into the twentieth century and has been described by numerous sociologists and social anthropologists. Thus, "ethnicity is strongly related to processes of social stratification...light skin color, bright eyes, and Caucasian features enjoy higher prestige than Amerindian; even members of the Maya-speaking
lower classes prefer persons of lighter skin" (Gabbert, 2001, p. 475-479); "higher class people are whiter, lower class people more Indian-looking" (Wade, 1997, p. 45); "the Indian population is overwhelmingly rural and poverty stricken" (Modiano, 1988, p. 315); "the indigenous people of Mexico have been commonly associated with poverty" (Panagides, 1994, p. 127); "the plutocracy and the upper middle classes throughout the country are overwhelmingly constituted by white and light mestizo phenotypes" (Nuttini, 2004, p. 66); "almost without exception the Mexican officials, lawyers, and business executives we dealt with were light-skinned and foreign educated, with elegant European names. Meanwhile, the people doing the photocopying and cleaning the floors were all shorter, darker, and plainly more 'Indian-blooded'...lightness of skin correlates directly and glaringly with increasing wealth and social status" (Chua, 2002, p. 59). While Europeans are virtually all middle class or skilled workers, many Native American Indians live in third world poverty:

A typical house has one room about 20 feet square with a dirt floor, windowless walls of mud or split boards, and a high-peaked thatched roof with a smoke hole; family members sleep on planks or mats around the periphery of this room where cooking is done over the perpetually burning fire in the center (Brazelton, Robey, and Collier, 1969, p. 275).

At the end of the twentieth century, 9 percent of the population were European, mainly of Spanish descent, 60-80 percent were mestizos, and 10-30 percent Native American Indian (Flores-Crespo, 2007). There were also small numbers of Chinese and Japanese. These have prospered, and by the beginning of the twenty-first century "most Chinese have taken up residence in middle-class suburbs" (Kent, 2003, p. 134), while the Japanese, "often desperately poor when they first arrived in Mexico in the early twentieth century, by the late 1960s they were primarily middle to upper class" (Masterson and Funada-Classen, 2004, p. 216).

Statistics showing the racial gradient for intelligence and socioeconomic status in Mexico are given in Table 9.9. Row 1 gives racial differences in intelligence from a study carried out in Baja California in 2003, in which Europeans obtained an IQ of 98 ( $\mathrm{n}=155$ ), almost exactly the same as that of Europeans in Europe and North America, mestizos obtained an IQ of 94 ( $\mathrm{n}=571$ ), and Native American Indians obtained an IQ of 83 ( $\mathrm{n}=194$ ), typical of Native American Indians found in other
studies throughout the Americas. The IQs of the mestizos are closer to the Europeans than to the Native American Indians. The reason for this is that mestizos in Mexico have more European genes ( 56 percent) than Native American Indian genes (43 percent) (the remaining 1 percent are African) (Cerda-Flores, Villalobos-Torres, and Barrera-Saldana, 2002).

Table 9.9. Race differences in Mexico

|  | Measure | Year | European | Mestizo | Native American |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1 | IQ | 2003 | 98 | 94 | 83 |
| 2 | Years education | 1989 | 4.9 | 2.8 | 2.0 |
| 3 | Literate: percent | 1989 | 76 | 59 | 48 |
| 4 | Income: Pesos | 1989 | 324 | 112 | 91 |
| 5 | Poverty: percent | 1989 | 3 | 44 | 74 |
| 6 | Fertility | 1989 | 2.6 | 2.8 | 3.1 |

Sources: row 1: Lynn, R., Backhoff, E., and Contreras, 2005; rows 2-6: Panagides, 1994.

Rows 2 through 6 give the results of a social survey that was carried out in 1989 by the Instituto de Eatadistica, summarized by Panagides (1994). The racial identity of the sample was not recorded, but this has been constructed by Panagides from the 1990 census. On the basis of the census, he has divided the municipal districts (municipios) into three categories consisting of predominantly European, predominantly mestizos, and predominantly Native American Indians. He has then examined a variety of social phenomena in these three populations. Row 2 gives the average years of education of the three groups and shows that Europeans had the most schooling at 4.9 years, mestizos came next with an average of 2.8 years, while Native American Indians had the least education with an average of only 2.0 years. Row 3 gives the percentages literate and shows similar differences. Row 4 gives average earnings per month in Pesos (the Mexican currency) and shows that Europeans had average earnings almost 3 times as great as those of mestizos, while the average earnings of Native American Indians was about 20 percent lower than that of mestizos. Row 5 gives the percentages of the three groups living below the poverty line defined as having less than the equivalent of US $\$ 60$ per month and showing the highest percentage among the Native American Indians at 74 percent in poverty, as compared with 44 percent among the
mestizos, and only 3 percent among the Europeans. Row 6 gives the average numbers of living children and shows that this was highest in Native American Indians at 3.1, lower in the mestizos at 2.8, and lowest in the Europeans at 2.6.

A survey of educational attainment in reading comprehension and mathematics of sixth graders aged approximately 12 years, was carried out in 2004 and the mean scores broken down by school type (Mexican Government, 2004). The results are shown in Table 9.10. The students in private schools were almost entirely European and obtained the highest mean scores. Those in urban schools, predominantly mestizos, performed better than those in rural schools, predominantly Native American Indians. Those in exclusively indigenous schools for Native American Indians performed at the lowest level. The report did not give standard deviations, so it is not possible to calculate the size of the racial differences in standard deviation units, but it will be noted that the mestizos and Native American Indians in the public schools scored about midway between the Europeans in the private schools and the Native American Indians in the exclusively indigenous schools.

Table 9.10. Mean scores of 6th grade students in reading comprehension and mathematics in Mexico in the 2004 National Study

|  | Reading <br> Comprehension |  | Mathematics |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| School Type | Mean | S. E. | Mean | S. E. |  |
| Total | 488.49 | 1.10 | 417.98 | 1.03 | 52,413 |
| Private | 567.99 | 3.67 | 474.68 | 3.32 | 3,562 |
| Urban Public | 497.33 | 1.57 | 425.01 | 1.45 | 25,286 |
| Rural Public | 462.33 | 1.79 | 399.60 | 1.73 | 14,900 |
| Indigenous | 424.85 | 2.67 | 360.07 | 2.67 | 8,665 |

Several studies of Mexicans have found that light skin color is associated with better education, greater earnings, and higher socioeconomic status (Arce, Murguia, and Frisbie, 1987; Telles and Murguia, 1990; Murguia and Telles, 1996). In the United States, lighter skinned Mexicans in the 1980 and 1990 censuses earned 12.8 percent more than dark skinned Mexicans (Darity, Hamilton and Dietrich, 2002). This is
normally attributed to greater discrimination by whites against the darker-skinned, but this is only conjecture. The lighter skinned will have higher IQs than the darker-skinned since they have more European ancestry, as is the case with blacks in the United States (Lynn, 2002), and this is likely the reason for their higher socioeconomic status.

## 11. Nicaragua

The racial composition of the population is 17 percent white, 69 percent mestizo and Native American, and 9 percent black and Creole. An American anthropologist has described the racial hierarchy:

There are a few ruling class whites of primarily European ancestry. Spanish language and Spanish culture have long been ensconced in the commanding heights of society. Things Spanish or white are super-ordinate; things Indian or black are subordinate; color participates in each generation's construction of social and economic hierarchy...the mestizos make a range of assertions about blackness vis-a vis whiteness; black is primitive, irrational, dirty, and less attractive than white (Lancaster, 1991, pp.346, 345,351).

## 12. Paraguay

There has been continuous immigration by Spaniards into Paraguay since the initial conquest by the Spanish in the sixteenth century. A number of Italians and Germans settled after World War I. The population is largely mestizo, with small numbers of Europeans and Native American Indians. Education has been compulsory and free for all 7 - to 14 -year-olds since the mid-1960s. Race differences in Paraguay are summarized in Table 9.11. Row 1 gives the percentage composition of the population. Row 2 gives the results of a survey of the incidence of poverty carried out in 1990, the results of which have been summarized by Patrinos (1994a). Race was identified from the languages spoken. Europeans typically speak only Spanish, and of these

Table 9.11. Race differences in Paraguay (percentages)

|  | Year | European | Mestizo | Native American |
| :--- | :---: | :---: | :---: | :---: |
| Population | 1990 | 7 | 90 | 3 |
| Poverty | 1990 | 1 | 24 | 37 |

only 1 percent were poor. Mestizos are generally bilingual in Spanish and Guaraní, the language of the indigenous Native American Indians, and among these 24 percent were poor. The Native American Indians typically speak only Guaraní, and of these, 37 percent were poor.

## 13. Peru

Peru was the center of the Inca Empire before the Spanish conquest by Francisco Pizarro in 1532-1535. Pizarro founded Lima as the capital of the Spanish colony, and it was rapidly developed as a substantial city. The Spanish founded the University of San Marcos in the year 1551. The Spanish colonists took control of the land and reduced the Native American Indians to serfdom, requiring many of them to work in the mines or as agricultural laborers. In 1821, the colony rebelled against Spanish rule, and an independent republic was declared in 1825.

Peru has the typical Latin American racial socioeconomic hierarchy in which the Europeans have the highest status, the mestizos occupy the middle positions, and the Native American Indians are at the bottom. Thus, "the white Spanish stock share with the mestizos the control of Peru's political and economic fortunes" (Encyclopedia Britannica, 1960, p. 634). This hierarchy remained unchanged at the end of the twentieth century, when it was described by Macissaac (1994, p. 165):

The social pyramid is such that Spanish-speaking European descendants are at the top, followed in turn by mestizos (who mostly speak only Spanish) and the cholos (bilingual Spanish and native language speaking indigenous people; the indigenous languages of Peru are Quechua and Amyara), while the monolingual indigenous speakers are at the bottom.

The population also contains a small number of ethnic Chinese and Japanese estimated at around 120,000 , many of whose ancestors migrated to Peru to work as laborers, mainly between 1850 and 1880, to work in the guano mines, the sugarcane industry, cotton plantations, and railroad construction (Kent, 2003). The owners of these enterprises brought in Chinese and Japanese laborers after the abolition of slavery in 1854 because the blacks and Native American Indians proved to be unreliable workers: the plantation owners "were unsuccessful in employing Indian or free African labor on their plantations," and the Chinese "were better than slaves and without the problems" (Masterson
and Funada-Classen, 2004, p. 21). In the twentieth century, these rose in the socioeconomic hierarchy, and an ethnic Japanese, Alberto Fujimori, was prime minister from 1990 to 2000. Many of the ethnic Chinese and Japanese have entered the middle and professional class, as they have elsewhere in Latin America, the Caribbean, and South East Asia. In the first half of the twentieth century, the Chinese population lived largely in Lima's Chinatown, but "in the 1940s and 1950s the Chinese began moving to middle- and upper-class suburban municipalities" (Kent, 2003, p. 132). In the 1940 census, it was recorded that 11.6 percent of the Chinese worked in professional occupations, and 70 percent in commerce.

The composition of the population is not known precisely because some of the Native American Indians live in the eastern jungle, and their numbers have not been accurately identified. The census of 1953 gave 13 percent of the population as European, 40 percent as mestizo, 46 percent as Native American Indian, and 1 percent as East Asian. Data on race differences in educational attainment, literacy, earnings, and occupational status were collected in the Living Standards Measurement Study carried out in 1991 on a sample of 11,491 (Macissaac, 1994). The study classified the sample on the basis of self-identification into Spanish speakers, who would have been Europeans and mestizos, and indigenous language speakers, who would have been Native American Indians. The division by language does not perfectly correspond to racial differences, because some Native American Indians speak Spanish, but it is good enough to give an approximate picture of racial differences. The results of this study showing that Europeans and mestizos have had more education than Native American Indians over the approximate period 1920-1990 are shown in Table 9.12. The years of education of the two groups were broken down into 10 -year age bands. Row 1

Table 9.12. Race and ethnic differences in the years of education in
Peru

|  | Age Groups | European-Mestizo | Native American | EM/NA Ratio |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $60+$ | 6.7 | 4.8 | 1.40 |
| 2 | $50-59$ | 7.7 | 4.7 | 1.64 |
| 3 | $40-49$ | 9.1 | 5.6 | 1.63 |
| 4 | $30-39$ | 10.5 | 6.6 | 1.59 |
| 5 | $20-29$ | 11.0 | 7.7 | 1.43 |
| 6 | All ages | 8.1 | 5.6 | 1.47 |

shows that among the oldest aged 60+ and born before 1930, Europeans and mestizos had an average of 6.7 years of education, and Native American Indians an average of 4.8 years. Among successively younger age groups, the years of education progressively increased, but the gap between the two groups remained unchanged. This is shown when the years of education of the two groups are expressed as a ratio, shown in the right hand column.

Further data on differences between the two groups in education are summarized in Table 9.13. The figures represent the highest-level education achieved. Row 1 shows that 7.0 percent of Europeans and mestizos and 26.5 percent of Native American Indians had incomplete primary schooling. Native American Indians were also over-represented among those who had completed primary school, but gone no further. There is virtually no difference at the next stage of incomplete secondary schooling. Europeans and mestizos are more over-represented at the higher levels of education among those with completed secondary schooling, non-university higher education, and university education. It is interesting to see that although Spanish speaking Europeans and mestizos are approximately five times over-represented among those with university education, it is not impossible for indigenous language speaking Native American Indians to obtain a university education in Peru, and 3.3 percent had done so in this 1991 survey.

The 1991 survey also collected information on racial and ethnic differences in literacy, earnings, percentages in poverty, and occupations. The results are summarized in Table 9.14. Row 1 gives percentages of literacy and shows almost the entire population was literate, although illiteracy at 5.2 percent was significantly higher among the indigenous language speaking Native American Indians than among the Europeans

Table 9.13. Race and ethnic differences in education in Peru (percentages)

|  | Measure | European-Mestizo | Native American |
| :--- | :--- | :---: | :---: |
| 1 | Incomplete Primary | 7.0 | 26.5 |
| 2 | Completed Primary | 15.0 | 28.8 |
| 3 | Incomplete Secondary | 16.8 | 16.4 |
| 4 | Completed Secondary | 35.1 | 21.6 |
| 5 | Non-univ. Higher | 8.2 | 2.0 |
| 6 | University | 16.6 | 3.3 |

and mestizos ( 0.3 percent). Row 2 gives average earnings per month in Peruvian soles (the Peruvian currency) and shows that Europeans and mestizos had average earnings $21 / 3$ times higher than indigenous language speaking Native American Indians. Row 3 gives the percentage of the two groups living below the poverty line defined as having less than the Peruvian currency equivalent of US $\$ 60$ per month, and showing a higher percentage ( 79 percent) of Native American Indians in poverty as compared with Europeans and mestizos ( 50 percent). Row 4 gives the percentage of the two groups working as farmers and shows that this is by far the largest occupational category ( 66 percent) among the Native American Indians, while only 12 percent of Europeans and mestizos worked as farmers. Row 5 gives the percentages working as teachers and shows that more than twice as many Europeans and mestizos worked in this profession as compared with Native American Indians.

Table 9.14. Race and etbnic differences in literacy, earnings, and socioeconomic status in Peru

|  | Measure | European-Mestizo | Native American |
| :--- | :--- | :---: | :---: |
| 1 | Illiterate | $5.2 \%$ | $0.3 \%$ |
| 2 | Income | 164.7 | 70.6 |
| 3 | Poverty | $50 \%$ | $79 \%$ |
| 4 | Farmers | $12 \%$ | $66 \%$ |
| 5 | Teachers | $6.1 \%$ | $2.6 \%$ |

Europeans and mestizos enjoyed better health than Native American Indians, as assessed in a number of ways. Some of these are summarized in Table 9.15. Row 1 gives the rate of child mortality of under 5 -yearolds in the mid-1980s at 8.2 percent for Europeans and mestizos, and 26.9 percent for Native American Indians (Psacharopoulos and Patrinos, 1994). Rows 2 and 3 give results from the 1991 survey. Row 2 gives the number of days of illness in the preceding 4 weeks and shows more

Table 9.15. Race and ethnic differences in health in Peru

|  | Year | Measure | European-Mestizo | Native American |
| :--- | :--- | :--- | :---: | :---: |
| 1 | 1985 | Child mortality | 8.2 | 26.9 |
| 2 | 1991 | Days ill in last 4 weeks | 8.7 | 9.4 |
| 3 | 1991 | Hospitalized \% | 4.5 | 7.2 |

days of illness among the Native American Indians than among the Europeans and mestizos. Row 3 gives the percentage that had been hospitalized, and again shows poorer health among the Native American Indians than among Europeans and mestizos.

## 14. Surinam

The British first settled Surinam in 1651. It was ceded to Holland in 1667, and became a Dutch colony. In 1975, it became independent. During the seventeenth and eighteenth centuries the Dutch imported African slaves to work on their plantations. Slavery was abolished in 1863, but the slaves were required to continue working on the plantations until 1873. From this date they were free to leave the plantations, and approximately two thirds of them did so. Some of them left the plantations voluntarily, but many were dismissed and replaced by Indians from the subcontinent and a smaller number of Indonesians from the Dutch East Indies. The plantation owners preferred the Indians and Indonesians because "they were easier to control than the ex-slaves" and the Africans were found to be "unmanageable and unreliable" and "were not much good at farming and in fact were not very motivated to work at all; they were simply not willing to continue working like slaves" according to the Dutch sociologist Mies van Niekerk (2000, p. 45-49). When the contracts of the Indians and Indonesians expired, many of them bought their own farms and small-holdings. It is widely believed that the Creoles and Indians had a different work ethic:

Creoles tended to immediately spend their money on what they viewed as the pleasant side of life. East Indians preferred to set aside their money for long-term expenditures (van Niekerk, 2000, p. 51).
By the 1990s, the population consisted of 35 percent Creole of mixed European and African descent, 33 percent Asian Indian, 16 percent Indonesian, 10 percent African, and 3 percent Native American Indian (Phillips', 1996). Many Surinamese migrated to the Netherlands in the second half of the twentieth century. Their IQ is approximately 85.

The crime rates of women for the two largest groups have been reported by Binda (2001, p. 529). Over the period 1965-1978, 35 Creoles and 14 Asian Indians were imprisoned for violence, and 6 Creoles and 3 Asian Indians were convicted of murder. Thus, the crime rate of the Creoles was approximately double that of the Asian Indians.

## 15. Conclusions

We have seen that throughout Latin America, there is a racial socioeconomic hierarchy in which Europeans are at the top, mixed race mestizos occupy an intermediate position, and Native American Indians are at the bottom. How to explain this has been a problem for economists, social anthropologists, and sociologists. From their North American perspective, many of them are used to the notion that minorities (blacks, Hispanics and Native Americans Indians) do poorly, and this must be because whites discriminate against them. They apply this explanation to Latin America. For instance, World Bank economist Patrinos (1994, p. 57) has observed, "indigenous, ethnic, racial, and linguistic minorities worldwide are in an inferior economic and social position vis-à-vis the 'mainstream' population." He proceeds to present statistics showing that in Bolivia, Guatemala, Mexico, Peru, and Paraguay, poverty is much greater among the indigenous peoples than among the Europeans. He has evidently forgotten that the indigenous Native American Indians are not minorities, but are majorities in all these countries. It is the minorities (Europeans and Chinese) who have the wealth and the high socioeconomic status. A majority becomes a "minority" when it is poor.

A problem that is difficult to explain is the intermediate position of mestizos throughout Latin America. No doubt it would be argued that Europeans discriminate less against these than against the Native American Indians, but there is no evidence for this except that they do so much better. The most straightforward explanation is that the mestizos have higher intelligence than the Native Americans Indians. We have seen direct evidence for this in Mexico, where the IQ of mestizos is intermediate between that of Europeans and the Native Americans Indians. The reason for the intermediate position of the mestizos is that they have some of the European genes for intelligence, and this raises their intelligence above that of the Native American Indians. Furthermore, the more European genes they have, as shown by their whiter skins, the better they do. In Latin America, as in the United States and throughout the Caribbean, the lighter the skin, the higher the socioeconomic status.

Equally problematical are the Chinese and Japanese who are tiny minorities but who have prospered in Latin America. They are rarely mentioned by the social scientists that have analyzed race differences in Latin America. Those who have noted this have generally attributed the socioeconomic achievements of the Chinese and Japanese to their strong
work ethic. For instance,
the work ethic and business skills of the Japanese in Latin America allowed them to compete very favorably in the less competitive economic environments of Mexico and South America (Masterson and FunadaClassen, 2004, p. 12.).

In Argentina, the president Juan Peron promoted Japanese immigration in the 1950s, asserting that the Japanese are known for "their honesty, diligence, and respect for the law," while in Paraguay president Alfredo Stroessner "welcomed the settlement of hard working and productive Japanese" (Masterson and Funada-Classen, 2004, pp. 179, 200).

The high IQ of the Chinese and Japanese, which is found everywhere throughout the world and for which there is evidence in Brazil, is never mentioned and probably not understood by the economists, social anthropologists, sociologists, and others who have researched the racial socioeconomic hierarchies in Latin America.

Several social scientists attempt to explain the race differences in socioeconomic status in Latin America as resulting from differences in education. Thus, according to the World Bank economists Patrinos and Psacharopoulos (1994), Europeans have the most education so they do best, the mestizos have somewhat less education and so they do less well, while the Native American Indians have the least education so they do the worst. From this, they conclude that the differences in education must be responsible for the differences in earnings and socioeconomic status, and from this, they move to the further conclusion that if the differences in education could be removed, the differences in earnings and socioeconomic status would largely disappear. Hence,

> if policy makers concentrate on equalizing the human capital characteristics (economists' jargon for the amount of education)that is ensuring that indigenous peoples can obtain better schooling, training, and health services-much of the income differential would disappear; this in turn would help alleviate poverty among a large section of the Latin American population (Psacharopoulos and Patrinos, 1994, p. xxii).

The two World Bank economists have fallen into the well-known trap of confusing correlation with causation. Education and earnings are associated across the races, but this does not mean that the race differences in education are responsible for the race differences in earnings.

The causal sequence is that race differences in intelligence are responsible for the differences in education, earnings, and socioeconomic status.

Some of the economists who attribute the racial socioeconomic hierarchy in Latin American countries largely to differences in education, admit, however, that these cannot wholly explain the differences. Wood and Patrinos (1994) have shown that when the racial groups are matched for the amount of education they have received, the differences in earnings and health are greatly reduced by 84 percent. However, they do not disappear, so differences in education cannot explain the whole of the differences in earnings because even after controlling for schooling attainment, indigenous individuals have a 16 percentage point greater probability of being poor than non-indigenous individuals (p. 94). How to explain this disadvantage? They have no suggestions.

Patrick McEwan is another World Bank economist who has documented the poor educational attainment of Native American Indians in Bolivia and Chile and believes $50-70$ percent of this is attributable to poorer education and a further 20-40 percent to "family variables like parental education" (2004, p. 157), i.e., Native American Indian children do poorly at school because their parents did poorly at school. This leaves 10-20 percent of the difference unexplained.

Our conclusion on Latin America is that throughout the continent, Europeans have been able to maintain their dominant socioeconomic position because they are the most intelligent, the mestizos with their intermediate intelligence occupy an intermediate socioeconomic position, while the Native American Indians are at the bottom of the socioeconomic status hierarchy because they have the lowest intelligence. The Chinese and Japanese who arrived as poor immigrants have prospered in Latin America by virtue of their high IQs, as they have elsewhere in the world.

## Chapter 10

## The Netherlands

1. Composition of the Population
2. Intelligence of Surinamese and Antillians
3. IQs of South Asians, North Africans, and Indonesians
4. IQ and Length of Residence in the Netherlands
5. Educational Attainment
6. Socioeconomic Status
7. Unemployment
8. The Creole Underclass
9. Infant Mortality
10. One Parent Families
11. Conclusions

TThe population of the Netherlands was almost entirely native Dutch until the second half of the twentieth century. In the early years following World War II, peoples from the former Dutch colonies of Surinam, the Netherlands Antilles, and Indonesia were permitted to settle in the Netherlands and acquire Dutch citizenship.

The immigrants from Surinam consisted of East Indians and Creoles of mixed European and African descent. A number of Turks, Moroccans, Moluccans from Indonesia, and Chinese from Hong Kong
and Vietnam, also settled in the country. The increasing numbers created alarm in the native Dutch population and unrestricted immigration was ended in 1980. Nevertheless, the immigrant population continued to grow through family reunification, illegal entry, asylum seekers and high fertility. By 2000, immigrants comprised approximately 17 percent of the population defined as those who were born abroad or at least one of whose parents had been born abroad.

## 1. Composition of the Population

In the mid-1990s, the composition of the population estimated by the Dutch Central Bureau of Statistics is shown in Table 10.1.

## Table 10.1. Composition of the population of the Netherlands around 1995

| Dutch | Antilles | China | Indonesia | Morocco | Surinam | Turkey |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14.6 m | 93,000 | 50,000 | 75,000 | 203,000 | 275,000 | 247,000 |

## 2. Intelligence of Surinamese and Antillians

Studies of the intelligence of the Surinamese and Antillians who migrated to the Netherlands from the former Dutch colonies of Surinam and from the Netherlands Antilles are summarized in Table 10.2. The population of Surinam consists of 35 percent of Creoles of mixed AfricanEuropean ancestry, 10 percent Africans, 33 percent Asian Indian, 16 percent Indonesian, and 3 percent American Indian. The population of the Dutch Antilles is 85 percent African and mixed African-European. Row 1 gives an IQ of 86 for the children of immigrants from Surinam. The test used and the age of the sample is not given. Row 2 gives an IQ of 84 for a sample of the children of first-generation immigrants from Surinam and the Netherlands Antilles. Row 3 gives an IQ of 88 for a sample of the children of second-generation immigrants from Surinam and the Netherlands Antilles. These children have a four IQ point gain compared with the children of first-generation immigrants shown in row 2. This confirms the studies in Britain showing that second-generation immigrants obtain higher IQs than first-generation. The likely reasons for this are that the children of second-generation immigrants have better nutrition and education. Row 4 gives an IQ of 85 for a further sample of the children of immigrants from Surinam. The test used and
the age of the sample are not given. Row 5 gives an IQ of 83 for another sample of immigrants from Surinam and the Netherlands Antilles. Row 6 gives an IQ of 85 for adult immigrants from Surinam. Row 7 gives an IQ of 85 for immigrants from the Netherlands Antilles.

The IQs obtained in the studies lie in the range between 83 and 88 with a median of 85 . This is about what would be predicted because the Antillians are Afro-Caribbeans and their IQ is the same as that of blacks in the United States (85) and in Britain (86). A third of the Surinamese are Asian Indians who have an IQ of 82 on the Indian sub-continent, 35 percent are African Creoles with an IQ of about 85, while 16 percent are Indonesian whose indigenous IQ is 87 (indigenous IQs are given in Lynn, 2006). Hence the IQs of these peoples in the Netherlands are closely consistent with those obtained elsewhere.

## Table 10.2. IQs of Surinamese and Antillians in the Netherlands

|  | Age | N | Test | IQ | Reference |
| :--- | :--- | ---: | ---: | :--- | :--- |
| $\mathbf{1}$ | Children | 110 | GALO | 86 | De Jong \& van Batenburg, 1984 |
| 2 | Children | 123 | RAKIT | 84 | Resing et al., 1986 |
| 3 | Children | 77 | RAKIT | 88 | Resing et al., 1986 |
| 4 | Children | 138 | - | 85 | De Jong, 1988 |
| 5 | 11 | 404 | CITO | 83 | Pieke, 1988 |
| 6 | Adults | 535 | GATB | 85 | te Nijenhuis, 1997 |
| 7 | Adults | 129 | GATB | 85 | te Nijenhuis, 1997 |

## 3. IQs of South Asians, North Africans, and Indonesians

A useful review of studies IQs of South Asians, North Africans, and Indonesians in the Netherlands, has been given by te Nijenhuis and van der Flier (2001). The results of these and other studies are summarized in Table 10.3. Row 1 gives an IQ of 78 for a sample of the children of first-generation immigrants from Turkey, and row 2 gives an IQ of 79 for a sample of the children of second-generation immigrants from Turkey. Both IQs are low and indicate no significant improvement in the intelligence of second-generation immigrants. Row 3 gives an IQ of 75 for a sample of the children of first-generation immigrants from Morocco, and row 4 an IQ of 79 for a sample of the children of second-generation immigrants from Morocco. Again, both IQs are low but there appears to be a marginal 4 IQ point improvement in the intelligence of second-generation immigrants, as has been found in the studies of immigrants in Britain.

Row 5 gives an IQ of 83 for children of immigrants from Morocco and Turkey. Rows 6 and 7 give IQs of 85 and 84 for further samples of Moroccan and Turkish immigrant children. Row 8 gives an IQ of 88 for a sample of Indians, 6 IQ points higher than the median IQ of 82 in India. Row 9 gives an IQ of 93 for Moroccan and Turkish children, the average of 92 obtained on the Otis and 94 on the Cito, both of which are largely verbal tests. Row 10 gives an IQ of 84 for Turkish and Moroccan children obtained on the standardization sample of the Snijders-Oomen Non-Verbal Test; IQs of those born in the Netherlands were the same as those who had only been in the country from 1-6 years. Rows 11 and 12 give IQs of 85 and 84 for samples of Moroccan and Turkish children. Rows 13 and 14 give IQs of 84 and 88 for Moroccan and Turkish adults on the General Ability Test Battery (GATB); this is a Dutch test with eight subtests measuring vocabulary, arithmetical ability, perceptual speed, etc. The Turkish and Moroccan immigrants performed poorly on vocabulary because they had not learned Dutch well, and this test has therefore been omitted in the calculation of the

Table 10.3. IQs of South Asians, North Africans, and Indonesians in the Netherlands

|  | Ethnicity | Age | $\mathbf{N}$ | Test | IQ | Reference |
| :--- | :--- | :---: | :---: | :---: | :--- | :--- |
| 1 | Turkish | Children | 177 | RAKIT | 78 | Resing et al., 1986 |
| 2 | Turkish | Children | 104 | RAKIT | 79 | Resing et al., 1986 |
| 3 | Moroccan | Children | 177 | RAKIT | 75 | Resing et al., 1986 |
| 4 | Moroccan | Children | 76 | RAKIT | 79 | Resing et al., 1986 |
|  |  |  |  |  | De Jong \& van <br> Batenburg, 1984 |  |
| 5 | Mixed | Children | 106 | GALO | 83 | Baten |
| 6 | Turkish | 11 | 815 | CITO | 85 | Pieke, 1988 |
| 7 | Moroccan | 11 | 720 | CITO | 84 | Pieke, 1988 |
| 8 | Indian | 11 | 338 | CITO | 88 | Pieke, 1988 |
|  |  |  |  |  |  |  |
| 9 | Mixed | 10 | 47 | Otis/Cito | 93 | Willemse, 1991 |
| 10 | Turkish | $5-17$ | 33 | Son-R | 84 | Laros \& Tellegren, 1991 |
| 11 | Moroccan | $5-8$ | 194 | LPTP | 85 | Hamers et al., 1996 |
| 12 | Turkish | $5-8$ | 194 | LPTP | 84 | Hamers et al., 1996 |
| 13 | Moroccan | Adult | 167 | GATB | 84 | Te Nijenhuis, 1997 |
| 14 | Turkish | Adult | 275 | GATB | 88 | Te Nijenhuis, 1997 |
| 15 | Mixed | $6-12$ | 1,315 | Arithmetic | 92 | Driessen, 1997 |
| 16 | Indonesian | $6-10$ | 84 | NV | 94 | Tesser et al., 1999 |
| 17 | Mixed | $6-12$ | 474 | RAKIT | 94 | Helms-Lorenz et al., 2003 |

IQs. The figures given are the average of the remaining seven subtests. Row 15 gives an IQ of 92 for Muslims in the Netherlands from Turkey and Morocco compared with approximately 69,000 Dutch Europeans; this figure is obtained from a test of arithmetic. The mean vocabulary IQ of this sample was 85 , but this is not entered because most of these children did not speak Dutch as their first language. Row 16 gives an IQ of 94 for Indonesian immigrant children. Row 17 gives an IQ of 94 for second-generation immigrant children of whom 72 percent were from Turkey and Morocco and 10 percent from Surinam and the Netherlands Antilles. Their verbal IQ was 80, but this has been omitted on the grounds that most of them did not speak Dutch as their first language. The median of the first 13 studies is 84 , exactly the same as that of indigenous peoples of South Asia and North Africa (Lynn, 2006). The IQ of 94 of the immigrants from Indonesia is somewhat higher, consistent with studies finding that the IQs of South East Asians is higher that of South Asians and North Africans.

A study of the intelligence of 36 Korean and 100 Sri Lankan children adopted by predominantly middle class Dutch parents has been reported by Stams, Juffer, Rispens, and Hoksbergen (2000). The children were adopted as babies and tested at the age of 7 years with the RACIT test, a test of general intelligence that correlates 0.86 with the Wechsler and was standardized in 1982. The Korean children obtained a mean IQ of 115 and the Sri Lankan children a mean IQ of 104. A control group of 147 7-year-old Dutch children obtained a mean IQ of 107 , significantly lower than that of the Korean children. Probably the explanation for the control group of Dutch children obtaining a mean IQ of 107 is that IQs have increased during the period of approximately 16 years between the standardization of the test and the collection of the data. The best reading of the results is that the Korean children had a mean IQ of 108 ( 8 IQ points higher than the control group of Dutch children). This figure is a little higher than the 105 of other East Asian populations reviewed in Lynn (2006). By the same reasoning, the best reading of the result for the Sri Lankan children, in relation to an IQ of 100 for Dutch children, is an IQ of 97. This is consistent with studies in Britain that have found that second-generation South Asians from the Indian sub-Continent have an IQ only slightly lower than that of indigenous British. It should be noted, however, these children were only 7 -years-old and it has been found in the United States that black children adopted by white middle class
parents have higher IQs at this age than they obtain in late adolescence by around 6 IQ points (Lynn, 1994). Apparently being raised in white middle class families has a boosting effect on the IQ that subsequently fades out, like Head Start effects.

Intelligence scores of 11-year-olds from eight racial groups have been given by Pieke (1991). The tests were of verbal reasoning, verbal comprehension, and arithmetic. The results are shown in Table 10.4 and are presented as raw scores. The standard deviations are not given, so the magnitude of the differences in IQs cannot be calculated. Row 1 gives the scores of the native Dutch who scored the highest on verbal comprehension and verbal reasoning, but were second to the Chinese on arithmetic. Row 2 gives the scores of Northwest Europeans who scored a little below the native Dutch on verbal comprehension because many of them spoke their own languages at home; on verbal reasoning and arithmetic they scored virtually exactly the same as the native Dutch, consistent with many studies showing that all Northwestern Europeans have approximately the same IQ of 100 (except for the IQ of 92 in Ireland). Row 3 gives the scores of Southern Europeans who scored somewhat lower than the Northwestern Europeans, consistent with many studies showing that Southern Europeans from the Balkans (IQs 89-93) and Portugal (IQ 95) have lower IQs than Northwestern Europeans. Row 4 gives the scores of the Chinese who scored the highest on arithmetic but third highest on verbal comprehension and verbal reasoning. The Chinese children were quite recent immigrants who spoke Chinese at home, so they were inevitably handicapped on the two verbal tests in Dutch. Their score on arithmetic best represents their intelligence and is the equivalent of approximately 2 IQ points higher than that of the native Dutch (Pieke, 1988). Row 5 gives the scores of Moluccans from the former Dutch East Indies. They score somewhat lower than the native Dutch, the other Europeans, and the Chinese, but they score higher than the Creoles and Indians consistent with many studies showing that Southeast Asians have a mean IQ of approximately 90 . Row 6 gives the scores of Indians from Surinam. They score quite low on all three tests, consistent with many studies showing that Indians have lower IQs than Europeans. Indians from Surinam score about the same as the Creoles from Surinam; this is consistent with their socioeconomic status, which is about the same for the two groups (van Nierkerk, 2004). Row 7 gives the scores of the Creoles
with mixed European and African ancestry from the Netherlands Antilles and Surinam. They spoke Dutch as their first language, but nevertheless performed poorly on the two Dutch language tests and scored the lowest on arithmetic and third lowest on verbal comprehension and verbal reasoning. Rows 8 and 9 give the scores of Moroccans and the Turks. They scored the lowest on all three tests (together with the Creoles) consistent with many studies showing that Southwest Asians and North Africans have a mean IQ of approximately 84. They will have been handicapped on the tests of verbal comprehension and verbal reasoning because many of them spoke their own languages at home, but they performed equally poorly on arithmetic suggesting a deficit of intelligence rather than of language.

## Table 10.4. IQs of eight racial groups

|  | Group | $\mathbf{N}$ | Verbal Reasoning | Verbal | Arithmetic |
| :--- | :--- | ---: | :---: | :---: | :---: |
| 1 | Dutch | 55,156 | 74 | 71 | 70 |
| 2 | NW Europeans | 159 | 73 | 67 | 69 |
| 3 | South Europeans | 210 | 67 | 61 | 64 |
| 4 | Chinese | 150 | 63 | 59 | 73 |
| 5 | Moluccans | 217 | 61 | 59 | 56 |
| 6 | Indians | 338 | 58 | 55 | 53 |
| 7 | Creole | 523 | 58 | 55 | 48 |
| 8 | Moroccans | 730 | 54 | 50 | 49 |
| 9 | Turks | 815 | 53 | 49 | 51 |

## 4. IQ of First and Second-Generation Immigrants

A review of the studies of the IQs of first and second-generation immigrants has been made by te Nijenhuis, de Jong, Evers, and van der Flier (2004). They conclude that second-generation immigrants obtain higher IQs than first-generation by around 4 in the case of immigrants from the Caribbean (this group combines Creoles and Indians from Surinam and the Netherlands Antilles) and by 7 IQ points in the case of Moroccans and Turks (rises of similar magnitude have been found in Britain shown in Chapter 5). Their results are shown in Table 10.5. The authors suggest that the most probable reason for this in the case of Moroccans and Turks is that as first generation immigrants they had a poor command of Dutch, while the second-generation who had been born in the Netherlands had a better command of Dutch. Immigrants
from the Caribbean spoke Dutch, so the IQ of second-generation immigrants did not improve so much. They also propose improvements in nutrition as a further factor responsible for the increase in the IQs of second-generation immigrants. The IQ of 105 of the Chinese is the same as that of indigenous Chinese and other East Asians given in Lynn (2006).

Table 10.5. IQs of first and second-generation immigrants

| Generation | Dutch | Caribbean | Chinese | Indonesian | Moroccan | Turks |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| First | 100 | 84 | - | - | 81 | 81 |
| Second | 100 | 88 | 105 | 94 | 88 | 88 |

Several studies have shown that immigrants who speak their own language in the home are handicapped in verbal tests administered in Dutch and that their performance on Dutch language tests improves with their length of residence in the Netherlands. This improvement does not however take place on non-verbal tests of numerical and spatial abilities. Two of these studies that presented correlations between IQs and length of residence in the Netherlands are summarized in Table 10.6. Notice that in both studies, performance on verbal tests in the Dutch language is positively correlated with length of residence in the Netherlands, but that correlations between non-verbal reasoning, numerical and spatial IQs, and length of residence in the Netherlands are negligible. Similar results have been reported by Laros and Tellegren (1991, p. 88) and several further studies have been summarized by te Nijenhuis and van der Flier (1999).

Table 10. 6. Correlations between IQ and length of residence in the Netherlands

| Verbal | Non-Verbal <br> Reasoning | Numerical | Spatial | Reference |
| :---: | :---: | :---: | :---: | :--- |
| 0.31 | - | 0.12 | 0.01 | De Jong \& van Batenburg, 1984 |
| 0.30 | -0.01 | 0.05 | - | Van Leest \& Bleichrodt, 1990 |

## 5. Educational Attainment

A study of the educational level of 12-18 year olds was carried out in 1988 by Roelandt, Martens, and Veenman (1991). They found that all of the four main immigrant groups had lower educational
levels than indigenous Dutch. They proposed that this could be due to the lower socioeconomic status of the immigrants and to assess the effect of this they calculated the educational level expected from the socioeconomic status of the group and the level actually achieved. Their results are shown in Table 10.7. This shows that the indigenous Dutch achieved the percentage educational level that would be expected, while the immigrants achieved around half the educational level that would be expected. They concluded that lower socioeconomic status explains about half of the lower educational level of the immigrants and that there must be other factors operating to explain the other half. They suggest that these might be school factors or low teacher expectations. The second of these, known as the "Pygmalion effect," has never been replicated in numerous studies and has long since been discredited as an explanation of poor school performance (Elashoff and Snow, 1971).

## Table 10.7. Race differences in expected and actual educational attainment (percentages)

| Educational Level | Indigenous | Antilleans | Moroccans | Surinamese | Turks |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Expected | 52 | 46 | 22 | 39 | 28 |
| Actual | 52 | 26 | 10 | 28 | 13 |

Further data for race differences in educational attainment are given in Table 10.8 for the year 1998. It will be seen that the indigenous Dutch had much higher levels of educational attainment, followed by the Surinamese (these include the Antillians). Most of the Turks and Moroccans had only primary education.

Table 10.8. Race differences in educational attainment, 1998 (percentages)

|  | Dutch | Surinamese | Turks | Moroccans |
| :--- | :---: | :---: | :---: | :---: |
| Primary only | 20 | 30 | 70 | 80 |
| Some High school | 18 | 29 | - | - |
| Competed High school | 54 | 56 | - | - |
| University Degree | 28 | 15 | - | - |
| Sources: row 1: Hagendoorn et al., 2003; rows 2-4: van Niekerk, <br> 2000. |  |  |  |  |

## 6. Socioeconomic Status

The socioeconomic status of Turkish and Moroccan immigrants compared with that of the indigenous Dutch is shown in Table 10.9. This gives data collected for all school students ( $\mathrm{n}=2,400$ ) in 1984-1986 in the city of Utrecht (de Lange and Rupp, 1992). The distribution of the socioeconomic status of the families was coded 1=professional and senior managerial, $2=$ minor white collar, $3=$ skilled blue collar, etc. It will be seen that the distribution of socioeconomic status of Turkish and Moroccan immigrants is much lower than that of the Dutch and these were employed entirely in blue-collar occupations.

Table 10.9. Race Differences in socioeconomic status (percentages)

| SES |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Race | 1 | 2 | 3 | 4 | 5 |
| Dutch | 5.3 | 8.4 | 30.1 | 24.4 | 31.9 |
| Turk/Moroccans | - | - | 9.2 | 20.0 | 70.8 |

## 7. Unemployment

Table 10.10 shows that unemployment has been substantially higher among immigrants than among the indigenous Dutch. Row 1 gives the percentages unemployed among the Surinamese in 1979 given by the Dutch Central Bureau of Statistics (Van Niekerk, 2000, p. 191), and shows that unemployment was more than four times higher than that of the native Dutch. Row 2 gives the percentages unemployed nationwide in 1989, showing unemployment more than three times higher among Moroccans and Turks, and about twice as high among Antilleans and Surinamese, as compared with the native Dutch (de Lange and Rupp, 1992). Row 3 gives unemployment statistics for 1995 for Amsterdam and shows unemployment about three times higher among Antilleans, Moroccans, Surinamese, and Turks, than among the native Dutch (Rath, 2000). However, among European immigrants, largely from southern Europe, unemployment was somewhat lower.

Table 10.10. Race differences in unemployment (percentages)

| Year | Indigenous | Antilleans | Moroccans | Surinamese | Turks | Europeans |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 | 6 | - | - | 25 | - | - |
| 1989 | 13 | 24 | 44 | 23 | 42 | - |
| 1995 | 8 | 23 | 27 | 25 | 22 | 18 |

Dutch social scientists have attributed the high rate of unemployment among the Surinamese immigrants to low levels of education, poor command of the Dutch language, and discrimination.

## 8. The Creole Underclass

A Creole underclass of blacks from Surinam has emerged in the Netherlands that is similar to that in the United States. It is particularly evident in Amsterdam, where by 1991 there were 55,000 Creoles, and "a key characteristic of the Surinamese community is heavy welfare dependency and a very high rate of unemployment, reaching over 60 percent in 1989 in the 25-35 age group; many have never actually performed regular paid work" according to Sansone (1994, p. 177), a social anthropologist who has made a study of them. Several Dutch social scientists have noted the differences between the Creole and East Indian (Hindustani) immigrants. The Indians are typically law-abiding and hard working, while the Creoles have not assimilated so well to Dutch society because of their "oppositional subculture." Sansone (2000, p. 156) has written that the high rate of unemployment of the Creoles is partly due to poor work attitudes:
the Creoles are seen by job center officers as belonging to the hard-to-place category, due to lack of technical skills combined with a "different" work ethic and a "choosy" attitude about prospective jobs; sometimes they are even regarded as undisciplined, aggressive, and haughty-getting to work late in a country where punctuality is expected, balking at taking orders from superiors, holding unrealistic expectations as to work, etc.
Suzanne Model, an American sociologist, has described this "oppositional subculture" in a lower class Creole community in Amsterdam:
most of these young people slip unnoticed into long-term unemployment...most of the boys thought the hard drug market offered the best chances of fast success...this has a disastrous effect on their school achievements as well as on their commitment to looking for regular jobs....in their eyes, the best solutions to the problem of climbing out of their low social position are not the white solutions but owning their own business, hustling, and the use of their own body and "naturalness" in fashion, as a gigolo, dancer or musician, or in professional sport.

Of the female Creoles, "a few have had some formal work experience; most are never married mothers living on welfare benefits." The Indian Hindustanis are quite different: "Hindustani men accept the jobs offered to them...deviance from community norms is rare" (Model, 2003, pp. 280-281).

The differences between the Indian and Creole immigrants in rates of juvenile crime are shown in Table 10.11. Row 1 presents data from a study carried out in the early 1990s, in which 410 Indian and Creole immigrants, and white Dutch 12-17-year-old boys reported on their own delinquent behaviors of stealing, fighting, vandalism, etc. and shows the prevalence of these delinquent behaviors about twice as great among the Creoles as among the Indians and whites. Row 2 gives crime rates for $12-24$-year-olds for immigrants from Surinam and the Netherlands Antilles, Morocco, and Turkey. It will be seen that the rates for all groups are substantially greater than for the Dutch, especially for the Creoles which is more than twice as high, and for the Moroccans which is more than three times as high.

Table 10.11. Race and ethnic differences in juvenile crime (odds ratios)

|  | Dutch | Creoles | Indians | Moroccans | Turks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1.0 | 1.9 | 0.9 | - | - |
| 2 | 1.0 | 2.7 | - | 3.8 | 1.4 |

Sources: row 1: Junger and Polder, 1993; row 2: Junger-Tas, 1997.

## 9. Infant Mortality

Racial differences in perinatal mortality (death at birth) and infant mortality (death in the first year) expressed as Odds Ratios in relation to indigenous Dutch for 1981 through 1998 are shown in Table 10.12. The figures for Moroccans and Turks are for infant mortality. It will be seen that the rates for both Moroccans and Turks improved over the ten-year period but remained significantly higher relative to that of Dutch. The Moroccan and Turkish children had higher death rates from infectious diseases, accidents, and drowning. A quarter of the deaths occurred while the children were on holiday in their country of origin. The authors of the study observe that the Moroccan and Turkish immigrants need
health and safely education concerning the yearly holiday trip to the country of origin, better knowledge of early warning symptoms of serious infectious diseases, road safely education, and early swimming lessons (Van Steenbergen et al., 1999, p. 205).

Table 10.12. Race differences in perinatal and infant mortality (odds ratios) (The figure for Surinamese is for perinatal mortality.)

|  | Dutch | Surinamese | Moroccans | Turks |
| :---: | :---: | :---: | :---: | :---: |
| 1981 | 1.0 | - | 1.8 | 2.1 |
| 1986 | 1.0 | - | 1.5 | 1.9 |
| 1991 | 1.0 | - | 1.5 | 1.8 |
| 1998 | 1.0 | 2.1 | - | - |

## 10. One-Parent Families

The Creoles in the Netherlands have the same high proportion of single mothers, as is characteristic of Africans in the United States, Britain, and the Caribbean. A survey carried out in 1997 found that 22 percent of the Afro-Surinamese lived in single parent households as compared with 3 percent of the native Dutch (van Niekerk, 2004). Another survey also carried out in 1997, found that 45 percent of AfroSurinamese mothers were single parents as compared with 38 percent of Indian Hindustanis. The figure for the Hindustanis looks high and is attributable to the high divorce rates rather than to the high rate of never-married among the Afro-Surinamese. Van Niekerk (2000, p. 192) explains the reason for the high rate of divorce among the Hindustanis: "it is a public secret that the unexpectedly large number of Hindustani lone mothers is partly due to the incidence of fake divorces, obtained to secure social security benefits."

## 11. Conclusions

The racial minorities in the Netherlands display the typical intelligence levels and social characteristics of those elsewhere. The Chinese have the highest IQ at 105, followed by the native Dutch (100), and the Indonesians (94), while the Antilleans, Surinamese, Moroccans, and Turks have the lowest IQs at 88 . These IQs are associated with a wide range of economic and social phenomena including educational attainment, socioeconomic status, unemployment, crime, and one-parent
families. In addition, the Creoles from the Netherlands Antilles and Surinam have been found to have unsatisfactory work attitudes. Rath (2000, p. 32) explains:

Between 1956 and 1963, industries recruited in the Netherlands Antilles and Surinam; experiences with these laborers were, however, not so positive, and new recruits were not sought; the slow work tempo, the high level of absenteeism, and the lack of work experience made the factories wary of hiring more Surinamese.
The aversion to disciplined work and the high rates of crime of Creoles in the Netherlands has frequently been found among Africans in other countries, notably in Brazil, the Caribbean, East and South Africa, Britain and the United States.

The high unemployment of immigrants in the Netherlands has created resentment among immigrant organizations, who have lobbied for legislation for quotas that would compel employers to employ the same percentage of immigrants as are present in their localities. In 1994 the Dutch government went some way to meet this demand by requiring companies with more than 35 employees to register their ethnicity and to draw up plans to increase the numbers of immigrants and promote their careers.

## Chapter 11

## New Zealand

1. Composition of the Population
2. Race and Ethnic Differences in Intelligence
3. Educational Attainment
4. Earnings
5. Unemployment
6. Socioeconomic Status
7. Crime
8. Mental Illness and Alcohol Abuse
9. Fertility
10. Infant Mortality and Life Expectancy
11. Maori in Australia
12. Conclusions

The indigenous peoples of New Zealand are the Maori. They are one of the sub-races of the Pacific Islanders, that also include the Micronesians, Melanesians, Polynesians, Hawaiians, Fijians, and Samoans. These peoples came originally from South East Asia from which they colonized most of the numerous Pacific islands between around B.C. 3,000-1,000. The last of the Pacific islands to be colonized was New Zealand which was settled about 800 A.D. by Polynesians
who were the ancestors of the contemporary Maori. They mainly settled in the North Island, where about 85 percent of Maori still live. In classical anthropology the Pacific Islanders were recognised as one of the seven major races by Coon, Garn, and Birdsell (1950). This was confirmed by Cavalli-Sforza, Menozzi, and Piazza (1994) in their genetic classification in which Micronesians, Melanesians, and Polynesians appear as a genetic "cluster," a euphemism for a race. Not much is known about the Maori before the European colonization of the islands because they never invented a written language.

The first European to discover New Zealand was Abel Tasman, a Dutchman who found the islands in 1642 and named them after the Dutch province Zealand. They were rediscovered in 1769 by the British Captain James Cook, who charted the islands and proclaimed them British. From around 1800, British immigrants began to arrive, initially for whaling and later for sheep farming, and as missionaries to convert the Maori. Europeans who described the Maori observed that they were largely hunter-gatherers, but some groups planted and cultivated the sweet potato (Shawcross, 1967). Their life-style has been described thus, they "practice slash-and-burn long-fallow agriculture with wood and stone Neolithic technology. They move from one place to another when the land, unfertilized except by ashes from burned brush, ceases to yield a harvest; they cultivate the land with a simple stick, an archaic tool characteristic of the pre-agricultural, gathering economy" (Kabo, 1985, p. 605).

By the 1960s a number of them had moved into towns and cities while most of the others lived in rural settlements where they planted tubers including yams, sweet potatoes, taro, bananas, and sugarcane. This is how the Maori were described by a sympathetic American psychology professor David Ausubel (1961) who made a study of them in the late 1950s:

Maori parents tend to adopt a passive, uninterested, and laissezfaire attitude towards their children's vocational careers. They are more willing to let an adolescent son drift...; they live in an atmosphere of wretched housing and sanitary conditions, uncontrolled drinking, improvident spending, and gross neglect of children...adolescents and adults alike tend to become demoralised, apathetic, and unwilling to take even the simplest steps to improve their lot (pp. 65-73).

## 1. Composition of the Population.

The racial composition of the population found in the censuses of 1956, 1991, and 2001 is shown in Table 11.1. It will be seen that there has been considerable change over the half century, with a decline in the proportion of Europeans from 94 percent to 74 percent and a corresponding increase in the proportion of Maoris, resulting from their high fertility, and of Pacific Islanders and Asians, resulting from immigration. Of the Asians in 2001, 56 percent were East Asians (Chinese, Japanese, and Koreans), 26 percent were Indians, and the remaining 18 percent were from the rest of Asia.

Small numbers of Chinese entered New Zealand in the nineteenth century, but they only came in significant numbers from 1945 onwards. The number recorded in the 1956 census was 6,731 and increased to 19,248 in the 1981 census. According to an ethnic Chinese academic Kwen Fee Lian (1988, p. 521) "the economic adjustment of the Chinese has been very successful." In the 1981 census, 11 percent were professionals, 36 percent of them worked in wholesale, retail and restaurant businesses, 22 percent in manufacturing businesses, and 9 percent in business services (financing, insurance, and real estate).

Table 11.1. Composition of the population (percentages)

|  | Year | European | Maori | Pacific Is. | Asian |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1956 | 94 | 6 | - | 0.03 |
| 2 | 1991 | 80 | 12 | 5 | 3 |
| 3 | 2001 | 74 | 14 | 6 | 6 |

## 2. Race and Ethnic Differences in Intelligence.

The lower IQs obtained by Maori as compared with Europeans were recorded in the 1920s. These early studies were summarized by Butchers (1930, p. 399) who commented that "when language difficulty is taken into account the Maori is the intellectual equal of the European." This rather remarkable assertion has been disproved by much subsequent research. Studies of the intelligence of Maori are summarized in Table 11.2. The IQs of the Maori are in relation to a New Zealand European IQ of 100 (standard deviation of 15). The IQs were obtained from verbal comprehension and reasoning, from nonverbal reasoning, and from multi-ability tests like the Wechsler and the

TOSCA. All the tests give similar results with IQs in the range between 81 and 96 with a median IQ of 90 . Note that contrary to the assertion of Butchers (1930) the Maori IQs of 88 and 91 on non-verbal reasoning tests like the Progressive Matrices (rows 9 and 11) are just the same as their IQs on verbal tests.

Table 11.2. IQs of New Zealand Maori

|  | Age | $\mathbf{N}$ | Test | IQ | Reference |
| :---: | :---: | ---: | :---: | :---: | :--- |
| $\mathbf{1}$ | $12-41$ | 53 | Wechsler Bell | 91 | Adcock et al., 1954 |
| 2 | 13 | 214 | PMA | 90 | Walters, 1958 |
| 3 | 15 | 98 | OTIS | 82 | Ausubel, 1961 |
| 4 | 11 | 18 | Wechsler Bell | 81 | Ritchie, 1966 |
| 5 | $8-12$ | 238 | OTIS/PMA | 85 | Lovegrove, 1966 |
| 6 | $13-14$ | 236 | OTIS | 87 | Du Chateau, 1967 |
| 7 | 14 | 77 | OTIS | 84 | Martin, 1969 |
| 8 | $5 / 7$ | 80 | Verbal | 90 | Clay, 1971 |
| 9 | 14 | 55 | SPM | 88 | Codd, 1972 |
| 10 | $4 / 6$ | 151 | PIPS | 96 | St. George \& St. George, 1975 |
| 11 | 9 | 211 | SPM | 91 | Harker, 1978 |
| $\mathbf{1 2}$ | 9 | 225 | Reading Comp. | 91 | Harker, 1978 |
| 13 | 8 | 23 | Reading Comp. | 88 | St. George, 1978 |
| 14 | $8-14$ | 303 | QT | 95 | St. George, 1983 |
| 15 | $10-12$ | 130 | TOSCA | 90 | St. George \& Chapman, 1983 |
| 16 | $8-9$ | 22 | WISC-R | 92 | Fergusson et al., 1991 |
| 17 | Adults | 103 | V. Reasoning | 92 | Guenole et al., 2003 |

Studies of the intelligence of Pacific Islanders in New Zealand are summarized in Table 11.3. Rows 1 and 2 give reading comprehension (89) and reading vocabulary (83) IQs of Pacific Islander Polynesian children in primary schools in Auckland compared with European children at the same schools. Rows 3 and 4 give non-verbal reasoning (88) and Wechsler (91) IQs for further samples. The Pacific Islander children may have been disadvantaged on the reading tests because some of them may

Table 11.3. IQs of Pacific Islanders in New Zealand

|  | Age | $\mathbf{N}$ | Test | IQ | Reference |
| :--- | :---: | :---: | :---: | :---: | :--- |
| 1 | $8 / 9$ | 71 | Reading Comp. | 89 | Beck \& St. George, 1983 |
| 2 | $8 / 9$ | 82 | Reading Vocab. | 83 | Beck \& St. George, 1983 |
| 3 | $9 / 17$ | 65 | SPM | 88 | Reid \& Gilmore, 1989 |
| 4 | $8 / 9$ | 17 | WISC-R | 91 | Fergusson et al., 1991 |

have spoken their own languages at home, but this cannot have had a major effect because the non-verbal SPM IQ of 88 is barely higher than the average of 86 of the two reading IQs. The median of the studies is 88.5 , which should not be regarded as significantly different from the 91 of the Maori.

There have been two studies by Fergusson et al. (1991) of the intelligence of Part Maori and Part Pacific Islanders, the results of which are summarized in Table 11.4. They obtained IQs of 94 and 96, approximately intermediate between Europeans on the one hand and Maori and Pacific Islanders on the other. This is as would be expected, since the mixed race children would have a mix of higher IQs of the Europeans and the lower IQs of the Maori and Pacific Islanders.

## Table 11.4. IQs of part-Maori and part-Pacific Islanders in New Zealand

| Group | Age | N | Test | IQ |
| :--- | :---: | :---: | :---: | :---: |
| Part-Maori | $8-9$ | 140 | WISC-R | 94 |
| Part-Pacific Is. | $8-9$ | 28 | WISC-R | 96 |

## 3. Educational Attainment.

Europeans have higher levels of educational attainment than Maori, while the educational attainment of part-Maori is intermediate between that of Europeans and Maori. Figures for these differences in educational attainment are given in Table 11.5. Row 1 gives the percentages obtaining the School Certificate at the age of 15 or 16 in 1960 published by the Commission on Education (1962). The School Certificate is an examination normally in six subjects (mathematics, English, science, history, etc). The remaining figures come from the censuses for 1966, 1986, and 1996. Row 2 shows that in 1966, 27 percent of Europeans and 45 percent of Maori had primary only education. Row 3 shows that in 19667.2 percent of Europeans but only 1.1 percent of Maori had university degrees. Row 4 shows that in 196947.3 percent of European school leavers had the School Certificate but only 13.1 percent of Maori.

Row 5 shows that in 198664.5 percent of Europeans had the School Certificate; the corresponding figure for part-Maori was 56.5 percent, and for Maori 34.5 percent.

Row 6 shows that in 19866.9 percent of Europeans had university degrees; the corresponding figures for part-Maori were 4.0, and for Maori 0.9 percent, while for Chinese the figure was 10.2 percent.

Rows 7 and 8 give corresponding statistics for 1996. Row 7 shows that 70.5 percent of Europeans had the School Certificate; the corresponding figure for part-Maori was 62.5 percent, and for Maori 37.5 percent. Row 8 shows that 12.2 percent of Europeans had a university degrees; the corresponding figure for part-Maori was 5.8 percent, and for Maori 2.2, while 18.0 percent of Chinese had a university degree.

## Table 11.5. Race differences in educational attainment (percentages)

|  | Education | Year | European | part-Maori | Maori | Chinese |
| :--- | :--- | ---: | :---: | :---: | :---: | :---: |
| 1 | School Certificate | 1960 | 29.7 | - | 4.8 | - |
| 2 | Primary only | 1966 | 27.0 | - | 45.0 | - |
| 3 | Degree | 1966 | 7.2 | - | 1.1 | - |
| 4 | School Certificate | 1969 | 47.3 | - | 13.1 | - |
| 5 | School Certificate | 1986 | 64.5 | 56.5 | 34.5 | - |
| 6 | University Degree | 1986 | 6.9 | 4.0 | 0.9 | 10.2 |
| 7 | School Certificate | 1996 | 70.5 | 62.5 | 37.5 | - |
| 8 | University Degree | 1996 | 12.2 | 5.8 | 2.2 | 18.0 |

The general trends in Table 11.5 are that educational attainments have increased for all groups over the thirty year period, but that the educational attainments of the Maori have not improved relative to those of Europeans. It is also evident that part-Maoris consistently perform better than full Maoris, while the Chinese perform best.

A study of the educational attainment of European, Asian, Maori, and Pacific Islander 15 -year-olds was carried out in 2000 as part of an OECD survey on mathematical and verbal abilities of representative samples of 15 -year-olds in 26 countries. The study is known as the PISA survey (Programme for International Student Assessment). The New Zealand study was carried out on a representative sample of 3,667 school students, born between May 1, 1984 and April 30, 1985. The results have been published by Sturrock and May (2002) and are shown in Table 11.6. It will be seen that the Europeans performed best followed in descending order by the Asians, Maori, and Pacific Islanders.

Table 11.6. Race differences in math and verbal ability

| Group | Math |  | Verbal |  |
| :--- | :---: | :--- | :--- | :--- |
|  | Mean (SE) | Mean (SE) |  |  |
|  | 557 | 4.6 | 554 | 3.0 |
| Europeans | 557 | 4.0 |  |  |
| Asians | 547 | 11.6 | 513 | 7.9 |
| Maori | 499 | 8.0 | 482 | 4.3 |
| Pacific Is. | 4711 | 3.7 | 462 | 9.4 |

## 4. Earnings

Race differences in average earnings are given in Table 11.7. Row 1 shows that in 1966, 22.1 percent of Europeans had an income in excess of $\$ 3,000$ as compared with 4.8 percent of Maori (Collette, 1973). Rows 2 and 3 give earnings for 1986 for men and women and show that Europeans had the highest average earnings followed by part-Maori, while Maori had the lowest average earnings (Maani, 2004). Rows 4 and 5 give average earnings for 1996 and show the same racial differences (Maani, 2004). There has been no sign of improvement in the average earnings of Maori over the 1986-1996 decade. In 1986, average earnings of Maori men were 73.5 percent of those of European men, while by 1996, they had dropped to 69.2 percent of the average earnings of European men. Among women, the relative decline in average earnings has been more pronounced from 84.3 percent of the earnings of European women in 1986 to 74.4 percent of the earnings of European women in 1996.

Table 11.7. Race differences in earnings (NZ\$)

|  | Income | Year | European | Part-Maori | Maori |
| :--- | :--- | ---: | :---: | :---: | :---: |
| 1 | M \& F | 1966 | 22.1 | - | 4.8 |
| 2 | Men | 1986 | 19,521 | 16,597 | 14,349 |
| 3 | Women | 1986 | 9,841 | 9,167 | 8,301 |
| 4 | Men | 1996 | 34,071 | 26,217 | 23,575 |
| 5 | Women | 1996 | 19,145 | 16,561 | 14,238 |

There has been no tendency for Maori incomes to improve relative to European incomes over the years 1961-1996. This is shown in Table 11.8, which gives Maori incomes as a percentage of European incomes over this period. It will be seen that while there are fluctuations, the general trend is for Maori incomes to deteriorate relative to
those of Europeans. This deterioration is more marked for men than for women.

Table 11.8. Median Maori incomes as a percentage of median European incomes, 1961-1996

| Year | Men | Women | Total | Reference |
| :---: | :---: | :---: | :---: | :--- |
| $\mathbf{1 9 6 1}$ | $89.8 \%$ | $90.8 \%$ | $90.3 \%$ | Nicol \& Ffiske, 1991 |
| $\mathbf{1 9 8 1}$ | $83.3 \%$ | $80.1 \%$ | $81.7 \%$ | Nicol \& Ffiske, 1991 |
| $\mathbf{1 9 8 6}$ | $80.6 \%$ | $97.7 \%$ | $88.9 \%$ | Statistics NZ |
| $\mathbf{1 9 9 1}$ | $64.7 \%$ | $87.5 \%$ | $75.5 \%$ | Statistics NZ |
| $\mathbf{1 9 9 6}$ | $73.0 \%$ | $89.3 \%$ | $79.3 \%$ | Statistics NZ |

## 5. Unemployment

There are substantial racial differences in unemployment in New Zealand with the lowest rates among Europeans, followed by part-Maori, and highest rates among Maori. Statistics are given from the 1986 and 1996 censuses in Table 11.9. Row 1 shows that in 1986 unemployment was 2.5 percent among Europeans, twice as high at 5.0 percent among part-Maori, and nearly three times as high among Maori at 7.4 percent. Row 2 shows similar although less pronounced differences among women. Rows 3 and 4 show similar differences for men and women in 1996. Unemployment rates fluctuate with the state of the economy. When the economy is weak, unemployment rates increase and the less skilled employees (disproportionately the Maori) are laid off and not recruited. Thus, Chapple and Rea (1998) have shown using the New Zealand Household Labour Force surveys that during the mid-1980s when the New Zealand economy was booming and there was virtually full employment, the Maori-European disparity in unemployment rates was around 4 percent. In the economic recession of the early 1990s Maori-European disparity in unemployment rose to over $14 \%$ and from the mid-1990s it fell to around 6 percent in 1998.

Table 11.9. Race differences in unemployment (percentages)

|  |  | Year | European | part-Maori | Maori | Reference |
| :--- | :--- | :---: | :---: | :---: | ---: | :--- |
| $\mathbf{1}$ | Unemployed: men | 1986 | 2.5 | 5.0 | 7.4 | Maani, 2004 |
| 2 | Unemployed: women | 1986 | 3.8 | 6.8 | 8.2 | Maani, 2004 |
| 3 | Unemployed: men | 1996 | 3.8 | 8.3 | 12.8 | Maani, 2004 |
| 4 | Unemployed: women | 1996 | 3.5 | 9.3 | 11.8 | Maani, 2004 |

## 6. Socioeconomic Status

Race differences in socioeconomic status in New Zealand are consistent with IQs. Some figures showing this are given in Table 11.10. Row 1 taken from the 1966 census shows that 59.1 percent of Maori entered employment unskilled, as compared with 24.0 of Europeans (Codd, 1972). Row 2 gives results for the year 2000 from the PISA study (Programme for International Student Assessment) carried out by the OECD of mathematical and other educational abilities of representative samples of 15 -year-olds in a number of countries (Sturrock and May, 2002). The New Zealand report gives the socioeconomic status of the four ethnic groups the sample. Socioeconomic status was assessed on a scale with a mean of 50 and standard deviation of 10 for the whole population. The results show that Asians scored slightly but significantly higher than Europeans, while Maori and Pacific Islanders scored significantly lower than Europeans and Asians.

Table 11.10. Race differences in socioeconomic status

|  | Year | SES | Asians | European | Maori | Pacific Is. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1966 | Unskilled \% | - | 24.0 | 59.1 | - |
| 2 | 2000 | SES | 57 | 54 | 46 | 47 |

## 7. Crime

It has become well established that Maoris and Pacific Islanders in New Zealand have much higher rates of crime than Europeans (Fifield \& Donnell, 1980; Lovell \& Norris, 1990; Newbold, 2000; Spier, 2001). Criminal convictions per 1,000 men for eight racial and ethnic groups for four categories of crime are shown in Table 11.11 for the period 1951-1966 (Statistics New Zealand, 1970) (theft includes burglary and fraud, and drunkenness includes vagrancy). Row 1 gives conviction rates of native born whites. Rows 2 through 5 give broadly similar rates for Polish, Scottish, English, and Yugoslav immigrants. Row 6 gives much higher rates for Maori: 7.8 times the native born European rate for assault; 4.8 times the native born European rate for theft, burglary, and fraud; 3 times the native born European rate for drunkeness and vagrancy; and 3.7 times the native born European rate for sex crimes. For all crimes the rate for Maori was 6.4 times the rate for Europeans. Row 7 shows that the Samoans have even higher rates than the Maori,
except for theft, burglary, and fraud. Row 8 shows that the Chinese had much lower rates for all crimes than the other racial and ethnic groups (except for the Yugoslavs on sex crimes, a chance result arising from the small numbers). The low rate of crime of the Chinese in New Zealand is the same as that in Britain and the United States.

Table 11.11. Criminal convictions per 1,000 males aged 15 and over, 1951-1966

|  | Group | Assault | Theft | Drunkenness | Sex Crimes |
| :--- | :--- | ---: | ---: | :---: | :---: |
| $\mathbf{1}$ | White NZ | 0.61 | 5.71 | 5.17 | 0.40 |
| 2 | Poles | 2.12 | 5.56 | 21.25 | 0.17 |
| 3 | Scots | 0.87 | 3.64 | 15.27 | 0.24 |
| 4 | English | 0.71 | 3.73 | 7.04 | 0.30 |
| 5 | Yugoslavs | 1.03 | 2.16 | 3.04 | 0.08 |
| 6 | Maori | 4.79 | 27.57 | 15.46 | 1.49 |
| 7 | Samoans | 14.03 | 8.45 | 29.50 | 2.00 |
| 8 | Chinese | 0.42 | 0.89 | 0.86 | 0.13 |

Table 11.12 shows age standardized conviction rates for Maori, Pacific Islanders, and European males and females for 1995 given in Statistics New Zealand. It will be seen that conviction rates for Maori are about 3.5 times greater than those for Europeans while the rates for Pacific Islanders fall about midway between the other two groups. In 1999, Maoris were approximately 14 percent of the population but 38 percent of prison admissions (Rich, 2000).

Table 11.12. Conviction rates per 1,000 for Maori, Pacific Islanders, and Europeans

|  |  | Europeans | Maori | Pacific Is. |
| :--- | :---: | :---: | :---: | :---: |
|  | Male | 100 | 365 | 222 |
|  | Female | 29 | 108 | 43 |

A number of social scientists in New Zealand have argued that the higher rate of criminal convictions of the Maori does not reflect a higher rate of offending but is due to discrimination, prejudice, and racism of the police and the criminal justice system. This racism and discrimination includes bias in police arrest practices and cultural biases in the justice system that place Maoris at greater risk of being convicted when
they appear before the Court (Lovell and Norris, 1990). This explanation has been tested by Fergusson and Horwood and their colleagues in the Christchurch Health and Development Study (CHDS). This is a longitudinal study of a birth cohort of over 1,000 young people that has been studied from birth to age 21 . As part of this study, data on both officially recorded convictions and self-reported crime have been gathered at regular intervals. In the first of these studies Fergusson, Horwood, \& Lynskey (1993) examined rates of police contact amongst young Maoris up to the age of 14. They found that Maoris had rates of police contact that were 2.9 times higher than rates for Europeans. These ethnic differentials could not be explained fully by ethnic differences in self-report offending and the study estimated that Maori offenders were twice as likely to come to police attention as European offenders with the same self-reported history of offending and social background.

In a second study, Fergusson, Horwood, and Swain-Campbell (2003) examined rates of conviction and of self reported serious (assault and burglary) and less serious crimes committed between the ages of 18 and 21 by Maori $(\mathrm{N}=109)$ and Europeans $(\mathrm{N}=875)$ in the CHDS cohort.

The results are shown in Table 11.13. Row 1 shows that Maori had 5.9 times the rate of conviction for serious crimes as Europeans, closely similar to the 6.4 times higher rate for all ages shown in Table 12.13. Row 2 shows that the Maori conviction rate for all crimes was a little lower at 4.1 times the rate for Europeans. Rows 3 and 4 give the Maori self reported crime rates and show that these were 3.2 times the rate of Europeans for serious crimes and 1.1 the rate for non-serious crimes.

Rows 5 and 6 give the results of a third study in which Fergusson, Swain-Campbell, and Horwood (2003) examined rates of arrest and conviction for the use and possession of cannabis by the age of 21 in the CHDS cohort. Row 5 shows that Maori had 6.0 times the rate of conviction for cannabis related crimes as Europeans, and row 6 shows that Maori had 5.2 times the rate of self-reported cannabis related crimes as Europeans. The authors of these studies conclude that the results suggest the presence of biases in the criminal justice system in so far as the conviction rates of Maoris are greater than their self reported crime rates. However, this inference assumes that Maori and European youth are telling the truth when asked about

Table 11.13. Crime rates per annum of 18-21-year-olds (percentages)

|  | Crime | Europeans | Maori | Odds Ratio |
| :--- | :--- | :---: | ---: | :---: |
| 1 | Convictions: serious | 5.2 | 30.3 | 5.9 |
| 2 | Convictions: all | 11.0 | 44.7 | 4.1 |
| 3 | Self-reported: serious | 136 | 452 | 3.2 |
| 4 | Self-reported: other | 1193 | 1452 | 1.1 |
| 5 | Cannabis: convictions | 2.2 | 13.1 | 6.0 |
| 6 | Cannabis: self-reported | 3.3 | 17.1 | 5.2 |

what crimes they have committed. Research in the United States by Huizinga and Elliott (1984) and Hindelang, Hirschi, and Weis (1981) has shown that there are large discrepancies between criminal convictions and self-reported crimes, and that blacks under-report their crimes more than whites. The most significant results of the Fergusson and Horwood studies are that they show that self-reported crimes by Maori are considerably greater than those of Europeans, except for selfreported minor and non-serious crimes shown in row 4.

## 8. Mental Illness and Alcobol Abuse

The Maori and Pacific Islanders have higher rates of mental illness than Europeans, as would be expected because mental illness is associated with low intelligence. In the 2003-4 Mental Health Survey, the 12 month prevalence for any serious mental disorder was (adjusted for age and sex) 4.2 per cent for Europeans, 7.6 percent for Maori, and 5.3 per cent for Pacific Islanders (Baxter, Kokaua, Wells et al., 2006).

The Maori did not invent the making of alcohol. The European colonists brought alcohol in the nineteenth century and introduced the Maori to it. Many of them developed alcohol abuse, and this problem was sufficiently serious in the 1850s that the British colonial authorities prohibited the sale of alcohol to Maori. In the twentieth century Maori men were 2.7 times more likely to die from excessive alcohol consumption than Europeans, while Maori women were 1.6 times more likely to die from excessive alcohol consumption. Maori had higher rates of admission to hospitals for liver cirrhosis and diseases of the pancreas resulting from excessive alcohol consumption; and had 1.6 times the rate of drunk-driving accidents than Europeans (Mancall, Robertson, and Huriwai, 2000).

## 9. Fertility

The Maori have consistently had higher fertility than Europeans. Birth rates obtained in census returns from 1931 to 1996 are shown in Table 11.14. The disparity in fertility narrowed in the second half of the twentieth century. Thus in 1931 the Maori birth rate was approaching three times as great as the European, while by 1996 it had fallen to about one and a half times as great as the European. The 1996 census showed that the Pacific Islanders' birth rate was somewhat higher than that of the Maori. It is widely believed in New Zealand that these differences in fertility will continue and this will lead to an increasing proportion of Maori and Pacific Islanders in the population. This anticipated scenario has become known as the "browning of New Zealand" and is confidently predicted by many. The New Zealand Government's Statistics Department has forecast on medium population assumptions that the Maori population is projected to rise nearly 6 percentage points over the next half century from 14.7 percent of the population in 1996, to 20.5 percent in 2051.

Table 11.14. Birth rate per 1,000 population

| Year | European | Maori | Pacific Is | Reference |
| :--- | :---: | :---: | :---: | :--- |
| 1931 | 17.0 | 45.2 | - | Douglas, 1973 |
| 1951 | 25.8 | 44.6 | - | Douglas, 1973 |
| 1970 | 22.1 | 37.1 | - | Douglas, 1973 |
| 1996 | 17.0 | 27.0 | 33.0 | Census |

## 10. Infant Mortality and Life Expectancy

Life expectancy at birth is greater for Europeans than for Maori. This difference appears in the first year of life where Maori infants have greater mortality than Europeans, as shown in the first three rows of Table 11.15. Average life expectancies at birth for European and Maori from 1950 through 1996 are also given in Table 11.15. Average life expectancy has increased for both races during this period and has been consistently higher for Europeans than for Maori (the 1996 figures are given in the Statistics New Zealand 1999 life tables). These differences are due to higher Maori death rates from disease and are attributable partly to lower intelligence.

Table 11.15. Infant mortality per 1,000 population and life expectancy

| Measure | Year | Sex | European | Maori | Reference |
| :--- | :---: | :---: | :---: | :---: | :--- |
| Infant mortality | 1969 | M \& F | 15.8 | 24.1 | Collette, 1973 |
| Infant mortality | 1981 | M \& F | 11.3 | 17.8 | Trovato, 2001 |
| Infant mortality | 1991 | M \& F | 7.1 | 14.1 | Trovato, 2001 |
| Life expectancy | 1950 | M \& F | 70.4 | 55.0 | Collette, 1973 |
| Life expectancy | 1966 | M \& F | 71.8 | 63.1 | Collette, 1973 |
| Life expectancy | 1996 | Men | 75.0 | 67.0 | Statistics NZ |
| Life expectancy | 1996 | Women | 79.0 | 72.0 | Statistics NZ |

## 11. Maori in Australia

There were 24,449 Maori resident in Australia recorded in the 1986 census, about $6 \%$ of Maori in New Zealand at the same period. The degree of success achieved by the Maori who emigrated to Australia can be assessed from their unemployment rate. This is shown in Table 11.16, which gives Maori performance in Australia (column 2) relative to all New Zealanders in Australia (column 3), and for Maori in New Zealand compared to all New Zealanders in New Zealand. The data are taken from Lowe (1990) and Hogan (1988) and are given by age groups, to allow for different age compositions of the populations (no comparable data are available for age 50 and above). The results show that Maori in Australia do worse than in New Zealand with consistently higher levels of unemployment in all age groups.

These results run counter to the involuntary minority/colonisation theory of Ogbu (1992) which purports to explain the underachievement of certain minorities in western societies as a result of their ancestors having been involuntarily colonized or enslaved. This ancestral experience, according to the theory, has a demoralizing effect that persists for generations and is responsible for their achieving poorly. Those who have migrated voluntarily, according to this theory, achieve well, like the Europeans and Jews who migrated from Europe to the United States and Canada, while those who migrated involuntarily, like the ancestors of blacks in the United States, and American Indians, who were colonized, fare poorly. Yet we see that Maori who have migrated voluntarily to Australia, perform worse than those who remained in New Zealand, contrary to Ogbu's thesis. The same problem is present in the poor achievements of the Pacific Islanders in New Zealand. They
Table 11.16. Unemployment rates for Maori and all New Zealanders at bome and in Australia in 1986

| Age <br> group | Maori <br> in Australia | All N.Z.s <br> in Australia | Maori <br> in New <br> Zealand | All N.Z.s <br> in New <br> Zealand | \%apori in N.Z. <br> (column 4. <br> -column 5) | \% Maori <br> gap in Aus. <br> (column 2 <br> column 3) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $15-19$ | 30.6 | 10.6 | 29.4 | 19.7 | 9.7 | 20.0 |
| $20-24$ | 24.3 | 11.0 | 18.1 | 9.0 | 9.1 | 13.3 |
| $25-29$ | 18.8 | 7.4 | 13.7 | 6.4 | 7.3 | 11.4 |
| $30-34$ | 16.1 | 5.8 | 10.9 | 5.2 | 5.7 | 10.3 |
| $35-39$ | 13.5 | 4.9 | 8.2 | 4.0 | 4.2 | 8.6 |
| $40-44$ | 13.3 | 4.5 | 7.4 | 3.4 | 4.0 | 8.8 |
| $45-49$ | 11.8 | 4.3 | 6.4 | 3.1 | 3.3 | 7.5 |

are voluntary migrants but they do not perform well, again contrary to Ogbu's thesis.

## 12. Conclusions

In New Zealand the Chinese are the "model minority" with the highest proportion of university degrees, the highest socioeconomic status, and low rates of crime: "Chinese success in education and occupation and their relative invisibility in the law courts established them as whiter than white...they were a model minority" (Yee, 2003, p. 218).

The Maori and Pacific Islanders are an underclass that does poorly in schooling and occupational attainment, and has high rates of crime. Part Maoris and Pacific Islanders do rather better. A number of psychologists in New Zealand have shown that the Maori and Pacific Islanders have low IQs and perform poorly in educational tests. They have attributed these deficits to environmental disadvantages and especially to a relative lack of intellectual stimulation. For instance, Ausubel (1961, p. 92) wrote "the Maori has lost the intellectual stimulation of his indigenous culture but has not yet learned to replace it with appropriate intellectual stimulation from pakeha sources," while Lovegrove (1966, p. 34) of the University of Auckland has written
the home and the school may be culpable; the environments Maori parents provide are not conducive to the development of complex intellectual processes assessed by intelligence tests; compared with the surroundings in which the European child grows up, typical Maori homes are less visually and verbally complex to provide a variety of experiences.
None have suggested that genetic factors might be involved or that a number of the Maori and Pacific Islanders form a racial underclass similar to the Aborigines in Australia and the Native American Indians throughout North and South America.

Economists in New Zealand are also aware that the Maori and Pacific Islanders do poorly in schooling and occupational attainment and have proposed a number of environmentalist explanations. Simon Chapple (2000), a senior research economist in the New Zealand Department of Labour, has suggested that the Maori may have "different tastes and preferences," especially a stronger preference for leisure; Maori
may lack information as a consequence of their social networks regarding how to succeed in socioeconomic terms...there may be racial discrimination against Maori or cultural barriers preventing them from taking advantage of economic opportunities, either directly or through the education or the health system; or there may be problems of social pressures arising from the fact that Maori are an involuntary minority which cause them to act as if socioeconomic success was a an ethnic group sell-out.

Neither Chapple nor any other economists make any mention of the low intelligence of the Maori as a possible factor responsible for
their underachievement and high rates of crime and drug abuse. Some of the informed public are aware that the Maori perform poorly on intelligence tests, but this is ascribed to test bias. In 1978, the Minister of Education stated in the House of Representatives that "the tests are culturally biased" (Beck and St. George, 1983, p. 34).

Health experts have documented that the Maori and Pacific Islanders have poorer health, greater infant mortality, and lower life expectancy than Europeans. Trovato (2001, p. 82) has documented this and concludes that "the leading killers for the Maori are infectious and parasitic diseases, and respiratory conditions." He attributes these higher death rates to European discrimination and prejudice, but does not explain how Europeans are responsible.

## Chapter 12

## Southeast Asia

1. Intelligence of Chinese and Southeast Asians
2. Chinese Control of Wealth
3. Cambodia
4. Indonesia
5. Malaysia
6. The Philippines
7. Singapore
8. Thailand
9. Conclusions: Explanations for Chinese Economic Success

TThe Chinese began to settle in Southeast Asia from 1567 when the Chinese emperor lifted the prohibition on trade outside China. From this date onwards, Chinese communities were established in Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam. By the mid-1600s it is estimated that there were Chinese communities of about 10,000 in Manila, and of about 3,000 to 5,000 on Batavia and Banten in Java, Ayuttaya in Thailand, and Hoi An in Vietnam.

Numerous historians, sociologists, and social anthropologists have commented on the economic success of the Chinese throughout Southeast Asia. In the late nineteenth century this was noted by the

German sociologist Wilhelm Roscher, who compared the Chinese in Southeast Asia to the Jews in Europe, another ethnic minority that has frequently achieved greater socioeconomic success than their host populations (see the chapters on Britain, Canada, and the United States). Many subsequent writers have commented on the similarity between the Chinese in Southeast Asia and the Jews in Europe and later in the Americas. In 1914 the Thai king wrote a pamphlet in which he described the Chinese as "the Jews of the East" (Hamilton and Waters, 1997, pp. 262-268). Chinese economic success in Southeast Asia can be dated as far back as the beginning of the seventeenth century when a number of other ethnic groups had established small trading communities in the region, including Malays, Gujaratis, Chettiars, and Portuguese, but "by 1700, the Chinese were unrivalled as the pre-eminent commercial minority everywhere in Southeast Asia"; the local rulers welcomed the Chinese because of
> their wealth, skills, and international contacts...they virtually introduced urban life and manufacture to many areas that had known little of either...the Chinese intermarried with or even created ruling dynasties, notably in Ayutthaya, Brunei, Melaka, and Demak, during this early and relatively open stage; the ruling class found them indispensable as producers and providers of goods and services and as brokers with the majority agricultural population (Reid, 1997, pp. 41-42).

> From the seventeenth until the end of the nineteenth century, the rulers throughout Southeast Asia used the Chinese as tax collectors from the profits of gambling, alcohol, the slaughter of livestock, the opium trade, and other commercial activities.

## 1. Intelligence of Chinese and Southeast Asians

The Chinese in Southeast Asia have the advantage over the indigenous Southeast Asians of possessing higher intelligence. Studies demonstrating this are summarized in Table 12.1. The IQs are based on a British mean of 100 . Column 2 gives the number of studies on which IQs are based. I have given the details of the individual studies from which these figures are derived in Lynn (2006). It will be seen that all the samples of Chinese have IQs in the range of 105 to 110 except for the lower figure of 99 in Malaysia. The most probable reason for this is that the

Chinese in Malaysia are largely the descendants of laborers who were a little below the Chinese average because migration to Malaysia to work in the mines or as agricultural laborers would not have appeared an attractive option to those who could secure a better livelihood in China. The median IQs are given in the bottom row and are 105 for the Chinese and 89 for the indigenous Southeast Asians.

Table 12.1. IQs of Chinese and Southeast Asians

| Country | N Studies | Chinese | Southeast Asians |
| :--- | :---: | :---: | :---: |
| China | 10 | 105 | - |
| Hong Kong | 9 | 108 | - |
| Taiwan | 11 | 105 | - |
| Indonesia | 4 | - | 87 |
| Laos | 2 | - | 89 |
| Malaysia | 1 | 99 | 89 |
| Philippines | 1 | - | 86 |
| Singapore | 2 | 107 | 93 |
| Thailand | 1 | - | 91 |
| Median |  | 105 | 89 |

## 2. Chinese Control of Wealth

In the second half of the twentieth century the Chinese gained huge economic power in Southeast Asia: "some seventy conglomerates have emerged in Southeast Asia since the early 1970s, nearly all of which are owned by Southeast Asian Chinese" (Palmer, 2001). "When all enterprises, large and small, are considered in each Southeast Asian state, the majority are owned by Chinese" (Suryadinata, 2001, p. 60). Statistics giving the percentages of Chinese in the populations of 7 major Southeast Asian countries in the second half of the twentieth century, their control of the wealth of the economies, and the per capita incomes are shown in Table 12.2. Control of the wealth of the economies is based on the Chinese share of the capitalization value of listed firms and is given by Rigg (2003). Per capita incomes are expressed as per capita GDP (Gross Domestic Product) at Purchasing Power Parity in US dollars for 1998. It will be seen that in all countries the economic power of the Chinese is far greater than their proportion in the populations (the figures for Vietnam are for 1969; by 1997 the percentage of Chinese had fallen to 1.3 as a result of large scale emigration). Column 4 shows that the per capita
incomes in the countries are directly proportional to the percentage of Chinese in the population. Singapore, with a majority Chinese population, has by far the highest per capita income. Malaysia, with its sizeable Chinese minority, comes next, followed by Thailand. Finally, there are the four poorest countries with their tiny Chinese populations. The only conclusion that can be drawn is that the per capita income in these countries is largely determined by the proportion of Chinese in the population.

Table 12.2. Chinese populations and control of the wealth in Southeast Asian countries (percentages) and per capita gross domestic product

| Country | Population | Control of Wealth | Per Capita GDP |
| :--- | :---: | :---: | :---: |
| Cambodia | 4.0 | - | 1,257 |
| Indonesia | 3.8 | 73 | 2,651 |
| Malaysia | 28.0 | 69 | 8,137 |
| Philippines | 1.3 | 55 | 3,555 |
| Singapore | 77.0 | 81 | 24,210 |
| Thailand | 10.0 | 81 | 5,456 |
| Vietnam | 2.6 | 38 | 1,689 |

## 3. Cambodia

Cambodia was colonized by France in the late eighteenth century, when together with Laos and Vietnam, it became part of French Indochina. It achieved independence in 1947. At this time it had a Chinese minority that comprised about 4 percent of the population. Nevertheless,
in the cities, Chinese dominated retail, the restaurant and hotel business, export-import trade, and light industry, including food processing, soft drinks, printing and machine shops; no less than 95 percent of the commercial class was Chinese; the richest men during this period were Chinese (Pan, 1998, p. 146).

## 4. Indonesia

Around two thousand years ago the numerous islands of Indonesia were ruled by independent princes. Between the thirteenth and sixteenth centuries Arab and Indian Muslim traders brought Islam to the two main islands of Sumatra and Java. In the sixteenth and seventeenth centuries the Portuguese, British, and Dutch began to trade with Indonesia. Their
principal commercial interest was the importation of spices to Europe. The Dutch East India Company was established for this trade in 1602. In the seventeenth century it became the leading European commercial enterprise trading with the islands and secured a monopoly of the spice trade from the local princes. In 1800 the Dutch made Indonesia a colony. During 1942-1945 Indonesia was occupied by the Japanese. On the defeat of Japan in 1945 it was declared a republic. In 1966 General Suharto took control of Indonesia and established a military regime.

Chinese have migrated to Indonesia for many centuries. In the eighteenth century a number of Chinese settled in western Borneo to work in the gold mines. Many of them subsequently became farmers and traders. Large-scale immigration of Chinese took place during the period from 1860 to 1930 when several hundred thousand came to Indonesia. The first census was carried out in 1930 and showed a Chinese population of 582,430 , representing approximately one percent of the population. The Europeans who were largely Dutch comprised about 0.5 percent of the population. The census of 1956 found that the Chinese population had increased to approximately 1.6 million, representing approximately two percent of the population. By this time most of the Dutch had returned to the Netherlands as a result of which their numbers had declined to about 60,000 out of a total population of approximately $77,988,000$. Some of the Chinese men who immigrated into Indonesia married Indonesian women, but this has not happened on an extensive scale because the Muslim religion of the Indonesians has acted as a barrier. Klitgaard (1986) estimated the Chinese population of Indonesia at approximately three percent in 1980. It is impossible to put a precise figure on the percentage of the Chinese in Indonesia because there has been some intermarriage between Chinese and Indonesians producing mixed race children who may count themselves as either.

There have been four studies of the intelligence of the general population in Indonesia. They are summarized in Table 12.3. Row 1 gives an IQ of 86 for children in the city of Bandung in Java. Row 2 gives an IQ of 87 for children and adolescents in two villages in central Java. Row 3 gives an IQ of 87 for children of families working on a tea plantation in Java. Row 4 gives an IQ of 87 for children in northern Jakarta. The average IQ of 87 is about the same as that of other indigenous South East Asians in Malaysia and Singapore given in Lynn (2006). It has not proved possible to find IQs for the Chinese in Indonesia.

Table 12.3. Intelligence of Indonesians

|  | Age | $\mathbf{N}$ | Test | IQ | Reference |
| :---: | :---: | ---: | :---: | :---: | :--- |
| 1 | $5-12$ | 1,149 | DAM | 86 | Thomas \& Shah, 1961 |
| 2 | $5-20$ | 163 | CPM | 87 | Bleichrodt et al., 1980 |
| 3 | 4 | 139 | PPVT | 87 | Soewondo et al., 1989 |
| 4 | $6-8$ | 483 | CPM | 87 | Hadidjaja et al., 1998 |

However, the IQs of migrants are typically closely similar to those of their populations of origin, so it is probable that their average IQ will not differ greatly from the 105 of China and Taiwan. Thus, the Chinese in Indonesia should have an advantage of around 18 IQ points.

Some evidence for the higher IQ of the Chinese than of indigenous Indonesians has been given by Klitgaard (1986, p. 121). He notes that in Indonesia the ethnic Chinese do much better than the indigenous Indonesians in the entrance examinations for the major public universities. In the early 1980s about 9 percent of the applicants for the major public universities were ethnic Chinese, although they comprised only about 3 percent of the population. The average score of the Chinese on the science tests was 90.7 ( $\mathrm{sd}=24.4$ ), while the average score of the indigenous Indonesians was 74.3 (sd $=19.3$ ). This is a difference of $.75 d$ (standard deviation units), equivalent to 11 IQ points. This will underestimate the true difference between the Chinese and the indigenous Indonesians because a greater proportion of the Chinese take the entrance examinations.

The Chinese have done well economically in Indonesia. Although the Chinese immigrants arrived initially mostly to work as agricultural laborers, after a generation or two they had established prosperous businesses and become economically powerful. In the mid-nineteenth century opium farms were a major industry in which the laboring work was done by the Indonesians while "Chinese merchants ran the farms and monopoly concessions," and "Chinese moneylenders controlled the peasant economy" (Shiraishi, 1997, pp. 195, 199).

By the first decade of the twentieth century, according to Twang Peck Yang (1998, p. 317), an economist at the University of Singapore, "the Chinese and Indonesian business classes were unevenly developed, the Chinese being more developed than the ethnic majority"; and the Indonesian business class "was very much smaller than the Chinese business class, lacking a solid capitalist foundation, business culture,
and skills" ( p .139 ). When the author notes that the Indonesian business class did not possess the same skills as the Chinese, he comes close to identifying their lower IQs as the root cause of their inability to compete with the Chinese. Other economists have also noted the strong economic position of the Chinese. According to Rigg (2003) in the second half of the twentieth century the Chinese owned 73 percent of the wealth of the country (Table 12.1). Similar figures have been given by Gooszen (2002) who estimates that in the first half of the twentieth century the Chinese controlled 90 percent of the economy, while Mosher (2000) states that they owned 110 of the 140 largest business conglomerates in the country. At the end of the twentieth century the Chinese "have a controlling position in the modern economy; most large corporations are in ethnic Chinese hands" (Pan, 1998, p. 151).

It is a feature of multiracial societies that minorities that do well incur the envy, resentment, and frequently the hatred of majorities who do less well. These envies and resentments frequently erupt into violence in which the under-performing majorities attack, expropriate, and even kill the more successful minorities. Throughout history gentiles have persecuted Jews, who with their high IQs have generally done well and excited envy. In Uganda Idi Amin expelled the economically successful Asians. The Chinese have attracted the same hostility in Indonesia. They were safe during the period of Dutch rule when law and order were preserved, but during the civic disorder of 1945-47 and the assumption of political power by the Indonesians, the Chinese were harassed in a number of ways. The Chinese suffered from
> the denial of property rights, the exaction of financial contributions for a variety of Indonesian organizations, confiscation and acquisition of property, looting and sacking; Chinese businessmen received heidan (black bills) from Indonesian armed groups requiring huge donations... in 1945 there was considerable looting of Chinese and Eurasian property; several hundred Chinese were killed on (usually quite groundless) suspicion of being spies (Twang, 1998, pp. 150-155).

Twang Peck Yang contends that the reason the Indonesian political leaders Sukarno and Hatta set about establishing a socialist economy after independence in 1945 was that they realized that "the Indonesians would most likely lose to the Chinese in a free market economy" whereas "they would flourish in a controlled economy"(p. 123). Accordingly, to
secure Indonesians advantages they introduced a controlled economy in which large enterprises were administered by government. In this way the Indonesians who had political power were able to appoint their own friends and relations to senior and well-remunerated positions and exclude the Chinese. Thus, from 1945 onwards "while many Chinese businesses were being destroyed and their trade opportunities circumscribed, the Indonesian business class was consolidating its position in domestic trade with the aid of the state" (Twang, 1998, p. 163). Between 1945 and 1949 the harassment of the Chinese grew worse, and a number of them left for Singapore. In 1965 there were widespread attacks on the Chinese leaving half a million dead and prompting tens of thousands to flee the country. There were further attacks on the Chinese in 1974 and 1998.

Because of the problem of the Chinese doing much better on the university entrance examinations than the indigenous Indonesians, in 1982 the Indonesian government introduced a quota system limiting the Chinese students to 6 percent of the student body. Applicants taking the universities' entrance examinations were required to give their ethnic identity. To prevent Chinese attempting to pass themselves off as indigenous Indonesians, "monitors examined their physical features to confirm their self-identification" (Klitgaard, 1986, p. 121). The result of this affirmative action procedure was that a number of ethnic Chinese applicants were rejected while a number of indigenous Indonesians with lower scores than the Chinese were admitted.

The Indonesian political elite operated a controlled economy to promote its own advantage during the second half of the twentieth century. In 1999 it was observed that "Indonesia's regulatory environment is characterized by bribery, kickbacks, and other corruption. Many regulations are applied arbitrarily, and payoffs may become necessary to receive an 'exemption' from a government regulation" (Johnson, Holmes, and Kirkpatrick, 1999, p. 218). In similar vein, the U.S. Department of Commerce (1998) has reported that in the 1990s "Indonesia continues to have a reputation as a difficult place to do business; local and foreign companies report that corruption is commonplace; complaints arise from irregular fees and commissions that companies are asked to pay to operate businesses in a timely efficient manner."

The Chinese have achieved much more economically in Indonesia than the indigenous people. How can this be explained? It is a question
that has often been asked. Perhaps Linda Lim and Peter Gosling (1997, p. 288) are hinting at the answer when they write "The Chinese are the best endowed and most competitive members of the private sector." What do they mean by the phrase best endowed? Best endowed with what? Is it possible that they suspect that the Chinese may be more intelligent than the Indonesians? If they harbor this suspicion, they do not elaborate.

## 5. Malaysia

The first Europeans to discover Malaysia were the Portuguese who reached the peninsula in 1498 and established a colony based on the town of Malacca in 1511. The Dutch took control of this part of Malaysia in 1641. Control of the whole peninsula was assumed by the British in 1795 . In 1957 the British granted the colony independence. The Malays are the indigenous people, but there has been substantial immigration of Chinese and also of Indians in the nineteenth and twentieth centuries, so that at the end of the twentieth century approximately 58 percent of the population were Malays, 32 percent were Chinese, and 10 percent were Indian. Most of the Chinese migrated to Malaysia in the nineteenth century to work as agricultural laborers and as miners in the tin mines following the discovery of large deposits of tin ore in Perak. Most of the Indians came in the 1880s to work as laborers on rubber plantations (Govindasamy and DaVanzo, 1992). Although in the nineteenth century the Malays had a dominant economic and social position by virtue of being the established indigenous people, the Chinese gradually improved their position, and by the second half of the twentieth century "the Chinese dominated private business in Malaysia" (Lim and Gosling, 1997, p. 303). The Indians have also improved their economic and social position and on most criteria perform better than the Malays.

The racial composition of the population shown in the censuses of 1931, 1970, and 1988 are shown in Table 12.4 (Govindasamy and DaVanzo, 1992; Mackerras, 2003). It will be seen that the Malays have increased their representation in the population over the period. This is a result of their higher fertility.

The first study of the intelligence of the racial groups in Malaysia was carried out in the mid-1970s by Keats and Keats (1977). They tested

Table 12.4. Racial composition of the population of Malaysia

| Group | 1931 | 1970 | 1988 | 1997 |
| :--- | :---: | :---: | :---: | :---: |
| Malay | 50 | 53 | 58 | 60 |
| Chinese | 34 | 35 | 32 | 32 |
| Indian | 15 | 11 | 10 | 7 |
| European | 2 | 1 | 0 | 0 |

75 Malay and 65 Chinese five-year-olds in Kuala Lumpur on tests of operational thinking and of vocabulary using a version of the Peabody Picture Vocabulary Test. On both tests the Chinese children performed better than the Malays, but the authors did not report standard deviations so it is not possible to express the difference in IQ points. This result was confirmed and extended to the Indian population in a standardization of the Standard Progressive Matrices test carried out in Malaysia in 1992 by Chaim (1994) on a representative sample of 5,165 7-12-year-olds, consisting of 3,151 Malays, 1,459 Chinese, and 555 Indians. The standardization was based on representative schools stratified as urban/rural, single sex/coeducational, and state controlled or private. The mean IQs for the three racial groups, in relation to a British mean of 100 , were 99 for the Chinese, 89 for the Malays, and 88 for the Indians. Chaim's study is unpublished, but a copy is held in the John Raven Progressive Matrices archive. This is by far the best study of the IQs of the three racial groups in Malaysia and is the one entered in Table 12.1. A further corroborative but less impressive study by Kuhnen et al. (2001) gives an IQ of 85 based on the Embedded Figures Test for Malay college students at the International Islamic University in Kuala Lumpur in relation to 100 for college students at universities in Germany, Russia, and the United States. Thus, the 15 point IQ difference between Malaysian and European college students is not greatly different from the 11 point IQ difference between Malaysian and European school children.

Statistics for the educational attainment of the three groups are shown in Table 12.5. Rows 1 and 2 give the years of education of the three groups calculated from surveys carried out in 1976 and 1988. It will be seen that there is little difference between the three groups in the years of education, suggesting that differences in education cannot explain either the differences in intelligence or the differences in incomes and occupational status that will be given below. Row 3 gives
the percentages of the three groups that were below average in the Malaysian Primary School Achievement Examination taken in 2001 by 12-year-olds in five subjects (Malay language, Malay literature, English language, mathematics, and science) ( $\mathrm{ns}=1047$ Malays, 513 Chinese, 411 Indians). It will be seen that the Chinese had a much lower percentage below average ( 11.5 percent), while the Indians and Malays performed about the same at 52.8 and 50.9 percent, respectively.

Rows 4 and 5 give the percentages of the three groups obtaining university degrees in 1970 and 1980. It will be seen that in 1970 the Chinese obtained 49.2 percent of the university degrees, when they comprised only 32 percent of the population, but in 1980 the Chinese obtained only 31.1 percent of the university degrees, almost exactly the same as their proportion in the population. The Malays increased their proportion of college graduates very considerably from 39.7 percent to 61.8 percent, while the percentage of Indians changed little. The explanation for these changes is that in the mid-1970s the Malay-controlled government introduced quotas for university entrance in order to favor the Malays.

Table 12.5. Race differences in educational attainment in Malaysia

|  | Measure | Chinese | Indians | Malays |
| :--- | :--- | :---: | :---: | :---: |
| 1 | Years education, 1976 | 4.6 | 4.6 | 3.9 |
| 2 | Years education, 1988 | 7.6 | 7.1 | 7.8 |
| 3 | Below average: percent | 11.5 | 52.8 | 50.9 |
| 4 | Degrees: 1970, percent | 49.2 | 7.3 | 39.7 |
| 5 | Degrees: 1980, percent | 31.1 | 6.6 | 61.8 | Sources: rows 1-2: Govindasamy \& DaVanzo, 1992; row 3 : Boey et al., 2003; rows 4-5: Ramasamy, 1993.

The average incomes of the three racial groups are shown in Table 12.6.The figures are for mean monthly household income in ringgits (the Malaysian currency) and are shown for the years 1957, 1967, 1987, 1990, and 1999. It will be seen that throughout these years the Chinese had the highest average incomes, the Indians the next highest, while the Malays had the lowest. The Malays improved their relative position somewhat in so far as they had less than half of the average income of the Chinese in 1957 and 57 percent of the average income of the Chinese in 1999.

Table 12.6. Income of Cbinese, Indians and Malays in Malaysia

|  | Year | Chinese | Indians | Malays |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 1957 | 272 | 217 | 144 |
| 2 | 1967 | 321 | 253 | 130 |
| 3 | 1987 | 1,430 | 1,089 | 868 |
| 4 | 1990 | 1,631 | 1,201 | 928 |
| 5 | 1999 | 3,456 | - | 1,984 |

Sources: rows 1-2: Faaland et al, 1990; rows 3-4: Pan, 1998, p. 181; rows 5: Malaysia Yearbook of Statistics, 2001.

Statistics for the wealth of the three racial groups are shown in Table 12.7. Row 1 gives the percentages of Chinese, Malays, and Indians in the population in 1988. Rows 2 through 5 give the percentages of wealth held by the three groups for the years 1969 through 1995. The figures are the percentage ownership of shares at par value in limited liability companies. It will be seen that the percentage of shares owned by foreigners declined considerably during the period. In all four years the Chinese held a greater proportion of wealth than the Indians and Malays, and in 1990 and 1995 they held a greater percentage of wealth than their proportion of the population ( 32 percent of the population owned more than 40 percent of the wealth). The Malays owned negligible wealth in 1969 but improved their holding to 19.3 to 20.6 percent in 1990 and 1995. However, they comprised 60 percent of the population, but by 1995 they owned only 20.6 percent of the wealth. The Indians also owned less wealth than would be predicted from their proportion in the population ( 10 percent of the population but owning only 0.9 to 1.5 percent of the wealth).

Table 12.7. Wealth held by Chinese, Malays, Indians and foreigners (percentages)

|  | Year | Chinese | Indians | Malays | Foreigners |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1 | Population | 32 | 10 | 58 | - |
| 2 | 1969 | 22.8 | 0.9 | 1.5 | 62.1 |
| 3 | 1982 | 33.4 | 0.9 | 15.6 | 34.7 |
| 4 | 1990 | 45.5 | 1.0 | 19.3 | 25.4 |
| 5 | 1995 | 40.9 | 1.5 | 20.6 | 27.7 |
| So |  |  |  |  |  |

Sources: row 1: Govindasamy \& DaVanzo, 1992; rows 2-5: Jomo, 1997.

Race differences in socioeconomic status are provided in Table 12.8. Shown first are the percentages of the three groups in the middle class in 1975. The percentage of the Chinese in the middle class was much higher than their percentage in the population: they comprised 32 percent of the population but 48.3 percent of the middle class and were therefore over-represented in the middle class by about 50 percent. The Indians comprised 10 percent of the population but 13 percent of the middle class and were therefore over-represented by about 25 percent. The Malays were under-represented: they were 58 percent of the population but only 38 percent of the middle class.

A further measure of race differences in occupational status is provided by the percentages of doctors and dentists in the mid-1970s, given in rows 3 and 4 . Nearly all of these were Chinese or Indian, and only 4 and 3 percent, respectively, were Malays.

Row 5 shows similar differences in 1988 for professional occupations as a whole, consisting of architects, accountants, engineers, dentists, doctors, veternarians, surveyors, and lawyers. The Chinese were highly over-represented with almost twice as many professionals as would be predicted from their percentages in the population. The Indians were

Table 12.8. Race differences in Malaysia in the percentages in the middle class, professional occupations, and unemployment.

|  | Measure | Year | Chinese | Indians | Malays |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1 | Population | 1988 | 32 | 10 | 58 |
| 2 | Middle class | 1975 | 48 | 38 | 13 |
| 3 | Doctors | 1975 | 45 | 40 | 4 |
| 4 | Dentists | 1975 | 89 | 5 | 3 |
| 5 | Professionals | 1988 | 60 | 25 | 14 |
| 6 | Unemployed | 1980 | 3.9 | 6.2 | 6.7 |
| 7 | Unemployed | 1985 | 5.5 | 8.4 | 8.7 |
| 8 | Accountants | 2000 | 77 | 6 | 17 |
| 9 | Architects | 2000 | 56 | 1 | 43 |
| 10 | Doctors | 2000 | 32 | 30 | 38 |
| 11 | Engineers | 2000 | 52 | 5 | 43 |
| 12 | Lawyers | 2000 | 40 | 7 | 33 |

Sources: row 1: Govindasamy \& DaVanzo,1992; row 2: Young et al. 1980; rows 3-4: Snodgrass, 1980; row 5-7: Faaland et al., 1990; rows 1-10: Malaysia Yearbook of Statistics, 2001.
approximately 25 percent over-represented. The Malays were underrepresented with only about a quarter of the professionals than would be expected from their percentage in the population.

Rows 6 and 7 show that at the lower end of the socioeconomic status hierarchy, among the unemployed, the Chinese had the lowest percentage of unemployment in 1980 and 1985. The Indians and Malays had rates of unemployment about a little over 50 percent higher than among the Chinese.

Rows 8 to 12 show the percentages of the three races in the five major professions in the year 2000. It will be seen that the Chinese remained over-represented in all except medicine, where the percentage of doctors who were Chinese was the same as their proportion in the population. Indians were under-represented except in medicine. Malays had increased their representation but remained under-represented in all the professions.

There are race differences in fertility in Malaysia and consequently secular changes in their proportions in the population. Total fertility rates of the three groups in 1987 are shown in Table 12.9 (Saw, 1990). It will be seen that fertility is lowest among the Chinese, a little higher among Indians, and much higher among the Malays. The result of these fertility differences is that the numbers of Malays in the population are increasing while the numbers of the Chinese and Indians are declining. This can be seen in the percentages of the racial groups in the population in 1931 and 1997, shown in Table 12.4. Notice that the proportion of Malays increased from 50 to 60 percent over the period, while the proportion of Chinese declined from 34 to 32 percent and of Indians from 15 to 7 percent. Swee-Hock Saw, an economist at the National University of Singapore who has presented these fertility differences, suggests that the low fertility of the Chinese is due to their later age of marriage, their lower proportion of women who marry, and their higher incidence of divorce. He does not mention their higher IQs.

Table 12.9. Race differences in fertility in Malaysia

| Year | Chinese | Indians | Malays |
| :---: | :---: | :---: | :---: |
| 1987 | 2.25 | 2.77 | 4.51 |

The economic success of the Chinese has inevitably generated resentment among the less successful Malays. The Malays have used
their numerically dominant position and control of the government to attempt to redress their disadvantages. In 1970 the Malay-dominated government introduced the National Economic Plan designed to "restructure Malaysian society to correct economic imbalance, so as to reduce and eventually eliminate the identification of race with economic function." To further this objective, the government introduced legislation to reserve for Malays four-fifths of jobs in the civil service, three quarters of university scholarships and places on government training programs, and a majority of license permits for the operation of trade and business (Govindasamy and DaVanzo, 1992). These quotas give the Malays advantages in excess of the percentage of their numbers in the population. However, despite these privileges Malays have remained the poorest racial group.

In the 1980s the government introduced further legislation for ethnic quotas for admission to universities to reflect their proportions in the population. Previously the Chinese had secured many more university places than their numbers in the population appeared to warrant. The effects of this legislation are shown in Table 12.5 and 12.8. The Malays increased their proportion of college graduates very considerably from 39.7 percent to 61.8 percent, and they also increased their representation in the professions (Table 12.8). However, these affirmative action quotas were only a partial solution to the problem because many Chinese who were refused admission to universities in Malaysia went to universities in other countries such as Australia, Singapore, Britain, and the United States. There was a further problem that the Chinese in the Malaysian universities secured better grades than the Malays. To overcome this problem the government introduced separate grading criteria for Chinese and Malay students, so that both groups obtained approximately the same grades.

## 6. The Pbilippines

Chinese immigrants began to settle in the Philippines from around 1570. By 1600 it is estimated that they numbered some 20,000 to 30,000 , mainly in Manila. They rapidly established economic dominance.

Economically, the Chinese created new occupations and services; besides handling the important trade between China and the Philippines, they engaged in most lines of commerce, artisanry, and
services; having created these occupations, they quickly established a monopoly over them; the entire Spanish colony was economically dependent on the Chinese (Wickberg, 1997, p. 155).

Many of the Chinese immigrants were single men who intermarried with the Filipino women, producing a population of Chinese mestizos.

In the second half of the eighteenth century the Chinese and Chinese-Filipino mestizos were concentrated in the Bindono district of Manila. This became Manila's Chinatown and "the center of business for the city as a whole" (Wickberg, 1997, p. 159). During this period the Spanish levied the highest taxes on the Chinese, somewhat lower taxes on the mestizos, and the lowest taxes on the Filipinos, on the assumption (no doubt correct) that this reflected the relative earnings and assets of the three groups.

In the middle of the nineteenth century "the Spanish began to try to make its Philippine colony profitable; one of the measures it initiated was almost unrestricted immigration of 'industrious' Chinese" (Wickberg, 1997, p. 161). The result was that the Chinese population increased to around 100,000 by the 1890 s. In the 1939 census it was recorded as 117,000 .

In the second half of the twentieth century it is estimated that about 10 percent of the population has some Chinese ancestry. Pure ethnic Chinese comprise less than 2 percent of the population. The ChineseFilipino mestizos
have been a critically important element in the development of the modern Philippine economy and society. Historically, they have been a major source of the modern Filipino economic, social, and political elite. By 1810 there were approximately 120,000 of them in a Philippine population of about 2.5 million. By the early nineteenth century they were becoming the most powerful and influential group. As urban society developed in the late $19^{\text {th }}$ century, its culturally most creative element was the Chinese mestizo. Most modern Filipino political leaders, including presidents, have been of at least partly Chinese mestizo background (Pan, 1998, p. 190).
There was further immigration of Chinese in the second half of the nineteenth century and
when the Chinese began to immigrate again in larger numbers after 1850 they were able to oust the mestizos from many of their occupations;
between 1850 and 1930 the Chinese assumed a commanding role in the economy; estimates from the 1930s indicate that the Chinese controlled much of the domestic economy including over 75 percent of both retail trade and the rice business (Pan, 1998, p. 191).

It has been estimated that in 1935 the Chinese controlled 80 percent of retail trade (Reid, 1997, p. 54).

By the closing decades of the twentieth century the Chinese-Filipino mestizos and the pure ethnic Chinese were "the elite" of the Philippines and "disproportionately represented in the private sector of the economy" (Lim and Gosling, 1997, pp. 30, 301). As noted in Table 12.2, the Chinese who comprised 1.3 percent of the population, owned 55 percent of the national wealth. They have also been successful in public life. A Chinese mestizo, Corazon Aquino, was elected president of the country following the fall of the Marcos dictatorship. Other prominent Chinese mestizos in the late twentieth century included the leading cleric Cardinal Jaime Sin and the Chief Justice Claudio Teehankes.

After independence in 1946 the Filipino government introduced measures to restrict the economic dominance of the Chinese in order to give greater opportunities to the Filipinos. Many of the Chinese had not acquired citizenship, and under the terms of these measures, only citizens were permitted to operate retail trade, to work in the nationalized food grain production industry, and in the professions. The Chinese moved into wholesaling, light manufacturing, financial services, and property development. They rapidly succeeded in dominating these sectors of the economy and "became more prosperous than ever" (Wickberg, 1997, p. 168). Edgar Wickberg, a leading authority on the Philippines, has written that "the ethnic Chinese do better than most non-Chinese Filipinos" (1997, p. 178). But why? He does not offer any suggestions.

## 7. Singapore

Singapore was part of the British colony of Malaya from 1795-1800 and remained a colony until it achieved independence in 1957. In 1965 Singapore separated from Malaysia, as it had become known, and became an independent state. The British began to develop the island from 1819, at which time it had only a small population of around 1,000 Malays. British developers needed laborers to work in the tin mines, rubber plantations, and other business undertakings. They found
that the Malays did not make satisfactory workers, so to overcome this problem they brought in Chinese and a smaller number of Indians (Turnbull, 1977). Their experience was that the Chinese made more efficient workers than the Indians. In the 1830s George Earl, a British traveler to Southeast Asia, observed that it was the Chinese immigrants "whose industry and perseverance have mainly contributed to the present flourishing state of the settlement" (Earl, 1937, p. 49). Hence in the early and middle decades of the nineteenth century it was largely Chinese who were brought in. The result was that by the end of the century the Chinese became the largest group in the population, followed by Malays, and by a small number of Indians. The percentages of the three races in the population in successive censuses in the nineteenth and twentieth centuries are shown in Table 12.10.

Table 12.10. Percentages of Chinese, Malays, and Indians in the population of Singapore

| Race | 1824 | 1891 | 1970 | 1990 |
| :--- | ---: | ---: | ---: | ---: |
| Malay | 60.0 | 19.8 | 15.0 | 14.1 |
| Chinese | 31.0 | 67.1 | 76.2 | 77.7 |
| Indian | 7.1 | 9.8 | 7.8 | 7.1 |

The Malays have never done as well in education or in the socioeconomic hierarchy as the Chinese. The long term Prime Minister of Singapore, Lee Kuan Yee, in an unusually frank statement commenting on the poor performance of the Malays in public examinations and especially in mathematics, attributed this to "innate differences in learning aptitudes between racial groups and announced that the Singapore government should be resigned to the fact that the Malays could not score as well as the Chinese in mathematics" (Rahim, 1998, p. 187).

The intelligence of the Chinese and Malays (but unfortunately not of Indians) in Singapore was assessed by Phua (1976), and the results are summarized in Lynn (1977). The samples were 147 Chinese and 190 Malay 13-year-old school children tested with the Standard Progressive Matrices. The IQ of the Chinese in relation to a British mean of 100 was 107, while the Malays obtained an IQ of 93. The high IQ in Singapore has been confirmed in a study by Lim (1994) of 45915 -year-olds tested with the Advanced Progressive Matrices. The sample had an IQ of
114. No breakdown of results was given for the Chinese, Malays, and Indians. In a more recent study of a representative sample of 1,092 elderly people was given the Mini-Mental State test. This is a cognitive ability test designed to identify dementia in old people. The test does not give IQs but can be regarded as an acceptable measure of intelligence. This study found that the Chinese scored obtained the highest score, the Indians came next, while the lowest score was obtained by the Malays (Ng, Niti, Chiam and Kua, 2007).

The higher intelligence of the Chinese than of the Malays in Singapore appears in their better educational attainments, which show a racial gradient in which the Chinese perform best, followed by the Indians, while the Malays perform worst. These differences are shown in the data displayed in Table 12.11, given by Rahim (1998). Rows 1, 2, and 3 give the pass rates in the PSLE (Primary School Leaving Examinations) tests taken by 10 - and 11 -year-olds at the end of their last year in primary school. Results are given for the years 1988, 1990, and 1992 and show that in all three years Chinese achieved the highest percentage of passes followed by the Indians, while the Malays secured the lowest percentage (the same differences are present in 1989 and 1991). Rows 4 through 8 give the pass rates in English and Mathematics in the PSLE examinations in 1984 and 1991 and show that for both subjects in each year the rank order of the passes is again Chinese first,

Table 12.11. Educational attainment of Chinese, Malays, and Indians in Singapore (percentages)

|  | Criterion | Year | Chinese | Indians | Malays |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1 | PSLE: pass | 1988 | 89.4 | 79.4 | 70.5 |
| 2 | PSLE: pass | 1990 | 91.1 | 80.2 | 74.1 |
| 3 | PSLE: pass | 1992 | 93.4 | 86.3 | 81.8 |
| 4 | English | 1984 | 87.7 | 84.9 | 74.3 |
| 5 | English | 1991 | 95.4 | 92.7 | 88.4 |
| 6 | Mathematics | 1984 | 83.3 | 51.8 | 37.4 |
| 7 | Mathematics | 1991 | 84.9 | 55.9 | 46.6 |
| 8 | 0 Level: 3 passes | 1980 | 72.0 | 62.0 | 48.0 |
| 9 | 0 Level: 3 passes | 1988 | 91.0 | 81.0 | 78.0 |
| 10 | 0 Level. 3 passes | 1992 | 93.0 | 86.3 | 81.8 |
| 11 | O Level: 5 passes | 1992 | 60.0 | 35.0 | 24.0 |
| 12 | Degrees | 1992 | 9.9 | 6.4 | 1.4 |

Indians second, and Malays third. Rahim (1998, p. 195) asserts "the weak Malay performance in mathematics can be attributed to their poor grasp of the English language and subsequent weak understanding and familiarity of often abstract terminology and complicated concepts which are conveyed in the English language." This seems improbable because the performance of the Malays in English is only marginally below that of the Chinese and Indians, whereas their performance in mathematics is much worse. Rows 8,9 , and 10 give the rates for passing 3 subjects in the GCE O level (General Certificate of Education Ordinary Level) public examinations in 1980, 1988, and 1992 normally taken at the age of 16 ; the results show that in all three years the Chinese achieved the highest percentage of passes followed by the Indians, while the Malays secured the lowest percentage (the same differences are present in 1989 and 1991). Row 11 gives the percentages obtaining five or more passes in the GCE O level examinations in 1992; these show similar but more pronounced race differences indicating that the more difficult the test, the greater the advantage of the Chinese over the Indians and the Malays.

Five GCE O level passes are required for entry to university in Singapore, so the same race differences appear in the percentages of the races with university degrees. These are shown for 1992 in row 12.

The Chinese in Singapore have always achieved more in terms of socioeconomic status than the Malays and the Indians, as would be predicted from their higher IQ and better educational attainment. As a Malay sociologist has written: "throughout the duration of colonial rule in Singapore, the Malay community persistently remained on the socioeconomic margins of society" (Rahim, 1998, p. 19). Figures showing these differences in 1957, 1980, and 1990 are given in Table 12.12. We see that in 1957 the Chinese had a higher percentage in professional (includes technical) and managerial (includes administrative) occupations than the Malays, although both races had the same percentages in manual production work. Indians were not included in this survey.

Rows 4 through 9 give results from the censuses of 1980 and 1990. Here we see that again the Chinese have a higher percentage in professional (includes technical) and managerial (includes administrative) occupations than the Malays, while they have lower percentages in manual production work. The socioeconomic status
differences evidently widened over the 33-year period. Thus, in 1957 the percentage of Chinese in professional occupations was a little less than a third greater than that of the Malays, while by 1990 the percentage of Chinese in professional occupations was almost three times greater than that of the Malays. Similarly, the Chinese and Malays were equally represented among manual production workers in 1957, but in 1990 the Chinese had only about two thirds the percentage of manual production workers, as compared with the Malays. It appears therefore that Singapore has become more meritocratic in this period, in the sense that Chinese-Malay differences in intelligence are more closely associated with differences in socioeconomic status.

The Indians appear intermediate between the Chinese and Malays on all of the indices of socioeconomic attainment. However, there seems to have been some change in the relative position of the Indians between 1980 and 1990. In 1980 the Indians were much closer to the

Table 12.12. Socioeconomic status of Chinese, Malays, and Indians in Singapore (percentages)

|  | Occupation | Year | Chinese | Malays | Indians | Reference |
| :--- | :--- | ---: | :---: | :---: | :---: | :--- |
| 1 | Professional | 1957 | 3.6 | 2.8 | - | $\mathrm{Li}, 1989$ |
| 2 | Managerial | 1957 | 1.8 | 0.3 | - | $\mathrm{Li}, 1989$ |
| 3 | Production | 1957 | 42.3 | 42.3 | - | $\mathrm{Li}, 1989$ |
| 4 | Professional | 1980 | 9.0 | 4.8 | 8.8 | $\mathrm{Jesudason,1993}$ |
| 5 | Managerial | 1980 | 5.2 | 0.5 | 3.6 | Jesudason, 1993 |
| 6 | Production | 1980 | 38.6 | 54.2 | 36.0 | Jesudason, 1993 |
| 7 | Professional | 1990 | 17.5 | 6.6 | 12.0 | Jesudason, 1993 |
| 8 | Managerial | 1990 | 9.6 | 0.9 | 5.4 | $\mathrm{Jesudason} 1993$, |
| 9 | Production | 1990 | 38.3 | 54.8 | 51.3 | Jesudason, 1993 |

Chinese with, for example, 8.8 percent in professional occupations compared with 9.0 percent of the Chinese, while the Malays had a much lower percentage of 4.8 percent. But in 1990 the Indians were virtually exactly mid-way between the Chinese and the Malays.

It is unfortunate that there is so little information on the intelligence of the Indians in Singapore. It may be that the Indians evidently perform better in the socioeconomic hierarchy than would be predicted from their intelligence. Recalling the equation IQ $x$ motivation $=$ achievement (Young, 1958), it must be assumed that the Indians have stronger personality qualities of motivation and industriousness
than the Malays. The decline in the socioeconomic achievement of the Indians relative to the Chinese from 1980 to 1990 again suggests that Singapore became more meritocratic in this period, in the sense that differences in intelligence between the Chinese and the Indians became more closely associated with differences in socioeconomic status.

Differences in average head of household monthly income in Singapore dollars of Chinese, Malays, and Indians in Singapore found in the censuses of 1980 and 1990 are shown in Table 12.13. It will be seen that in both years the Chinese had the highest average income, followed by the Indians, while the Malays had the lowest incomes. There also appears to be some tendency for the Indians to have lost ground, compared with the Chinese, over the ten year period.

Table 12.13. Average head of household monthly income (\$) of Cbinese, Malays, and Indians

| Year | Chinese | Malays | Indians | Reference |
| :--- | :---: | :---: | :---: | :--- |
| 1980 | 1,213 | 896 | 1,133 | Jesudason, 1993 |
| 1990 | 3,213 | 2,246 | 2,859 | Jesudason, 1993 |

Race differences in rates of crime of $10-15$-year-olds per 1,000 in Singapore are shown in Table 12.14. The Chinese have the lowest rate (12.3) and the Malays only fractionally higher (12.8), but the rate for Indians (44.6) is more than three times higher that of the other two peoples.

Table 12.14. Race differences in rates of crime per 1,000

| Year | Age | Chinese | Malays | Indians | Reference |
| :--- | :---: | :---: | :---: | :---: | :--- |
| 1960 | $10-15$ | 12.3 | 12.8 | 44.6 | Murphy, 1963 |

There have been race differences in fertility in Singapore such that the Chinese have had fewer children than the Malays and Indians. This is shown for total fertility rates in Table 12.15 during the years 1960-2000 (Census, 2000). Fertility declined in all three groups during the second half of the twentieth century in Singapore, as in many countries. These results are consistent with numerous studies showing that individuals and groups with lower intelligence have higher fertility than those with higher.

Table 12.15. Race differences in fertility in Singapore

| Year | Chinese | Malays | Indians |
| :--- | :---: | :---: | :---: |
| 1960 | 5.6 | 6.5 | 7.4 |
| 1970 | 3.0 | 3.5 | 3.2 |
| 1980 | 1.7 | 2.0 | 1.9 |
| 1987 | 1.5 | 2.2 | 1.9 |
| 2000 | 1.2 | 1.2 | - |

Fertility has also been strongly dysgenic among the Chinese and Malays. Li (1992) gives fertility for four levels of education found in the 1980 census for Chinese and Malays (but not for Indians). The results are given in Table 12.16 and show that for both groups the least educated have the highest fertility while the best educated have the lowest fertility.

Table 12.16. Dysgenic fertility for Chinese and Malays

| Education | Chinese | Malays |
| :--- | :---: | :---: |
| Basic | 4.27 | 4.91 |
| Primary | 2.28 | 2.43 |
| Secondary | 1.56 | 1.42 |
| Tertiary | 1.52 | 0.70 |

It is instructive to note the similarities between the race differences in intelligence and attainment in Singapore and those in Malaysia. Both countries have Chinese, Indian, and Malay populations, and in both countries the Chinese do best, followed by the Indians, while the Malays do the least well. In Singapore, sociologists have sought to explain the poor educational attainment, socioeconomic status, and earnings of the Malays as a result of discrimination against them by the majority Chinese. But this explanation will not work for Malaysia, where the Malays have always been the majority and in the nineteenth century had a dominant economic and social position by virtue of being well established, while the Chinese came to the country as poor immigrants. Despite this initial handicap, the Chinese gradually improved their position, and by the second half of the twentieth century were economically dominant. To a lesser extent the Indians have also improved their economic and social position and on most criteria perform better than the Malays. It is difficult to avoid the conclusion that the Chinese have secured their dominant
economic and social position in both countries by merit consisting of their higher intelligence and possibly also a stronger work ethic.

## 8. Thailand

In the 1990s the Chinese were approximately 12 percent of the population of Thailand (formerly Siam). There was a Chinese commercial community in Thailand as early as the fourteenth century. In the late eighteenth and nineteenth centuries the Thai kings were themselves half-Chinese. The first of these was the Thornburi dynasty (1767-1782) and was succeeded by the Bangkok dynasty. The ChineseThai rulers, who "were very dependent on the Chinese as traders in Bangkok, commercial cultivators in the southeast, and tin miners in the south" (Reid, 1997, p. 47), used them to collect taxes and employed them in staff positions in the royal household. The kings found the Chinese so useful that they encouraged immigration, with the result that in the early nineteenth century Bangkok became a predominantly Chinese city. "In Bangkok it was Sino-Thais who pioneered the early publishing houses, newspapers, and film corporations" (Reid, 1997, p. 51). Throughout the nineteenth century the Chinese formed a majority of the population of Bangkok. By the middle of nineteenth century, "Chinese merchants and petty traders quickly became prominent players in the new trade-based domestic economy," and by the closing decades of the century "large portions of the economy were controlled by the Chinese" (Tejapira, 1997, p. 80). By the early decades of the twentieth century the Chinese owned the major banks and "the royal household was using Chinese capital and expertise to create modern enterprises." In 1927, the Thai king Prajadhipok wrote a pamphlet entitled Democracy in Siam that discussed the merits and demerits of introducing democracy. He argued first that the Chinese were more successful than the Thais in business:
there are many reasons why the Chinese are able to make money more rapidly than other people; according to Chinese thought, money is the beginning and end of all good. The Chinese appear to be willing to do anything and everything for money (Reid, 1997, p. 56).

He went on to argue that if democracy were introduced the Chinese would inevitably take control of the country by applying the same motivations and skills that made them dominant in business, and the
parliament would be entirely dominated by the Chinese Party. One could exclude the Chinese from every political right, yet they would dominate the situation all the same, since they have the money. Any party that does not depend on Chinese funds cannot succeed, so that politics in Siam will be dominated and dictated by the Chinese merchants (Tejapira, 1997, p. 80). From this he concluded that it would be best to keep the political and military control of the country in Thai hands.

In the 1980s Suehiro Akira (1989) made a study of the ownership of the seventy largest businesses in Thailand. He found that only three were owned and operated by Thais. These were the Military Bank, the Crown Property Bureau, and the Siam Vidhaya group, owned by a Thai-Indian family. All the remainder were owned and operated by the Chinese. As two American sociologists have written "the Chinese in Thailand have been economically successful for hundreds of years" (Hamilton and Waters, 1997, p. 277).

Throughout Southeast Asia the indigenous peoples have realized that they cannot compete against the Chinese in free societies. The Southeast Asians have dealt with this problem by establishing dictatorships or authoritarian regimes that give privileges to the indigenous peoples and discriminate against the Chinese. We have seen this in Indonesia, Malaysia, and the Philippines. It has been the same in Thailand, where in the second half of the twentieth century the Chinese were barred from the Armed Forces' officer corps and had voting and candidacy rights curtailed (Tejapira, 1997, p. 81).

## 9. Conclusions: Explanations for Chinese Economic Success

How is it that throughout Southeast Asia tiny percentages of Chinese (except in Malaysia and Singapore) have been able to gain possession of such large percentages of the wealth? How to account for the success of the Chinese in starting at the bottom of the socioeconomic hierarchies when they arrived to work as traders, miners, and agricultural laborers and rising to the top of the hierarchy by the twentieth century? This has been a difficult one for economists and sociologists to explain. The standard sociological theory of group differences in education, socioeconomic status, and earnings is derived from Marxism, according to which a dominant class holds down other classes in order to maintain its own position. By extension this is applied
to dominant races holding down other races. The theory does not work well for Southeast Asia where the indigenous peoples have been the dominant class (except in Singapore), yet the Chinese have become the most successful group economically and in socioeconomic status. Much ink has been expended in the attempt to explain the success of the Chinese in Southeast Asia. Eight theories have most commonly been proposed.
(i) Confucianism. Many scholars have attributed the economic successes of the Chinese to the values of Confucianism, which is said to promote the virtues of education, saving, and hard work (e.g., Redding, 1990; Li, 1992). The most popular theory of Chinese success in business relates it to Confucianism; the theory assumes that to work hard for the glory of the family is the core of Confucianism (Suryadinata, 2001, p. 66). Cindy Fan, a professor of geography at the University of California, says that among geographers Confucianism is widely regarded as a major factor responsible for the socioeconomic success of the Chinese: "the high priority given to education is rooted in Confucianism, and is transferred from immigrants to their children." Jomo, however, comments "this is ironic because as recently as the 1970s Western culturalists were blaming Confucianism for the economic backwardness of the Chinese" (1997, p. 237). It takes barely a moment's thought to discern the limitations of this theory. If Confucianism is a major factor responsible for the high educational attainment of the Chinese, how is that the Japanese do equally well or even, in the United States, better in earnings?
(ii) Family networks. A number of sociologists have asserted that the Chinese socioeconomic success throughout Southeast Asia is attributable to their exceptionally strong family networks. For instance, Jesudason (1997, p. 122) has written
family ties are particularly important for cementing the internal organization of the firm, while broader ties have been central in regulating inter-firm transactions. These networks have given the Chinese important advantages over other ethnic groups in Southeast Asia.

In similar vein, Chinese sociologist Ma (2003, p. 28) writes "scholars have long recognized the important role of culture, especially social networks based on family and native-place ties, in the success of the Chinese in the business world."
(iii) Desire for wealth. Other sociologists have proposed that the

Chinese have an unusually strong desire for wealth. Thus, McVey (1992, p. 24) in discussing the socioeconomic success of the Chinese throughout Southeast Asia writes of their "desire for wealth accumulation," while Reid (1997, p. 40) writes more bluntly of their "greed."
(iv) Middleman minority. According to sociologist Anthony Reid "the most recently fashionable term in the North American sociological literature is middleman minority" (Reid, 1997, p. 36). The theory is that immigrants "occupy particular niches in small business." Why it is that not all immigrants are able to occupy these niches, that the Chinese in Southeast Asia are particularly adept at filling them, and why have these niches not been filled by some of the indigenous populations? This is not explained.
(v) Minority status. This is another frequently advanced theory. "Ethnic minority status has also been used to account for success in the economic domain; according to this theory, the ethnic Chinese are a clannish group; members help each other in business and use ethnic networks to promote economic interests" (Suryadinata, 2001, p. 66). The Chinese "high educational attainment is a strategy to compensate for discrimination in the labor market and a means to overcome racebased discrimination in achieving social mobility" (Fan, 2003, p. 279). The problem with this theory is that it does not address the problem that the Chinese do equally well in Singapore, where they are the majority, while the Indians who are also a minority in both Malaysia and Singapore do not do nearly as well.
(vi) Education. Education has frequently been advanced to explain the successes of some racial groups and the failures of others. The theory is that some groups value education, ensure that their children receive more of it, and the result is that they do better in the socioeconomic hierarchy. This is the explanation for the high socioeconomic status of the Chinese advanced by American sociologist Charles Hirschman, an expert on Malaysia. He proposes that the Chinese success is mainly due to their higher educational attainment, and that the main explanation for this lies in their higher socioeconomic status:
research has shown that the largest share of the ethnic gap in educational attainment (years of schooling) and income can be accounted for by differential social and economic background. Controlling for the additive effects of these background variables reduces the Malay-Chinese gap in educational attainment by

80 percent and the income gap by 65 percent. The occupational attainment process is more complicated. For occupations that are dependent upon formal educational qualifications, differential social origin was the primary explanation of ethnic inequalities (Hirschman, 1984, p. 4).
Thus, the Chinese do well because their parents have done well and gave them more education. The parents of the Chinese did well because their parents did well and so on back through the generations. However, in the nineteenth century, the Chinese did not have a socioeconomic status advantage, but somehow they managed to rise in the socioeconomic status hierarchy. What can explain this? Hirschman sees the problem and asks (1984, p. 18) "why were Chinese men more able to take advantage of the emergent opportunities?" To this question he answers lamely that "while it is impossible to address this question with the data in hand, it may be that Chinese are better positioned to take advantage of the diverse structure of employment in towns." Evidently, the Chinese were lucky in being in the right place at the right time.

Hirschman notes that while in terms of standard sociological theory, better education and coming from higher socioeconomic status families explains much of the success of the Chinese in socioeconomic status and income, it cannot provide a complete explanation. It appears therefore the Chinese must have some additional advantage. What can this be? The routine response of economists and sociologists when faced with this problem is to invoke discrimination, and Hirschman falls back on this well worn explanation: "it seems that employers, especially in the small-shop sector that dominates retail trade, are more likely to hire on the basis of ascriptive criteria of ethnic identity" (Hirschman, 1984, p. 4). In other and simpler words, employers prefer Chinese.
(vii) Personality qualities. Many writers have attributed the economic success of the Chinese to a variety of personality qualities. Adaptability is the key to their success, according to Daniel Chirot (1997, p. 25), a professor of international studies at the University of Washington: "the Chinese in Southeast Asia have produced an astounding number of success stories in business and what used to be called the 'liberal professions'; much of this success is owing to a high degree of adaptability." But what precisely is this adaptability and could it be associated with intelligence? Chirot does not even hint that this might be the case.

The possession of entrepreneurial virtues is the answer to the
question preferred by Kasian Tejapira (1997, p. 76), a lecturer in political science at the university of Thammasat in Bangkok, who suggests that the answer lies in "Chinese immigrant entrepreneurial virtues: diligence, patience, self-reliance, discipline, determination, parsimony, self-denial, business acumen, friendship, family ties, honesty, shrewdness, modesty." This covers everything except the crucial quality of high intelligence.
(viii) Luck. Others have fallen back on good luck as the crucial factor accounting for the Chinese success. This is the explanation advanced by John Wong and Sritua Arief, two economists at the National University of Singapore and the Southeast Asia Research and Development Institute in Kuala Lumpur, to explain the success of the Chinese in Malaysia. They believe the reason for the Chinese success is simple-it is all attributable to luck:

The economic explanation of the ethnic-based income inequality in Malaysia is actually quite simple to follow. The glaring income gaps between the Chinese and Malays were mainly caused by the fact that the former were in the modern-sector employment located in the urban areas ( $65 \%$ of the Chinese were in manufacturing in 1970 as compared with only $29 \%$ of the Malays) while the majority of the latter were mainly engaged in low-productivity subsistence farming in the rural areas ( $68 \%$ of the Malays in agriculture as compared with $21 \%$ of the Chinese). In other words, the Chinese were in a much better position than the Malays to benefit from the process of modern economic growth (Wong and Arief, 1984, pp. 33-34).
The problem with all these explanations is that they are post boc suggestions for particular instances of Chinese success; the qualities proposed for this success are unmeasurable and have no predictive value. They fail to acknowledge the total pattern of Chinese success, not only in Southeast Asia but also throughout the world. The unifying concept that explains the Chinese socioeconomic success, not only in Southeast Asia but also in many other locations, is their high intelligence. The Chinese have a 16 IQ point advantage over the indigenous Southeast Asians, almost exactly the same as the 15 IQ point advantage of whites over blacks in the United States, and this is sufficient to explain their socioeconomic success.

It may also be that in addition the Chinese have personality advantages of a stronger work ethic or higher conscientiousness. The economic and social achievements of the Indians, who perform better in these regards
than Malays in Malaysia, despite having virtually identical IQs, and also in Singapore, suggests that racial difference in personality qualities also contribute to differences in earnings and socioeconomic status. The Indians are relatively recent immigrants to Malaysia, and possibly it was those who had these personality advantages who migrated.
"Why are the Chinese so successful in business?" ask the American sociologists Gary Hamilton and Tony Waters (1997, p. 258). They continue "This question has been asked again and again in reference to the Chinese in virtually every location outside of China where they have settled in substantial numbers in the past 150 years." But they do not have an answer. They conclude only that throughout Southeast Asia there has been "a disproportionately high level of Chinese success and an extraordinary ability of new groups of Chinese to adapt to whatever situation they found. What it is about the Chinese that accounts for this success remains poorly explained "(Hamilton and Waters, 1997, p. 279). The answer to this question turns out to be that the Chinese are more intelligent than the indigenous peoples of Southeast Asia.

## Chapter 13

## The United States

1. Composition of the Population
2. Race and Ethnic Differences in Intelligence
3. Mental Retardation
4. Educational Attainment
5. Earnings and Wealth
6. Socioeconomic Status
7. Unemployment and Poverty
8. Who are the Gifted?
9. Race Differences in Eminence
10. Crime
11. Infant Mortality and Life Expectancy
12. Fertility
13. Conclusions

The United States is, as has often been said, "a nation of immigrants," but it was almost entirely a nation of North European immigrants and African slaves until the mid-nineteenth century. The first Chinese came to the United States in the 1850s to work as miners during the gold rush and in the period 1860-1882 to work on the transcontinental railroads and as agricultural laborers. Chinese immigration ceased in

1882 following the Chinese Exclusion Act. The Chinese population stood at around 60,000 to 90,000 up to 1945. The 1965 Immigration Act abolished the national quotas for immigration and effectively opened the gate for new waves of immigrants from Asia, the Caribbean and Latin America. The 1990 Immigration Act increased the numbers of immigrants permitted to enter the United States.

## 1. Composition of the Population

The principal racial and ethnic groups with which we are concerned are blacks, whites, Jews, who are generally counted as whites but are here considered separately when possible because of their high IQs and achievements; East Asians, consisting of ethnic Chinese, Japanese, Koreans, and most of the Vietnamese; Southeast Asians, consisting of Filipinos, Cambodians, Hmong, and Laotians; Hispanics, consisting of immigrants from former Spanish colonies in Latin America and the Caribbean; and Native American Indians. The percentages of these in the population found in the censuses for 1980 and 2000 are given in Table 13.1. It will be seen that the percentage of whites declined from 80 to 69 percent over the 20 -year period, while that of East Asians, Southeast Asians, and Hispanics doubled.

Table 13.1. Composition of the population (percentages)

| Group | $\mathbf{1 9 8 0}$ | $\mathbf{2 0 0 0}$ |
| :--- | :---: | :---: |
| Blacks | 12 | 12 |
| East Asians | 1 | 2 |
| Hispanics | 6 | 12 |
| Jews | 2 | 2 |
| Native Americans | 0.6 | 0.6 |
| Southeast Asians | 1 | 2 |
| Whites | 80 | 69 |

## 2. Race and Ethnic Differences in Intelligence

Racial and ethnic differences in intelligence are summarized in Table 13.2. All the IQs are given in relation to a white IQ of 100 . Row 2 gives an IQ of 85 for blacks as the median of hundreds of studies carried out from around 1920. Row 3 gives an IQ of 104 for East Asians consisting of ethnic Chinese, Japanese, and Koreans and is virtually the same as

Table 13.4. Prevalence of mental retardation (MR) and learning disability (LR) (percentages)

|  | Condition | Asian | Black | White | Hispanic | Native American |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | MR | - | 5.3 | 1.7 | - | - |
| 2 | MR | 0.5 | 2.1 | 1.0 | 1.0 | 1.2 |
| 3 | LD | 2.0 | 7.0 | 6.0 | 5.4 | 6.3 |
| 4 | LD | - | 18.6 | 9.7 | 15.0 | - |

Sources: 1: Broman, Nichols, Shaughnessy \& Wallace, 1987; 2-3:
Zhang and Katsiyannis, 2002; 4: Office of Civil Rights, US Dept of Education.
the Implementation of the Individuals with Disabilities Education Act for 2000. The figures are for school students in special education for the mentally retarded. It will be noted that the race differences in the prevalence rates are smaller than those shown in row 1 in so far as blacks have only approximately double the rate of mental retardation as whites ( 2.1 per cent and 1.0 per cent, respectively). Possibly the explanation for this is that there is strong pressure against putting blacks into special education on the grounds that it is discriminatory. The Native American Indians have a rate of mental retardation of 1.2 per cent, higher than that of whites but lower than the blacks, as would be expected from their average IQ. It is, however, anomalous that the Hispanics should have the same rate of mental retardation as the whites, despite having a lower IQ. The Asians have a substantially lower rate ( 0.5 per cent) than the whites, consistent with their having a higher average IQ.

Row 3 gives rates of learning disability, a less serious form of mental retardation consisting of poor school performance and placement in special education classes. It will be seen that once again the highest prevalence is among blacks followed by Native American Indians and then by whites. It is surprising to find Hispanics with a lower prevalence of learning disability than whites. Possibly the explanation of this anomaly is that the diagnosis of learning disability is not consistent for the different races. For instance, many Hispanics do not speak English and are at school with other Hispanics who do not speak English, so they are all taught in regular classes rather than in classes designated for slow learners. The low prevalence of learning disability among the Asians is consistent with their low rate of mental retardation. Row 4 gives rates of learning disability defined as placement in special education classes in New York in 1998 and shows the expected white-Hispanic-black gradient.

## 4. Educational Attainment

Racial and ethnic differences in educational attainment can be assessed by the percentages literate, possession of the High School Diploma for graduation from High School, and by scores on tests. Race differences in literacy have been calculated from census data for 1880,1900 , and 1910 by Darity, Dietrich, and Guilkey (1997) and are shown in Table 13.5 (the censuses for these years did not record educational qualifications). During this period the whites were nearly all literate (these figures are for the ethnic English; nonEnglish speaking Whites were counted as illiterate if they could not read English, and this applied to $14-20$ per cent of them in these years). Next came the Jews and the East Asians with 70 to 83 percent literate. After these came the Hispanics, Native Americans, and blacks with much lower levels of literacy. These figures show that as far back as 1880 to 1910 the United States was racially divided between the ethnic English, the Jews, and the East Asians with high levels of literacy and the Hispanics, Native Americans, and blacks of whom only half were literate even by 1910.

Table 13.5. Race and ethnic differences in literacy, 1880-1910 (percentages)

|  | Group | $\mathbf{1 8 8 0}$ | 1900 | 1910 |
| :--- | :--- | :---: | :---: | :---: |
| 1 | Blacks | 27 | 28 | 50 |
| 2 | East Asians | 75 | 70 | 81 |
| 3 | Hispanics | 42 | 58 | 50 |
| 4 | Jews | 83 | 79 | 79 |
| 5 | Native Americans | 27 | 28 | 50 |
| 6 | Whites | 95 | 99 | 99 |

Percentages of the races that completed high school and had been awarded High School Diplomas for 1980 and 1990, and who obtained college degrees, given in the censuses for these two years, are shown in Table 13.6. We see much the same rank order as for literacy during the years 1880-1910, except that the Jews (Jews are identified from their Russian ethnic origin because this is what the great majority were) are now ranked first, East Asians and whites ranked second and about the same, followed by Native Americans and blacks, while Hispanics had the lowest percentage of high school diplomas. The main reason
for the low figure for Hispanics is that many of these were recent immigrants without much education.

Table 13.6. Race and ethnic differences in high school diploma and college degree, 1980-1990 (percentages)

|  | Group | H.S. Diploma <br> $\mathbf{1 9 8 0}$ | H.S. Diploma <br> 1990 | Degree 1990 |
| :--- | :--- | :---: | :---: | :---: |
| 1 | Blacks | 62 | 75 | 13 |
| 2 | East Asians | 86 | 91 | 37 |
| 3 | Hispanics | 43 | 51 | 10 |
| 4 | Jews | 92 | 97 | - |
| 5 | Native Americans | 62 | 75 | - |
| 6 | S.E. Asians | - | - | 20 |
| 7 | Whites | 79 | 91 | 26 |
|  |  |  |  |  |
|  |  |  |  |  |

Data for racial and ethnic differences in scores on educational tests for Asians, blacks, Hispanics, and whites are given in Table 13.7. The differences are expressed as $d$ scores (standard deviation units) for educational attainment in relation to whites, minus signs showing racial minorities scoring lower than whites and plus signs showing racial minorities scoring higher than whites. Rows $1-4$ give $d$ scores on mathematics and reading obtained in 1965 in the Coleman Report based on approximately 5,000 third to twelfth graders (age about 9 to 18 years) from each of the four principal racial minorities. It will be seen that in both math and reading whites did best followed closely by East Asians, and somewhat behind these by Native Americans and Hispanics, and finally blacks. Rows 5-7 give scores on reading, math, and science obtained by 10th graders (age about 16 years) in 1988 in the National Educational Longitudinal Study. It will be seen that in reading and science, whites again did best followed closely by Asians (these were aggregated East and South Asians), and somewhat behind those by Hispanics and blacks. In math, Asians did best followed closely by whites, and again someway behind these by Hispanics, and finally by blacks. Closely similar results were obtained in a 1989 survey of 198, 127 12th grade students in California shown in rows 8-10. Once again in reading whites did best followed closely by Asians (aggregated Northeast and South Asians), and somewhat behind these by Hispanics and finally by blacks. In math, Asians did best followed closely by whites,

Table 13.7. Race and ethnic differences in educational attainment in relation to whites (ds)

|  | Group | Year | Age | Math | Reading | Science |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | East Asians | 1965 | $9-18$ | -0.19 | -0.29 | - |
| 2 | Blacks | 1965 | $9-18$ | -1.01 | -0.93 | - |
| 3 | Hispanics | 1965 | $9-18$ | -0.97 | -0.81 | - |
| 4 | Native Americans | 1965 | $9-18$ | -0.81 | -0.73 | - |
| 5 | Asians | 1988 | 16 | 0.10 | -0.10 | -0.11 |
| 6 | Blacks | 1988 | 16 | -0.68 | -0.58 | -0.68 |
| 7 | Hispanics | 1988 | 16 | -0.58 | -0.52 | -0.55 |
| 8 | Asians | 1989 | 18 | 0.13 | -0.30 | - |
| 9 | Blacks | 1989 | 18 | -0.66 | -0.51 | - |
| 10 | Hispanics | 1989 | 18 | -0.56 | -0.49 | - |
| 11 | Vietnamese | 1994 | 15 | 0.27 | -0.33 | - |
| 12 | Cambodians | 1994 | 15 | -0.40 | -1.1 | - |

Sources: rows 1-4: Coleman, 1966; rows 5-7: Lynn \& Mau, 2002; rows 6-8: NCES, 2000; rows 8-10: Rumberger \& Willms, 1992; rows 11-12: Kim, 2002.
and again somewhat behind these by Hispanics and finally by blacks. Rows $11-12$ give $d$ scores on math and reading for Indo-Chinese children from Vietnam and Cambodians in San Diego. The Vietnamese Indo-Chinese children scored above national norms on math and below on reading, while the Cambodians scored below national norms on both math and reading. A further study of the educational attainments of Indo-Chinese children ( $\mathrm{n}=536$ ) from Vietnam was carried out in the late 1970s, about three and a half years after their arrival in the United States. The children scored at the 54th percentile on the California Achievement test of math and language, equivalent to an IQ of 101.5 (Caplan, Choy, and Whitmore, 1992). The children did better in math than in language, but the figures were not given.

Racial and ethnic differences of 8th graders in math and science in 1992 expressed as average percentile scores collected in the National Educational Longitudinal Study are shown in Table 13.8 (Gua, 2005, p. 5). The East Asians are the average of ethnic Chinese, Japanese, and Koreans. The Filipinos performed unusually well in this study. So also did the Southeast Asians, probably because many of these are ethnic Chinese-Vietnamese. Hispanics and Pacific Islanders came next as would be expected from their IQs, while blacks and Native Americans performed worst.

Table 13.8. Race and etbnic percentile scores of 8th graders in math and science, 1992

| Group | Math | Science |
| :--- | :---: | :---: |
| East Asians | 73 | 67 |
| Filipinos | 62 | 57 |
| Southeast Asians | 61 | 52 |
| Whites | 56 | 56 |
| Hispanics | 39 | 37 |
| Pacific Islanders | 39 | 36 |
| Blacks | 33 | 29 |
| Native Americans | 29 | 29 |

Data for racial and ethnic SAT scores (Scholastic Achievement Test, formally the Scholastic Aptitude Test) for 2003, are given in Table 13.9 (Gua, 2005, p. 245). This confirms the high math abilities of Asians and their slightly lower verbal abilities, as compared with whites. This test is only taken by those applying for entrance to colleges and so is not representative of the total population. This is probably the explanation for the relatively high scores achieved by Native Americans in contrast to their poor performance among 8th graders shown in Table 13.7. The Native Americans who take the SAT appear to be a more select group.

Table 13.9. Race and ethnic SAT scores, 2003

| Group | Math | Verbal |
| :--- | :---: | :---: |
| Asians | 575 | 508 |
| Whites | 534 | 529 |
| Native Americans | 482 | 480 |
| Mexicans | 457 | 448 |
| Puerto Ricans | 453 | 456 |
| Blacks | 426 | 431 |

Taking the results as a whole, East Asians perform about as well as whites, but Southeast Asians perform less well. East Asians typically perform better on math and a little worse on reading and verbal tests. The same Asian pattern of strong non-verbal reasoning ability and weaker verbal ability is found in indigenous Chinese and Japanese in their own countries (as shown in Lynn, 2006), apparently because this is a genetic characteristic of East Asians. These results on educational attainment are consistent with those on intelligence given in Section 2 in so far as Asians
and whites score about the same, followed by Native Americans and Hispanics, while blacks score lowest. Puerto Ricans scored somewhat higher than blacks in the 2003 SAT (Table 13.8), consistent with their greater proportion of white ancestry. In the 1990 census 46 per cent of the Puerto Rican population identified themselves as white.

How far can these differences in scores on educational tests be attributed to the quality of schooling? The National Center for Health Statistics (NCES) (2000) has published results for 1998-1999 for a nationwide sample of $22,0005-6$-year-old pupils enrolled in kindergarten. It does not give means but provides the percentages in the top 25 percent in math, reading, and general knowledge. The results show that white children did best with 32-34 percent among the top 25 percent, Hispanics come next with 12-15 percent, while Blacks perform worst with 6-15 percent. The performance of Asians was not given in this study. These results are instructive because the children were tested shortly after they arrived in school and therefore cannot be attributed to effects of schools.

## 5. Earnings and Wealth

Racial and ethnic differences in average annual earnings (thousands of US dollars) calculated from census data are given in Table 13.10. Column 1 gives average annual earnings (thousands of US dollars) from the 1980 census (these are the earnings in 1979, the previous year) of native born men aged $25-54$ given in the Bureau of the Census Public Use Microdata one per cent sample. The figure of those who identified themselves as ethnic Russians are presented for Jews, because virtually all

Table 13.10 Race and ethnic differences in average annual earnings (\$1000) for men aged 25-54

| Group | 1980 | $\mathbf{1 9 9 0}$ |
| :--- | :---: | :---: |
| Asians | 23.5 | 46.4 |
| East Asians | 26.6 | - |
| Southeast Asians | 20.3 | - |
| Blacks | 18.6 | 24.5 |
| Hispanics | 19.3 | - |
| Jews | 32.4 | - |
| Native Americans | 19.1 | - |
| Whites | 23.4 | 46.4 |

of these are Jewish. It will be seen that there is a perfect linear association between the IQs of the groups and their average earnings. Jews with the highest IQ had the highest average earnings, while blacks with the lowest IQ had the lowest average earnings. Column 2 gives average annual earnings (thousands of US dollars) for 1990 of native born men aged 25-54 found in the 1990 census (Kollehlon and Eule, 2003). The figure for Asians is for all Asians, who obtained the same average earnings as whites, while blacks had much lower average earnings.

Table 13.11 gives a breakdown for a number of racial and ethnic groups in average per capita income and wealth. Column 2 gives average annual incomes ( $\$ 1000$ ) for men and women combined from the 1990 census given by Bonilla-Silva (2004). The figures are low because they include the unemployed and are thus income rather than earnings. The Asians are categorized as East Asians and Southeast Asians. Of the East Asians, the Chinese, Japanese, and Taiwanese have higher average incomes than whites and Southeast Asians. The Koreans have slightly lower incomes because they are the most recent arrivals. The Southeast Asians have much lower incomes except for Filipinos, who have

Table 13.11. Race and ethnic differences in average annual incomes and wealth

| Group | Income 1990 | Wealth Native <br> $\mathbf{1 9 9 2}$ | Wealth Immigrants <br> $\mathbf{1 9 9 2}$ |
| :--- | :---: | :---: | :---: |
| Whites | $\mathbf{1 2 , 1 5 9}$ | $\mathbf{1 0 5 , 0 6 4}$ | $\mathbf{1 4 6 , 8 2 1}$ |
| Asians | - | 96,475 | - |
| East Asians | - | - | - |
| Japanese | 15,802 | - | 135,575 |
| Chinese | 12,695 | - | 191,824 |
| Taiwanese | 13,301 | - | - |
| Koreans | 10,177 | - | 91,955 |
| Southeast Asians | - | - | - |
| Filipinos | 12,314 | - | 74,224 |
| Cambodians | 3,760 | - | - |
| Hmong | 1,192 | - | - |
| Laotians | 4,250 | - | - |
| Vietnamese | 7,931 | - | 38,447 |
| Mexicans | - | 38,014 | 26,320 |
| Puerto Ricans | - | 26,971 | - |
| Blacks | 7,210 | 23,414 | 19,402 |

been longer in the United States. The other groups are more recent immigrants. Column 3 gives average wealth of the native born obtained from the 1992 Survey of Income provided by Hao (2004). We see that whites have the greatest wealth, closely followed by Asians (not disaggregated in this data set). Much lower come Mexicans with less than half the average wealth of Asians. Below these come the Puerto Ricans, and then the blacks. Column 4 gives the average wealth of immigrants also provided by Hao (2004). We see that the differences among these are similar. The Chinese have the greatest wealth, followed by whites, Japanese, and Koreans. Then come the Filipinos and the Vietnamese. Below these come Mexicans, and at the bottom are the blacks (mainly from the Caribbean).

Table 13.12 gives a breakdown for different Hispanic immigrant groups in average per capita income ( $\$ 1000$ ) for men and women combined from the 1990 census and shows also the percentage of these groups who identified themselves as white. These data are provided by Bonilla-Silva (2004). It will be seen that there is a strong linear relationship between the percentage that identified themselves as white and average incomes. Immigrants from Argentina, Chile, and Cuba are largely white and have the highest average incomes. Immigrants from Puerto Rico, Guatemala, El Salvador, and Mexico are lowest on the percentage white and have the lowest average incomes. Immigrants from Bolivia and Costa Rica are intermediate on the percentage white and have average incomes.

Among American blacks, intelligence measured by vocabulary is

## Table 13.12. Differences in average annual incomes for men and women among Hispanic immigrants and percentages self-identified as white (1990)

| Group | Income | \% White |
| :--- | :---: | :---: |
| Argentina | 15,506 | 85 |
| Chile | 12,728 | 75 |
| Cubans | 11,727 | 85 |
| Bolivia | 10,662 | 68 |
| Costa Rica | 10,616 | 59 |
| Puerto Rico | 7,250 | 46 |
| Guatemala | 7,104 | 42 |
| El Salvador | 6,745 | 39 |
| Mexico | 6,470 | 51 |

related to skin color in so far as it is highest among the light skinned, intermediate among medium skinned, and lowest among dark skinned. This has been shown for the vocabulary scores obtained in the National Opinion Research Center's survey in 1982 (Lynn, 2002). The same relationship with skin color is present for years of education, occupational status, and income, shown in the 1979-80 National Survey of Black Americans and given by Keith and Herring (1991). The figures for these are shown in Table 13.13. Notice that the vocabulary difference between light skinned and dark skinned blacks (0.9) is almost as great as the difference between the light skinned blacks and whites (1.08). The sociologists who present these data believe they show that "the continuing disadvantage that darker blacks experience is due to persisting discrimination against them in the contemporary United States" (p. 760). They do not mention the possibility that the educational, occupational, and income advantages of the lighter skinned blacks could be due to their having higher intelligence as a result of their greater proportion of white genes.

## Table 13.13 Vocabulary, education, occupational status, and incomes in relation to skin color

| Group | Dark | Medium | Light | Whites |
| :--- | :---: | :---: | :---: | :---: |
| Vocabulary | 4.19 | 5.01 | 5.10 | 6.18 |
| Education: years | 10.3 | 11.0 | 11.9 | - |
| Professional \% | 11 | 16 | 25 | - |
| Laborers \% | 27 | 22 | 13 | - |
| Income | 6,965 | 8,632 | 9,630 | - |

## 6. Socioeconomic Status

Racial and ethnic differences in socioeconomic status from census data from 1880 to 1990 have been provided by Darity, Dietrich, and Guilkey (1997). Socioeconomic status is calculated as the Duncan index, which gives a score to each occupation (e.g., physicians 100, laborers 1, etc.). These scores are then averaged to give a mean for each racial and ethnic group. The results are given in Table 13.14. The broad picture is that in 1880-1910 the Jews and the three white groups of English, Scots-Irish, and Continental Europeans had the highest average socioeconomic index. During these years the East Asians, Hispanics, Native American Indians, and blacks did poorly. Looking at the data in more detail,
we see that in 1880 the Jews performed best. The English came next, closely followed by the Scots-Irish and the continental Europeans. The East Asians performed poorly because these were the Chinese who were brought in to do unskilled laboring work such as building the railways and hence had low socioeconomic status. The Hispanics followed by the Native American Indians came next, and blacks performed the worst. In 1900 and again in 1910 the English and the Scots-Irish did best. The Jews were a little lower, reflecting the large influx of impoverished Jewish immigrants from Russia between 1880-1900, many of whom worked in low socioeconomic status occupations such as the garment industry. The position of the Continental Europeans also deteriorated, again reflecting the large influx of impoverished immigrants from Continental Europe. The East Asians, Hispanics, Native American Indians, and blacks continued to perform poorly.

In 1980 and 1990 the racial and ethnic hierarchy had changed. The Jews were well ahead followed by the East Asians. Then came the three white groups: the English, the Scots-Irish, and the Continental Europeans. A long way behind came the Native American Indians, the blacks, and the Hispanics. The low average score of the Hispanics reflects the large-scale immigration from the mid-1960s principally of Mexicans to do mainly unskilled work in agriculture and as domestics.

Similar differences are present in the percentages of the native born men and women aged 25 and over working in professional and managerial occupations shown in the 1980 census (East Asians are Japanese, Chinese, and Koreans; Southeast Asians are Filipinos) and in the 1990 census (Southeast Asians are Filipinos, Vietnamese, Cambodians, Hmong, and Laotians) shown in Table 13.15.

Table 13.14. Race and etbnic differences in socioeconomic status, 1880-1990

| Group | $\mathbf{1 8 8 0}$ | $\mathbf{1 9 0 0}$ | $\mathbf{1 9 1 0}$ | $\mathbf{1 9 8 0}$ | $\mathbf{1 9 9 0}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Blacks | 11.70 | 13.03 | 13.65 | 29.19 | 30.81 |
| East Asians | 13.41 | 13.36 | 17.63 | 49.32 | 51.75 |
| English | 24.38 | 28.14 | 30.39 | 45.17 | 47.61 |
| Scots-Irish | 22.57 | 27.62 | 31.64 | 46.09 | 46.73 |
| Europeans | 21.39 | 19.36 | 24.78 | 43.93 | 44.67 |
| Hispanics | 13.60 | 11.54 | 12.54 | 27.85 | 27.48 |
| Jews | 27.41 | 26.93 | 29.10 | 59.65 | 60.97 |
| Native Americans | 12.76 | 16.98 | 14.86 | 31.99 | 31.64 |

In both years the East Asians had the highest percentages in professional and managerial occupations followed by whites; below these came blacks and Southeast Asians, while the Hispanics had the fewest. The main reason for the under-representation of Hispanics is that many of them were recent immigrants who had not had the opportunity to acquire the educational qualifications required for professional and managerial occupations.

Table 13.15, Race and ethnic percentages in professional and managerial occupations, 1980-1990

| Group | 1980 | 1990 |
| :--- | :---: | :---: |
| East Asians | 28 | 33 |
| Whites | 23 | 29 |
| S.E. Asian | 14 | 18 |
| Blacks | 14 | 18 |
| Hispanics | 12 | 14 |
| Sources: <br> 1980: <br> 1985. Garner et al.; |  |  |

## 7. Unemployment and Poverty

Racial and ethnic differences in unemployment and poverty are broadly consistent with differences in incomes. Racial statistics for poverty are shown in Table 13.16 for 1979 from the 1980 census (men and women combined) and for men and women separately from survey data collected for 1996, with poverty as defined by the US Census Bureau based on money income and family composition. It will be seen that in both data sets whites had the lowest rates of poverty for both men and women. Asians came next lowest, almost the same percentage in poverty in 1979 as whites but a somewhat higher percentage in poverty in 1996.

Table 13.16 Race differences in poverty

| Group | $\mathbf{1 9 7 9}$ | 1996 Men | 1996 Women |
| :--- | :---: | :---: | :---: |
| Asians | 7.7 | 10.6 | 12.6 |
| Blacks | 26.5 | 15.9 | 26.6 |
| Hispanics | 21.3 | 20.3 | 26.9 |
| North Americans | - | 18.8 | 25.0 |
| Whites | 7.0 | 6.3 | 8.9 |

Sources: 1979: Garner et al., 1985; 1996: Elmelech \& Lu, 2004.

The reason for this is that Asians included substantial numbers of recent immigrants from South Asia, mainly from Laos, Cambodia, and the Hmong, many of whom do not speak English and do not have high levels of skill. Hispanics had high percentages in poverty for the same reasons. Native Americans had almost as high a percentage in poverty in 1996 because many of them live on reservations and are welfare dependent. Blacks had the highest percentage in poverty in 1979 and a high percentage in poverty in 1996, but black men had a lower percentage in poverty than black women. The reason for this is that more black women are single mothers whose men folk do not support them.

## 8. Who are the Gifted?

Race differences in the proportions of the gifted are consistent with the differences in IQs. Studies showing this are given in Table 13.17. Row 1 gives the proportions of the gifted children (defined as those with IQs of 130 and above) aged 5-9 years, among 26,300 tested in San Diego schools during the years 1984-1993 (Saccuzzo and Johnson, 1995). The proportions of the gifted are presented as odds ratios in relation to 1.0 for the whole sample. It will be seen that the Asians had the highest proportion of gifted ( $\mathrm{OR}=1.8$ ) followed by whites ( $\mathrm{OR}=1.6$ ), Native Americans ( $\mathrm{OR}=$ 0.9 ) and finally by Hispanics and Blacks ( $\mathrm{OR}=0.45$ ). Thus Asians had four times the proportion of gifted as Hispanics and blacks. Row 2 shows similar results found in an examination of the top 3 per cent in combined math and reading in the National Educational Longitudinal Study data set of 23,701 eighth grade students surveyed in 1988 (Konstantopoulos, Modi, and Hedges, 2001). Once again the Asians had the highest proportion of gifted ( $\mathrm{OR}=2.17$ ) followed by whites ( $\mathrm{OR}=1.86$ ), Hispanics ( $\mathrm{OR}=0.45$ ), blacks ( $\mathrm{OR}=0.37$ ), and Native Americans $(\mathrm{OR}=0.17)$. The differences are a little greater in this data set than in row 1 , in so far as the Asians had almost five times the proportion of gifted as the Hispanics and almost six times the proportion of gifted as the blacks. The two data sets are reasonably consistent, except for the higher proportion of gifted Native Americans in the first data set compared with the second. The explanation for this is probably that the first data set was obtained in San Diego to which the more intelligent Native Americans have migrated, while the second data set was obtained nationwide and included many Native Americans living on reservations.

Row 3 gives the percentages of gifted high school students in California. The figures are for those in the top eight of their graduating classes in high school, which qualifies them for admission to the University of California. The Asians perform best, the majority of these being East Asian including some Southeast Asians. They are followed by the whites and then by the Hispanics and finally by the blacks (Thernstrom and Thernstrom, 2003) (no figure for Native Americans was given in this study).

## 9. Race Differences in Eminence

Because intelligence is a determinant of achievement it would be expected that groups with high average IQs would produce a greater proportion of eminent individuals. The first study of race differences in eminence in the United States was made by Weyl and Possony (1963). They used seven reference books of eminence as sources (e.g., Who's Who in America, American Men and Women of Science, Who's Who in Finance and Industry, etc), and counted the numbers in these with identifiable ethnic and racial names. For instance, Cole and Spence are the commonest English names, Schmid and Wagner are the commonest German names, while Cohen and Rosenberg are the commonest Jewish names. They counted Washington as a black name, having found that blacks are eighty per cent of those with this name. Next, they expressed the frequency of ethnic and racial names in the reference books as a ratio of their frequency in the general population taken from Social Security rolls. The ratios for each group were finally multiplied by 100 to give an "occupational performance coefficient." Thus, a performance coefficient of 100 is the average for the total population. Their results for the performance coefficients of five racial groups are shown in Table 13.18. It will be seen that the Jewish coefficient is the highest at about 450 percent higher than the white. East Asians came next at about half that of Jews but two and a half times higher than that of

Table 13.17. Prevalence of the gifted (rows 1 and 2: odds ratios; row 3: percentages)

|  | Years | Asian | Black | Hispanic | Native American | White |
| :--- | :--- | ---: | :---: | :---: | :---: | :---: |
| 1 | $1984-1993$ | 1.80 | 0.45 | 0.45 | 0.90 | 1.60 |
| 2 | 1988 | 2.17 | 0.37 | 0.45 | 0.17 | 1.86 |
| 3 | UC Eligible | 32 | 2.5 | 3.5 | - | 12.4 |

whites. Hispanics come much lower at 10 percent of the whites, while the blacks'coefficient is the lowest at 9 percent of the white.

Table 13.18. Race differences in rates of eminence (total America=100)

| Jews | East Asian | Whites | Hispanic | Blacks |
| :---: | :---: | :---: | :---: | :---: |
| 448 | 249 | 99 | 10 | 9 |

A second study of racial and ethnic differences in eminence was made by Lieberson and Carter (1979) for the years 1924-1925, 1944-1945, and 1974-1975, and a further study for the years 1995-1995 has been made by McDermot (2002). They followed Weyl and Possony's method of taking Who's Who in America as their source for eminence and categorizing those listed into ethnic groups on the basis of their names. Thus, the names Bell, Bennet, etc., were classified as English; Amato, Basso, etc. as Italian; Abraham, Abrams, etc. as Jewish; Carlson, Dahl, etc, as Scandinavian; and Michal, etc. as Slavic. The identification of blacks from their names is problematic because typically they have English names, so it is not possible to tell whether the entry is English or black. To handle this problem they checked whether the names appeared in Who's Who among Black Americans. The frequency of the names in the general population were taken from Social Security records. The rates of inclusion of the names in Who's Who in America were then calculated as rates per 10,000 of the names in the general population. The results are shown in Table 13.19. We can see that blacks improved their rates over the seventy-year period. However, even in 1994-1995 their rate was less than a fifth of the English and Italian. Furthermore, 14 per cent of blacks were included for their eminence in sport compared with only one per cent of the other white groups and none of the Jews. The English had by far the highest index in 1924-1925, but their eminence has declined over the century as new nonEnglish immigrants have established themselves, so that by 1994-1995 their index was lower than that of the Scandinavians and Slavics.

Perhaps the most striking feature of the data is the high index of the Jews. Even in 1924-1925 their index of 1.59 was higher than that of any of the other white groups except for the English (3.74). This was a remarkable achievement considering that most Jews arrived in the United States as impoverished immigrants fleeing persecution in Russia and Poland from 1881 onwards, yet only 45 years later they were well
ahead of all other groups except the English. By 1974-1975 their index was more than twice as high (8.39) as that of the English (3.88), and by 1994-1995 it was almost six times (16.62) higher than that of the English (2.83) and well ahead of all the other groups. The increasingly high Jewish indices reflect the two or three generations it takes for impoverished immigrants from Eastern Europe in the period 1880-1914 and from Germany 1933-1939 to establish themselves in the United States and get the college education that is generally required to achieve the degree of eminence for inclusion in Who's Who in America.

The Lieberson and Carter and McDermot studies evidently confirmed the results of Weyl and Possony, except that they did not give data for East Asians or Hispanics. It is apparent that the race differences in the indices of eminence reflect the IQs of the racial and ethnic groups. Jews with the highest IQ have an index of eminence much higher than any of the other groups; the four white groups with their IQ of 100 come next, while the blacks with their IQ of 85 have the lowest index. Surprisingly (or perhaps unsurprisingly), the sociologists who made these studies make no mention of the IQ differences between the groups.

Table 13.19. Rates of inclusion in Who's Who in America (per 10,000 population)

| Group | $\mathbf{1 9 2 4 - 2 5}$ | $\mathbf{1 9 4 4 - 4 5}$ | $\mathbf{1 9 7 4 - 7 5}$ | $\mathbf{1 9 9 4 - 9 5}$ | \% change 1975-95 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Black | 0.06 | 0.07 | 0.37 | 0.53 | 43 |
| English | 3.74 | 3.74 | 3.88 | 2.83 | -27 |
| Italian | 0.09 | 0.33 | 1.31 | 2.72 | 108 |
| Jewish | 1.59 | 1.97 | 8.39 | 16.62 | 98 |
| Scandinavian | 0.42 | 1.29 | 3.57 | 4.79 | 34 |
| Slavic | 0.16 | 0.29 | 1.48 | 3.52 | 138 |
| Total | 2.27 | 2.48 | 3.42 | 3.55 | 4 |

## 10. Crime

Race differences in crime for 1994 have been given by Taylor and Whitney (1999) and are shown in Table 13.20. The figures are presented as odds ratios (OR) in relation to 1.0 for whites. Column 2 gives the OR for being in prison per 10,000 population and shows blacks with the greatest proportion in prison at 8.1 times that of whites. East Asians have the lowest proportion in prison at only half (0.5) times that of

Table 13.20. Race differences in rates of crime in 1994 (odds ratios)

| Group | Prison | Assault | Homicide | Rape | Robbery |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Black | 8.1 | 5.0 | 11.0 | 5.5 | 11.2 |
| East Asian | 0.5 | 0.5 | 0.6 | 0.4 | 0.8 |
| Hispanic | 3.6 | 3.0 | 2.5 | 3.0 | 3.0 |
| Native American | 2.7 | 2.0 | 2.0 | 1.7 | 2.1 |
| White | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

whites, while Hispanics and Native Americans have 3.6 and 2.7 times the proportion in prison of whites. Columns $3,4,5$ and 6 give ORs for assault, homicide, rape, and robbery and show similar race differences with minor variations. The year 1994 for which these data are given is a typical year. I have provided similar statistics for a number of other years in Lynn (2002a).

## 11. Infant Mortality and Life Expectancy

Race differences in infant mortality per 1,000 live births for selected years from 1920 through 1990 are shown in Table 13.21. For 1920 and 1950 data are only available for blacks and whites. It will be seen that in both years the infant mortality rate for blacks was much greater than for whites. The same was true for 1990, by which year the rates had fallen dramatically but the black-white differential was a little larger than in 1920 and 1950. For 1990 rates are available for other races (these figures are for native born) and show that East Asians had the lowest rate followed by whites, the rates of Hispanics and Native Americans were a little higher, while the rate for blacks

Table 13.21. Race differences in infant mortality per 1,000 live births

| Group | $\mathbf{1 9 2 0}$ | $\mathbf{1 9 5 0}$ | $\mathbf{1 9 9 0}$ | $\mathbf{2 0 0 2}$ |
| :--- | :---: | :---: | ---: | :---: |
| East Asians | - | - | 4.2 | 5.0 |
| Blacks | 132 | 45 | 11.4 | 13.9 |
| Filipinos | - | - | 6.3 | - |
| Hispanics | - | - | 5.7 | 5.8 |
| Native Americans | - | - | 14.1 | 9.1 |
| Whites | 82 | 27 | 5.5 | 5.9 |
| Sources: $1920 / 1950: C o l l i n s ~ \& ~ T h o m a s s o n, ~ 2004 ; ~$ <br> 1990: Hummer et al., 1999, Trovato, 2001; 2002: <br> CDC. |  |  |  |  |

was approximately double that of the other races.
Race differences in life expectancy expressed as risk of death for blacks, Mexicans, and whites have been calculated by LeClere, Rogers, and Peters (1997) for 1986-1990 for a sample of 30,000 . Their results are shown in Table 13.22. The risks of death for blacks and Mexicans are given as odds ratios in relation to 1 for whites, and are presented for the three age groups 18-44, 45-64, and 65 and over. We see that in the 18-44 age group blacks have a 2.32 greater risk of death than whites, and Mexicans a 1.77 greater risk of death than whites. Among the older age groups these differences diminish until in the 65 and over group Mexicans have a lower risk of death than whites. The authors show that these differences remain although they are smaller when the groups are matched for socioeconomic status, income, and concentration of minorities in census tracts. They do not offer any explanation for the different mortality risks.

Table 13.22. Risk of death

| Age | Black | Mexican | White |
| :--- | :---: | :---: | :---: |
| $18-44$ | 2.32 | 1.46 | 1.00 |
| $45-64$ | 1.77 | 1.06 | 1.00 |
| $65+$ | 1.19 | 0.78 | 1.00 |

## 12. Fertility

Racial differences in fertility are given Table 13.23. Row 1 gives number of children ever born per women aged 15-45 in the 1980 census. Asians had the lowest fertility, and East Asians (Chinese, Japanese, and Koreans) had lower fertility than Southeast Asians (Filipinos). Whites had slightly higher numbers of children, while blacks and Hispanics had the highest number. Row 2 gives fertility for the year 2002. These figures are live births per 100 women. The figure for Asians is for all Asians and Pacific Islanders and conceals

Table 13.23. Race differences in fertility

| Year | Asian | Black | Hispanic | East Asian | Southeast Asian | White |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 1980 | 1.16 | 1.81 | 1.81 | 1.02 | 1.22 | 1.34 |
| 2002 | 1.65 | 1.61 | 2.26 | - | - | 1.17 |
| Sources: 1980 census; National Vital Statistics Report, 2004, p. 19. |  |  |  |  |  |  |

the low fertility of the East Asians and the higher fertility of the Southeast Asians.

## 13. Conclusions

Herrnstein and Murray (1994) showed in The Bell Curve that in the United States the differences in intelligence between whites, Hispanics, and blacks goes a long way towards explaining the differences between them in educational attainment, earnings, socioeconomic status, poverty, crime, and a number of other social phenomena. In this chapter this analysis is extended to include four other racial groups: Jews, East Asians, Southeast Asians, and Native Americans. We have seen that the thesis holds up well for the total of seven racial groups. The Jews have the highest IQ (110) and are well ahead in educational attainment, earnings, eminence, and the other social phenomena examined by Herrnstein and Murray. Next come the East Asians (IQ 104) (the model minority), followed closely by the whites (IQ 100). Below these in descending order come the Southeast Asians (IQ 92), Hispanics (IQ 89), Native Americans (IQ 86), and blacks (IQ 85). The racial gradient of intelligence is expressed in the prevalence of mental retardation, educational attainment, earnings, socioeconomic status, poverty, giftedness and eminence, crime, mortality, and fertility.

We read frequently of the social pathologies of America's minorities, yet two of these minorities (the Jews and East Asians) perform better on all these social criteria than the white majority. How can this be explained? This question is typically ignored by those who attribute the social problems of Hispanics, Native Americans, and blacks to white racism and discrimination. Occasionally it is confronted and some bizarre explanation advanced. Thus, writing of the ethnic Chinese and Japanese, historian David Bell (1985, p. 30) opines that "All the various explanations of Asian Americans' success tend to fall into one category: self-sufficiency" although he does not provide any evidence that Asians are exceptionally self-sufficient or that self-sufficiency contributes to educational and socioeconomic achievement. More frequently East Asians and Jews are credited with cultural values that promote educational and socioeconomic success. For instance, Harvard historian Stephan Thernstrom and his wife assert that the achievements of these two groups "is the product of cultural values that they have brought
with them and transmitted from generation to generation over a very long time" (Thernstrom and Thernstrom, 2003, p. 98), although they fail to give a shred of evidence that Asians and Jews have the requisite cultural values for educational and socioeconomic success. In the world of the Harvard history faculty it is apparently sufficient to make assertions, and the requirement to produce evidence to support them is considered unnecessary. Nevertheless, it may well be that these two groups have an additional advantage, over and above their high IQ, of stronger motivation for achievement, as argued in the case of East Asians by Flynn (1991).

Another bizarre explanation for the racial differences in all these social phenomena is the spatial segregation theory advanced by Wilson (1987) and Massey and Denton (1993), both of whom have devoted whole books to expounding this thesis. This theory has convinced Hao, a sociologist at Johns Hopkins University, who writes "persistent racial segregation remains the main force shaping social inequality" (Hao, 2004, p. 542). The theory is that Hispanics, Mexicans, and blacks tend to live in their own racially segregated districts, and this is responsible for their low earnings. The economists and sociologists who favor this theory have mistaken cause and effect. It is because these racial groups are poor that they live in poor areas. They either do not know, or prefer not to consider, how well differences in IQ explain differences in education, earnings, and wealth.

We should note finally that there are race differences in fertility that are negatively related to differences in intelligence. Whites and East Asians with the highest average IQ have the fewest children while blacks and Hispanics with lower average IQs have more children. There is however an anomaly in so far as Hispanics and Asians in 2002 had higher fertility than blacks. The main reasons for the higher fertility of Hispanics, despite having higher average IQs than blacks, are that they are Roman Catholics and more recent immigrants who have not adapted to controlling their fertility. The higher fertility of Asians is due to the large numbers of recent South Asian immigrants who also have not adapted to controlling their fertility.

## Chapter 14

## Conclusions

1. Assimilation Theory
2. Structuralism and Discrimination
3. Minority Status Theory
4. Cultural Values
5. Ogbu's Voluntary and Involuntary Minorities
6. Race Differences in IQ and Achievement

Tnthis book we have examined whether the theory advanced by Herrnstein and Murray in The Bell Curve-that race differences in intelligence go a long way to explain the differences in educational attainment, earnings, socioeconomic status, crime, longevity, infant mortality, fertility, and other social phenomena in the United States-holds for other multiracial societies. The results of this inquiry are a resounding confirmation of the thesis of The Bell Curve. We have seen that throughout the world there are racial hierarchies, and that it is the races with the highest IQs that have the highest educational attainment, earnings, and socioeconomic status, the best health, and greatest longevity, together with the lowest rates of crime, infant mortality, and fertility.

This conclusion overthrows the sociological paradigm that posits social class differences as the root cause of racial inequalities. In this
concluding chapter we examine the different variants of sociological theories of racial hierarchies, and show they are inadequate. We conclude by showing that only the race differences in intelligence theory can provide a coherent explanation for the consistent worldwide racial inequalities.

## 1. Assimilation Theory

Assimilation theory starts with the observation that immigrants typically arrive in new countries poor and lacking educational and professional qualifications. Frequently, they do not speak the language of the new country. Consequently, the first generation of immigrants typically have low earnings and low socioeconomic status. However, in a generation or two, they should become assimilated. Their children and grandchildren should have the same opportunities to acquire the education and vocational skills as the host society, and should do as well in the socioeconomic hierarchy. This theory holds for European immigrants in Canada, the United States, and Australia, and for the Chinese and Japanese immigrants in the United States, Hawaii, Canada, and throughout Latin America.

But assimilation theory encounters the problems that some immigrants do better than the host populations, but others fail to assimilate. The Jews in North America and Britain have invariably surpassed gentiles in the socioeconomic hierarchies. So too have the Chinese throughout Southeast Asia, together with the Japanese in Brazil. But other immigrants have not succeeded in assimilating. This is particularly the case with African immigrants in North America and Europe. There is a problem here for sociologists. As Hirschman, a sociologist at Cornell University, has observed

> the classical sociological theory of race and ethnic relations suggests that assimilation-the withering away of divisions based on race and ethnicity-is the long term expectation in modern societies...; yet there is considerable evidence of persistent ethnic inequality in many countries at all stages of development throughout the modern world (1984, p. 4).
> This is puzzling for sociologists. Evidently, there must be something wrong with the assumption that in multi-racial societies, all races should in time become assimilated and become equal. The flaw in the theory is the assumption that all races have the same intelligence.

## 2. Structuralism and Discrimination Theory

Structuralism and discrimination theory assert that in multiracial societies, the races that hold political and economic power maintain their dominant position by discrimination against other races to keep them subordinate. For instance, the low socioeconomic status of Africans found in many societies is, according to the British social anthropologist Peter Wade, "explained away by saying that slavery put them there and class mechanisms maintained their place" (Wade, 1997, p. 72); while an American anthropologist writes that "there is strong evidence to indicate that the plight of many racial and ethnic groups is the result of structured inequality and racial oppression" (Li, 1988, p. 36). Many economists have adopted the same explanation. They have found that in many parts of the world there are race differences in education and in earnings, but that they are unable to explain the whole of the differences in earnings in terms of the differences in education. They find that even when races are matched for education, some races still earn more than others. Economists typically attribute this to discrimination by the races that have political and economic power against races that lack political and economic power. Thus, World Bank economist Patrinos (1994, p. 12) finds that in Canada the Native American Indians living off reservations had only one year less schooling than Europeans and concludes that the small difference in education can explain only 17 percent of their lower earnings, which are 80 percent of those of Europeans. To explain this, he observes, "the remaining difference in wages, 83 percent, is unaccounted for and attributed to unmeasured factors such as discrimination." Most economists who document race differences in earnings favor the same explanation that discrimination must be responsible for race differences in earnings that cannot be explained by differences in education.

Structuralism theory does not stand up well in the light of our examination of racial socioeconomic hierarchies worldwide. The theory is most persuasive for South Africa in the apartheid years, when whites undoubtedly discriminated against blacks. It may have some plausibility for the white-mulatto-black hierarchies in the Caribbean, Brazil, and the United States, where in the "pigmentocracies" whites and light skinned mulattos do better than dark skinned blacks. It may have some plausibility for the white European-mestizo-Native American Indian hierarchies that are present throughout Latin America. Very likely, the
whites that have political and economic power do prefer light skinned mulattos to blacks, and light skinned mestizos to dark skinned Native American Indians. But there are a number of awkward exceptions. Mulattos are quite a small minority in the Caribbean in which blacks have political power, yet they do better than blacks. The Chinese and Japanese have been discriminated against but have overcome this and have done better or at least as well as Europeans in Brazil, Canada, Europe, Hawaii, and the continental United States. Jews have also been discriminated against, but have done strikingly better than gentile Europeans in Britain, the United States, and Canada.

Structuralism encounters further difficulties in Southeast Asia, where the ethnic Chinese are a minority and lack political power, except in Singapore. The ethnic Chinese have been discriminated against and sometimes persecuted, yet they have performed consistently better than the native Southeast Asians. Like the East Asians and Jews in North America, these minority groups with high IQs outperform indigenous populations, despite discrimination against them.

I do not wish to argue that the structuralism/discrimination theory of racial and ethnic differences in socioeconomic status and earnings is wholly wrong. Very likely, the theory has an element of truth. There is little doubt that men (and perhaps to a lesser extent women) normally prefer their own race and ethnic group to men of other races and ethnic groups, and men who have power will be inclined to appoint men of their own race to work with, in preference to other races and ethnic groups. This all too human characteristic was identified in the nineteenth century by Herbert Spencer (1897) as in-group amity and out-group enmity (an instinctive liking for members of our own group and race combined with an instinctive disliking for members of other groups and races). Early in the twentieth century, this basic thesis was designated ethnocentrism by the sociologist William Sumner, and refined and updated by Rushton (1989) as genetic similarity theory, which states that people normally prefer members of their own race as friends, colleagues, and partners, where it is known as assortative mating. This propensity may explain why in the United States black men have average earnings that are only 96 percent of those of white men of the same intelligence, reported by Herrnstein and Murray in The Bell Curve. The ethnocentric antipathy of men towards those of a different race is felt more strongly towards men and less strongly towards women. This may well explain
why black women in the United States have average earnings somewhat higher than white women of the same intelligence. The white men who generally have power have a disinclination to appoint black men to work with them as colleagues, but feel more comfortable appointing black women as secretaries, receptionists, personal assistants, and the like (Lynn and Mau, 2002).

## 3. Minority Status Theory

A number of sociologists have noticed that the structuralism/ discrimination theory of racial and ethnic differences in socioeconomic status and earnings cannot explain why there are several instances where small racial minorities have done better in socioeconomic hierarchies than the majorities among whom they live. We have seen this phenomenon in the socioeconomic achievements of the Chinese in Southeast Asia, the Japanese in Brazil, both the Chinese and the Japanese in Hawaii and the United States, and of the Jews in Britain and North America. Sociologists have proposed minority status theory to explain the socioeconomic successes of these racial minorities. According to this theory, there are advantages to being a racial minority. There are several variants of this theory. First, Georg Simmel (1950) suggested that racial minorities have "market objectivity," a somewhat opaque concept that Hamilton and Waters (1997, p. 258) explain: "it enables them to maneuver in the marketplace with an objectivity unavailable to people who are more deeply entangled in the social order and more invested in the status-quo." A second variant of the theory is that racial minorities devote greater energies to success in education, the professions, and business because they are typically excluded from the higher reaches of the social status hierarchy of the host society (e.g. Waldinger, Aldrich, and Ward, 1990). A third variant is that racial minorities frequently form ethnic networks that give each other mutual support in business enterprises (e.g. Light, 1972).

There may well be some truth in all these variants of minority status theory. We need not doubt that racial minorities do tend to form mutually supportive business networks, because people generally prefer to work with their own racial and ethnic groups, as Rushton (1989) and Salter (2004) have shown. But the problem is that the advantages of minority status only work for some minorities. They do not work
for African and South Asian immigrants in Europe and North America. Evidently, it is only the minorities with high IQs who do well in other societies, and whether it is necessary to posit additional motivating and other factors to account for their success is questionable.

## 4. Cultural Values Theories

Cultural values theories, outlined in Chapter 1, propose that racial differences in educational attainment, earnings, socioeconomic status, and so forth, are attributable to some peoples possessing values that promote success. These include a strong work ethic, a positive attitude to working for long term goals, a capacity to delay gratification, and so on, that are lacking in the peoples that do poorly. The possession of these appropriate cultural values has been proposed to explain the socioeconomic successes of Protestant Europeans, Jews, the Indians in Africa, and the Chinese and Japanese in many countries. The lack of these values has been proposed to explain the socioeconomic failures of the sub-Saharan Africans in the United States, the Caribbean, Latin America, and Europe, the Native American Indians throughout the Americas, and the indigenous Southeast Asians, Maori, and Australian Aborigines.

I do not wish to argue that the cultural values theory of racial and ethnic differences in educational and socioeconomic achievement is wrong. On the contrary, I believe the theory is quite plausible. The problem for cultural values theory is that cultural values are hard to measure, so that theories of their importance for racial differences in educational attainment, socioeconomic status, and other social phenomena are difficult to test. Typically, cultural values theory is simply asserted without any attempt to measure it. Herrnstein and Murray adopted the right approach to this question by first examining race differences in intelligence and determining whether these were sufficient to explain differences in educational attainment, socioeconomic status, etc. If there are residual differences that cannot be explained by intelligence differences, we can look for additional factors of which different cultural values are a possibility and try to measure them.

It may well be that the races that do poorly in terms of socioeconomic status (sub-Saharan Africans, Native American Indians, Australian Aborigines, and New Zealand Maoris) are weaker in work motivation or some similar construct than Europeans and East Asians. Some evidence
for this was produced by Rosen (1959), who proposed that the racial and ethnic populations in North America differed in what he called an "achievement syndrome" consisting of achievement motivation, value orientation, and educational-occupational aspiration. He showed in an empirical study that Greeks, Jews, and white Protestants have a strong "achievement syndrome" and argued that this was responsible for their educational and socioeconomic achievements, while blacks, Catholic Italians, and Catholic French-Canadians had a weaker "achievement syndrome," and this was responsible for their lower educational and socioeconomic success. The same theory has been used to explain the upward social mobility of the Jews and the East Asians in the United States (e.g. Hsu, 1972; Kallen, 1976; Flynn, 1991). We have seen that there have been spasmodic reports supporting this theory such as those in Britain, where Chinese and South Asian immigrants have been found to have stronger achievement motivation than whites and blacks.

## 5. Ogbu's Voluntary and Involuntary Minorities

A variant of cultural values theory that attempts to explain why some minorities do well while others do poorly has been proposed by Ogbu (1987). His theory distinguishes between voluntary and involuntary minorities. Voluntary minorities are those who have migrated to a new country of their own free will, and these do well, such as the Jews and East Asians in North America and Europe. Involuntary minorities are those who have been forcibly shipped as slaves to a new country (African blacks) or who become involuntary minorities in their own countries when these have been colonized by Europeans (Native Americans, New Zealand Maori, and Australian Aborigines). These involuntary minorities do poorly because they have developed a distrust of whites and see "cultural differences as markers of identity instead of barriers to be overcome" (p. 327). To preserve their own identity, they refuse to adopt the achievement culture of the white majority.

This theory is a favorite of anthropologists (e.g. Suarez-Orozco, 1991), but does not stand up well in the light of the worldwide studies. First, not all voluntary minorities do well. Hispanics from Latin America, and blacks from Africa and the Caribbean, who have migrated voluntarily to the United States and Canada, do poorly, and the Caribbeans, sub-Saharan Africans, and North Africans who have migrated voluntarily
to Europe also do poorly. So too do Pacific Islanders who have migrated voluntarily to New Zealand and Maoris who have migrated to Australia. Second, if all that holds back blacks in the United States is the experience of being an involuntary minority, blacks in Africa who have not had this experience should do well. In fact, however, blacks in sub-Saharan Africa are far more impoverished than those in the United States, have lower IQs, and perform very poorly in educational tests. Third, blacks that are a majority throughout the Caribbean islands also do poorly. It is impossible to avoid the conclusion that the crucial factor that explains racial differences in achievement is not whether they are voluntary and involuntary minorities but whether they are intelligent.

## 6. Race Differences in IQ and Achievement

None of the sociological theories of persistent racial and ethnic hierarchies withstand examination. These theories may have a superficial plausibility as explanations of the successes or failures of various races in particular places, such as the attribution of the successes of the Chinese in Southeast Asia to their possession of Confucian values, the successes of the Jews to the motivating effects of their minority status, and the failures of Africans to achieve equality in the United States, and of the Australian Aborigines to achieve equality in Australia, to their being involuntary minorities. But all these theories are no more than ad hoc and unquantifiable surmises and have so many exceptions that they are unable to provide a coherent explanation of the worldwide existence and consistency of racial hierarchies. To achieve credibility, a theory must explain the totality of the phenomena. Only intelligence theory can do this.

The strength of the racial IQ theory is that it provides an explanation of four phenomena that are present worldwide. First, it explains the consistency of the racial hierarchies in so many different locations. It is invariably the Europeans, the East Asians, and the Jews that have the high IQs and that do well in the socioeconomic hierarchies. We have seen this in the United States and Canada, in Europe, Latin America, Africa, Australia and New Zealand, and throughout South East Asia. Conversely, it is invariably the races with the low IQs that have the poorest educational attainment, the lowest earnings, the lowest socioeconomic status, the lowest longevity, and the worst health,
together with the highest crime, infant mortality, and fertility. This is true of sub-Saharan Africans in North and Latin America, in Africa, the Caribbean, and in Europe. It is also true of Native American Indians in North and Latin America, of Indonesians, Malays, and other indigenous peoples throughout Southeast Asia, of Aborigines in Australia, and of Maoris and other Pacific Islanders in New Zealand.

Second, the consistency of the racial differences in IQs and socioeconomic status throughout the world is a powerful indication that these must have a strong genetic basis. If the race differences in IQs in the United States and Britain were solely environmentally determined, we should expect to find different racial hierarchies in other continents. Historical accident would have seen that, in some of these places, other races had secured the most privilege and wealth, the best nutrition and education for their children, and the highest IQs accruing from these economic advantages. Some sociologists have argued that this is the case and that racial hierarchies have arisen by accident. For instance: "By an accident of history, lighter-skinned peoples conquered darker-skinned peoples" (Lancaster, 1991, p. 349). But if this were just an accident of history we would not find that it is invariably the lighter-skinned peoples (i.e., the Europeans and the East Asians) who have conquered and outperformed the darker-skinned peoples. The only credible explanation for this consistency is that the lighter-skinned peoples have higher IQs than other peoples, so they are able to dominate them.

Third, in multiracial societies where there are three racial groups, the groups with the intermediate IQs invariably fall intermediate in the racial socioeconomic hierarchy. This is true of the East Indians from the Indian sub-continent in Britain and in East Africa and South Africa. These intermediate groups are frequently mixed-race peoples, such as the mestizos in Latin America and the Hispanics in North America, most of whom have mixed European and Native American Indian ancestry, and who typically occupy an intermediate socioeconomic position between Europeans and Native American Indians. It is true also of the mulattos in the Caribbean and Brazil and the coloreds in South Africa who have mixed European and African ancestry. These mixed-race peoples get some of their genes from their European forbears, and some from their African forbears, so both their skin color and their intelligence are intermediate between those of Europeans and Africans. The result of this is that they fall intermediate between Europeans and Africans in the
socioeconomic hierarchies. Furthermore, those with the lighter skins who tend to have more European than African ancestry, also tend to have higher intelligence and socioeconomic status. In all these cases, the racial hybrids fall intermediate in intelligence and socioeconomic status between the two parent races.

Fourth, it is particularly difficult for social scientists to explain how some peoples that have arrived in new countries as impoverished immigrants have risen quite rapidly in the socioeconomic hierarchies and within two or three generations have joined the socioeconomic elite, while others have remained at the bottom of the socioeconomic hierarchies. How to explain the rapid socioeconomic achievements of the Chinese and Japanese in the United States, Canada, Latin America, Hawaii, Europe, and Southeast Asia? How to explain the rapid socioeconomic successes of the Jews in the United States, Canada, and Britain? The only explanation that can provide a comprehensive answer to this question is that these peoples have high IQs. As an old English proverb has it, the cream rises to the top.

## Appendix

## Intelligence Tests

## Brief descriptions of the tests abbreviated in the tables are given below.

AAB. The American Army Beta constructed for testing the IQs of military personnel in World War I. A non-verbal test of general intelligence on which the performance subtests of the Wechsler tests were based. AFQT. Armed Forces Qualification Test. A mainly verbal test of general intelligence.
AH Tests. Tests of verbal and non-verbal reasoning ability.
AP. Alexander Passalong Test. A non-verbal test of intelligence and visualization consisting of a succession of shallow boxes in which are placed a number of colored square and rectangular blocks. The task is to rearrange the blocks so that the red ones are all at one end and the blue all at the other.
Arthur Point Performance Scale. A non-verbal test of general intelligence. BAS. British Ability Scales. A test of general intelligence and verbal and non-verbal ability.
BG. Bender Gestalt. A drawing test of general intelligence.
BTBC. Boehm Test of Basic Concepts. A test of general intelligence measuring verbal understanding of spatial and quantity concepts.
BTBC-R. Boehm Test of Basic Concepts-Revised. A revised version of
the BTBC.
CCAT. Canadian Cognitive Abilities Test. A test of verbal, quantitative and non-verbal reasoning.
CEFT. Children's Embedded Figure Test. A children's version of the EFT: test of the ability to find a simple figure embedded in a larger figure.
CF. Cattell's Culture Fair Test. A non-verbal test of general intelligence.
CITO. A Dutch test measuring numerical reasoning and verbal comprehension.
CMM. Columbia Mental Maturity Scale. A verbal and non-verbal reasoning test of general intelligence.
CPM. Colored Progressive Matrices. A non-verbal reasoning test for ages 5-11.
CPMT. A test of visualization.
CTMM. California Test of Mental Maturity. A non-verbal reasoning test of general intelligence.
DAM. Goodenough Draw a Man test. A drawing test of general intelligence.
EFT. Embedded Figure Test. A test of the ability to find a simple figure embedded in a larger figure. Correlates 0.65 with WISC performance and 0.30 with verbal scale (Witkin et al., 1962).
EPVT. English Picture Vocabulary Test.
FF. Fergusson Form Boards. A test of visualization involving fitting pieces of different shapes into spaces as in a jigsaw puzzle.
GALO. A Dutch test of general intelligence.
GFT. Gottschalt Figures Test. A test of visualization.
GMRT. Group Mental Rotations Test. A test of visualization.
GSAT. General Scholastic Aptitude Test. A South African test of reasoning, verbal, visualization, and other abilities.
ITPA. Illinois Test of Psycholinguistic Abilities. Measures 12 auditory (verbal) and visual language abilities.
JAT. Junior Aptitude Test. A South African test with 10 subtests measuring reasoning, verbal, spatial, etc. abilities.
KABC. Kaufman Assessment Battery for Children. A test of general intelligence resembling the Wechsler tests.
KAIT. Kaufman Adolescent and Adult Intelligence Test. A test of general intelligence resembling the Wechsler tests.
LPT. Learning Potential Test. A test of general intelligence.
LT. Lorge-Thorndike. A test of general intelligence.

Matrix Analogies Test. A non-verbal reasoning test.
MFFT. Matching Familiar Figures Test.
MH. Moray House. A verbal test of general intelligence.
MHV. Mill Hill Vocabulary. A measure of verbal ability.
MMFT. Matching Familiar Figures Test. A mainly visualization test.
MMSE. Mini-Mental State Examination. A test of general intelligence.
NFER. British National Foundation for Educational Research Test of non-verbal reasoning and verbal ability.
NIT. National Intelligence Test. A test of general intelligence.
OT. Otis Test. A mainly verbal test of general intelligence.
PAT. Progressive Achievement Test. A verbal test of general intelligence.
PIPS. Pacific Infants' Performance Test. A non-verbal test of general intelligence.
PNL. Pintner Non-Language Test. A non-verbal test of general intelligence.
PP. Pinter-Patterson. A test of general intelligence.
PPMA. Primary Test of Musical Audation. A test of musical ability.
PPVT. Peabody Picture Vocabulary Test. A set of four pictures of different objects that have to be named.
QT. Queensland Test. A non-verbal test of general intelligence.
RACIT. A Dutch test with a number of subtests measuring reasoning, verbal, spatial, etc. abilities.
SA. Stanford Achievement Test. A verbal test of word meaning, spelling, and arithmetic.
SB. Stanford-Binet. A mainly verbal test of general intelligence.
Seashore. A test of musical ability.
SON-R. The Snijders-Ooman non-verbal intelligence test. A non-verbal test of general intelligence.
SOT. Spiral Omnibus Test. A reasoning test.
SRAT. Science Research Associates Test. A test of general intelligence.
STAS. Stanford Test of Academic Skills. A test of a range of academic subjects.
TOSCA. Test of Scholastic Abilities. A verbal and numerical test of general intelligence.
WAIS. Wechsler Adult Intelligence Scale. Gives measures of general, verbal and visualization intelligence
WB. Wechsler Belview. Gives measures of general intelligence and verbal and visualization abilities
WCST. Wisconsin Card Sorting Test. A non-verbal test of general
intelligence.
WISC. Wechsler Intelligence Scale for Children. Gives measures of general, verbal, and visualization intelligence.
WPPSI. Wechsler Preschool and Primary Scale for Intelligence. Gives measures of general, verbal, and visualization intelligence for 4-6-yearolds.
WRAT. Wide Range Achievement Test. A test of general intelligence. 3DW. An Austrian test of general intelligence.

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## Richard Lynn

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