

## Chapter 8

# The Geography of Intelligence

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### 1. Introduction

In this chapter it is shown that the intelligence levels of peoples throughout the world varies consistently with their geographical location and with their race. There is a considerable overlap between geography and race. The most recent and thorough classification of the world's peoples by geography and race has been produced by Cavalli-Sforza *et al.* (1994). From an analysis of genetic differences between populations they distinguish eight major geographical-racial groups. Although they prefer to avoid the classical descriptive terms of Caucasoids, Mongoloids and so forth, their categories are so similar to these that it is convenient to use them. In terms of the classical taxonomy, their geographical-racial groups are European Caucasoids, South Asian and North African Caucasoids, Northeast Asian Mongoloids, Southeast Asians extending from Thailand to Indonesia and the Philippines, Pacific Islanders, Australian Aborigines, Negroids and American Indians. This is the classification adopted in this chapter. The data presented here are an updated version of the evidence collected in the late 1980s (Lynn 1991). The IQs have been calculated from the Progressive Matrices or from other tests of general intelligence such as the Wechsler tests and the Cattell Culture Fair. IQs are expressed in relation to a British IQ of 100 and take into account Flynn effects of 2 IQ points per decade for the Progressive Matrices and similar tests and 3 IQ points per decade for Wechsler and similar tests. This is responsible for a number of minor differences between the present calculations and those presented previously, which were not adjusted for Flynn effects. A number of studies presented previously have been omitted here because of defects of various kinds and because they have been superseded by better studies. For example, Vernon (1969) reported data for 50 children in Uganda showing that their IQ was about 80. The sample was drawn from a selective academic secondary school so this must have been an overestimate of the IQ in Uganda. The study reported here was based on a representative sample of 2,019 children tested with the Progressive Matrices and is so much more satisfactory in terms of representativeness and sample size that the Vernon results have been discarded.

## 2. IQ Distribution of the World

### 2.1. *European Caucasoids — Europe*

Mean IQs derived from 26 data sets for the populations of 21 European nations are shown in Table 8.1. This table omits Buj's (1981) IQ data for 21 European cities on the grounds that his sample sizes are in many cases rather small (e.g. 75 for Ireland and 100 for Norway) and in 13 of the countries his standard deviations are greater than 20, suggesting sampling defects. For most countries his results have been superseded by more recent data based on greater sample sizes and these have been entered in the table. The European IQs fall in the range between 92 for Ireland and 103 for Germany (the average of the two results). The median of the 26 data sets is 98, which can be taken as the best estimate of the IQ of the European peoples.

The lowest IQ of 92 for Ireland is probably explicable in terms of the backward economy until quite recently and the long history of selective emigration of the more intelligent, which is documented in Lynn (1979). With this exception, IQs in north and west Europe are generally higher than elsewhere, lying in the range of 98–103, while IQs in southeast and east Europe lie in the range of 88–96, and the IQ of 98 in the two central European countries of the Czech and Slovak Republics is intermediate. The relatively low IQs in east and southeast Europe are probably due in part to the lower living standards in these counties, brought about by half a century of impoverishment caused by communist economies. Particular interest is attached to the IQ of 96 for Russia which has recently been obtained from a study in the city of Briansk, which lies about two hundred miles south west of Moscow. Work on intelligence was prohibited throughout the Soviet Union in the 1930s as contrary to Marxist-Leninism and it was not until 1997 that normative data on intelligence were collected from which the IQ of 96 has been calculated.

### 2.2. *European Caucasoids — Outwith Europe*

During the last four centuries European Caucasoids have colonised and occupied a number of parts of the world, notably North and South America, Australia, New Zealand and South Africa. IQs from 15 studies for eight of these populations are shown in Table 8.2. The IQs fall between 93 and 102 and are thus in the same range as IQs in Europe. The studies for Argentina and Uruguay are derived from norms for the total population. In Argentina this is 85% white and 15% Mestizo and Native American, and in Uruguay it is 88% white, 8% Mestizo and 4% black (Ramsay 2000). A notable feature of these results is the consistency of the IQs over a period of many decades in the cases of Argentina, Australia, New Zealand and the United States. These results show that wherever European populations are located their IQs fall in the European range of between 92 and 103.

### 2.3. *South Asian and North African Caucasoids*

IQs for 15 samples from ten South Asian and North African countries are shown in Table 8.3. Apart from Israel, all the IQs lie between 78 and 90 and the median IQ is 83.

Table 8.1: IQs of European caucasoids.

Country	IQ	Reference	Country	IQ	Reference
Belgium	99	Goosens 1952a	Ireland	92	Raven 1981
Belgium	103	Goosens 1952b	Italy	103	Tesi & Young 1962
Britain	100	Raven 1981	Netherlands	99	Raven <i>et al.</i> 1995
Bulgaria	91	Lynn <i>et al.</i> 1998	Netherlands	101	Raven <i>et al.</i> 1996
Croatia	90	Sorokin 1954	Poland	92	Jarorowska & Szustrowa 1991
Czech Rep.	98	Raven <i>et al.</i> 1996	Portugal	91	Simoes 1989
Denmark	97	Vejleskov 1968	Romania	94	Zahirmic <i>et al.</i> 1974
Finland	98	Kyostio 1972	Russia	96	Raven 1998
France	102	Dague <i>et al.</i> 1964	Slovak Rep.	98	Raven <i>et al.</i> 1995
France	97	Bourdier 1964	Spain	96	Raven <i>et al.</i> 1995
Germany	105	Raven 1981	Sweden	100	Scandinavia Test 1970
Germany	101	Raven <i>et al.</i> 1995	Switzerland	101	Raven <i>et al.</i> 1995
Greece	88	Fatouros 1972	Switzerland	102	Raven <i>et al.</i> 1995

Table 8.2: IQs of other European caucasoids.

Country	IQ	Reference	Country	IQ	Reference
Argentina	93	Rimoldi 1948	N. Zealand	101	Reid & Gilmore 1989
Argentina	98	Raven <i>et al.</i> 1998	South Africa	96	Owen 1992
Australia	95	McIntyre 1938	Uruguay	96	Risso 1961
Australia	98	Raven <i>et al.</i> 1995	United States	100	Scottish Council 1933
Australia	99	Raven <i>et al.</i> 1996	United States	99	Scottish Council 1949
Canada	97	Raven <i>et al.</i> 1996	United States	100	Hodgkiss 1978
N. Zealand	100	Redmond & Davies 1940	United States	100	Raven <i>et al.</i> 1996

Table 8.3: IQs of South Asian and North African caucasoids.

Country	IQ	Reference	Country	IQ	Reference
Egypt	83	Dennis 1957	Israel	97	Miron 1977
Egypt	83	Ahmed 1989	Israel	90	Lynn 1994
India	81	Sinha 1968	Lebanon	86	Dennis 1957
India	82	Rao & Reddy 1968	Morocco	84	Te Nijenhuis & van der Flier 1997
India	82	Raven <i>et al.</i> 1996	Nepal	78	Sunberg & Ballinger 1968
Iran	84	Valentine 1959	Qatar	78	Bart <i>et al.</i> 1987
Iraq	87	Abul-Hubb 1972	Turkey	90	Sahin & Duzen 1994
Iraq	85	Abul-Hubb 1972			

We note that in these populations the IQ is highest in Turkey (90), reflecting their close genetic similarity with Greeks (shown by Cavalli-Sforza *et al.* 1994), who have the same IQ. The IQs in the remaining nine countries fall in the range of 78 to 86. Thus, there is not a sharp break at the Dardanelles between the European and the Asian Caucasoids but rather a continuous gradient reflecting the genetic admixture of peoples with their neighbors all the way from North-West to South-East Europe through to Turkey and on to South-East Asia and North Africa.

The IQ in Israel requires separate consideration. If the two results of 90 and 97 are averaged to 94, the IQ is evidently higher than among any of the other South Asian and North African Caucasoids. Israel is an ethnically diverse nation with about equal numbers of Western (European) and Eastern (Asian) Jews. Western Jews have an IQ 12 points higher than Eastern Jews (Lieblich *et al.* 1972; Zeidner 1987). It can be inferred that the IQ of Eastern Jews in Israel is about 88 and falls into place in the intelligence gradient running from Turkey east and south. The IQ of Western Jews in Israel is about 100, and about the same as that of other North-Western European populations. Most Western Jews migrated to Israel during the second half of the twentieth century and have raised the intelligence level above that of other south Asian populations.

#### 2.4. IQs of East Asian Mongoloids

IQs for 24 samples of East Asian Mongoloids from six countries are shown in Table 8.4. The results of the 24 studies lie between 98 and 110. The median of the studies is an IQ of 104. Of the three studies from China, the IQ of 98 is obtained from children and adults in which the IQ for children is higher than that for adults, reflecting a substantial increase in intelligence in China during the last half century. The IQ of 108 is derived from a standardisation of the WISC-R in Shanghai and is likely to be too high because the IQ in Shanghai is probably higher than in China as a whole. The ten results for Japan all lie between 103 and 110 with the exception of the IQ of 100 derived from the Japanese standardisation of the McCarthy test. The explanation for this is probably that this test is for 2 to 8-year-old children and Oriental children mature more slowly than European (Rushton 2000).

An explanation is required for the IQs of 104 for Japan and for Taiwan entered for the study by Stevenson *et al.* (1985). This study compared the IQs of 240 6-year-olds and 240 10-year-olds in the American city of Minneapolis, the Japanese city of Sendai and the Taiwanese city of Taipei. The investigators constructed their own tests of various abilities. These did not include a test of non-verbal reasoning but did include a vocabulary and a spatial test. The results were that there were no overall differences in the scores obtained by the children in the three cities, which led the investigators to conclude that the Japanese and Chinese have the same IQ as Europeans. A defect of this study is that Minneapolis is not representative for intelligence of American cities. A series of studies have shown that intelligence in the state of Minnesota, in which Minneapolis is situated, is higher than in the United States as a whole. In the military draft in World War I, the whites from Minnesota obtained the highest score on the Army Beta Test of all American States (Ashley Montagu 1945). In the draft for the Vietnam

Table 8.4: IQs of North East Asian mongoloids.

Country	IQ	Reference	Country	IQ	Reference
China	98	Raven <i>et al.</i> 1996	Japan	103	Li <i>et al.</i> 1996
China	108	Li <i>et al.</i> 1990	Hong Kong	103	Lynn <i>et al.</i> 1988
China	103	Li <i>et al.</i> 1996	Hong Kong	110	Lynn <i>et al.</i> 1988
Japan	103	Lynn 1977a	Hong Kong	109	Chan & Lynn 1989
Japan	107	Lynn & Dziobon 1980	Hong Kong	107	Lynn <i>et al.</i> 1988
Japan	110	Misawa <i>et al.</i> 1984	Singapore	106	Lynn 1977b
Japan	105	Stevenson <i>et al.</i> 1985	South Korea	105	Moon 1988
Japan	100	Lynn & Hampson 1986a	South Korea	106	Lynn & Song 1994
Japan	103	Lynn & Hampson 1986b	Taiwan	102	Rodd 1959
Japan	107	Kaufman <i>et al.</i> 1989	Taiwan	103	Hsu 1976
Japan	110	Shigehisa & Lynn 1991	Taiwan	104	Stevenson <i>et al.</i> 1985
Japan	104	Takeuchi & Scott 1992	Taiwan	105	Lynn 1997

war, the percentage of draftees (blacks and whites) who failed the pre-induction mental assessments was the second lowest in Minnesota among the American states (Office of the Surgeon General 1968: 45). On the basis of these data, Flynn (1980) has calculated that the average IQ in Minnesota is 105. Hence, as the Japanese and Taiwanese IQs are the same as those in Minnesota, they must be 105 in relation to that of the United States. It is another defect of this study that the authors do not say whether the sample was all white or, if not, what percentage was black. Since Minnesota is very largely white, it is assumed that the sample was white and therefore that it had an IQ 5 points higher than that of American whites.

The four results from Hong Kong are reasonably consistent, all lying in the range of 103–110. The two results from South Korea yielding IQs of 105 and 106 are highly consistent. The four results from Taiwan are highly consistent, all lying in the range of 102–105. The explanation for entering an IQ of 105 for the Stevenson *et al.* (1985) study has been given above. A curious feature of the Stevenson *et al.* study is that Hsu, the member of Stevenson's team who conducted the study in Taiwan, had already published a study of the performance of all 6 and 7-year-old children numbering 43,825 in Taipei on the Coloured Progressive Matrices. The result, as shown in Table 8.4, is that the Chinese children had an IQ of 103 in relation to the British mean of 100. This result from this huge sample should have alerted the investigators to the inconsistency with their own result. Furthermore, since Hsu's result from this huge sample for one of the best tests of *g* was already available, it is difficult to understand the point of Stevenson and his group carrying out a further study of 480 children using tests of unknown properties.

## 2.5. South East Asia and Pacific Islanders

IQs for 13 samples from nine countries are given in Table 8.5. The IQs lie in the range between 82–91 and the median is 89. The IQs in these populations are discernibly lower than those of the North-East Asian Mongoloids (median = 104) and higher than those of the South Asian and North African Caucasoids (median = 82). The explanation for this is that the South-East Asians are a hybrid population consisting of South Asians from the Indian sub-Continent who migrated east into South-East Asia and then into the Pacific islands, interbred with Mongoloids who migrated southwards.

## 2.6. IQs of Australian Aborigines

The IQs of six samples of Australian Aborigines are given in Table 8.6. They fall in the range of 65–79 and the median is 71. There is no overlap between the IQs of these samples and those of the South-East Asians and Pacific Islanders, whose lowest recorded IQ is 82. The explanation for this is that the Australian Aborigines are genetically distant from the South East Asians and Pacific Islanders. Their ancestors migrated from South East Asia around 50,000 years ago and were not followed by other South-East Asian migrants, so they remained genetically isolated from other populations throughout South-East Asia and the Pacific Islands.



Table 8.5: IQs of South East Asians and Pacific islanders.

Country	IQ	Reference	Country	IQ	Reference
Fiji	82	Chandra 1975	NZ Maoris	95	St. George 1983
Indonesia	89	Thomas & Sjah 1961	NZ Maoris	90	St. George & Chapman 1983
Malaysia	89	Chaim 1994	Philippines	86	Flores & Evans 1972
Marshall Is.	84	Jordheim & Olsen 1963	Singapore	90	Lynn 1977b
NZ Maoris	90	Walters 1958	Thailand	91	Pollitt <i>et al.</i> 1989
NZ Maoris	84	Du Chateau 1967	Tonga	86	Beck & St.George 1983
NZ Maoris	9	Harker 1978			

Table 8.6: IQs of Australian aborigines.

Country	IQ	Reference	Country	IQ	Reference
Australia	65	Piddington 1932	Australia	79	Bruce <i>et al.</i> 1971
Australia	65	Porteus 1965	Australia	75	Edwards & Craddock 1973
Australia	67	Nurcombe & Moffit 1963	Australia	77	McElwain & Kearney 1973

### **2.7. IQs of Sub-Saharan African Negroids**

IQs for 26 samples of sub-Saharan African Negroids from 14 countries are given in Table 8.7. The IQs fall in the range between 61–78 and the median is 69. The differences between the samples are probably due to sampling and measurement errors rather than to real differences in different parts of the continent. This is suggested by the differences obtained in several cases between samples drawn from the same country. For instance, the highest IQ of 78 comes from one of the two studies in Tanzania. This was obtained from a sample of secondary school students who were admitted to the schools on the basis of their performance in a selective examination, so their IQs would have been higher than the average of the population. The other study from Tanzania obtained an IQ of 69, which although based on a smaller sample is close to the average for sub-Saharan Africa and probably more accurate. One of the problems which a number of investigators have commented on in calculating IQs in Africa is that many children do not know their age, so this has to be estimated. Another problem is that studies of children have normally been carried out on school children and may not be representative in countries where not all children attend school.

### **2.8. IQs of Native Americans**

IQs of ten samples of Native American Indians are given in Table 8.8. The IQs of the American Indians lie between 76 in Peru and 94 in two of the studies from the United States. The median IQ for the studies of Native American Indians is 84. The study from Mexico comes from a remote rural area populated by Native Americans and Mestizos.

## **3. Discussion**

A number of useful conclusions can be drawn from the survey of the geographical distribution of intelligence and racial IQs presented in this chapter. First, these IQs should be regarded as differences in *g* as this construct is used by Jensen (1998). Most of the results are obtained from the Progressive Matrices which is a pure measure of *g* and the remainder come from tests like the Wechslers which are good measures of *g*. The differences in *g* among all these populations should be regarded as arising from a mix of genetic and environmental factors. These populations differ genetically in numerous respects including the color of skin, eyes and hair, body build, blood groups and susceptibility to diseases. It is from the analysis of these genetic differences that Cavalli-Sforza *et al.* (1994) have constructed their world map of genetic differences between peoples. These genetic differences are so pervasive that it is impossible that all these peoples could be genetically identical for intelligence. The studies surveyed in this chapter show that the IQs of the world's populations vary consistently with their race. There is no environmental theory that can explain this. The only conclusion that can be drawn from this association is that race is the most important determinant of the IQs of populations.

Table 8.7: IQs of sub-saharan African negroids.

Country	IQ	Reference	Country	IQ	Reference
Congo	73	Ombredane <i>et al.</i> 1952	South Africa	67	Owen 1992
Congo	72	Nkaya <i>et al.</i> 1994	South Africa	63	Lynn & Holmshaw 1990
Ethiopia	67	Lynn 1994	Sudan	72	Ahmed 1989
Ghana	62	Glewwe & Jacoby 1992	Tanzania	78	Klingelhofer 1967
Guinea	70	Faverge & Falmagne 1962	Tanzania	69	Boissiere <i>et al.</i> 1985
Kenya	69	Boissiere <i>et al.</i> 1985	Uganda	73	Heyneman & Jamison 1980
Kenya	75	Costenbader & Ngari 2000	Zaire	68	Laroche 1959
Nigeria	69	Wober 1969	Zaire	62	Boivin & Giordani 1993
Nigeria	69	Fahrmeier 1975	Zaire	68	Boivin <i>et al.</i> 1995
Sierra Leone	67	Berry 1966	Zaire	65	Giordani <i>et al.</i> 1996
South Africa	65	Fick 1929	Zambia	75	MacArthur <i>et al.</i> 1964
South Africa	75	Notcutt 1950	Zimbabwe	61	Zindi 1994
South Africa	71	Notcutt 1950	Zimbabwe	70	Zindi 1994

Table 8.8: IQs of native American indians.

Country	IQ	Reference	Country	IQ	Reference
Canada	85	MacArthur 1965	United States	81	Haught 1934
Mexico	87	Modiano 1962	United States	85	Reschly & Jipson 1976
Peru	87	Raven <i>et al.</i> 1995	United States	94	Raven & Court 1989
United States	88	Telford 1932			
United States	83	Beiser & Gotoweic 2000			

With regard to the intelligence difference between blacks and whites in the United States, the consistency of the black-white differences worldwide corroborates the thesis that genetic factors are largely responsible for the difference in the United States. We have seen that whites from North West Europe, which is where the ancestors of most American whites came from, almost invariably have IQs close to 100, whether they are in Europe, Canada, Australia, New Zealand or South Africa, while blacks in sub-Saharan Africa invariably obtain IQs in the range of 62–78. The IQ of blacks in the United States is around 85 and hence substantially higher than the IQs of blacks in sub-Saharan Africa. There are two explanations for this. The first is that American blacks are a hybrid population with about 25% of white ancestry (Reed 1969; Chakraborty *et al.* 1992). According to genetic theory this would raise their IQs above the level of blacks in Africa. The second is that American blacks live in a society run by whites and enjoy much higher standards of living, nutrition, education and health care than they have in societies run by blacks. This enriched environment can be expected to have some advantageous impact on their IQ. When we look at the IQs of blacks in Africa we have to conclude that living in a white society has raised rather than lowered the IQs of American blacks.

This conclusion is the opposite to that of a number of environmentalists who contend that the low IQ of American blacks is due to “white racism”. For instance, Mackintosh writes: “it is precisely the experience of being black in a society permeated by white racism that is responsible for lowering black children’s IQ scores” (1998: 152). The IQs of blacks in Africa is compelling evidence against this theory. African countries gained independence from white rule in the 1960s and African children born from 1970 onwards no longer experienced white racism. The theory that white racism has been responsible for the low IQ of American blacks leads to the prediction that recent generations of young African blacks would show significant IQ gains. Studies carried out in the 1990s show that this has not happened. African blacks have continued to obtain the same low IQs of 62 (Ghana), 75 (Kenya), 62–68 (Zaire) and 61–70 (Zimbabwe) as they have obtained from the 1920s onwards. The theory that white racism has been responsible for the low IQ of American blacks was never plausible because its proponents have not identified the mechanism by which racism could lower intelligence and because racism has had no adverse impact on the intelligence of Asians and Jews. The evidence from Africa finally discredits it.

This association between intelligence and race is sufficiently close for it to be possible to predict the approximate IQs of nations and of sub-populations within nations from their racial identity. For instance, the population of Jamaica is 90% black, 7% mixed and 3% Indian (Ramsay 2000). It would be predicted that the population’s IQ should be a little above the median IQ of 68 of blacks in sub-Saharan Africa. The mean IQ is 72 (Manley 1963). In neighboring Cuba the population is 37% white, 11% black and 51% Afro-European. Assigning IQs of 98 for whites, 69 for blacks and 83 for Afro-Europeans, the IQ of the population should be 87. The actual IQ derived from the standardisation of the Progressive Matrices by Alonso (1974) is 84. Numerous other predictions can be made and tested from the genetic theory of race differences in intelligence. The theory has crossed the threshold from descriptive to predictive science.

The causes of genetically based racial differences in intelligence should be sought in their evolutionary history. Differences in IQ must have developed together with differences in skin color, morphology and resistance to diseases as adaptations to the environments in which the races evolved. We can reconstruct the broad outline of how this occurred. Modern humans evolved in Central East Africa about a quarter of a million years ago. Their brain size was the same as that of living blacks and it can be assumed that their intelligence was the same, represented by an IQ of 69. About 100,000 years ago some of these migrated into South West Asia. Here they encountered cold winters and a lack of plant foods during winter and spring. These conditions exerted selection pressure for an increase of intelligence to enable them to make clothing and shelters to protect themselves from the cold winters and to hunt large animals to obtain meat when plant foods were not available. By around 50,000 years ago these selection pressures raised the IQ of these peoples to about 75, represented by the present day Australian Aborigines, who migrated to Australia at about this time and whose IQ stabilized at around this figure.

During the next 25,000 years some of the peoples of South Asia migrated into North East Asia and others migrated into Europe. Some of those who migrated into North East Asia evolved into the Mongoloids. Others crossed into America and evolved into the Native Americans. Those who migrated into Europe evolved into the European Caucasoids. About 25,000 years ago the climate in the northern hemisphere began to grow colder with the onset of the last ice age. Winter temperatures fell by around 10 degrees centigrade. This made survival more difficult and exerted further selection pressure for enhanced intelligence. This selection pressure was weakest on the peoples of South Asia but it was sufficient to raise their IQs to the present day level of about 83; it was about the same on the Native Americans because these had migrated into America before the onset of the ice age and their IQs were raised to about the same level as that of South Asians. Climatic conditions were more severe in Europe and North East Asia, where the environment resembled that of present day Alaska and Siberia. This increased the selection pressure for enhanced intelligence and drove the IQs of the European Caucasoids up to its present day figure of around 98. In North East Asia the climate was even more severe than in Europe and drove the IQs of the Mongoloids up to the present day figure of around 104. The morphological basis of the increase in intelligence in the Caucasoids and Mongoloids was an enlargement of brain size the evidence for which is set out by Rushton (2000).

The ice age came to an end about 10,000 years ago. In the more benign climate that followed the South Asian Caucasoids and the Mongoloids were able to use their enhanced intelligence to develop the early civilisations along the river valleys of the Tigris, Euphrates, Indus, Nile and Yangtze, where the flood plains and the favourable climate made it possible to produce the agricultural surpluses required to feed urban populations and sustain an intellectual class. The Native Americans had also evolved sufficiently high intelligence to develop the quasi-civilizations of the Aztecs, Mayas and Incas. Europe, Northern China and Japan did not have the flood plains or the favorable climate necessary for the development of these early civilizations but in the last two millennia these peoples have used their high IQs to overcome these problems and produce the advanced civilisations of today.

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