

Available online at www.sciencedirect.com

SCIENCE @ DIRECT®

PERSONALITY AND
INDIVIDUAL DIFFERENCES

Personality and Individual Differences xxx (2005) xxx–xxx

www.elsevier.com/locate/paid

Book review

Lynn Richard, *Race Differences in Intelligence: An Evolutionary Analysis*, Washington Summit Books, Augusta, GA, 2005. ISBN 1-59368-020-1, 318 pp., US\$34.95

Lynn's book represents the culmination of more than a quarter of a century's work on race differences in intelligence. It was in 1977 that he first ventured into this field—some would say minefield—with the publication of two papers on IQ in Japan and Singapore. Both showed that the East Asians obtained higher means than White Europeans in the United States and Britain. These initial studies were criticised, but the present book lists 60 studies of the IQs of indigenous East Asians all of which confirm the original claim.

Most studies of race differences in intelligence have been conducted and discussed in local contexts. In the United States they have been largely concerned with the IQs of Whites, Blacks, Hispanics, Asians and Native American Indians. In Australia they have been concerned with the low IQ of the Aborigines, and in New Zealand with the low IQ of the Maoris. Although a few theorists have taken a global perspective and posited genetic and evolutionary explanations for the three macro-races of East Asians, Europeans and Africans (Jensen, 1998; Lynn, 1991; Rushton, 1995), most have typically explained the local differences by cultural factors such as poverty and racism.

Lynn's book extends the global perspective well beyond the three-macro races. He reviews more than 500 published IQ studies world wide from the beginning of the twentieth century up to the present, devoting a chapter to each of the ten “genetic clusters” or population groups identified by Cavalli-Sforza, Menozzi, and Piazza (1994), which Lynn regards as “races.” He concludes that the East Asians (Chinese, Japanese and Koreans) have the highest mean IQ at 105. Europeans follow with an IQ of 100. Some way below these are the Inuit or Eskimos (IQ 91), South East Asians (IQ 87), Native American Indians (IQ 87), Pacific Islanders (IQ 85), South Asians and North Africans (IQ 84). Well below these come the sub-Saharan Africans (IQ 67) followed by the Australian Aborigines (IQ 62). The lowest scoring are the Bushmen of the Kalahari Desert together with the Pygmies of the Congo rain forests (IQ 54).

After the 10 chapters setting out the evidence for the average IQ of each of the 10 races there follows a chapter on the reliability and validity of the measures. These show that although additional evidence may be required to confirm some of the racial IQ estimates, many have very high reliability in the sense that different studies give closely similar results. For instance, East Asians invariably obtain high IQs, not only in their own native homelands but also in Singapore, Malaysia, Hawaii, and North America. To establish the validity of the racial IQs, Lynn shows that they correlate highly with performance in international studies of achievement in mathematics and science. Racial IQs also correlate with national economic development and so help to explain why

some nations are rich and others poor. He suggests further that IQ differences explain how quickly populations made the Neolithic transition from hunter-gatherer to settled agriculture, to building early city states, and later the development of mature civilizations.

Lynn concludes that the causes of race differences in intelligence are 50% genetic and 50% environmental, an estimate in line with those of other recent reviews (Rushton & Jensen, 2005). He argues that the consistency of the racial IQs in so many different locations differing widely in circumstance can only be explained by powerful genetic factors. He works out the genetic contribution in most detail for people of African descent. He argues that Blacks in the United States experience the same environment as Whites in regard to the determinants of intelligence, such as nutrition, because Blacks and Whites have had the same average height since World War I. He presents evidence that Blacks in the southern states have very little White ancestry and have an average IQ of about 80, and he proposes this be adopted as the genotypic IQ of Africans. Because the average IQ for Blacks in sub-Saharan Africa is about 67, he takes this 13 point difference as the amount due to the adverse cultural conditions, principally poor nutrition and health, found on that continent.

The last three chapters are concerned with the book's subtitle (*An Evolutionary Analysis*) and discuss how race differences in intelligence have evolved. Lynn begins by putting the problem in context by summarizing Jerison's (1973) classic study showing that during the course of evolution, species have evolved greater intelligence in order to survive in more cognitively demanding environments. The same principle, Lynn argues, explains the evolution of race differences in human intelligence. As early humans migrated out of Africa they encountered the cognitively demanding problem of having to survive cold winters where there were no plant foods and so they had to hunt big game. They also had to solve the problem of keeping warm. Solving these problems required greater intelligence than was needed in tropical and semi-tropical equatorial Africa where plant foods are plentiful throughout the year. Lynn shows that race differences in brain size and intelligence are both closely associated with low winter temperatures in the regions they inhabit. He gives a figure of 1282 cc for the average brain size of sub-Saharan Africans, as compared with 1367 cc for Europeans and 1416 cc for East Asians. (For corroborating evidence on the world wide relationship between average winter temperature and IQ, as well as summer temperature and skin color, see Templer & Arikawa, *in press*).

From time to time Lynn notes anomalies in his theory that require explanations. One of these is that Europeans made most of the great intellectual discoveries, while the East Asians, despite having a higher IQ, made relatively few (extensively documented by Murray (2003)). Lynn proposes the explanation for this may be that East Asians are more conformist than Europeans and this inhibits creative achievement.

Another anomaly is that the IQ of Israel is only about 95, which although substantially higher than the median IQ of 85 found elsewhere in the region, is much lower than the IQ of Jews outside of Israel, estimated at between 108 and 115. Lynn breaks the Israeli IQ into three components: 40% Ashkenazim (European Jewish) with a mean IQ of 103; 40% Sephardim (Oriental Jewish) with a mean IQ of 91; and 20% Arab with a mean IQ of 86, which is virtually the same as that of Arabs elsewhere. Lynn suggests these differences could have arisen from selective migration (more intelligent Jews emigrated to Britain and the USA), intermarriage with different IQ populations (those in Europe versus those in North Africa), selective survival through persecution (European Jews were the most persecuted), and the inclusion of ethnic non-Jews among the Ash-

kenazim in Israel as a result of the immigration of people from the former Soviet Bloc countries who posed as Jews.

He also notes one or two anomalies in the cold winter theory of intelligence, the most striking of which is that the Inuit have been exposed to the coldest winter temperatures, have a brain size equal to East Asians, and yet have an average IQ of only 91. To explain this anomaly he proposed that additional genetic processes are important—such as population size. The larger the network of co-operating and competing population groups (“demes”), the faster any mutations for advantageous alleles can spread. This may help to explain why large landmass groups like East Asians and Europeans average higher IQs than isolated hunter-gatherer groups like the Inuit.

Lynn also advances a general principle from evolutionary biology to previous analyses finding a substantial genetic contribution to the differences in intelligence between East Asians, Whites, and Blacks (Rushton & Jensen, 2005). He argues that wherever subspecies adapt to novel environments they invariably develop differences in *all* characteristics for which there is genetic variation. Lynn asserts that intelligence cannot be an exception.

Over the years Lynn has made a number of important contributions to the field of intelligence. He was the first to identify the higher IQ scores of East Asians in Pacific Rim countries (e.g., Lynn, 1982). He has shown that the problem of why some nations are rich and others poor is largely explained by the intelligence of the populations (Lynn & Vanhanen, 2002). And, he has helped overturn the century long consensus that there is no sex difference in intelligence by showing that men average 4 to 5 IQ points higher than women (Lynn & Irwing, 2004). The present book documenting global race differences in intelligence and analysing how these have evolved may be his crowning achievement.

References

- Cavalli-Sforza, L. L., Menozzi, P., & Piazza, A. (1994). *The history and geography of human genes*. Princeton, NJ: Princeton University Press.
- Jensen, A. R. (1998). *The g factor*. Westport, CT: Praeger.
- Jerison, H. J. (1973). *Evolution of the brain and intelligence*. New York: Academic Press.
- Lynn, R. (1982). IQ in Japan and the United States shows a growing disparity. *Nature*, 297, 222–223.
- Lynn, R. (1991). Race differences in intelligence: a global perspective. *Mankind Quarterly*, 31, 255–296.
- Lynn, R., & Irwing, P. (2004). Sex differences on the progressive matrices: a meta-analysis. *Intelligence*, 32, 481–498.
- Lynn, R., & Vanhanen, T. (2002). *IQ and the wealth of nations*. Westport, CT: Praeger.
- Murray, C. (2003). *Human accomplishment*. New York: HarperCollins.
- Rushton, J. P. (1995). *Race, evolution, and behavior*. New Brunswick, NJ: Transaction.
- Rushton, J. P., & Jensen, A. R. (2005). Thirty years of research on race differences in cognitive ability. *Psychology, Public Policy and Law*, 11, 235–294.
- Templer, D. I., & Arikawa, H. (in press). Temperature, skin color, per capita income and IQ: An international perspective. *Intelligence*.

Philippe Rushton
 Department of Psychology
 University of Western Ontario
 London, Ont., Canada N6A 5C2
 Tel.: +1 519 661 3685; fax: +1 519 850 2302
 E-mail address: rushton@uwo.ca