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A STUDY OF IQ IN LITHUANIA[1]

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Summary.—Data for the Colored Progressive Matrices were collected for a sample of 259 8- to 12-yr.-old children in Lithuania in 1999. In relation to the British 1979 standardization sample the mean IQ of the Lithuanian children was 92.2. Adjusted for the estimated secular increase of intelligence in Britain, the Lithuanian mean IQ is estimated at 90.

During the last half century intelligence tests constructed and standardized in the United States and Britain have been administered in a number of countries throughout the world. From these it has been possible to calculate the mean IQs of the peoples of a variety of different countries. A compilation of these studies for 81 countries has been made by Lynn and Vanhanen (2002). In this compilation the mean IQ in Britain has been set at 100 and the means of other countries have been calculated in relation to this standard. The results are that European peoples in Europe, North America, and elsewhere obtain average IQs in the range of 90–105, East Asian peoples indigenous to Northeast Asia obtain average IQs in the range of 100–110, South Asians obtain mean IQs in the range of 78–94, and Sub-Saharan African peoples obtain average IQs in the range of 65–80

While intelligence tests have been standardized in many countries and mean population IQs can be calculated from the data, few data on intelligence have been available for the former Soviet Union. The reason for this is that intelligence testing was prohibited throughout the Soviet Union in the 1930s on the grounds that the notion that people differ in intelligence is contrary to Marxist-Leninist doctrine. The prohibition of intelligence testing remained in force during the post-World War II decades. The concept of intelligence was rehabilitated, and intelligence testing was reintroduced in clinical practice in the 1970s (Zeigarnik, Luria, & Polyakov, 1977), but it was not until 1997 that the first standardization of a Western intelligence test was carried out in Russia. This was the Standard Progressive Matrices. From the results it was estimated that the mean IQ in Russia is 97 (Lynn & Vanhanen, 2002).

In 1999 data for the Colored Progressive Matrices were collected for a sample of 259 children aged 8 to 12 years, mean age 10.1 yr., attending socially representative junior schools in the city of Kaunas in Lithuania. The test was given without time limits. The mean score was 28.9. This converts to a score of 35 on the Standard Progressive Matrices (Raven, Court, & Raven, 2000). This is the 35th percentile equivalent on the norms of the 1979 British standardization sample given by Raven (1981) and is equivalent to an IQ of 92.2.

To compare this estimate to a British mean of 100 for 1999 it is necessary to make an adjustment for an increase of intelligence in Britain over the years 1979–99, known as the Flynn effect (Flynn, 1987), that can be assumed to have taken place in Britain over the years 1979–1999. There are no data for the rate of secular increase in norms for the Progressive Matrices during these years. Over the years 1938-1979, IQs measured by the Progressive Matrices increased in Britain by approximately 2 IQ points per decade (Lynn & Hampson, 1986). It could

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be assumed that there was the same rate of increase during the years 1979-1999. This would entail deducting 4 IQ points from the Lithuanian IQ bringing it to 88.2; however, evidence suggests that the rate increase of IQs has fallen in recent years. In the United States the rate of increase in the Wechsler IQ was 3.3 IQ points over the period 1932–1978 (Flynn, 1984), but the latest evidence is that it was 1.71 over the years 1978–1995 (Flynn, 1998). It has been found by Teasdale and Owen (2000) that the rate of secular increase of a nonverbal reasoning test similar to the Progressive Matrices in Denmark over the years 1988–98 was 1.35 IQ points. We consider the most reasonable assumption is that the same rate of increase has occurred for the Progressive Matrices in Britain and therefore to conclude that the British IQ increased by 2.7 IQ points over the 20-yr. period 1979 to 1999. To adjust the result for Lithuania to a British IQ of 100 for 1999, it is therefore necessary to deduct 2.7 IQ points from the Lithuanian IQ, giving an IQ of 90.

This result of 90 for the mean IQ of children in Lithuania is in line with other calculations of IQs obtained from the Progressive Matrices in the former Soviet Union and communist countries of Eastern Europe. These have shown IQs of 97 for Russia, 96 for the Czech Republic, 92 for Poland, 94 for Romania, 96 for Slovakia, and 95 for East Germany (Lynn & Vanhanen, 2002). These IQs are all a little lower than those in Britain. We propose the most probable explanation for this set of results is that the low living standards in the former Soviet Union and communist Eastern Europe have had an adverse effect on intelligence (Lynn, 1990, 1993, 1998; Lynn & Harland, 1998), probably largely by reducing the quality of nutrition. On the other hand, the adverse effect of low living standards has not been very great considering the difference between standards of living in the former communist countries and the West. For instance, in 1995 the per capita income (GNP per capita at Purchasing Power Parity) in Lithuania was $4,120 compared with $19.260 in Britain and $26,980 in the United States [see Lynn & Vanhanen (2002) for per capita incomes in all nations]. This suggests that the adverse effect of low living standards on national intelligence is relatively small.

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