A Study of the IQ in Bangladesh Richard Lynn^{*}

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In our most recent compilation of IQs for all nations of the world (Lynn and Vanhanen, 2006) we presented measured IQs for 113 nations and estimated IQs for a further 79 nations. The estimated IQs were derived on the assumption that a nation's IQs would be similar to that of geographically and racially similar nations for which we had measured IQs. At the time of this compilation we had no measured IQ for Bangladesh, so we assumed it would be the same as that of the Indian average for which we had a measured IQ of 82. We have now located a study in Bangladesh from which a measured IQ for can be calculated at 81.

Key Words: IQ; Bangladesh; MMSE.

Estimates of mean IQs for all the nations of the world have been given in Lynn and Vanhanen (2002, 2006). These estimates have been based on a British IQ of 100 and standard deviation of 15, and have shown considerable differences ranging from approximately 105 in the nations of North East Asia (China, Hong Kong, Japan, South Korea, Singapore and Taiwan), approximately 99 in the nations of Europe and in the nations populated largely by European peoples in North America, Australia and New Zealand, approximately 84 in the nations of South Asia and North Africa, and approximately 67 in the nations of sub-Saharan Africa. We have shown that these differences in national IQs are correlated at about 0.7 with per capita income and therefore, assuming a causal relationship, explain about half the variance in economic development.

These differences in national IQs have attracted the attention of economists, sociologists and psychologists. Several of these have confirmed that national IQs are associated with per capita income, including Jones and Schneider (2006, p.91) (respectively an economist and a psychologist) who have concluded that "IQ differences alone can explain a substantial fraction of cross country differences in living standards; the health and vigor of the human brain is likely to be a key

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determinant of national economic performance". Others who have confirmed this relationship include Ram (2007) (an economist), Weede & Kampf (2002), and Templer & Arikawa (2006).

Others have examined the relationship between national IQs and other phenomena. These have shown that national IQs are positively related to suicide rates (Voracek, 2004), educational attainment in math and science (Lynn & Mikk, 2007), light skin color (Templer & Arikawa, 2006), low winter temperatures (Templer & Arikawa, 2006), and life expectancy (Kanazawa, 2006). It has also been shown that national IQs are negatively related to the prevalence of AIDS (Oesterdiekhoff & Rindermann, 2007).

In our first compilation of national IOs we presented measured IQs for 81 nations and estimated IQs for a further 104 nations from the measured IQs of nations that were geographically and racially similar (Lynn & Vanhanen, 2002, p.71). For instance, as we had no IQ for Luxembourg we estimated it at 101 on the basis of an IQ of 102 in the Netherlands and 100 in Belgium (national IQs can only be considered accurate to within 2/3 IQ points because of sampling and measurement errors, so we do not regard the difference between the IQ of 102 in Netherlands and 100 in Belgium as a real difference). In our second compilation of national IOs given in Lynn & Vanhanen (2006) we presented measured IOs for 113 nations and estimated IOs for a further 79 nations using the same method as before, i.e. from the measured IOs of nations that were geographically and racially similar to those for which we had measured IOs.

Some of our critics have been critical of our estimated IQs. To check the validity of these estimates, we examined the agreement for 25 countries between the estimated IQs given in our first study with the measured IQs given in our second study. The correlation between the estimated IQs and the measured IQs was 0.91, indicating that the estimated IQs are closely similar to the measured IQs. Nevertheless, measured IQs certainly have more credibility than estimated IQs and we have continued our search for measured IQs for new nations. In this connection, we estimated that the IQ of Mongolia at 101, as the average of contiguous China (105) and Russia (97). We have now shown empirically that the IQ of Mongolia can be

calculated at 100 Lynn & Higgins (2007).

In this paper empirical data are presented from which it is possible to calculate an IQ for Bangladesh.

In our previous work we estimated the IQ of Bangladesh at 82 on the basis of an IQ of this figure for India. It is recognised that India is not genetically or culturally homogeneous and the IQ of 82 is derived as the median of 12 studies with a range from 78 and 88. The study to be described entailed the administration of the Mini-Mental State Examination (MMSE) to representative samples of the population in Bangladesh in 1995-6 by Kabir and Herlitz (2000). The MMSE is a test of general intelligence constructed for the diagnosis of mental deterioration in the elderly. The test consists of 12 subtests covering general knowledge, arithmetic, immediate memory, language comprehension, carrying out instructions and figure copying. Normative American data for a sample of 1350 aged 73 years, of whom 97 per cent were white, have been given by Ganguli, Ratcliff, Huff et al. (1991).

The first part of this study administered the MMSE to a representative sample of 246 literate adults.

The sample were all aged 60 and over, with an average age of 67.2 years. The sample was drawn using a multi-stage sampling method from a rural area and from Dhaka (the capital city) to represent the urban population. The sample had an average of 8.4 years of schooling. The Bangladesh sample had a mean score of 25.1 (sd = 3.7), while the American sample of Ganguli, Ratcliff, Huff et al. (1991) had a mean score of 27.2 (sd = 2.9). Hence, the Bangladesh sample scored .636d (standard deviation units) lower than the American sample = 9.5 IQ points. Hence, the mean IQ of the Bangladesh sample in relation to 100 for the American sample was 90.5. This can also be taken as the sample's IQ on the international metric based on a British IQ of 100 and standard deviation of 15 used for the calculation of national IQs by Lynn and Vanhanen (2002, 2006), since American sample was virtually all white, and American whites have the same IQ as British whites. The authors of the study also gave a modified version of the test designated the BAMSE (Bangladesh Adaptation of the Mini-Mental State Examination) to a sample of 426 illiterate adults aged 66.4 years (this is not statistically significant from 67.2 years of the literate sample. The test was modified to make it

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suitable for illiterates in Bangladesh, but the changes were few. The illiterate sample was drawn from the same areas as the literate sample. The number of years of schooling of this sample is not given, but is implied to be zero. The literate sample took both tests and the correlation between the scores obtained was 0.57. The illiterate sample scored 12.8 IQ points lower than the literate sample, and therefore obtained a British IQ of 77.7.

The authors of the study state that 38.5 per cent of the population in Bangladesh are literate and 61.5 per cent are illiterate. To obtain an IQ for Bangladesh it is necessary to weight the IQs of the literate (90.5) sample and illiterate sample (77.7) by their percentages in the population. This gives an IQ for Bangladesh of 82.6. This figure can refined by adjusting for the American data having been collected 5 years before the Bangladesh data, so the American IQ is assumed to have gained 1.5 IQ points as a "Flynn effect" (note that this IQ for Bangladesh is calibrated against the IQ of American whites and is not affected by the considerable numbers of non-European immigrants into the U.S.). This adjustment reduces the Bangladesh IQ to 81.1. Thus, it is evident that our previous estimated IQ of 82 for Bangladesh was very close to the mark.

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