MANKIND QUARTERLY 2017 58:2 297-300

A New Study of the Coloured Progressive Matrices in Libya

Salaheldin Farah Attallah Bakhiet*
King Saud University, Riyadh, Saudi Arabia

Nasser Sayed Gomaa Abdelrasheed
Dhofar University, Sultanate of Oman

Richard Lynn
University of Ulster, UK

*Corresponding author: slh9999@yahoo.com

Data are reported for intelligence assessed with the Coloured Progressive Matrices for a sample of 504 children aged 6 to 11 years in Libya. The sample obtained a British-scaled IQ of 79.
Key words: Libya, Coloured Progressive Matrices, Intelligence, Misurata

A research program to collect IQs for all nations in the world and examine their social and economic correlates was initiated by Lynn and Vanhanen (2002) and extended in a number of subsequent studies summarized in Lynn and Vanhanen (2012). In these studies national IQs are scaled in relation to a British mean of 100 and standard deviation of 15. The results have shown that the average intelligence in countries is positively related to a large number of social and economic characteristics including scholastic achievement measured in international testing programs such as PISA and TIMSS (Meisenberg & Lynn, 2011), current level of economic development (Lynn & Vanhanen, 2012), economic growth rate (Meisenberg, 2014; Weede & Kämpf, 2002), good government (Kanyama, 2014), generalized trust (Carl, 2014), innovation (Burhan et al., 2014a), cultural variation in beliefs and values (Meisenberg, 2004; Meisenberg et al., 2012), democracy, rule of law and political liberty (Rindermann, 2008), longevity (Lv & Xu, 2016) and suicide rates (Voracek, 2009), and

negatively to rates of violent crime (Burhan et al., 2014b; Meisenberg & Woodley, 2013).

Three studies of the Libyan IQ are given in Lynn and Vanhanen's (2012) compilation of national IQs. These gave IQs of 86 calculated from a study using the Coloured Progressive Matrices, 78 calculated from a study using the Standard Progressive Matrices, and 85 calculated from a study using the WISC-R (Wechsler Intelligence Scale for Children-Revised). A more recent study of the Coloured Progressive Matrices in Tripoli, the capital city of Libya, has been published by Bakhiet and Lynn (2015).The sample obtained a British-scaled IQ of 82.5. The present paper contributes to this research program by reporting new data for children tested with the Coloured Progressive Matrices in the Libyan city of Misratah (Misurata).

Method

The sample consisted of 42 boys and 42 girls from each of the six age groups 6 through 11 years, making a total sample size of 504. The sample was selected from Misratah by the multi-stage random sampling method, to be representative of children in the city. With a population of approximately 280,000, Misratah is the third largest city in Libya. It has a university and is situated on the coast of the Mediterranean approximately 180 km east of the capital Tripoli and approximately 825 km west of the second city Benghazi. The sample was tested in 2014 with the Coloured Progressive Matrices, a test of non-verbal reasoning ability (Raven, 2008), by Khalid Mohammed Al-Madani (2016).

Results

The results are given in Table 1 showing for each of the six age groups the numbers, mean scores, standard deviations, and the IQs estimated from the manual of the 2007 British standardization (Raven, 2008).

Table 1. *Mean CPM raw scores, standard deviations, and British-scaled IQs for the Coloured Progressive Matrices in Libya.*

Age	6	7	8	9	10	11
N	84	84	84	84	84	84
Score	17.87	18.33	21.07	23.15	24.70	25.61
SD	3.43	4.54	4.54	4.14	4.23	4.43
IQ	87.5	75	75	80	80	72.5

Discussion

There are two points of interest in the results. First, the mean British IQ of the six age groups is 79.16 and is thus consistent with the four previous studies of the IQ in Libya giving IQs of 86, 78, 85 and 82.5 noted in the introduction. There are now five studies of the IQ in Libya of which the mean is 82.1 and the median is 82.5.

Second, it will be noted that the British-scaled IQs of the Libyan children declined with age. The 6 year olds obtained a mean IQ of 87.5 while the 11 year olds obtained an IQ of 72.5. This decline is consistent with Jensen's (1977) cumulative deficit hypothesis stating that an adverse environment has a depressing effect on intelligence that increases with age and that he reported for Blacks in the rural South of the United States. It indicates that socio-economic or educational conditions in Misratah were unfavorable for the development of children's intelligence during the years preceding 2014, when the study was done. For comparison, a similar study performed 2008 in Tripoli had obtained CPM raw scores of 22.5, 26.0 and 28.0 at ages 9, 10 and 11.5, respectively (Bakhiet & Lynn, 2015).

Acknowledgement

The authors are thankful to the Deanship of Scientific Research, College of Education Research Center at King Saud University for funding this research.

References

Al-Madani, K.M. (2016). The Standardization of Raven's Coloured Matrices on Libyan children in Misurata. *Journal of College of Arts, Misurata University* 1: 34-60 (in Arabic).

Bakhiet, S.F.A. & Lynn, R. (2015). A standardization of the Coloured Progressive Matrices in Tripoli, Libya. *Mankind Quarterly* 56: 79-86.

Burhan, N.A.S., Mohamad, M.R., Kurniawan, Y. & Sidek, A.H. (2014a). National intelligence, basic human needs, and their effect on economic growth. *Intelligence* 44: 103-111.

Burhan, N.A.S., Kurniawan, Y., Mohamad, M.R. & Sidek, A.H. (2014b). Crime and the bell curve: The role of people with high, average and low intelligence. *Intelligence* 47: 12-22.

Carl, N. (2015). Does intelligence have a U-shaped relationship with leftism? *Intelligence* 49: 159-170.

Jensen, A.R. (1977). Cumulative deficit in IQ of blacks in the rural South. *Developmental Psychology* 13: 1841-1891.

Kanyama, I.K. (2014). Quality of institutions: Does intelligence matter? *Intelligence* 42: 44-52.

Lv, Z. & Xu, T. (2016). The impact of national IQ on longevity: New evidence from quantile regression. *Personality and Individual Differences* 101: 282-287.

Lynn, R. & Vanhanen, T. (2002). *IQ and the Wealth of Nations*. Westport, CT: Praeger.

Lynn, R. & Vanhanen, T. (2012). *Intelligence: A Unifying Construct for the Social Sciences*. London: Ulster Institute for Social Research.

Meisenberg, G. (2004). Talent, character, and the dimensions of national culture. *Mankind Quarterly* 45: 123-168.

Meisenberg, G. (2014). Cognitive human capital and economic growth in the 21st century. In: T. Abrahams (ed.), *Economic Growth in the 21st Century: Perspectives, Role of Governmental Policies, Potential and Constraints*, pp. 49-106. New York: Nova Publishers.

Meisenberg, G. & Lynn, R. (2011). Intelligence: A measure of human capital in nations. *Journal of Social, Political and Economic Studies* 36: 421-454.

Meisenberg, G., Rindermann, H., Patel, H. & Woodley, M.A. (2012). Is it smart to believe in God? The relationship of religiosity with education and intelligence. *Temas em Psicologia* 20: 101-120.

Meisenberg, G. & Woodley, M.A. (2013). Global behavioural variation: A test of differential-K. *Personality and Individual Differences* 55: 273-278.

Raven, J. (2008). *Coloured Progressive Matrices and Crichton Vocabulary Scale Manual*. London: Pearson.

Rindermann, H. (2008). Relevance of education and intelligence for the political development of nations: Democracy, rule of law, and political liberty. *Intelligence* 36: 306-322.

Voracek, M. (2009). National intelligence, suicide rate, and subjective well-being. *Perceptual and Motor Skills* 109: 718-720.

Weede, E. & Kämpf, S. (2002). The impact of intelligence and institutional improvements on economic growth. *Kyklos* 55: 361-380.