

A Study of the IQ in Sudan

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Abstract

The Coloured Progressive Matrices (CPM) was standardized in Sudan in 2004 on a sample of 1683 69 year olds. The sample obtained a British IQ of 78.

Keywords: Sudan, Coloured Progressive Matrices, intelligence

1 Introduction

Twelve studies of intelligence in Sudan are listed by Lynn & Vanhanen (2012) in their compilation of IQs for all nations in the world. These gave British IQs ranging between 64 and 86 with a median of 77.5. These studies included a study of a sample tested with the Coloured Progressive Matrices published in Arabic by Khatib et al. (2006) which was given a British IQ of 81.

We believe this estimate of the British IQ needs description and revision. We give here a summary of the study. Khatib et al. (2006)'s study was a standardisation of the Raven's Coloured Progressive Matrices (CPM) (Raven et al., 1995) in Khartoum State, Sudan, in 2004 on a sample of 1683 participants consisting of males (728) and females (955). The participants were permanent residents of Khartoum and indigenous to northern Sudan. None of them were refugees or migrants from other parts of the country. They came from lower, middle, and upper socioeconomic strata.

The data are shown in the table below. The right hand column gives the British percentiles on the 1982 British standardisation given by Raven et al. (1995). The mean of the British percentiles IQ of 86.25.

This IQ needs adjustment for the increase of the British IQ over the 22 years from 1982 to 2004 which is calculated by Flynn (2012) as 3.8 IQ points a decade and was therefore 8.36 IQ points over the 22 years.

Table 1: Coloured Progressive Matrices data.

Age	Gender	N	M	SD	British PC
6	M	92	13.5	5.4	29
	F	167	12.5	4.3	21
7	M	167	14.2	4.6	23
	F	293	14.0	5.0	21
8	M	286	16.1	5.8	16.5
	F	366	15.3	5.3	14
9	M	183	17.6	7.3	12
	F	129	15.5	5.9	7.5

This reduces the Sudan IQ from 86.25 to 77.9 and can be rounded up to 78. It will be noted that the British percentiles of the Sudanese children declined with age. The 6 year olds scored at the 25th British percentile while the 9 year olds scored at the 9.75th British percentile. This decline is consistent with Jensen (1977)'s cumulative deficit hypothesis stating that an adverse environment has a depression effect on intelligence that increases with age that he demonstrated for blacks in the rural south of the United States.

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Peer review and original study

The peer review for this paper can be found at the submission thread (<https://openpsych.net/forums/15/thread/96/>), where a scan of the original study in Arabic can also be found.

References

- Flynn, J. (2012). *Are we getting smarter?* Cambridge: Cambridge University Press.
- Jensen, A. R. (1977). Cumulative deficit in iq of blacks in the rural south. *Developmental Psychology*, 13, 1841–1891.
- Khatib, M., Mutwakkil, M., & Hussain, A. (2006). Tagneen i'khtibar almasfofat almutatabia' almulawwan litalameez alhalaqa alo'la bimarhalat alasas biwilayat alkhartoum (standardization of the coloured progressive matrices to children in khartoum state). *Khartoum: Sharikat Matabi' alSudan lilOmlah alMahdodah*.
- Lynn, R., & Vanhanen, T. (2012). *Intelligence: A unifying construct for the social sciences*. London: Ulster Institute for Social Research.
- Raven, J., Court, J., & Raven, J. (1995). *Coloured progressive matrices*. Oxford, UK: Oxford Psychologists Press.