

## **A Standardization of the Standard Progressive Matrices in Egypt**

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### **Abstract**

Results are reported for intelligence in Egypt assessed with the Standard Progressive Matrices on a sample of 7,600 aged 6.0 to 20 plus years. The sample obtained a British IQ of 89.25.

**Keywords:** Intelligence; Standard Progressive Matrices; Egypt

Three studies of intelligence in Egypt are reported by Meisenberg & Lynn (2011) and Lynn & Vanhanen (2012) in their compilation of IQs for all nations in the world calculated in relation to a British mean of 100 and standard deviation of 15. The first of these studies reported results for a sample of 206 6-10 year olds on the Draw-a-Man test, on which the Egyptian children obtained a British IQ of 77 (Dennis, 1957). The second study reported results for a sample of 111 12-15 year olds on the Cattell Culture Fair test, on which the Egyptian children obtained a British IQ of 81 (Sadek, 1972). The third study reported results for a sample of 129 6-12 year olds on the Standard Progressive Matrices, on which the Egyptian children obtained a British IQ of 83 (Ahmed, 1989). All these results are based on quite small samples. We report here the results of another study of intelligence in Egypt based on a much larger sample.

### **Method**

The Standard Progressive Matrices was standardized in Egypt in 1986 by Saleh (1988) on a sample of 7,600 aged 6.0 to 20 plus years. The sample came from the south of Egypt from the provinces of Giza, Assiut, Sohag and Aswan. The test

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was administered in Arabic, the first language of the participants, and the results were published in Arabic.

## Results

The results are shown in Table 1. This gives the scores on the Standard Progressive Matrices for each age from 6.0 to 20 plus years, the British percentiles of these scores and their British IQ equivalents. The British percentiles for the 6.0 to 15.0 years olds (N = 4733) are taken from the 1979 British standardization sample given by Raven (1981). The British percentiles for the 18.0 to 20 plus year olds (N = 1844) are taken from the 1992 British standardization sample given by Raven (1998). There are no British norms for 16 and 17 years olds.

**Table 1.** Scores on the Standard Progressive Matrices for an Egyptian sample.

| Age         | N    | SPM | British PC | British IQ |
|-------------|------|-----|------------|------------|
| 6.0         | 478  | 11  | -          |            |
| 7.0         | 483  | 13  | 14         | 84         |
| 8.0         | 416  | 16  | 16         | 85         |
| 9.0         | 489  | 23  | 27         | 91         |
| 10.0        | 476  | 27  | 16         | 85         |
| 11.0        | 485  | 32  | 20         | 87         |
| 12.0        | 461  | 35  | 18         | 86         |
| 13.0        | 444  | 41  | 37         | 95         |
| 14.0        | 493  | 44  | 37         | 95         |
| 15.0        | 508  | 45  | 45         | 98         |
| <i>Mean</i> |      |     |            | 89.5       |
| 16.0        | 482  | 49  | -          | -          |
| 17.0        | 541  | 48  | -          | -          |
| 18.0        | 398  | 48  | 21         | 88         |
| 19.0        | 339  | 49  | 25         | 90         |
| 20+         | 1107 | 49  | 25         | 90         |
| <i>Mean</i> | -    | -   | -          | 89.3       |

An adjustment to these results needs to be made for the “Flynn effect”, i.e. the increase in the British IQ over time. This has been estimated for the Progressive Matrices in Britain at 2 IQ points a decade (Lynn & Hampson, 1986). Assuming that the Egyptian study was carried out two years before publication and therefore in 1986, the data were collected seven years later than the 1979 British standardization for 7 to

15 year olds. Adjustment for this Flynn effect requires the deduction of 1.4 IQ points to give an IQ of 88.1.

For those aged 18.0 to 20 plus, the British standardization for adults was carried out in 1992, 6 years later than the Egyptian study, and for this 1.1 IQ points need to be added to the Egyptian IQs. The effect of this adjustment is to give an Egyptian IQ of 90.4. The average of the British IQs for the two age groups is 89.25.

## **Discussion**

The three studies of intelligence in Egypt reported by Meisenberg & Lynn (2011) and Lynn & Vanhanen (2012) in their compilation of IQs for all nations in the world gave British IQs of 77, 81 and 83. Following their usual procedure, they took the median of 81 as the best estimate of the IQ in Egypt. The present study gives two significantly higher IQ of 88.1 and 90.4. We now have five studies of the Egyptian IQ of which the median is 83. This is regarded as the best estimate of the IQ in Egypt currently available. This estimate is closely similar to the IQ of 84 for Tunisia and 85 for the IQ in Libya given by Meisenberg & Lynn (2011) and Lynn & Vanhanen (2012).

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## **Peer review and supplementary material**

The peer review of this paper can be found in [the submission thread](#). A scan of the original Arabic study can be found [here](#).

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