

Binet Kamat Test for intelligence – issues with scoring and interpretation

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Sir,

Binet Kamat Test of Intelligence, popularly known as BKT though standardized few decades back, several clinical psychologists in the country still use it in their day-today practice for the assessment of Intelligence as the test cost less monetary wise, is easy to administer, takes less time, provides a comprehensive score and is a valid test in terms of standardization. Given that the test is standardized in 1960s and the different standard deviation of the test compared to what is used the world over today and with WHO guidelines, few important factors need to be considered for scoring and interpretation of the assessment results.

Prorating of IQ and Mental Age

The second important issue is the practice of ‘prorating the IQ’. ICD-10 [1] recognizes and recommends IQ categories, where the intelligence test mean is 100 and the standard deviation is 15. Given the standard deviation of BKT is 18.7, it become imperative to report the obtained (BKT) IQ equivalent to the general practice accepted World Health Organization. In this regard, several clinical psychologists are already familiar with this practice of prorating and are using it in their day today practice. Given this, there are still few who do not mention the prorated IQ as ‘prorated IQ’, which makes it difficult to those who reads the report, whether the IQ is original BKT IQ or prorated IQ.

However, while reporting the findings, most of us mention Mental Age as well as Prorated IQ. The crux of the problem lies here, where the IQ is prorated leaving Mental Age as unchanged as was in the original BKT score. This can lead to sometimes an under-reporting about 1 year or more in mental age if we do not prorated it. This might appear as an insignificant factor, but considering that when providing feedback to the parents/caretakers, majority of us use Mental Age score than the IQ score, it becomes important. For example, if we the child’s Chronological Age is 120 and her/his MA is 5 years, the BKT original IQ would be 50, and the Prorated IQ would be 60, but technically the MA doesn’t change and when providing feedback about the general mental growth of the child many will say it is equal to 5 years, but technically when we prorated the IQ, we should use the prorated MA to provide feedback. The prorated MA for the above example would be 6 years. As most of us are aware about the formula to prorated BKT IQ, we are not aware about this very concept of prorating MA. In this regard, we developed this procedure to prorated MA.

For Prorating MA, we should first calculate Prorated IQ than then use the following simple formula

$$100 - \left[\frac{(100 - \text{BKT IQ})}{18.7} \times 15 \right] = \text{Prorated IQ}$$

$$\frac{(\text{Chronological Age})}{100} \times \text{Prorated IQ} = \text{Prorated MA}$$

Flynn effect

The Flynn effect indicates that the intelligence of the successive generation increases in IQ [2] about 3 points per decade. Considering the BKT is an age scale and the last available norms are of 1964, the results obtained actually reflect about 15 IQ points lower in the person than what is expected of today. If Flynn effect is taken into account, a person scoring 95 IQ points will actually be relatively equivalent to having an IQ of 80 as of today. However, as India is still a developing and the majority of the population can be considered as middle or lower socioeconomic status, the IQ obtained (without considering the Flynn Effect) most of the times can still be equivalent to recent tests in terms of standardization. Here the clinical psychologist has to use her/his clinical judgment to arrive at a conclusion based on the Flynn effect, child's educational setting, and family setup and the socioeconomic status.

Therefore, we request all the clinical psychologists in India to keep the above in mind while scoring and interpreting BKT test.

REFERENCES

1. World Health Organization. International Classification of Diseases and Related Health Problems. 10th edition ; 1992.
2. Herrnstein RJ, Murray C. The Bell Curve Intelligence and class structure in American Life. Free press, USA ; 1994.

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