The transgenerational change in Intelligence Quotient (IQ) norms is an issue that has dominated the field of intelligence testing during recent decades. Every 30 years or so, there is a cumulated increase of approximately 10-20 points in the population IQ. This rise was originally observed with data from USA, and was subsequently confirmed with data from 20 countries. Apparently, such gains in IQ test performance are a universal phenomenon. The finding is known as the Flynn effect because it was first reported by the New Zealand political scientist, James Flynn (Wickelgren, 1999).

The transgenerational rise in test IQ is not noticed clinically because the manufacturers of IQ tests restandardize their tests every decade or so. Had it not been for such restandardization, norms set 50 years ago would classify 90% of today’s generation as geniuses; or, according to current norms, most persons belonging to previous generations would appear to have below average intelligence or borderline mental retardation (Wickelgren, 1999).

This is obviously ridiculous. To judge from current standards of achievement, geniuses are as rare today as in the past. All our grandparents were not low in intelligence, or mentally retarded. Progress in creative, social, scientific, and other domains shows no evidence to suggest that succeeding generations are truly more intelligent. Likewise, there has been no evidence of quantum increasing in cognitive abilities across time (Flynn, 1999). In the absence of age-standardized norms, the Flynn effect therefore prohibits the use of IQ tests to compare individuals belonging to different generations. It also prohibits the use of outdated IQ norms.

Explanations for the Flynn effect

The Flynn effect was recently discussed by Flynn himself (Flynn, 1999). One explanation for the Flynn effect is that higher standards of education are responsible for better performances on common IQ tests because these tests contain many items which are indirectly addressed in contemporary academic syllabi. But, although this explanation appears attractive, it is weakened by the finding that transgenerational IQ gains are most prominent on tests, such as the Raven’s Progressive Matrices, which are widely considered to be culture-fair and free of educational biases. The education explanation is further weakened by the finding that transgenerational gains are least on subtests, such as arithmetic and information, that address school-taught subjects. Finally, the education explanation for the Flynn effect is valid only if it is accepted that IQ can be taught, or that IQ tests tap education and not IQ; the former premise is patently absurd, while the latter strikes at the very heart of IQ testing.

Another explanation for the Flynn effect is that better education across generations leads to better problem-solving abilities and hence better IQ test performances. In other words, intelligence is at least partly an acquired skill. This does not conform well with theories that holds that intelligence reflects an innate ability. For example, the Spearman-Jensen theory of intelligence posits the existence of IQ tests to compare individuals belonging to different generations. It also prohibits the use of outdated IQ norms.

Key words: Flynn effect, Intelligence testing, IQ, Mental retardation
of a general intelligence factor called G. G explains the tendency of the same people to excel on a wide variety of intelligence tests and has been suggested to relate to abilities in real life. G has been considered to reflect innate, not acquired skills.

Might television and video games exposure improve IQ test performances? As with education, perhaps; but, this explanation does not hold for the Flynn effect because transgenerational IQ gains were recorded even before the television and video game era.

Better nutrition has also been suggested as an explanation. But, improved diet produces only modest gains in IQ, and these gains are clearly evident only in children who were poorly nourished to begin with (Brown and Pollitt, 1996). In contrast, IQ gains cumulated across decades are enormous, not modest; and (particularly in the Western world) few members of past generations who completed IQ tests suffered from malnutrition.

Implications of the Flynn effect with special reference to India

The Flynn effect on IQ testing underlines what psychologists have always underlined: IQ tests are but crude indicators of intelligence, and IQ test performances do not correlate well with achievements in real life.

The Flynn effect creates an absurdity: the day an IQ test is restandardized upwards, it classifies a large number of persons as below average in intelligence or, possibly, even mentally retarded, who had not been so categorized the previous day! The implication of this is that persons with mental retardation or below average intelligence may not be classified as such if outdated IQ test norms are applied. Users of IQ tests would therefore do well to check the current validity of the norms that they are employing. The assumption inherent in this assertion is that the shift in IQ with the Flynn effect is uniform across the range of intelligence scores rather than being greater at higher IQ levels. While this assumption is unproven and merits study in patients at the borderline of IQ categories, even small revisions in the norms at lower levels can have important implications for classification.

Table 1 provides a list of common and important IQ tests standardized for use in India along with the dates of standardization. From the table, it is clear that few tests are up-to-date. It is particularly regrettable that commonly used tests, such as the Binet-Kamat test, Bhatia’s battery and the WAPIS, have not been restandardized for a long time. Also regrettable is that, Indian norms are unavailable for the Coloured Progressive Matrices, a test commonly used for children. The Indian norms for the Standard Progressive Matrices have been obtained only for pediatric age groups and not for adults. Clinicians should therefore ensure that they use only those tests for which recent, age-appropriate Indian norms are available.

The issue is not merely an academic one. Several financial and legal provisions are available in India for persons with mental retardation—these include the Persons with Disabilities Act (Andrade, 1996), income tax exemptions for persons with mental retardation, or caregivers of persons with mental retardation, stipends for persons with mental retardation (Andrade, 1997, 1999, 2000) etc. If clinicians use old norms for ascertaining IQ, they will arrive at a falsely higher IQ, generate unreasonably higher expectations of the retarded child, and deprive the child and his caregiver of appropriate legal and financial benefits.

We hope that this discussion will stimulate clinicians and researchers to develop and use up-to-date norms for all the IQ tests necessary and commonly employed in this country.
Chittaranjan Andrade & Jamuna N.

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