

Intelligence in Autism

Sir,

The case report, "Intelligence and Cognition in a Child with High Functioning Autism" by M Thomas Kishore which appeared in the October–December 2012 issue, volume 34 (4) appears to be flawed in its conceptualization and conclusions as discussed below.

The very premise of the article that there exists 'a conventional hypothesis' that (probably) 'superior crystallized intelligence is characteristic of high functioning autism (HFA)' is erroneous. There is in fact some consensus that individuals with autism have superior fluid intelligence not crystallized intelligence.^[1] The other erroneous assertion is that: 'Verbal quotient was usually reported to be higher than the performance quotient'; it is the reverse that is often evident in practice. Verbal intelligence quotient (VIQ) is based on several of language tests including comprehension which autistics are consistently poor in. This has been demonstrated by several researchers, using the Wechsler Intelligence Scale for Children (WISC) and Stanford-Binet Intelligence Scale.

The author has not defined the concepts. Crystallized intelligence represents tasks in which either the content or operations involved depend on education and acculturation. According to Horn (1988),^[2] crystallized intelligence has prominent relationships with verbal knowledge, following instructions, information about the humanities, social and physical sciences, culture in general, as well as problem definition. Both fluid and crystallized intelligence have been defined by a large set of different variables and finding simple tests for either has always been difficult.

The diagnosis of autism needs to be explained better. What aspect of the Gilliams Aspergers Disorder Rating Scale was used to rule out Asperger's Syndrome, needs to be highlighted. Though different tests have been used to get a global developmental age and a social age, it is most unusual to describe a child with autism where the social age is higher than the developmental age. These findings of the author need better synthesis.

The reason for using the Binet Kamat Test of Intelligence (BKT) as a test of crystallized intelligence has also not been explained. The BKT was normed for Indian use in 1960. Such old norms will result in highly inflated IQ.^[3] On the other hand, performance based tests also have challenges. Rao *et al.*,^[4] (2010) had demonstrated

that children who were assessed with the help of the Raven's Progressive Matrices (RPM) showed higher IQ's than those who were assessed with the WISC. Despite the fact that the RPM has been often used for assessing individuals with autism, Rao *et al.*,^[5] (2011) found that only 42% of high functioning children selected for a study could complete the RPM. This shows that assessing intelligence in children with autism is a highly complex process.

We agree with the author that there is a lot to be gained by studying the cognitive processes in autism. The work needs to start with good definition of cases, concepts, as well as a critical approach to analysis. Unfortunately this published case study fails on all three counts.

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Website: www.ijpm.info	Quick Response Code 
DOI: 10.4103/0253-7176.122254	