Block Design Elevations on the Wechsler Scales: A Caveat

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ABSTRACT. Exposure to stimulating educational toys may artificially inflate a child's Performance IQ. A game produced by Lakeside Toys called "Trac 4" bears a striking resemblance to the Wechsler Block Design Subtest. The toy utilizes identical red and white one-inch cubes and contains similar geometric designs that are to be constructed. Exposure to this type of game may artificially inflate a child's Block Design Subtest. Significant elevations on the Block Design Subtest warrants further inquiry concerning certain educational toys such as "Trac 4" or "Rubic's Cube".

Over the past half century, education, life-styles and learning environments have undergone significant change. The preschool and elementary aged child of today enjoys opportunities that were generally unavailable to previous generations. These opportunities have included exposure to the high-tech world of the computer (and computer games) as well as a vast array of educational toys and games. As a nation, we seem to be preoccupied with stimulating and educating our children, and in the free-enterprise society in which we live, the strong demand for all manner of educational products has been met by an equally large force of enterprising companies dedicated to supplying parents and teachers with new educational products and paraphernalia.

Doubtless, at least part of the concern for creating stimulating and enriching environments for our children stems from the assumption (which has a strong empirical basis) that early and continued stimulation will help promote the development of cognitive and intellectual skills. However, the type of stimulation that children are currently receiving is

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likely to have another, less intentional impact. Namely, with the advent of new educational toys and games, coupled with radical changes in the overall level and quality of environmental stimulation, it is likely that the very tools that we use to measure intellectual skills are fast becoming outdated and/or are in need of updating or major revision.

The main purpose of the present report is to raise a red flag to all professionals who use the Wechsler scales of intelligence. During the past decade, a company called Lakeside Toys has marketed a children's game called "Trac 4," which bears a striking resemblance to the Block Design Subtest on the Wechsler scales. The game contains 64 red and white one-inch cubes which are identical in shape, size and color to the cubes on the Block Design Subtest. In addition, "Trac 4" contains 32 red and white geometric designs which the child constructs by placing 16 of the blocks in a 4 × 4 matrix. Many of the designs are identical to those appearing on the Wechsler scales, and many others only differ slightly.

Although Trac 4 is no longer available commercially, it is likely that many children have played the game or continue to do so at this time. Obviously, frequent exposure to this type of game is likely to artificially inflate a child's score on the Block Design Subtest—a fact that has been born out in individual cases that we have observed. Along similar lines, we have also noted a tendency for children who are highly skilled at solving the Rubic's Cube to perform comparatively high on the Block Design Subtest.

Further research is needed to determine the overall impacts that playing these and other modern toys and games might have in relation to the normative data of the WISC-R. However, until the necessary research is conducted, we would advise all professionals who use the Wechsler scales to routinely inquire whether the child may have had exposure to "Trac 4" or the "Rubic's Cube." This inquiry would be especially important if profile analysis indicated an unusually high score on the Block Design Subtest compared to the overall level of the child's Performance Scale score. Roughly speaking, a discrepancy of four scaled score points above the mean would warrant further questioning.