IVA-2 CPT: Is it valid for Spanish speaking populations?

There are now more native Spanish speakers in the U.S. than in Spain! Consequently, there is clearly a need for Spanish language test instruments. To help answer this need, the IVA-2 CPT offers the clinician the capability of administering the test in Spanish, even if he or she is not fluent in the language. In addition, the self-scoring ADHD Rating Scales included in the test are also available in Spanish. But is the test actually valid for use with Spanish speaking populations?

Researchers at the Universidad de Sevilla in Spain conducted a study with 191 children to evaluate the clinical efficacy of the Spanish language version of the IVA CPT in differentiating children with ADHD when compared to children without ADHD symptoms. Participants ranged from 7 to 13 years old and were selected from pediatric primary care clinics. Ninety of the children were clinically diagnosed with ADHD using the SNAP-4 and confirmed with DSM-4 criteria in combination with teacher and parent ADHD rating scales. The control group was comprised of 101 non-ADHD participants in the same age range, who came to the clinics for a variety of minor medical problems and were clearly identified as not having ADHD.

IVA uses a standard score format which is the same as is used in IQ testing; standard scores have a mean of 100, SD=15. For the non-ADHD participants in this study, almost all IVA test scores fell within the average range (90 – 109). On the IVA Full Scale Attention Quotient, Auditory Attention Quotient and Visual Attention Quotient scores, children with ADHD scored significantly lower than controls, on average by one SD (p<.001). The ADHD group also differed significantly from the control group in respect to the IVA Fine Motor Hyperactivity scale, which is a measure of off task behavior involving the mouse - double clicking, random spurious clicking, and holding the mouse button down. Two scales measure idiopathic, random responding, indicative of inattention and poor self-control; the ADHD subjects had significantly lower scores in Auditory Comprehension (-1.3 SD, p<.001), and Visual Comprehension (-1.6 SD, p<.001). These comprehension scales have been cited by the test authors as the test’s single most sensitive indicator of ADHD symptoms. This study helped to verify that these scales are one of the best measures to discriminate children with and without ADHD. These findings are congruent with the findings of previous studies done with ADHD and non-ADHD adults (Quinn, 2003, Tinus, 2003).

The ADHD and control groups did not differ significantly in respect to Response Control on the IVA Full Scale, Auditory, or Visual Response Control quotient scale scores. This indicates that in this study, the differences between these two groups were related to their respective abilities to maintain and direct attention expressly to identification of test targets rather than to excessive impulsivity and poor mental stamina.

In this study, which was the first IVA study done specifically with a Spanish population, the researchers found that the IVA CPT clearly identified deficits in both visual and auditory attention and mental processing speed in children with ADHD. They concluded that the test does provide valuable data for better understanding the problems and the cognitive functioning of these children and that the test results are likely to be useful in helping design intervention programs and guide educational strategies relevant to each child’s visual and auditory strengths and weaknesses.

Reference