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I Introduction

The assessment of intelligence, strengths and weaknesses of patients, using Wechsler's tools, consumes a lot of time, demanding levels of attention that show difficulty in sustaining; In addition, on many occasions they present instability of mood and outbursts of bad temper.

There are shorter scales such as Kaufman Brief Intelligence (K-BIT) which also allows the evaluation of intelligence, although their usefulness in people with disabilities is unknown.

Therefore, we explore whether K-BIT would effectively assess intelligence in patients with PWS, as well as analyze the specific neuropsychological characteristics of this population.

I Methods

In this study was included a sample of 25 individuals with PWS of both sexes, between 6 and 42 years of age, with a genetically confirmed diagnosis, who attend regular transdisciplinary treatment (TTR) in an institution that works in the research and treatment of rare or infrequent diseases. The Wechsler Scales for children and adults (WISC IV and WAIS-III) and the Kaufman Brief Intelligence Test (K-BIT) were used, they were administered individually and all the indices of the techniques were evaluated, which reflect intellectual functioning in different cognitive areas.

I Results Pediatric Population

Good agreement was obtained between the methods regarding the Full Intelligence Quotient (FSIQ) on the pediatric evaluation [ICC 0.91 (95% CI -0.55; 0.98)], although K-Bit underestimating the results compared to Wisk (Wechsler Scale) (53,7±11,4 vs. 56,0±9,0, p=0.34, Table 1).

Table 1

Niños (n=7 ; Age Range 6-16)			
Wisc (Wechsler)	K-Bit	ICC	CI
FSIQ = 56,0±9,0	IQ = 53,7±11,3	0,91	95% CI -055; 0,98

I Results Adult Population

Regarding the discrimination of WAIS III (Wechsler Scale) and in the K-BIT of adults (16 years and older) (Table 2), the IQ of WAIS III presented an acceptable concordance with the IQ of K-BIT [ICC 0,77 (95% CI -0.06; 0.93)], although also underestimating the results (56,9±5,9 vs. 49,3±8,5, p=0.047). Additionally, the Verbal IQ (VIQ) of WAIS III also presented an acceptable concordance with the Vocabulary variable of K-BIT [ICC 0.70 (95% CI 0.24; 0.89)], although also underestimating the results (61,3±6,1 vs. 56,7±13,0, p=0.047). Lastly, the WAIS III Performance IQ (PIQ) and the K-BIT Matrices subtest, presented a very good concordance as well [ICC 0.85 (95% CI 0.58; 0.94)], with no significant differences between the techniques (59,2±6,4 vs. 57,0±7,9, p=0.078).

Table 2

Adults (n=18 ; Age Range 17 - 42)			
WAIS III (Wechsler)	K-Bit	ICC	CI
FSIQ = 56,9±5,9	IQ = 49,3±8,5	0,77	95% CI -0.06; 0.93
VIQ = 61,3±6,1	Verbal Knowledge = 56,7±13,0	0,7	95% CI 0.24; 0.89
PIQ = 59,2±6,4	Matrices = 57,0±7,9	0,85	95% CI 0.58; 0.94

I Conclusions

A good agreement was observed between K-BIT, once compared to the IQ (Intelligence Quotient) of the Wechsler Techniques (WISC IV - WAIS III) and the areas verbal and executive, WAIS III, in patients with PWS.

This is not to assume that the K-BIT can be a substitute for full intelligence assessment. The K-BIT is intended for circumstances where rapid administration and assessment of intelligence is necessary. It should be noted that the results of the K -BIT, should be considered as attempts to make clinical or educational decisions until confirmed with a deeper exploration of intelligence.

References:

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