

## PSYCHOMETRIC PROPERTIES OF BAHASA MALAYSIA VERSION OF THE SWANSON, NOLHAN AND PELHAM (SNAP-IV) - TEACHER AND PARENT RATINGS OF ATTENTION DEFICIT/HYPERACTIVITY DISORDER SYMPTOMS

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### ABSTRACT

**Introduction:** SNAP-IV is one of the behaviour rating scales based on teacher or parent perception to screen patients with Attention Deficit/Hyperactivity Disorder (ADHD) symptoms. The SNAP-IV consists of 26 items that assess the ADHD core symptoms of hyperactivity-impulsivity and inattention, together with symptoms of oppositional defiant disorder (ODD). The original SNAP-IV has been psychometrically validated with report of high reliability and satisfactory on validation. To the author's knowledge, limited of the teacher-parent-reported questionnaire for ADHD is available in Malay language; therefore, a research is required to translate or develop such a questionnaire. This study, therefore, aimed to translate the English version of SNAP-IV into Bahasa Malaysia (BM) and to measure its psychometric properties.

**Methods:** Forward and backward translations were done in BM in accordance with the World Health Organization (WHO) guideline. The translated questionnaire was then reconciled and harmonized for cultural and content validation by the researchers and five expert panels before being piloted among 91 parents. Psychometric evaluations have been conducted using Cronbach's  $\alpha$  (for internal reliability), Pearson's correlation (for inter-item correlation) and exploratory factor analysis (for construct validity) were performed to all of the responses obtained from the respondents.

**Results:** The BM-SNAP-IV had excellent Cronbach's  $\alpha$  value of 0.97 for combined items and for its respective sub-scales of inattention (0.94), hyperactivity/impulsivity (0.92) and ODD (0.91). The items within the same sub-scales were significantly correlated with the ranged between strong and very strong ( $r=0.70-0.85$ ,  $p<0.01$ ). The BM-SNAP-IV has an acceptable factor loading values for most items (0.39-0.82).

**Conclusions:** The preliminary finding suggests the translated version of SNAP-IV has the potential to be a reliable and valid screening tool for ADHD population in Malaysia. This tool may also be used to further investigate the relationship between attention deficits and Auditory Processing Disorder (APD). Further studies are required to support this notion.

**Keywords:** Assessment; Attention deficit hyperactivity disorder; Children; SNAP-IV; Reliability; Validity

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