

# Validez del Ages & Stages questionnaires para predecir el desempeño cognitivo en los primeros años de educación escolar.

Luisa Schonhaut, Marcela Pérez, Ana María Castilla, Sonia Castro, Patricia Salinas y Iván Armijo.

## Abstract

*Predictive value of Ages & Stages Questionnaires for cognitive performance at early years of schooling.*

The Ages and Stages questionnaires (ASQ) has been recently validated in our country for developmental screening. The objective of this study is evaluate the validity of ASQ to predict low cognitive performance in the early years of schooling.

**PATIENTS AND METHOD:** Diagnostic test studies conducted on a sample of children of medium-high socioeconomic level were evaluated using ASQ at least once at 8, 18 and/or 30 months old, and later, between 6 and 9 years old, reevaluated using the Wechsler Intelligence Scale for Children-third edition (WISC-III). Each ASQ evaluation was recorded independently. WISC-III was standardized, considering underperformance when the total score were under -1 standard deviation.

**RESULTS:** 123 children, corresponding to 174 ASQ assessments (42 of them were 8 months old, 55 were 18 months and 77 were 30 months of age) were included. An area under the ROC curve of 80.7% was obtained, showing higher values at 8 months (98.0%) compared to 18 and 30 months old (78.1 and 79.3%, respectively). Considering different ASQ scoring criteria, a low sensitivity (27.8 to 50.0%), but a high specificity (78.8 to 96.2%) were obtained; the positive predictive value ranged between 21 and 46%, while the negative value was 92.0-93.2%. Conclusion ASQ has low sensitivity but excellent specificity to predict a low cognitive performance during the first years of schooling, being a good alternative to monitor psychomotor development in children who attend the private sector healthcare in our country.