Reliability and Validity of the Behavioral Check List for Preschool Children to Measure Attention Deficit Hyperactivity Behaviors

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doi: 10.1265/jjh.73.225.

Abstract

OBJECTIVES:
Nowadays, attention deficit hyperactivity (ADH) problems are observed commonly among school-age children. However, questionnaires specific to ADH behaviors among preschool children are very few. The aim of this study was to investigate the reliability and validity of the 25-item Behavioral Check List (BCL), which was developed from interviews of parents with children who were diagnosed as having Attention-deficit/hyperactivity disorder (ADHD) and measures ADH behaviors in preschool age.

METHODS:
We recruited 22 teachers from 10 nurseries/kindergartens in Miyagi Prefecture, Japan. A total of 138 preschool children were assessed using the BCL. To investigate inter-rater reliability, two teachers from each facility assess seven to twenty children in their class, and intraclass correlation coefficients (ICCs) were calculated. The teachers additionally answered questions in the 1/5-5 Caregiver-Teacher Report Form (C-TRF) to investigate the criterion validity of the BCL. To investigate structural validity, exploratory factor analysis with promax rotation and confirmatory factor analysis were performed.

RESULTS:
The internal consistency reliability of the BCL was good (α = 0.92) and correlation analyses also confirmed its excellent criterion validity. Although exploratory factor analysis for the BCL yielded a five-factor model that consisted of a factor structure different from that of the original one, the results were similar to the original six factors. The ICCs of the BCL were 0.38-0.99 and it was not high enough for inter-rater reliability in some facilities. However, there is a possibility to improve it by giving raters adequate explanations when using BCL.

CONCLUSIONS:
The present study showed acceptable levels of reliability and validity of the BCL among Japanese preschool children.