Partial validation of a French version of the ADHD-rating scale IV on a French population of children with ADHD and epilepsy. Factorial structure, reliability, and responsiveness.


Abstract

OBJECTIVE:
Attention deficit hyperactivity disorder (ADHD) is a well-known comorbidity in children with epilepsy. In English-speaking countries, the scores of the original ADHD-rating scale IV are currently used as main outcomes in various clinical trials in children with epilepsy. In French-speaking countries, several French versions are in use though none has been fully validated yet. We sought here for a partial validation of a French version of the ADHD-RS IV regarding construct validity, internal consistency (i.e., scale reliability), item reliability, and responsiveness in a group of French children with ADHD and epilepsy.

METHOD:
The study involved 167 children aged 6-15 years in 10 French neuropediatric units. The factorial structure and item reliability were assessed with a confirmatory factorial analysis for ordered categorical variables. The dimensions' internal consistency was assessed with Guttman's lambda 6 coefficient. The responsiveness was assessed by the change in score under methylphenidate and in comparison with a control group.

RESULTS:
The results confirmed the original two-dimensional factorial structure (inattention, hyperactivity/impulsivity) and showed a satisfactory reliability of most items, a good dimension internal consistency, and a good responsiveness of the total score and the two subscores.

CONCLUSION:
The studied French version of the ADHD-RS IV is thus validated regarding construct validity, reliability, and responsiveness. It can now be used in French-speaking countries in clinical trials of treatments involving children with ADHD and epilepsy. The full validation requires further investigations.