

A. Lepoura, S. Lampropoulou, T. Panagopoulos, M. Papadopoulou, V. Sakellari. Reliability and Validity of the Greek Translation of the Scale for Assessment and Rating Ataxia in ataxic children. *Movement Disorders* 2021;36 (S1), 518-519.

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Objective: Translation and Cross-cultural adaptation of the Scale for Assessment and Rating Ataxia (SARA) into Greek ataxic pediatric population. **Background:** Ataxia in the pediatric population has not been sufficiently studied in terms of both evaluation and intervention. The SARA has recently been validated for children over 8 years old however it is not available in Greek. **Methods:** The scale was adapted into Greek according to international guidelines by two bilingual translators. The pre-final version of SARAGR was pilot tested and cross-validated in ataxic children aged 8-18 years. In terms of reliability, the children were assessed over a period of 2 weeks (test-retest reliability) and their videotaped performance was rated by two pediatric physiotherapists (inter-rater reliability) twice in a period of 2-6 weeks (intra-rater reliability). Internal consistency was assessed by Cronbach's α . To evaluate convergent validity, SARAGR was correlated with the Brief Ataxia Rating Scale (BARS) and Barthel Index (BI) while exploratory factor analysis (EFA) was also assessed for interpretation of SARA's index variability. **Results:** Items 1, 2, 3, 5 and 6 of the pre-final SARAGR were further clarified and terms like "finger chase" rephrased to semantically being meaningful in Greek language. Thirteen children with ataxia (7 girls and 6 boys) of mean age 11 ± 3 years (range 8 to 17 years old) participated in the cross validation process. SARAGR yielded a very high test-retest for both raters ($p=0,102$ and $p=0,170$), inter-rater (ICC of 0,996) and intra-rater (ICC of 0,999 and 0,998) agreement. Internal consistency was excellent with Cronbach's α of 0.966 and 0,963 for the 1st and 2nd rater, respectively. The very high correlation presented between SARAGR total score with BARS total score ($r= 0.993$, $p < 0.001$) and BI total score ($r=-0.920$, $p < 0.001$) respectively satisfies the convergent validity. One factor, with eigenvalue of over 1 (7.06) was identified, explaining 88.25% of the variance. **Conclusion:** The Greek version of SARA is conceptual, semantic and content equivalent to the original scale. Its excellent reliability and very high convergent validity indicate its applicability in Greek paediatric ataxic population.