

# Validation of a Spanish version of the Sleep-Related Breathing Disorder scale of the Pediatric Sleep Questionnaire in children living in a high-altitude city

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## Abstract

**Objectives.** We aimed to validate a Spanish version of the Sleep-Related Breathing Disorder scale of the Pediatric Sleep Questionnaire (SRBD-PSQ) in children living in a high-altitude Colombian city. **Methods.** In a prospective cohort validation study, patients aged between 2 and 18 years who attended the Ear, Nose, and Throat pediatric department of our institution for symptoms related to sleep-related breathing disorders had a baseline visit at enrollment, a second visit the day scheduled for the surgical intervention, and a follow-up visit at least three months after the surgical intervention. In these three visits, we gathered the necessary data for assessing the criterion validity, construct validity, test–retest reliability, internal consistency, and sensitivity to change of the Spanish version of the SRBD-PSQ. **Results.** In total, 121 patients were included in the analyses. The exploratory factor analysis (generalized least squares method, varimax rotation) yielded a four-factor structure, explaining 65.93% of the cumulative variance. The intraclass correlation coefficient (ICC) of the measurements was 0.887 (95% CI: 0.809–0.934), and the Lin concordance correlation coefficient was 0.882 (95% CI, 0.821–0.943). SRBD-PSQ scores at baseline were significantly higher than those obtained after adeno-tonsillectomy surgery (median [IQR] 11.0 [9.0– 14.0] vs. 4.00 [1.50– 7.0];  $p < 0.0001$ ). Cronbach’s  $\alpha$  was 0.7055 for the questionnaire as a whole. **Conclusions.** The Spanish version of the SRBD-PSQ has acceptable construct validity, excellent test-retest reliability and sensitivity to change, and adequate internal consistency-reliability when used in pediatric patients living at high altitude with symptoms related to sleep-related breathing disorders.

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