



Sleep-Related Breathing Disorder Scale (PSQ-SRBD Scale), from Pediatric Sleep Questionnaire

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OVERVIEW

One-page, 22-item, widely-used screening questionnaire for symptoms of obstructive sleep apnea in children

- Symptom inventory originally validated by comparison to sleep-laboratory-confirmed obstructive sleep apnea in children aged 2 to 18 years
- Includes validated subscales for obstructed breathing/snoring, sleepiness, and daytime behavior

BACKGROUND

This questionnaire, essentially a symptom inventory, can help to screen children for obstructive sleep apnea (OSA). It was developed as a research instrument from a subset of items within the full Pediatric Sleep Questionnaire. However, the PSQ-SRBD Scale has since been used in many clinical as well as research settings, especially when access to objective testing in a sleep laboratory has been limited. Obstructive sleep apnea, the main recognized form of obstructive sleep-related breathing disorders (SRBDs), is common and consequential among children but to this day often remains undiagnosed. Methods to help identify OSA or screen for high risk OSA without the expense of polysomnography in a sleep laboratory, can facilitate clinical and epidemiological research.

University of Michigan researchers developed the PSQ-SRBD Scale to assist in screening for symptoms that suggest underlying OSA. The PSQ-SRBD Scale is completed by parents, or parents with assistance from an older child. The instrument was created using commonly recommended methods for questionnaire development. The reasonable performance of each individual question-item and each of three subscales were documented by demonstration of

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association with OSA confirmed on polysomnography.

The PSQ-SRBD Scale was tested for validity and reliability and results were peer-reviewed and published in *Sleep Medicine* in 2000, and in *Archives of Otolaryngology -- Head & Neck Surgery* in 2007. Since this time, the PSQ-SRBD Scale has been used in many research studies, and many additional peer-reviewed publications have added evidence of validity, provided data to indicate usefulness in predicting outcomes, documented sensitivity to intervention for OSA, and assessed validity and reliability of the PSQ-SRBD Scale after translation to other languages. Not all studies in all settings have confirmed the usefulness of the instrument. It did prove sensitive, predictive, and useful in the Childhood Adenotonsillectomy Trial (CHAT), a randomized, controlled trial of adenotonsillectomy vs. watchful waiting for pediatric OSA, and has been used in the subsequent Pediatric Adenotonsillectomy Trial for Snoring (PATS).

The PSQ-SRBD Scale includes subscales for obstructed breathing, sleepiness, and behavior. To our knowledge, the four-item sleepiness subscale is the only questionnaire-based tool that has been validated against results of the Multiple Sleep Latency Test (MSLT), the gold-standard sleep laboratory assessment for daytime sleepiness. Overall, the PSQ-SRBD Scale contains 22 items, fits on one page, and generally takes several minutes to complete. It is designed for use in screening for OSA and associated symptom-constructs in clinical research, especially when polysomnography is not feasible, or as a complement to polysomnography. However, neither the PSQ-SRBD Scale nor any other similar instrument, to our knowledge, has been formally approved for application to the care of individual patients as part of evidence-based medicine. Therefore use of the PSQ-SRBD Scale, its subscales, and the individual question-items in clinical practice should be undertaken only at the discretion and responsibility of the qualified clinician involved.

ADDITIONAL DETAILS

LICENSING INQUIRIES: Effective January 1, 2024 The University of Michigan has partnered with [MAPI Research Trust](#) for the licensing, management and distribution of all Michigan developed Clinical Outcome Assessments (COA's). MAPI is the recognized global leader in the COA space and has exceptional resources to assist with scale based distribution, instructional design, documentation as well as deep partnerships with [ICON](#) language services for translation services. All inquiries for this measure, regardless of if it is a research or commercial request should be directed to MAPI.

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