

Measuring sleep in children: A systematic review of questionnaires and their psychometric properties

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Aim

We aim to identify and assess the psychometric properties of self- and parent-reported questionnaires that measure sleep behavior in children aged 4-12 years old.

Background & scope

Poor sleep health is a risk factor for e.g.:



Obesity



Behavioral difficulties



Impaired cognition



Poor health

In order to monitor sleep, proper measurement instruments are necessary. However, an overview of studies on sleep measurement instruments, including their different psychometric properties, is lacking.

This systematic review will entail an overview of studies on measurement instruments to assess sleep (i.e. sleep duration, sleep quality and/or daytime sleepiness) in children aged 4-12 years, including a comprehensive assessment of their psychometric properties (e.g. reliability, validity, responsiveness).

Methods

We systematically searched through the electronic databases of PubMed, PsycInfo, Web of Science and Embase. Studies were included when reporting on at least one measurement property of a questionnaire measuring sleep behavior in children aged 4-12 years old. Aspects of children's sleep behavior we were interested in were: sleep duration, sleep quality, sleep hygiene, and daytime sleepiness. The methodological quality of the studies was assessed with use of a standardized tool, i.e. Consensus-based Standards for the selection of health Measurement Instruments (COSMIN) checklist.



Results of inclusion process

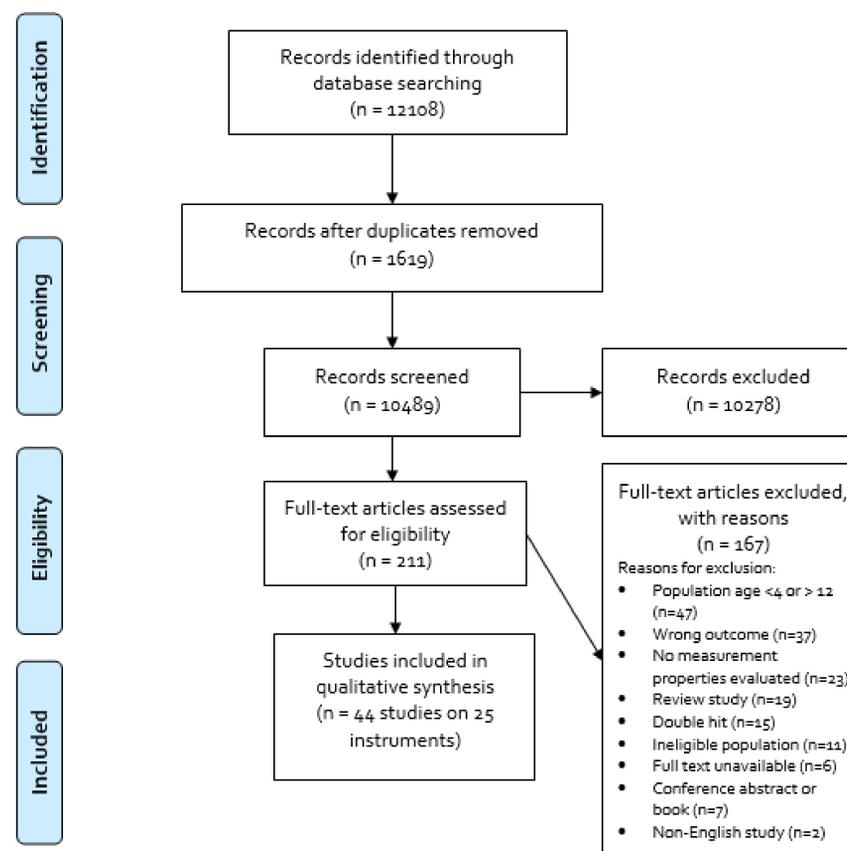


Figure 1. PRISMA flow diagram of study inclusion process.

PRISMA preferred reporting items for systematic reviews and meta-analyses.

Searched databases



Relevance for Sarphati

This study will lead to recommendations regarding a measurement instrument for measuring sleep behavior in children in the Sarphati cohort. The instrument should...



- ...be able to monitor and screen sleep behavior in children aged 4-12 years
- ...be valid and reliable
- ...be both a monitoring and screening instrument
- ...fit the research structure of Sarphati Amsterdam