

Purpose Consisting of 26 Likert-type items, the SDSC was designed both to evaluate specific sleep disorders in children, and to provide an overall measure of sleep disturbance suitable for use in clinical screening and research. Using factor analysis, developers Bruni and colleagues [1] divided items into six categories representing some of the most common sleep difficulties affecting adolescents and children: disorders of initiating and maintaining sleep, sleep breathing disorders, disorders of arousal/nightmares, sleep-wake transition disorders, disorders of excessive somnolence, and sleep hyperhidrosis (nighttime sweating).

Population for Testing The scale has been validated with youth populations aged 6–15 years.

Administration The questionnaire is completed by a parent or caregiver on behalf of the child using pencil and paper. Administration should require between 10 and 15 min.

Reliability and Validity Bruni and colleagues [1] conducted a psychometric evaluation of the SDSC and found an internal consistency ranging from .71 to .79, a test-retest reliability of .71, a diagnostic accuracy of .91.

Obtaining a Copy A copy can be found in the original article published by developers (1996).

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Scoring Parents use a five-point, Likert-type scale to indicate how frequently certain behaviors are exhibited by their children: 1 means “never,” while five corresponds with “always (daily).” Respondents also offer estimates of sleep quantity and onset time. Higher scores indicate more acute sleep disturbances. To obtain results, scores are tallied for each of the six sleep-disorder categories, and an overall score is calculated. Bruni and colleagues [1] have suggested a total cutoff score of 39 – in their evaluations of the scale, they found that this score corresponded with the upper quartile of their control group and gave a sensitivity of .89 and a specificity of .74.

INSTRUCTIONS: This questionnaire will allow to your doctor to have a better understanding of the sleep-wake rhythm of your child and of any problems in his/her sleep behaviour. Try to answer every question; in answering, consider each question as pertaining to the past 6 months of the child's life. Please answer the questions by circling or striking the number ① to ⑤. Thank you very much for your help.

Name: _____ Age: _____ Date: _____

1. How many hours of sleep does your child get on most nights.	① 9-11 hours	② 8-9 hours	③ 7-8 hours	④ 5-7 hours	⑤ less than 5 hours
2. How long after going to bed does your child usually fall asleep	① less than 15'	② 15-30'	③ 30-45'	④ 45-60'	⑤ more than 60'

	① Never	② Occasionally (once or twice per month or less)	③ Sometimes (once or twice per week)	④ Often (3 or 5 times per week)	⑤ Always (daily)
3. The child goes to bed reluctantly	①	②	③	④	⑤
4. The child has difficulty getting to sleep at night	①	②	③	④	⑤
5. The child feels anxious or afraid when falling asleep	①	②	③	④	⑤
6. The child startles or jerks parts of the body while falling asleep	①	②	③	④	⑤
7. The child shows repetitive actions such as rocking or head banging while falling asleep	①	②	③	④	⑤
8. The child experiences vivid dream-like scenes while falling asleep	①	②	③	④	⑤
9. The child sweats excessively while falling asleep	①	②	③	④	⑤
10. The child wakes up more than twice per night	①	②	③	④	⑤
11. After waking up in the night, the child has difficulty to fall asleep again	①	②	③	④	⑤
12. The child has frequent twitching or jerking of legs while asleep or often changes position during the night or kicks the covers off the bed.	①	②	③	④	⑤
13. The child has difficulty in breathing during the night	①	②	③	④	⑤
14. The child gasps for breath or is unable to breathe during sleep	①	②	③	④	⑤
15. The child snores	①	②	③	④	⑤
16. The child sweats excessively during the night	①	②	③	④	⑤
17. You have observed the child sleepwalking	①	②	③	④	⑤
18. You have observed the child talking in his/her sleep	①	②	③	④	⑤
19. The child grinds teeth during sleep	①	②	③	④	⑤
20. The child wakes from sleep screaming or confused so that you cannot seem to get through to him/her, but has no memory of these events the next morning	①	②	③	④	⑤
21. The child has nightmares which he/she doesn't remember the next day	①	②	③	④	⑤
22. The child is unusually difficult to wake up in the morning	①	②	③	④	⑤
23. The child awakes in the morning feeling tired	①	②	③	④	⑤
24. The child feels unable to move when waking up in the morning	①	②	③	④	⑤
25. The child experiences daytime somnolence	①	②	③	④	⑤
26. The child falls asleep suddenly in inappropriate situations	①	②	③	④	⑤
Disorders of initiating and maintaining sleep (sum the score of the items 1,2,3,4,5,10,11)					
Sleep Breathing Disorders (sum the score of the items 13,14,15)					
Disorders of arousal (sum the score of the items 17,20,21)					
Sleep-Wake Transition Disorders (sum the score of the items 6,7,8,12,18,19)					
Disorders of excessive somnolence (sum the score of the items 22,23,24,25,26)					
Sleep Hyperhydrosis (sum the score of the items 9,16)					
Total score (sum 6 factors' scores)					

Reference

1. Bruni, O., Ottaviano, S., Guidetti, V., Romoli, M., Innocenzi, M., Cortesi, F., & Giannotti, F. (1996). The sleep disturbance scale for children (SDSC): Construction and validation of an instrument to evaluate sleep disturbances in childhood and adolescence. *Journal of Sleep Research, 5*, 251–261.
- Hartshorne, T. S., Heussler, H. S., Dailor, A. N., Williams, G. L., Papadopoulos, D., & Brandt, K. K. (2009). Sleep disturbances in CHARGE syndrome: types and relationships with behavior and caregiver well-being. *Developmental Medicine & Child Neurology, 51*(2), 143–150.

Representative Studies Using Scale

- Carotenuto, M., Bruni, O., Santoro, N., Del Giudice, E. M., Perrone, L., & Pascotto, A. (2006). Waist circumference predicts the occurrence of sleep-disordered breathing in obese children and adolescents: a questionnaire-based study. *Sleep Medicine, 7*(4), 357–361.