JOURNAL OF TURKISH SLEEP MEDICINE | JTSM

www.tutd.org.tr

DEVELOPMENT AND INVESTIGATION INTO THE PSYCHOMETRIC PROPERTIES OF THE TROY SLEEP SCALE

ABSTRACT

Objective: A unique and comprehensive self-report scale to help assess sleep in Turkish is needed. This study aimed to develop the Troy Sleep Scale (TSS) and perform validity and reliability analyses.
Materials and Methods: The study was conducted with 494 medical students and residents. The psychometric properties of the devised scale were evaluated through exploratory and confirmatory factor analyses, Cronbach's alpha and McDonald's omega reliability evaluations, and item analyses based on both classical test theory and item response theory (IRT). The reliability assessment of the TSS was carried out through test-retest, and criterion-referenced validity was employed to provide additional validation.
Results: The TSS consists of 11 items with a 3-factor structure with eigenvalues greater than 2. The factors provided information about (I) dysfunction due to sleep problems, (II) affective symptoms due to sleep problems, and (III) sleep quality. The reliability levels of all three sub-factors and overall scale scores were 0.82 and above. The test-retest reliability level had a correlation value of >0.80. The item analyses conducted in line with the IRT showed that the scale items provided a high level of information and functioned together with the answer set. The correlation between the TSS and the Pittsburgh Sleep Quality Index was analyzed for criterion-referenced validity, yielding a correlation of 0.73.
Conclusion: The psychometric properties of the TSS indicated that it was valid and reliable, making it suitable for use as a screening test for individuals with sleep-related complaints.

