2009

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THE RELIABILITY OF THE FACTOR STRUCTURE OF THE PEDIATRIC DAYTIME SLEEPINESS SCALE IN BOTH A SPANISH-COLOMBIAN AND FRENCH-CANADIAN VERSIONS

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Introduction: Daytime sleepiness is characterized by an increased likelihood of falling asleep and adversely impacts youth's academic performance, behavior, and mood. The National Sleep Foundation Survey (2006) found almost 50% of youth sleep 1 to 2 hours less than the recommended 9 hours per night and 60% report daytime sleepiness. The Pediatric Daytime Sleepiness Scale (PDSS; Drake et al., 2003) is a self-report questionnaire used to evaluate the likelihood of youth falling asleep in various everyday situations. The original PDSS was developed with an English-speaking American sample (*M*age=11.8; *SD*=.6 years), and the measure was thought to assess a uni-dimensional construct: daytime sleepiness. The PDSS has previously been translated into a Spanish version for an Argentinean sample (*M*age=13.3; *SD*=1.5 years).

Methods: The current study evaluated the factor structure of the PDSS in two distinct samples: the first sample included 420 Spanish-speaking students from Bogota, Colombia (*M*age=9.49, *SD*=.67 years). The second sample included 377 French-speaking students from Montréal, Québec (*M*age=12.73; *SD*=.67 years) as part of the larger AdoQuest Study. The PDSS was translated into Spanish and French using back translation procedures and administered to their respective sample.

Results: Generalized least-squares method and varimax rotation were used; items with factor loadings >0.40 were retained. Exploratory factor analyses on both the Spanish and French versions revealed two factors: *daytime sleepiness* and *lark/morning preference*, which explained 49% and 56% of the variance, respectively. Daytime sleepiness included questions about feeling sleepy with factor loadings of .59 to .73 (Spanish version) and .73 to .91 (French version). Lark/morning preference included items about feeling alert after being awakened with factor loadings of .49 to .73 (Spanish) and .41 to .71 (French).

Conclusion: The original PDSS may tap into multiple constructs related to sleepiness, such as circadian phase/morningness/eveningness and sleep propensity. Differences in cultural and lifestyle behaviors (e.g., bed/wake-times, school start times, daytime napping) as well as interindividual differences in preferred timing of sleep/wake cycles may also play a role in the multiple constructs identified. Future research should further evaluate the validity of these subscales within the PDSS to determine their validity in relation to objective measures of circadian phase angle and sleep propensity.