

Results: The average age of the sample was 70.0 (SD=8.5; range 44–95). FIRST scores ranged from 0–27, with a mean of 8.30 (SD=5.9) and a median of 7. There were significant differences for gender (women > men, $p<.0001$), COPD ($p=.02$), asthma ($p=.03$), anxiety ($p<.0001$), and depression ($p<.0001$). The FIRST correlated with age ($r=-0.08$), depression ($r=0.34$), and quality of life ($r=-0.29$), with all p -values $<.0001$.

Conclusion: This study provides useful normative data for the FIRST. Higher sleep reactivity is related to younger age, gender, depression, and poorer quality of life. Future analysis will assess relationships with cognition, biological markers such as endothelial function and inflammation.

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0771

THE NATIONAL SLEEP FOUNDATION'S SLEEP HEALTH INDEX

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Introduction: Sleep health is essential for overall health and well-being. Therefore, a validated subjective assessment of sleep health would be an important research tool, particularly when objective measures of sleep are not feasible. As such, the National Sleep Foundation (NSF) spearheaded the development of the Sleep Health Index® (SHI).

Methods: The development of the SHI involved a task force of sleep experts who identified key sleep domains. From an extensive list of items they provided, an initial draft of survey questions was created and questions were further refined using cognitive testing and pre-testing. The resulting 28-question survey was administered via random-sample phone interviews to a nationally representative sample of adults in 2014 ($n=1253$) and 2015 ($n=1250$). These two surveys were combined to create the index. A factor analysis linked 14 questions to three discrete domains: sleep quality, sleep duration and disordered sleep. These were assembled as sub-indices, then combined to form the overall SHI with scores ranging from 0 to 100 (higher score reflects better sleep health).

Results: Americans earned an SHI score equivalent to a C grade (score 76), with sub-index scores of B- (score 81) in disordered sleep, C+ (score 79) in sleep duration and D+ (score 68) in sleep quality. In regression analyses, the strongest independent predictors of sleep health were self-reported stress ($\beta=-0.26$) and overall health ($\beta=0.26$), which were also the strongest predictors of sleep quality ($\beta=-0.32$, $\beta=0.27$ respectively). The 2014 and 2015 surveys produced virtually identical results.

Conclusion: The current 14-item SHI is a valid, reliable research tool that robustly measures the sleep health status of adults in the U.S. Given its inclusion of three separate but related elements of sleep health - duration, disorders and quality - SHI provides the information that is too often lacking in the determination of one's general health: sleep health.

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0772

STANFORD AND VISUAL ANALOG SCALE PILOT CORRELATIONS WITH PSYCHO VIGILANCE TEST AND REACTION TIME RESPONSE - IN A NON-SLEEPY HEALTHY YOUTH

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Introduction: Sleepiness in clinical care is identified by utilization of questionnaires and offers at best a qualitative estimate of the parameter. There is need for an objective, physiological tool to quantify alertness. We propose to compare A) PVT reaction time of three devices with a visual analog scale (VAS), B) the Stanford Sleepiness Scale

Methods: A subject obtained an observational data. Data collected included sleepiness questionnaires a visual analog scale for sleepiness. Concurrently, objective physiological vigilance, reaction time (primary outcome in mSec) was measured using an iPhone mobile application and 2 web based psycho-vigilance test. Statistical Analysis: We used Statview Version 5.01 (SAS institute Inc. Cary, NC) for analysis. We described continuous data by mean \pm standard deviation, and categorical data by percent. Spearman's rank correlations were constructed between the Stanford sleepiness scale questionnaire, the VAS and the physiological measurements.

Results: Data was obtained during a 30 days span. The Florida-PVT had a mean of 328 mSec \pm 15 SD. The Harvard-PVT had a mean of 346 mSec \pm 16 SD. The iPhone had a mean of 319 mSec \pm 62 SD. The measurements' mean of all three were included inside the \pm 1.96 SD of each other. The VAS had a mean of 4 \pm 1.6 SD and the Stanford a mean of 3.9 \pm 1.2 SD. We found the Spearman's rank correlation coefficient between the VAS with the three measurements noted in Fig 1. The R for Harvard-PVT was 0.17, Florida-PVT was 0.18 & for the iPhone Reaction Time was 0.8. We found the Spearman's rank correlation coefficient between the Stanford with the three measurements noted in Fig 2. The R for Harvard-PVT 0.3 was, Florida-PVT was 0.35 & for the iPhone Reaction Time was 0.08.

Conclusion: These tools represent the best sample available of easy to use affordable physiological-objective testing for alertness-arousal reaction time.

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INTERRATER RELIABILITY FOR SLEEP STAGE SCORING FROM ELEVEN JAPANESE LABORATORIES

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Introduction: Interrater reliability (IRR) of sleep stage scorings has an essential impact on the reading of polysomnographic studies (PSGs) for clinical trials. This is the first investigation on IRR for sleep stage scoring between experienced scorers from plural Japanese laboratories where the Japan Association of Polysomnographic Technologists (JAPT) member belongs to.

Methods: Forty experienced sleep technologists from eleven sleep laboratories, which mean experienced years were 9.2, were enrolled in this study. A normal sleep sample of the adult included 999 epochs. One of specific scoring software (NightOwl Professional, NoruPro Light Systems, Inc. Japan) were used to eliminate a visual difference in indication between software. Mean epoch agreement