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Impact of Sleep Patterns on Attention Focus during Lectures: A Perception-Based Study of Undergraduate Students

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Sleep quality and regularity are critical for maintaining attention, learning capacity, and academic success. However, inadequate and irregular sleep remains a prevalent concern among university students. This study examines the relationship between sleep patterns and attention focus during lectures among Sri Lankan undergraduates, addressing a gap in regional empirical research on student well-being and learning performance. Data were collected from 161 respondents representing both state and private universities through a structured questionnaire based on the Pittsburgh Sleep Quality Index (PSQI) and related validated scales. Descriptive and inferential statistical methods, including Pearson correlation and regression analysis, were employed to assess associations between sleep duration, quality, and perceived attentiveness. Findings revealed that nearly half of the participants (49%) slept fewer than six hours per night, below the recommended 7–9 hours, while 54% self-rated their sleep as "good." However, regression results indicated no significant relationship between total sleep duration and attention ($R^2 = .001$, $p = .632$). These results suggest that sleep quality and consistency exert a greater influence on cognitive focus than sleep quantity alone. Environmental and behavioral factors such as irregular routines, digital device use, and late-night study sessions also emerged as potential contributors to poor attentiveness. The study underscores the importance of promoting sleep hygiene awareness, stress management programs, and flexible academic scheduling in higher education institutions. By integrating behavioral health interventions into university support systems, educators can enhance students' cognitive alertness, emotional well-being, and academic engagement. These findings contribute to the growing global understanding of how lifestyle factors impact learning outcomes, particularly within the South Asian higher education context.

Keywords: Sleep Quality, Attention, Cognitive Performance, Undergraduates, Sri Lanka, Academic Engagement