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The Relationship Between Walking and Sleep Quality Among Taiwanese High School Students

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Abstract : Among Taiwanese high school students today, as academic stress increases during adolescence, it has become a major factor contributing to poor sleep, resulting in adverse impacts on mental health and academic performance. This study investigates the relationship between walking and sleep quality among Taiwanese high school students by utilizing Apple Watches for data collection. Addressing concerns over adolescents' sleep patterns due to academic stress and digital distractions, this research fills a gap in understanding the specific demographic within the Taiwanese context. Employing a quantitative approach, data were collected from 23 participants aged 15 to 18, focusing on their walking habits tracked by Apple Watches and sleep quality measured by the Pittsburgh Sleep Quality Index (PSQI). The findings suggest a positive correlation between walking and sleep quality, particularly among females. However, unexpected results, such as disparities in sleep quality among different age groups, highlight the complexity of factors influencing sleep patterns. While limitations exist, including potential confounding variables and sample size, this study provides valuable insights for future research. Recommendations for further research include exploring gender differences and conducting longitudinal studies across diverse demographics. Overall, this research indicates that encouraging adolescents to be more physically active, like walking, can enhance sleep quality.

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