МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ

ЛЬВІВСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ
ФІЗИЧНОЇ КУЛЬТУРИ ІМЕНІ ІВАНА БОБЕРСЬКОГО

МОЛОДА СПОРТИВНА НАУКА УКРАЇНИ

Збірник наукових праць

Заснований 1996 року

Випуск 29

ЛЬВІВ
ЛДУФК ім. Івана Боберського
2025

ISSN 1996-1448
YOUNG SPORT SCIENCE OF UKRAINE. 2025. V. 2. P. 208-208.
МОЛОДА СПОРТИВНА НАУКА УКРАЇНИ. 2025. Т. 2. С. 208-208.
UDC 796.012.3:613.79

ASSESSMENT OF THE RELATIONSHIP BETWEEN SCREEN TIME, PHYSICAL ACTIVITY, AND SLEEP QUALITY

Paweł NALBORCZYK, Aleksandra GODEK, Justyna WYSZYŃSKA

Medical College of Rzeszów University, Poland

Introduction. The increasing prevalence of screen-based activities in daily life has raised concerns regarding their potential impact on sleep quality and overall health. This study aimed to investigate the relationship between screen time, physical activity, and sleep quality among adults.

Goal. The study aimed to determine the relationship between physical activity levels, sleep quality and screen time.

Methods. A cross-sectional online survey involved 185 adults aged between 18 and 60. The study used an original survey questionnaire consisting of 6 questions, 4 of which were metric questions. Respondents provided information regarding screen time. Physical activity level was assessed using the International Physical Activity Questionnaire (IPAQ) short form, while sleep quality was assessed using the Pittsburgh Sleep Quality Index (PSQI).

Results. The analysis of physical activity levels in relation to selected factors revealed significant differences ($p < 0.05$) in sleep quality among individuals with different physical activity levels. Post hoc analysis indicated that participants with high physical activity demonstrated significantly better sleep quality compared to those with insufficient activity ($M = 5.88$; $SD = 3.20$ vs. $M = 7.74$; $SD = 3.89$). However, no statistically significant difference in sleep quality was found between individuals with insufficient and sufficient activity levels. Gender, education, and social status had no significant effect on participants' physical activity levels. Additionally, a significant relationship ($p < 0.05$) between average screen time and sleep quality was identified, showing that lower screen time corresponded with better sleep quality. Correlation analysis further indicated that higher average screen time was associated with prolonged sleep latency.

Discussion. Recent studies indicate that both screen time and physical activity significantly influence sleep quality and related parameters. Increased screen time is associated with poorer sleep quality and prolonged sleep latency. These findings align with previous research indicating that extended use of electronic devices negatively affects sleep. The current results are consistent with other reports demonstrating that higher physical activity levels correlate with improved sleep quality and reduced screen time. However, some studies suggest that high-intensity physical activity may reduce sleep duration, whereas moderate physical activity promotes optimal sleep length. Overall, these findings emphasize the importance of physical activity and reduced screen exposure as critical factors for enhancing sleep quality.

Conclusions. A higher level of physical activity is associated with improved sleep quality and reduced screen time. Conversely, increased screen time negatively affects sleep quality and prolongs sleep latency.

Keywords: physical activity; sleep quality; screen time

© Nalborczyk P., Godek A., Wyszyńska J., 2025.