



PAPER

THE IMPACT OF MOBILE PHONE USE ON SLEEP PATTERNS AND EDUCATIONAL EFFECTIVENESS

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Abstract

This article provides a comprehensive analysis of the level of smartphone usage among students of Turon University, including the frequency of use and main purposes (social media, studying, gaming, and communication). It also examines the factors contributing to smartphone addiction and its impact on students' daily lives. The study found that excessive and uncontrolled smartphone use leads to sleep disturbances, decreased sleep quality, and reduced concentration. Consequently, this negatively affects students' academic performance, knowledge acquisition, and overall learning outcomes. The research results were generalized based on survey data and statistical analysis, revealing correlations among the obtained data. Additionally, the article offers recommendations for rational smartphone use, effective time management, and maintaining healthy sleep hygiene. These findings are important for fostering a culture of responsible digital technology use among students.

Key words: smartphone, smartphone addiction, sleep quality, academic activity, students.

INTRODUCTION

In recent years, smartphones have become an inseparable part of young people's lives. In particular, university students widely use smartphones for education, communication, searching for information, and organizing their leisure time [1–4,6,9]. However, excessive smartphone use may lead to various psychological and physiological problems, including sleep disturbances, decreased attention, and reduced

academic performance.

First-year students are in the process of adapting to the university environment, and during this period, the intensity of using digital technologies may be high. Therefore, identifying smartphone use patterns among this group and determining its impact on sleep quality and academic activity is considered an urgent and relevant issue [5,7,8,10].

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MATERIALS AND METHODS

The study was conducted among first-year students at Turon University in Kashkadarya region. A total of 89 students participated in the survey. Among the respondents, 50.56% were male and 49.43% were female. The data were collected using a specially designed questionnaire. The questionnaire covered the following areas:

- daily duration of smartphone use;

- purposes of smartphone use;

- indicators of impact on sleep;

- smartphone addiction and its influence on academic activity.

The aim of the study was to determine the level of smartphone use among first-year students of Turon University, their main purposes for using smartphones, and the impact of smartphone addiction on sleep quality and academic activity. The obtained data were statistically analyzed based on percentage indicators, and scientific conclusions were drawn.

RESULTS

The results of the study showed that students actively use smartphones for long periods of time. According to the respondents, 41.57% use smartphones for 3–5 hours per day, while 25.84% reported using smartphones for more than 5 hours daily. It was found that nearly two-thirds of students use smartphones for at least 3 hours a day.

The analysis of smartphone use purposes revealed that 44.94% of respondents use smartphones for studying. Social media accounted for 40.44%, indicating that a large proportion of students spend their free time on social networking platforms. Communication (10.11%) and games (4.49%) represented relatively smaller proportions.

The analysis of indicators related to sleep impact showed that 64% of respondents use smartphones before going to sleep. 50.56% of students admitted that smartphone use delays the time they fall asleep. In addition, 61.79% of respondents reported keeping their phone near them during sleep. 64% of respondents noted that smartphone use negatively affects sleep quality.

Moreover, 44.94% of students stated that it is difficult to spend a day without a smartphone. 56.17% of respondents acknowledged that

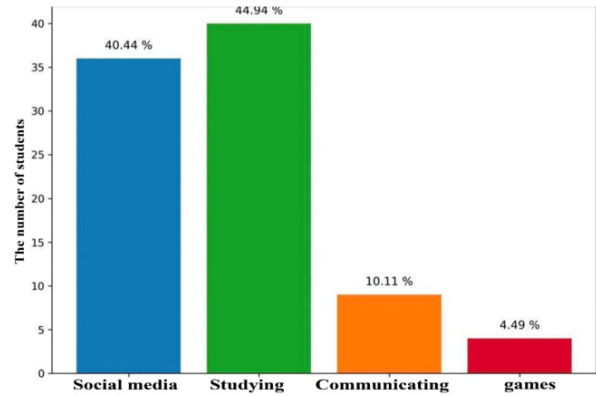


Figure 1. Distribution of students by smartphone usage.

smartphone addiction negatively affects academic performance.

DISCUSSION

The obtained results confirm that excessive smartphone use has a negative impact on students' sleep quality and academic activity. Using smartphones before bedtime may reduce the secretion of the hormone melatonin, which slows down the process of falling asleep.

Smartphone addiction distracts students' attention and reduces the time allocated to independent study. This, in turn, prevents deep learning of educational materials and may lead to a decline in academic indicators. The findings of this study demonstrate the necessity of developing recommendations for rational smartphone use among students in higher education institutions.

CONCLUSION

The results of the study showed that the level of smartphone use among students is extremely high, and smartphones occupy an important place in their daily lives as a key tool for information, communication, and entertainment. However, the collected data confirm that excessive and purposeless smartphone use may lead to negative consequences.

In particular, prolonged smartphone use in the evening and at night was found to reduce sleep duration and quality. As a result, students' attention, memory, and overall academic efficiency decrease. This situation directly affects students' academic outcomes and reduces their effectiveness in the learning process.

Therefore, developing digital hygiene skills among students in higher education institutions is considered an urgent task. This includes regulating the time spent using smartphones, especially limiting the use of electronic devices before sleep, and promoting the rational and effective use of smartphones for educational purposes only during the learning process. In addition, it is advisable to provide students with recommendations on time management, self-control, and developing healthy behavior in the digital environment.

Overall, conscious and moderate smartphone use is an important factor not only in maintaining students' health but also in improving their academic success. Thus, developing and implementing systematic preventive measures in this field is of great importance for future scientific research and educational policy.

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