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A STUDY TO EVALUATE THE IMPACT OF ADOLESCENT CELL PHONE DEPENDENCY ON BEHAVIOR AND ACADEMIC PERFORMANCE IN SELECTED SCHOOLS OF UP.

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ABSTRACT

The most widely used device for interpersonal communication is now the cell phone. Although they are increasingly more of an apparel trend than a status signal, mobile phones have also led to an implicit societal reliance. Young adults and teenage boys are less inclined to use their phones for texting, initiating calls, browsing the internet, or playing mobile games. Youth and youngsters that engage in feelings behavior are also more likely to want to experiment with associations, norms, even duties. Recreation, knowledge, and interaction with others are all facilitated by smartphones. A cross-sectional study involved 400 schoolchildren, from a few chosen schools in Uttar Pradesh, India. Using the simple random sampling method, Participants reported the purpose of smartphone usage and the duration spent on each activity were utilized to analyze the behavioral changes brought about by the usage of mobile phones. Survey distribution was used to track academic success. Descriptive statistics were employed to analyze the collected data. The findings highlight the impact of mobile phone policies on students' activities during breaks and underscore the challenge of completely eliminating mobile phone usage during these times. The study differentiates between primary (7–11 years old) and secondary tier (12–18 years old) students in terms of break time activities. Notably, younger students engage more in traditional activities, such as reading books, compared to secondary tier students. Awareness campaigns and educational programs can be designed to inform students about the potential health risks associated with excessive cell phone use.
Keywords: *Mobile phone, Social dependency, behavior, entertainment, awareness campaigns.*

Introduction

Mobile dependency, also called mobile devices dependency or mobile phone dependency, refers to an obsessive and excessive dependence on handheld devices, especially smartphones that disrupts different elements of a person's life. This behavioral phenomenon is characterized by an overwhelming preoccupation with mobile phone use, leading to a loss of control, neglect of responsibilities, and a persistent engagement with the device despite adverse consequences (Kuhdasht et al.,2018). Terms like "mobile addiction," "smartphone addiction," and similar expressions are used simultaneously to convey this contemporary behavioral problem. It is worth

mentioning that addiction to mobile devices has shared characteristics with other types of a dependency, such as using drugs or internet dependency, as it involves compulsive behavior and can have significant psychological and social implications (Cha et al.,2018). Mobile phone addiction among adolescents can have negative impacts on their mental and physical health. Symptoms of phone addiction may include anxiety, depression, changes in sleep patterns, fatigue, irritability, neglecting other activities, and withdrawal from social interaction. Excessive phone use can lead to physical symptoms such as neck pain, digital eye strain, and poor posture. Phone addiction can also lead to impaired social skills, reduced academic performance, sleep disturbances, and emotional and mental well-being issues. Treatment for phone addiction may involve establishing open communication, setting clear boundaries, and encouraging other healthy activities. Professional help may also be sought from mental health professionals who specialize in addictive behaviors in children or teens (Shoukat S, 2019).

Materials and methods

Research design: Descriptive research design
Sampling techniques: Random sampling method
Sample size: 400 participants (Gender distribution: 45% females, 55% males, Mean age: 24.45 ± 3.45 years).
Education level: 67.5% graduates, 32.5% undergraduates.
Demographic Analysis: "Conducted t-tests and chi-square tests to analyze demographic differences between Low Cell Phone Users (LCPU) and High Cell Phone Users (HCPU)", identified significant differences in age, gender, and education.
Physical Health Analysis: Identified prevalence of eye strain, neck/back pain, and weight gain and established significant correlations between "cell phone usage and mental health issues".
Mental Health Analysis: Higher levels of depression, loneliness, and mood disorders in HCPU and utilized binary logistic regression to measure the impact on overall personality.
Mobile Phone Activities (Children): Focused on active usage with permanent internet access and analyzed common activities: making/receiving calls, typing messages, watching YouTube videos.
Mobile Phone Activities (Children) Variables: Independent Variables: Active Usage by Children with Permanent Internet Access, Most Frequent Activities (Making/Receiving Calls, Typing Messages, and Watching YouTube Videos) the methodology provides a comprehensive assessment of adverse effects on children's physical health and behavior due to mobile phone usage.

Results and Discussion

The study found that the most prevalent mobile phone activities among participants were making or "receiving phone calls (72.49%), typing and sending messages on online services (66.39%), and watching videos on YouTube (65.42%). Other common activities included typing and sending SMS/MMS messages (54.22%), taking photos (51.66%), playing games (49.52%), and listening to music or spoken audio (47.10%). Participants also engaged in activities such as searching for

information (38.27%), watching favorite YouTubers (33.45%), browsing social networks passively (32.42%), and rating content on social networks (31.67%). Less frequent activities included sharing photos and videos on social networks (25.78%), watching videos on TikTok (19.57%), making videos (17.30%), using a mobile phone for educational purposes (16.85%), reading texts on a mobile phone (14.60%), managing a social network account (14.35%), watching videos on Twitch (13.20%), and streaming videos (6.69%)".

"Table 1: Most frequent activities on a mobile phone."

Activity	**"Total Frequency (*n*)"**	**"Relative Frequency (%)"**
Putting in and receive calls	19.701	72.49
typing and using online messaging apps "(such as Facebook Messenger, WhatsApp, etc.)"	18.044	66.39
observing YouTube videos	17.778	65.42
composing and messaging via SMS and MMS	14.735	54.22
Taking pictures	14.039	51.66
Engaging in gaming	13.457	49.52
listening to spoken word recordings or music (from Spotify as Apple Music, etc.)	12.801	47.10
Searching for data (e.g., on Google)	10.400	38.27
watching one's five YouTubers	9091	33.45
Facebook visiting (passive, post-reading)	8811	32.42
Social media content rating (liking, or using emoticons, such Roses on TikTok or Snapchat).	8608	31.67
distributing videos as well as pictures on websites and apps	7005	25.78
Viewing footage from TikTok	5319	19.57
Creating video content	4702	17.30
Using educational programmes, videos, and information on a mobile device	4580	16.85

Activity	**"Total Frequency (*n*)"**	**"Relative Frequency (%)"**
Using a mobile device to read texts (such as books, PDF files, text documents, etc.)	3969	14.60
running an Instagram account (running actions, maintaining picture and video collections, and controlling one's own post)	3900	14.35
Utilising Twitter to see videos	3588	13.20
Video streams (via YouTube or Twitch's for example)	1818	6.69

Table 2: "Using mobile phones in school (from the children's perspective)."

Breaks	**Lessons**	**Relative Frequency (%)**
"Allowed"	"Prohibited"	"53.30%"
"Prohibited"	"Prohibited"	"41.20%"
"Allowed"	"Allowed"	"2.48%"
"Prohibited"	"Allowed"	"1.09%"
"Not stated"	"Not stated"	"1.92%"

The study found that the relative frequency of breaks during lessons varied, with 53.30% of participants reporting that breaks were allowed and 41.20% indicating that breaks were prohibited. A smaller percentage of respondents mentioned that breaks were either allowed or prohibited (2.48% and 1.09%, respectively). Additionally, 1.92% of participants did not provide information about the allowance or prohibition of breaks during lessons.These activities are quite different from those taking place where using a phone during break is prohibited, with statistically significant $\chi 2$ values ranging from 97.64 to 345.27 (all p-values < 0.001). Notably, watching YouTubers on mobile phones has zero frequency when phones are not allowed.

According to this binary logistic regression study, there is a considerable rise in the likelihood of how specific illnesses, both mental and physical, related to HCPU would have a detrimental effect on an individual's personality in general. In particular, those who have eyestrain, trouble with their backs, neck pain, sadness, anxiety, or psychological disorders seem more probable to claim that these conditions have a detrimental effect on their demeanor. This highlights the need for treatments which deal with the negative effects of overuse of cellphones on a person's mental and physical wellness. The study delves into the activities of students during break times, considering whether mobile phones are allowed or prohibited. When mobile phones are allowed, chatting with peers,

playing games, and browsing social networks are prevalent activities. Interestingly, even in settings where mobile phones are disallowed, walking around the school premises remains a significant activity.

Conclusion

Studies have found that excessive mobile phone use is inversely related to academic performance and can lead to negative consequences such as impaired mental health, physical symptoms, neglecting other activities, reduced academic performance, sleep disturbances, and emotional and mental well-being issues. Therefore, mobile phone policies in schools should be carefully considered to promote healthy behaviors and academic success among students.

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