



A Study On The Relationship Between Social Networking And Sleep Hygiene Among Adolescents In India

Authors

1. **Briana** (Research Scholar, CGLD School of Counselling, Bangalore)
2. **Dr. Renny Samuel** (Vice President, CGLD School of Counselling, Bangalore)
3. **Dr. Francis Doddamani** (Professor, Global School of Counselling, Bangalore)

Abstract

The study aims to analyze the correlation between sleep hygiene and social networking among adolescents in India. We observed the relationship between social networking and sleep hygiene among adolescents in India through a correlational analysis, utilizing a total of 103 samples from the age group of 15–20 years across India. The data collection happened through both online and offline means: I created the Google form, shared the link, and shared it across; printed the survey form, and distributed it to nearby schools in Bangalore. The study is quantitative and objectively conducted, with a focus on demographics, sampling strategy, assessment tools, data collection methods, reliability, and validity. The limitations of the research include time constraints, the potential for bias and inaccuracy, and ethical considerations such as voluntary participation, informed consent, anonymity, and confidentiality. The quantitative study transformed the raw findings into SPSS for descriptive and correlational analysis, revealing a 99% correlation between the two variables. It is fascinating to see that the two variables in the title exist independently in their domains, yet there is an existing correlation between social networking and sleep hygiene among Indian adolescents.

Keywords: social networking, sleep hygiene, correlational analysis, descriptive analysis, adolescents aged 15–20, male and female.

Introduction

Overuse of screens during early childhood can have a detrimental effect on the development of social skills, resulting in delays in communication, fine motor skills, problem-solving abilities, and personal and social skills by the time a child is two years old. Sleep hygiene is a collection of behaviors that improve the quality of one's sleep. These behaviors include following a regular sleep schedule, setting up a comfortable sleeping environment, and exercising regularly. In India, age, gender, and lifestyle all play a role in the 37% of older adults who experience insomnia. Inadequate sleep exacerbates functional limitations and directly and indirectly affects life satisfaction.

Environment-related sleep hygiene behaviors moderate gender; women have more positive attitudes toward sleep and better sleep hygiene practices.

Literature Review

Digitalization has aptly defined the world. Children today are "digital natives," having been born into an ever-changing digital ecosystem augmented by mobile media. The age at which kids engage with media regularly has fallen from four years in 1970 to four months today (Redensky, MD, 2016). Children's heavy reliance on digitalization results in serious public health concerns, including cognition and linguistic and socio-emotional growth, which are both beneficial and detrimental.

As screen time includes social networking, the author picked the variable of social networking usage in terms of screen time. There is evidence that social networking is one of the important reasons why youngsters use the internet (Raju et al., 2015). Social networking refers to using internet-based social media sites to stay connected with friends, family, colleagues, or customers.

The pandemic has led to numerous studies on screen time and sleep hygiene, with various conclusions drawn. In India, sleep disorders account for 40% of mental health helpline TeleMANAS calls, primarily due to the overuse of social media. Neuroscientific research has shown that excessive screen time can lower brain

development in preschoolers. The COVID-19 pandemic has impacted sleep worldwide, with screen time increasing during quarantines. A large sample of adults in Brazil revealed a 266% increase in TV time and increased sedentary behaviors.

Authors have conducted studies on the relationship between screen usage and sleep patterns, specifically focusing on teenagers due to their unique identity development and its impact on life's essential questions. At a young age, Professor Manoj Sharma of the University of Nevada, Las Vegas (UNLV) Chair of Social and Behavioral Health recommends initiating efforts to prevent aggressive and risk-taking behaviors. In Canada, a research article suggests public health interventions should limit recreational screen time to improve sleep quality. Screen time and sleep hygiene have a collateral relationship with teenagers, impacting their personal, social, and educational aspects.

In December 2023, The Sleep Medicine Journal published an article highlighting the inverse relationship between screen time and sleep length, with adolescents with more than 9 hours of screen time being 60% more likely to report poor sleep quality. Research by Lauren Hale et al. suggests sleep-friendly screen behavior for children, with bedtimes after 8 p.m. linked to higher risks of increased adiposity and obesity. A study by Azar Pirdehghan et al. from Hamadan University of Medical Sciences in Iran found a high level of social media use positively associated with sleep quality, daily dysfunction, sleep duration, and depression. Authors found a negative correlation between the overall use of social networks and academic performance.

Research has linked excessive screen usage to poor academic performance and delayed cognitive development in children. Research by Xiaoning Zhang et al. from the Department of Psychology and Human Development in London found that excessive use of screens, especially before bedtime, contributes to sleep deprivation and poor academic performance.

In India, research by Medicover Hospitals in 2023 highlights the negative effects of excessive screen time on mental health, with blue light from screens causing less melatonin, disrupting sleep patterns, and hindering cognitive development. Physical issues related to digital screen use include dry eyes, difficulty falling asleep, and avoidance of outside activity.

Studies have linked excessive social media use to anxiety and depression, revealing a higher likelihood of depression among individuals involved in social media, games, texts, and mobile phones. Studies reveal that females are more prone to social media addiction than males, and passive activities such as reading posts have a stronger association with depression than active use.

Research from the Chinese University of Hong Kong and Harvard University also found negative impacts of social media use on sleep and mental health, with preliminary evidence suggesting potential benefits during COVID. According to research from San Diego State University and Duke University, time displacement occurs at the cohort level, with in-person social interaction declining, but not at the individual level.

Duke University's HomeNet Study found a link between increased internet use and declines in users' social circles, as well as increases in depression and loneliness. Typically, the benefits of increased connection, such as social support, are associated with positive associations between wellbeing and social network site use, while behaviors that fail to meet users' needs for acceptance and belonging are associated with negative associations. In conclusion, social networking has become an important factor in our lives, with its impact on sleep hygiene and mental health being a significant concern.

The National Library of Medicine published a UK study that explored adolescents' perspectives on social media and mental health, identifying five main themes: self-expression, validation, body ideals, pressure to stay connected, social engagement, peer support, and exposure to bullying and harmful content. A UK study by Michelle O'Reilly found that negative effects in relationships for adolescents are associated with the social media dimension. PubMed's 2016 study found that adolescents who used social media more and were more emotionally invested experienced poorer sleep quality, lower self-esteem, and higher levels of anxiety and depression.

An international study by Malgorzata Bartosik emphasized the importance of social media in higher education, highlighting cultural differences in its use and age-related diversions. In 2019, the International Journal of Computer Sciences and Engineering published an article titled "Social Media and Indian Youth," stating that excessive use of social media is affecting youth lifestyles and increasing health problems and behavioral changes.

A recent survey by TCS revealed that 72% of Indian youth own a smartphone or digital gadget, and more than 50% have internet access at home. Another paper by Abdul Fahad from the University of Malaya highlighted the growing relevance of social media in the 21st century, with the internet taking over a significant portion of youth's schedules and social media becoming a significant part of their lives.

The University of Michigan held a research conference on social media and society in India in April 2023, discussing various domains such as journalism, activism, mental health, culture, and industry. Social media has become a significant factor in India's growth, with India being one of the leading countries in internet usage and app downloads globally. However, social media addiction has led to an increase in personality and mental disorders, as well as poor social skills outside the virtual world.

Research Methodology

The study is quantitative and exploratory, focusing on adolescents aged 15-20 years, both males and females. Two hypotheses are presented: the null hypothesis (H_0) suggests no correlation between social networking and sleep hygiene, and the alternative hypothesis (H_1) confirms a correlation. The research design includes two reliable questionnaires: the Social Networking Addiction Scale (SNAS) and the Adolescent Sleep Hygiene Scale. Factors such as impulsivity, virtual freedom, and negative outcomes validate the SNAS, while 33 questions from eight domains design the Adolescent Sleep Hygiene Scale.

Findings and Discussion

We circulated the questionnaires via Google Forms and printed them out as handout forms. The author used SPSS software for descriptive analysis and correlation between social networking and sleep hygiene. The study has limitations, including time constraints and the potential for bias and inaccuracy due to the self-report procedure. Ethical considerations include voluntary participation, informed consent, anonymity, and confidentiality. Due to the limitations, this article is displaying the main table of findings performed through SPSS software using Pearson's correlation values.

S. No.	Items	Mean	7	6	5	4	3	2	1
1	Screen time ≤1 hour of bedtime	3.6602	.393**	.418**	.185	.241*	.312**	.378**	
2	Go online instantly after	3.3107	.490**	.260**	.491**	.342**	.254**	awake	
3	Difficult to stay focused	3.0971		.160	.263**	.307**	.271**		
4	Frequently check updates	3.2913	.310**	.129	.208*				
5	Ignore sleep for online	2.6602	.465**	.161					
6	When online, lose track of time	3.3592	.262**						
7	While in bed, the mind wanders on the online matters	2.6311							

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

The study found a lesser correlation between screen time and wandering thoughts online, while adolescents were more involved with screen time before sleep. On weekends, usage increases. Wandering thoughts about being online correlate with frequently checking updates. Loss of track of time while being online is highly correlated with screen time before sleep, going online immediately after waking up, and less focus time. The study found that adolescents spend screen time leisurely rather than mindfully, and 99% agree to go online immediately after waking up.

In this research, the author quantitatively found that the sleep time and wake-up time between weekdays and weekends have a major difference due to the daily activities involved. Moreover, the use of screen time seemed like an unmindful activity, according to the survey reports from the randomly selected samples. Further research is required to understand the existence of addictions among adolescents. Also, there

is an evident quantitative finding concerning the virtual freedom and negative outcomes of SNAS, which needs a specific research study.

Summary

Briefing the study, the author found that the alternative hypothesis is correct because there is a correlation between social networking and sleep hygiene among adolescents in India at a quantitative rate of 99% through Pearson's correlational analysis of SPSS. However, it is important to understand that there are other factors involved in this correlational study. The present research assisted the author in understanding the need for awareness of mindful activities required for adolescents in daily living to avoid extreme dependence on screen time, as severe screen exposure leads to cognitive disabilities.

References

- Abdul Fahad. (2017, January). *Psychological Impact of Social Media on Youth in India*. Research Gate.
https://www.researchgate.net/publication/340778224_PSYCHOLOGICAL_IMPACT_OF_SOCIAL_MEDIA_ON_YOUTH_IN_INDIA
- Anjali Popat and Carolyn Tarrant. (2023, January 28). *Exploring adolescents' perspectives on social media and mental health and well-being - A qualitative literature review - PubMed*. PubMed.
- Ashwini A Mahadule et al. (2022, July). *Sleep quality and sleep hygiene in preclinical medical students of tertiary care centre amidst COVID-19 pandemic: A cross-sectional observational study*. PubMed Central (PMC).
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9263951/>
- Chitkara University. (2017, March 6). *Impact of Social Networking Sites (SNSs): Are Youth affected by its usage? Issues and Ideas In Education*, 5.
- Danny J Yu et al. (2024, February 8). *The impact of social media use on sleep and mental health in youth: A scoping review*. PubMed.
- Donthu, R. K., Badabagni, R., Mohammed, A. S., Vuddandam, K. V., & Chatti, V. S. (2022).

Association of screen time with physical and mental health among children: A cross-

sectional study. *Journal of Indian Association for Child and Adolescent Mental Health*, 18(4), 272-282. <https://doi.org/10.1177/09731342231168495>

Eman M Alanazi et al. (2023, March 16). *Sleep hygiene practices and its impact on mental health and functional performance among adults in Tabuk city: A cross-sectional study*. PubMed

Central (PMC). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10105495/>

Michelle O'Reilly. (2020, January 28). *Social media and adolescent mental health: The good, the bad and the ugly*. PubMed.

MRIs show screen time linked to lower brain development in preschoolers. (2019, November 4).

CNN.

Ruder, Debra Bradley. (2019, June 19). Screen time and Brain. *Harvard Medical School*.

Sleep in adolescents: The perfect storm. (n.d.). PubMed Central

(PMC). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3130594/>.

Zendels, P., Ruggiero, A., & Gaultney, J. F. (2021). *Gender differences affecting the relationship between sleep attitudes, sleep behaviors and sleep outcomes*. *Cogent Psychology*, 8(1).

<https://doi.org/10.1080/23311908.2021.1979713>