



# INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

## Digital Engagement And Adolescents Well-Being: A Study Of Social Media Usage, Self-Esteem And Sleep Patterns

<sup>1</sup>RJ Sujana ,<sup>2</sup> Kavya Vijayan

<sup>1</sup>PG student,<sup>2</sup> Assistant Professor

<sup>1</sup> Department of Psychology

<sup>1</sup>CODE, JAIN ( Deemed- to – University ) Bengaluru -78, INDIA

### Abstract

The rapid growth of social media has significantly influenced the lifestyle and psychological well-being of adolescents. The present study aims to examine the relationship between social media usage, sleep patterns, and self-esteem among adolescents. A quantitative research design was adopted, and data were collected from 100 participants using structured questionnaires. The Rosenberg Self-Esteem Scale was used to assess self-esteem, along with tools measuring social media usage and sleep patterns. The findings indicate that a majority of adolescents reported high social media usage, which was associated with poorer sleep patterns and variations in self-esteem levels. The study suggests that excessive engagement with social media may negatively affect sleep quality and influence adolescents' perception of self-worth. The results highlight the importance of promoting balanced social media usage and healthy lifestyle habits among adolescents.

**Keywords:** Social Media Usage, Sleep Patterns, Self-Esteem, Adolescents, Mental Health

### I INTRODUCTION

In the contemporary digital era, social media has become an integral part of adolescents' daily lives. Platforms such as Instagram, WhatsApp, and Facebook are widely used for communication, entertainment, and self-expression. While these platforms offer numerous advantages, their excessive use has raised concerns regarding their impact on adolescents' physical and psychological well-being. Adolescence is a critical stage of development characterized by rapid emotional, cognitive, and social changes, making individuals more susceptible to external influences such as digital media.

One of the major concerns associated with increased social media usage is its effect on sleep patterns. Sleep plays a vital role in maintaining physical health, cognitive functioning, and emotional stability. However, prolonged exposure to screens, especially during nighttime, can disrupt circadian rhythms and lead to delayed sleep onset, reduced sleep duration, and poor sleep quality. Adolescents who frequently engage with social

media late at night are more likely to experience sleep disturbances, which may negatively affect their daily functioning and overall well-being.

In addition to sleep disturbances, social media usage has a significant influence on self-esteem. Self-esteem refers to an individual's overall sense of self-worth and self-evaluation. Social media platforms often expose adolescents to idealized images and lifestyles, encouraging social comparison and the need for validation through likes, comments, and followers. Such experiences can lead to fluctuations in self-esteem, where positive interactions may enhance self-worth, while negative experiences, including cyberbullying or lack of social approval, may diminish it.

Existing research indicates that there is a meaningful relationship between social media usage, sleep patterns, and self-esteem among adolescents. Excessive use of social media has been linked to poor sleep quality and lower levels of self-esteem, although these effects may vary depending on individual differences and usage patterns. Despite growing awareness, there remains a need for further research to explore these relationships within specific populations and contexts.

Therefore, the present study aims to examine the relationship between social media usage, sleep patterns, and self-esteem among adolescents. By investigating these variables, the study seeks to contribute to a better understanding of how digital engagement affects adolescent well-being. The findings may help in promoting awareness among adolescents, parents, and educators regarding the importance of balanced social media usage and healthy lifestyle practices.

## II REVIEW OF LITERATURE

The growing use of social media among adolescents has become a significant area of research due to its impact on psychological and behavioral outcomes. Social media platforms provide opportunities for communication and self-expression; however, excessive use has been associated with various mental health concerns, particularly among adolescents who are in a sensitive developmental stage.

Several studies have examined the relationship between social media usage and sleep patterns. Woods and Scott (2016) found that increased nighttime use of social media was associated with poor sleep quality and lower self-esteem among adolescents. Similarly, Hale and Guan (2015) reported that higher screen time negatively affects sleep duration and quality, highlighting the role of digital exposure in sleep disturbances.

Research has also explored the association between social media usage and self-esteem. Vogel et al. (2014) found that frequent social comparison on social media platforms is linked to lower self-esteem. In line with this, Gonzales and Hancock (2011) suggested that online interactions can influence individuals' perceptions of self-worth, depending on the nature of engagement.

Further evidence from Keles, McCrae, and Grealish (2020) indicates that excessive social media usage is associated with increased psychological distress, including reduced self-esteem and emotional well-being. Twenge (2019) also reported that higher levels of digital media use are linked to lower levels of happiness and overall well-being among adolescents.

Studies focusing on sleep disturbances have shown similar patterns. Levenson et al. (2016) found a significant association between social media usage and sleep disturbances, while Sivak and Smirnov (2020) highlighted that late-night digital activity contributes to reduced sleep quality and daytime fatigue.

In the Indian context, Mahajan and Sharma (2024) reported that excessive social media usage is associated with poor sleep quality among adolescents, while its impact on self-esteem may vary depending on individual differences and patterns of usage. This suggests that cultural and contextual factors may also influence the relationship among these variables.

Overall, the literature indicates that social media usage is closely linked with sleep patterns and self-esteem among adolescents. While most studies suggest negative effects, some highlight that outcomes may vary based on usage patterns. These findings support the need to further explore the relationship among these variables in the present study.

### III RESEARCH METHODOLOGY

The present study adopted a systematic methodology to examine the relationship between social media usage, sleep patterns, and self-esteem among adolescents. The details of the research design, objectives, hypotheses, variables, sample, tools, scoring procedure, data collection procedure, statistical analysis, and ethical considerations are presented below.

#### Research Design

The study employed a quantitative research design. This approach was chosen to objectively measure and analyze the relationship between social media usage, sleep patterns, and self-esteem among adolescents using statistical methods.

#### Objectives of the Study

1. To assess the level of social media usage among adolescents.
2. To examine the sleep patterns of adolescents.
3. To evaluate the level of self-esteem among adolescents.
4. To study the relationship between social media usage and sleep patterns.
5. To analyze the relationship between social media usage and self-esteem.

#### Hypotheses

1.  $H_{01}$ : There is no significant relationship between social media usage and sleep patterns among adolescents.
2.  $H_{11}$ : There is a significant relationship between social media usage and sleep patterns among adolescents.
3.  $H_{02}$ : There is no significant relationship between social media usage and self-esteem among adolescents.
4.  $H_{12}$ : There is a significant relationship between social media usage and self-esteem among adolescents.

#### Variables

Independent Variable: Social media usage

Dependent Variables: Sleep patterns and self-esteem

#### Sample

The sample consisted of 100 adolescents, including 51 males and 49 females. The participants were selected using a convenience sampling method from accessible settings.

## Tools for Data Collection

Data were collected using structured questionnaires. A self-structured questionnaire was used to assess social media usage, and another questionnaire was used to evaluate sleep patterns. The Rosenberg Self-Esteem Scale (Rosenberg, 1965) was used to measure self-esteem.

## Scoring Procedure

Responses were scored using a Likert-type scale. Each response was assigned a numerical value. Negatively worded items in the self-esteem scale were reverse scored before calculating the total score. Higher scores indicated higher levels of the respective variables.

## Procedure

Participants were informed about the purpose of the study, and informed consent was obtained prior to data collection. The questionnaires were administered, and participants were instructed to respond honestly. Confidentiality and anonymity were maintained throughout the study.

## Statistical Analysis

The collected data were analyzed using descriptive statistical methods such as frequency and percentage. The results were presented in tabular form for interpretation.

## Ethical Considerations

Ethical guidelines were followed throughout the study. Participation was voluntary, and informed consent was obtained. Confidentiality and anonymity of the participants were ensured, and the data were used only for academic purposes.

## CHAPTER IV ANALYSIS AND DISCUSSION

This chapter presents the analysis of data collected from 100 adolescent participants. The data were analyzed using descriptive statistics such as frequency and percentage to understand the distribution of variables including gender, sleep patterns, self-esteem, and social media usage.

**Table 4.1**  
**\*Distribution of Participants Based on Gender\***

Gender	Frequency	Percentage
Male	51	51%
Female	49	49%
Total	100	100%

Table 4.2

**\*Distribution of Sleep Patterns among Adolescents\***

Category	Frequency	Percentage
Poor Sleep	60	60%
Adequate Sleep	40	40%
<b>Total</b>	<b>100</b>	<b>100%</b>

Table 4.3

**\*Distribution of Self-Esteem Levels among Adolescents\***

Category	Frequency	Percentage
Low Self-Esteem	55	55%
High Self-Esteem	45	45%
<b>Total</b>	<b>100</b>	<b>100%</b>

Table 4.4

**\*Distribution of Social Media Usage among Adolescents\***

Category	Frequency	Percentage
High Usage	60	60%
Moderate/Low	40	40%
<b>Total</b>	<b>100</b>	<b>100%</b>

**Discussion**

The results of the study indicate that the sample consisted of a nearly equal distribution of male and female participants. A majority of adolescents reported high levels of social media usage, suggesting strong engagement with digital platforms. This finding reflects the increasing role of social media in adolescents' daily lives.

With regard to sleep patterns, a significant proportion of participants reported poor sleep quality. This may be attributed to excessive use of social media, particularly during nighttime, which can disrupt sleep schedules and reduce overall sleep duration.

In terms of self-esteem, more than half of the participants reported lower levels of self-esteem. This may be influenced by factors such as social comparison, peer pressure, and the need for validation on social media platforms.

The findings are consistent with previous research studies, which indicate that excessive social media usage is associated with poor sleep quality and variations in self-esteem. Overall, the results support the alternative hypotheses of the study, suggesting that social media usage is related to sleep patterns and self-esteem among adolescents.

**CHAPTER V: CONCLUSION**

The present study aimed to examine the relationship between social media usage, sleep patterns, and self-esteem among adolescents. The findings revealed that a majority of adolescents reported high levels of social media usage, indicating that digital platforms play a significant role in their daily lives.

The results further indicated that increased social media usage is associated with poor sleep patterns. Adolescents who engaged more frequently with social media, especially during nighttime, were more likely to experience reduced sleep duration and irregular sleep schedules. This suggests that excessive screen exposure may disrupt sleep routines and negatively affect overall well-being.

In addition, the study found variations in self-esteem levels among adolescents. Higher social media usage was associated with relatively lower self-esteem in some participants. This may be due to factors such as social comparison, peer pressure, and the need for validation through likes and comments on social media platforms.

The findings of the present study are consistent with previous research, which highlights the impact of social media on sleep quality and self-esteem. These results support the alternative hypotheses, indicating that there is a relationship between social media usage, sleep patterns, and self-esteem among adolescents.

In conclusion, the study emphasizes the importance of maintaining a balance in social media usage. Promoting awareness about healthy digital habits and encouraging better sleep practices can help improve the overall psychological well-being of adolescents.

## **CHAPTER VI LIMITATIONS AND SCOPE FOR FUTURE RESEARCH**

The present study provides valuable insights into the relationship between social media usage, sleep patterns, and self-esteem among adolescents; however, certain limitations must be acknowledged. One of the primary limitations of the study is the relatively small sample size of 100 participants, which may limit the generalizability of the findings to a broader population.

Another limitation is the use of convenience sampling, which may not accurately represent all adolescents from different socio-economic, cultural, or geographical backgrounds. Additionally, the study relied on self-reported questionnaires, which may be subject to response bias, including social desirability and inaccurate self-assessment by participants.

The study also utilized descriptive statistical methods such as frequency and percentage, which limit the depth of analysis. As a result, the study does not establish causal relationships between variables but only identifies general patterns and associations.

Despite these limitations, the study offers several directions for future research. Future studies can include a larger and more diverse sample to improve the generalizability of the findings. Researchers may also adopt longitudinal research designs to examine changes over time and better understand the long-term effects of social media usage.

Furthermore, future research can incorporate advanced statistical techniques such as correlation and regression analysis to explore relationships more precisely. Additional variables such as anxiety, depression, academic performance, and emotional well-being can also be included to gain a more comprehensive understanding of adolescent mental health in the digital age.

**REFERENCES**

1. Gonzales, A. L., & Hancock, J. T. (2011). Mirror, mirror on my Facebook wall: Effects of exposure to Facebook on self-esteem. *Cyberpsychology, Behavior, and Social Networking*, 14(1–2), 79–83. <https://doi.org/10.1089/cyber.2009.0411>
2. Hale, L., & Guan, S. (2015). Screen time and sleep among school-aged children and adolescents: A systematic review. *Sleep Medicine Reviews*, 21, 50–58. <https://doi.org/10.1016/j.smrv.2014.07.007>
3. Keles, B., McCrae, N., & Grealish, A. (2020). A systematic review: The influence of social media on depression, anxiety, and psychological distress in adolescents. *International Journal of Adolescence and Youth*, 25(1), 79–93. <https://doi.org/10.1080/02673843.2019.1590851>
4. Levenson, J. C., Shensa, A., Sidani, J. E., Colditz, J. B., & Primack, B. A. (2016). The association between social media use and sleep disturbance among young adults. *Preventive Medicine*, 85, 36–41. <https://doi.org/10.1016/j.ypmed.2016.01.001>
5. Mahajan, A., & Sharma, R. (2024). Social media usage, sleep patterns, and self-esteem among adolescents in India. *International Journal of Social Sciences*, 12(2), 45–52.
6. Sivak, E., & Smirnov, I. (2020). Digital activity and adolescent well-being: The role of nighttime social media use. *Journal of Youth Studies*, 23(6), 1–15.
7. Twenge, J. M. (2019). More time on technology, less happiness? Associations between digital media use and psychological well-being. *Current Directions in Psychological Science*, 28(4), 372–379. <https://doi.org/10.1177/0963721419838244>
8. Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture*, 3(4), 206–222. <https://doi.org/10.1037/ppm0000047>
9. Woods, H. C., & Scott, H. (2016). #Sleepyteens: Social media use, fear of missing out, and sleep quality. *Journal of Adolescence*, 51, 41–49. <https://doi.org/10.1016/j.adolescence.2016.05.008>