

# SOCIAL MEDIA AS A MEDIATING FACTOR IN ADOLESCENT LEARNING: AN EXPLORATORY STUDY ON BEHAVIORAL, COGNITIVE AND AFFECTIVE DIMENSIONS

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## Abstract

The use of online-based media empowers teenagers to establish and maintain online personas, connect with others and cultivate social networks. These digital communities are valuable for young people who face rejection or struggle with physical or chronic illnesses. Research published in the International Journal of Artistic Analysis states that social networks have a significant, positive and undeniable impact on youngsters, further, it highlights the field of techno-self-studies. The utilization of online platforms is advantageous for adolescents in various ways. They can provide a window to contemporary trends, enabling them to stay up-to-date with the latest developments. Furthermore, these digital platforms possess the capacity to facilitate transcontinental communication, enabling adolescents to engage in interactive discourse with their counterparts originating from diverse geographical regions across the globe. This cross-cultural exchange facilitated by such platforms presents opportunities for adolescents to broaden their perspectives and develop a more comprehensive understanding of diverse cultural contexts and worldviews. This interaction can be a valuable source of information and knowledge sharing, as adolescents can learn about various cultures, customs and practices. This study delves into the effects of social media on adolescents, the reasons for social media addiction, strategies for mitigating negative effects and the extent of social media usage. The study employed a convenient sampling method with a sample size of 200 and SPSS version 23 was utilized for statistical analysis. Responses were collected from individuals in Chennai. This research can offer valuable insights to educators and students seeking to incorporate emerging e-learning trends.

**Keywords:** Digital Communities, Media Addiction, Communication, Cross-Cultural Interaction.

## 1. INTRODUCTION

The rise of online media has been unprecedented and become an integral part of everyone's life. This term is quite broad and encompasses various types of media such as videos, blogs, etc. It is a platform where people can share information with others. Online media is a means of communication that allows people to share content with their online connections. Young adults have a plethora of advantages that accompany the liberty to embark on a diverse array of paths toward self-development. They can establish and foster social bonds and acquire knowledge with greater ease that does not exist in the past. Social interaction has become indispensable to our daily routines, whether for professional or recreational purposes. Web-based media is a powerful tool for communication and collaboration that offers a wide range of channels for online interaction. Whether it is through blogging, social networking, social bookmarking or wikis, web-based media provides users with an array of interactive web-based applications to create, share and exchange information. Users can create unique and engaging content such as text posts, comments, images and videos, which are essential elements of online media. Web-based media organizations maintain user profiles that help users connect with others and build their online social networks. By fostering collaboration and sharing information, web-based media is an excellent platform for creating meaningful relationships and sharing knowledge.

The study gathered data from individuals of all ages in Chennai who frequented public spaces such as courthouses, malls, libraries and metro stations. The research encompassed both online surveys and experiments. The results of the study highlighted that social media users can access a vast amount of information swiftly and generate a diverse range of content, including text, written pieces, photographs and videos. Moreover, they exhibit individual and collective engagement in educational pursuits. The structure of the paper is as follows: in Section 2, the researcher provided a review of the literature on the influence of social media on young learners. The adopted research technique is described in detail in Section 3; the analysis of the survey results is offered in Section 4 and the debate, limitations and recommendations about the constructive use of social media are included in Section 5. The study is then concluded in the sixth section.

## 2. OBJECTIVES

- To investigate the patterns and extent of social media utilization among adolescents
- To identify and analyze the underlying factors contributing to the development of social media addiction in the adolescent population.
- To examine the multifaceted impacts of social media engagement on various aspects of adolescent development and well-being.
- To explore and evaluate potential strategies and interventions to combat the detrimental effects of excessive or problematic social media use among adolescents.

## 3. LITERATURE REVIEW

By utilizing social media platforms and promoting self-regulated learning for students in higher education, a personal learning environment (PLE) is a promising potential technique for integrating formal and informal learning (Dabbagh & Kitsantas, 2012). According to O'Keeffe and Clarke-Pearson (2011), not all social media platforms are safe spaces for children and adolescents, parents must be aware of the nature of these platforms. Pediatricians are in a great position to educate families about social media, promote healthy use and advise parents to keep an eye out for potential issues with cyberbullying, 'Facebook depression', sexting and exposure to offensive information. Social media platforms are utilized by a vast number of individuals globally for the dissemination of information and the establishment of connections. On a personal level, these digital platforms enable users to communicate with their acquaintances and family members, acquire novel knowledge, cultivate their areas of interest and seek entertainment. Furthermore, social media can be leveraged to expand or deepen one's comprehension within a particular domain and construct a professional network by forming connections with other professionals operating within the same industry. From a commercial perspective, social media facilitates direct interaction with the target demographic, enabling the collection of customer feedback and enhancing the visibility and reputation of the business entity (Akram & Kumar, 2017). Allen et al. (2014) stated that social media use affects social connectedness in terms of three elements: a sense of belonging, psychosocial well-being and identity development and processes. Their article argues that online tools create a paradox of social connectedness and are used to communicate with the mass audience. The

study by El-Badawy and Hashem (2015) found that in Egypt, the utilization of social media is slightly higher in number compared to others. It dominates 25 % of the total MENA region. With that supportive data, the authors attempted to analyze how social media affects adolescent mental health. According to this study, Adolescents' usage of social media has become a larger and larger part of their everyday life, however, they are still resistant to parental control over it which can lead to stress.

“Social media fosters a false sense of online connections and superficial friendships leading to emotional and psychological problems. As well it also becomes easily addictive, taking away family and personal time by diminishing interpersonal skills, leading to antisocial behavior. At last, it has become a tool for criminals, predators and terrorists enabling them to commit illegal acts” (Amedie, 2015, p. 6). Richards et al. (2015) found that the adverse effects of social media on the well-being of children and adolescents are primarily observed in the realm of mental health, specifically influencing their self-esteem and overall psychological state. This impact is closely linked to phenomena such as cyberbullying and the phenomenon known as Facebook Depression, which is correlated with self-perception and body image concerns. Nonetheless, establishing a direct causal relationship is intricate and is likely influenced by the unique characteristics and circumstances of each young individual.

“Social media has infiltrated the lives of our adolescent and adult patients. We need to expand our capacity ‘to meet them on their turf’. However, to make a value proposition or develop an evidence-based framework to better engage young people with their health through social media” (Wong et al., 2014, p.223). According to Cookingham and Ryan (2015), the use of social media platforms presents prospects for constructive health and wellness interventions which need an extensive research effort to ascertain the efficacy of such programs. Healthcare professionals specializing in adolescent care play a major role as contributors to this emerging domain of inquiry. They must remain committed to maintaining a comprehensive understanding of the latest developments and actively engaging the burgeoning generation on the potential advantages and inherent risks associated with the use of social media.

Christofferson (2016) conducted a systematic review examining the effects of social networking sites (SNS) on the social and emotional development of youth. SNS represents a novel and intriguing area of study. This is because technology has become an integral part of adolescent life. Due to their widespread popularity, parents and educators express significant concerns regarding the impact of SNS. The review considered qualitative and quantitative studies exploring the benefits and risks of SNS for teenagers' social and emotional well-being. These studies demonstrated how youth utilize SNS, establish online communities and engage in communication behaviors linked to their development and positive social outcomes. However, the studies also highlighted substantial risks posed by SNS to adolescent health, such as cyberbullying and non-suicidal self-injury behaviors. The social benefits of SNS appeared to be more positively significant compared to the emotional effects. Conversely, the emotional risks seemed to be more negatively significant for teenagers' use of SNS.

According to Jan and Ahmad (2017), youngsters' overindulgence in social media within the most precious hours of their lives will result in behavioural changes. Social networking sites help people to make social comparisons, which increases the psychological distress of individuals and as a result, lowers the overall level of self-esteem. Many observers and researchers believe that due to the increase in the usage

of social networking sites, people have become the victims of lower self-esteem and self-growth. "Increase in social media usage decreases the self-esteem of individuals. One hour spent on Facebook daily results in a 5.574 decrease in the self-esteem score of an individual" (Jan et al., 2017, p.329). Following the previous study, the author attempted to analyze the social media impact on academic performance. "Social networking has become a common international trend which has spread across almost every corner of the world" (Abbare et al., 2023, p. 123). This study revealed that the time spent on social media can negatively affect student academic performance.

Fear of missing out (FOMO) is conceptualized as an intrapersonal trait characterized by anxiety stemming from the perception that one is missing out on rewarding experiences occurring to others (Medrano, 2022). Karim et al. (2020) elucidates that social interaction can confer psychological benefits by mitigating feelings of stress, anxiety and depression, while a dearth of social interaction may detrimentally impact mental health. As of 2019, there were an estimated 3.484 billion global users of social media platforms. The study posits that utilization of social media can have profound implications for one's psychological well-being. The researcher endeavored to investigate whether social media use augments or undermines adolescent well-being, a pertinent societal issue. The findings of this study revealed that social media usage exerts both constructive and deleterious effects. Kolhar et al. (2021) investigated the impacts of social media on learning, interpersonal interaction and sleep quality. The study posits that social media usage affects the mental health of students, encompassing their emotional, psychological and social well-being. The findings suggest that the deleterious effects outweigh the beneficial ones. The research indicates that social media may precipitate disengagement among students from their academic pursuits, occupational responsibilities and interpersonal relations.

#### **4. RESEARCH METHOD**

The review employed an empirical examination methodology. The sampling technique utilized was convenience sampling. Data were collected from individuals in Chennai, with a total sample size of 200 participants. The instrument used for this research was SPSS Version 23. The independent variables in this study were age, educational qualification and gender. The dependent variables examined were the manner in which social media influences well-being, which demographic groups exhibit higher levels of social media dependence, whether individuals experience anxiety when unable to access social media and the extent to which social media is integrated into daily routines. The analytical tools employed included bar graphs.

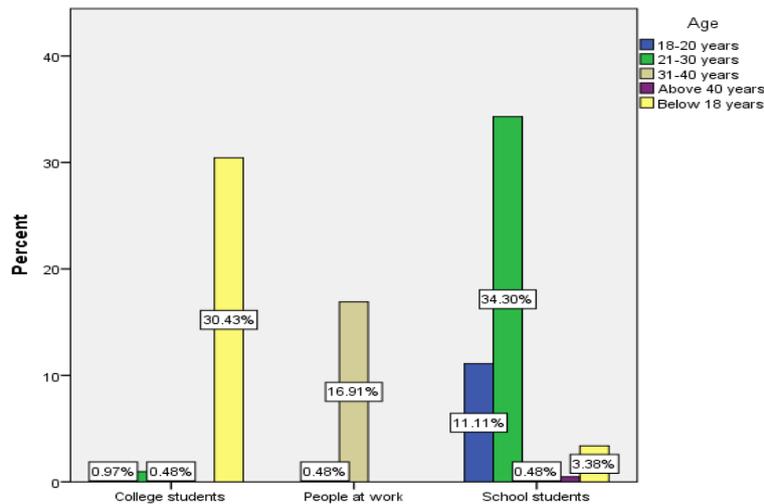
#### **5. ANALYSIS OF SURVEY DATA**

For the analysis of data obtained through the questionnaire, we counted the responses of survey participants and presented them in percentages. All the multiple choices are added in graphs that demonstrate the activities or interests and usage priorities of students who participated in this survey.

##### **5.1 Most Addicted**

The survey solicited responses regarding participants' engagement with and reliance on social media. It is noteworthy that a substantial proportion of the student respondents accessed social media via smartphones/mobile devices. Figure 1 delineates the demographics of individuals exhibiting social media use and addictive

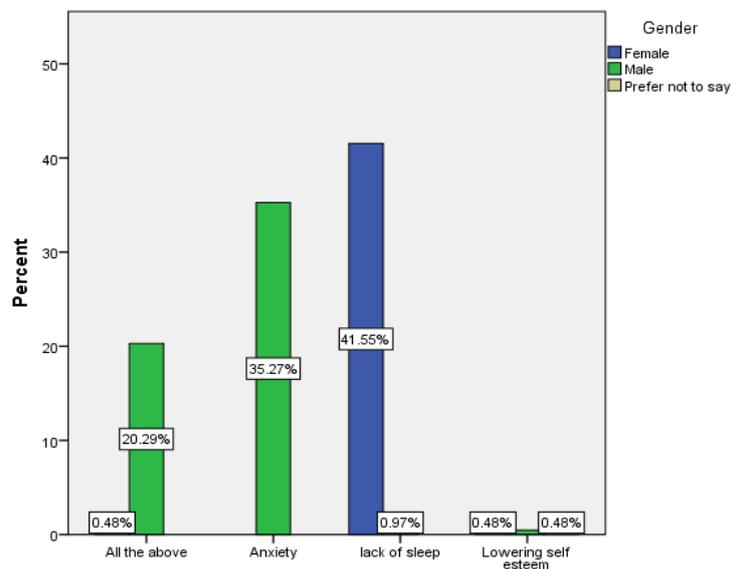
tendencies. The questionnaire garnered the highest response rate from students within the age range of 21-30 years, comprising 34.30% of respondents and representing the demographic most prone to social media addiction.



**Figure 1: Usage and Addiction to Social Media**

### 5.2 Health well-being (Male / Female)

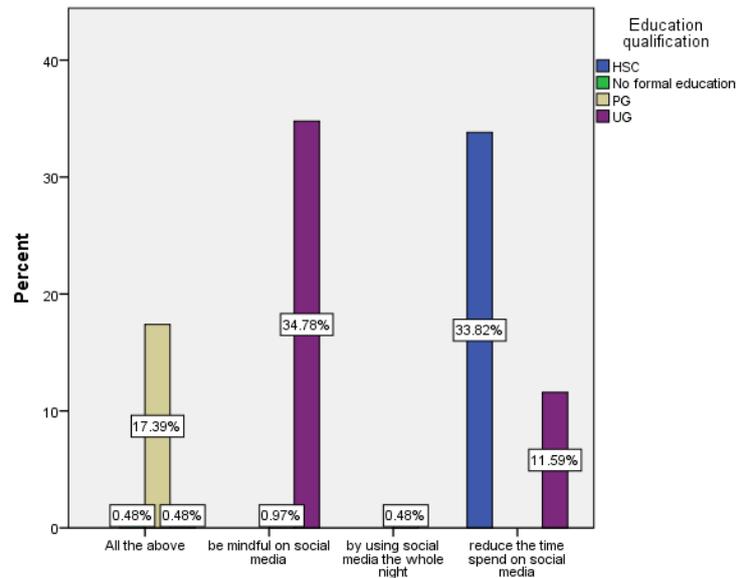
The survey questionnaire inquired about how social media impacts adolescent health concerning sleep deprivation. The responses indicated that a substantial proportion of the 80 participants, constituting primarily females at 41.55%, reported that social media negatively affects adolescent health by inducing a lack of sleep.



**Figure 2: Health Well Being**

### 5.3 Negative Effects of Social Media

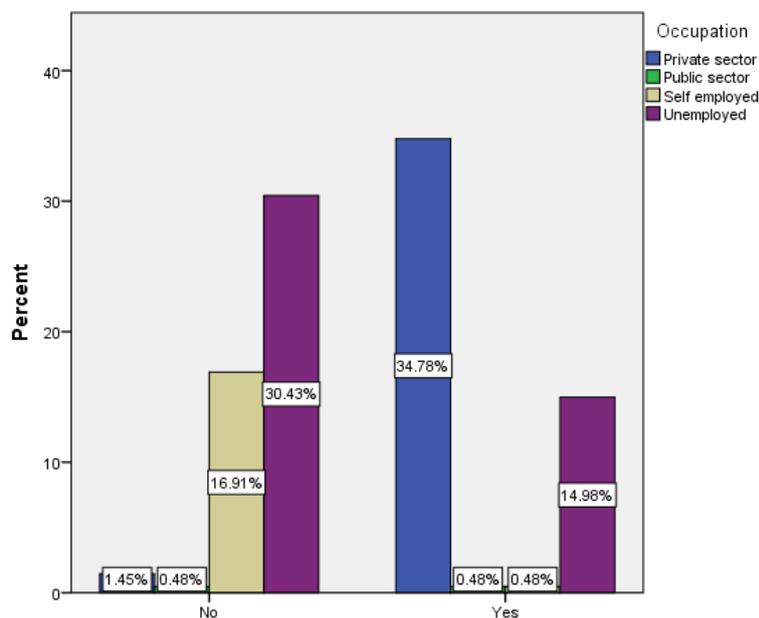
Regarding the negative impacts of social media, the survey solicited responses from students. As depicted in Figure III, 34.78% of undergraduate student participants indicated that cultivating mindfulness about social media use can aid in mitigating its deleterious effects.



**Figure 3: Negative Effects of Social Media**

### 5.4 Experiencing Impediments Arising from the Incapacity to Access Social Media

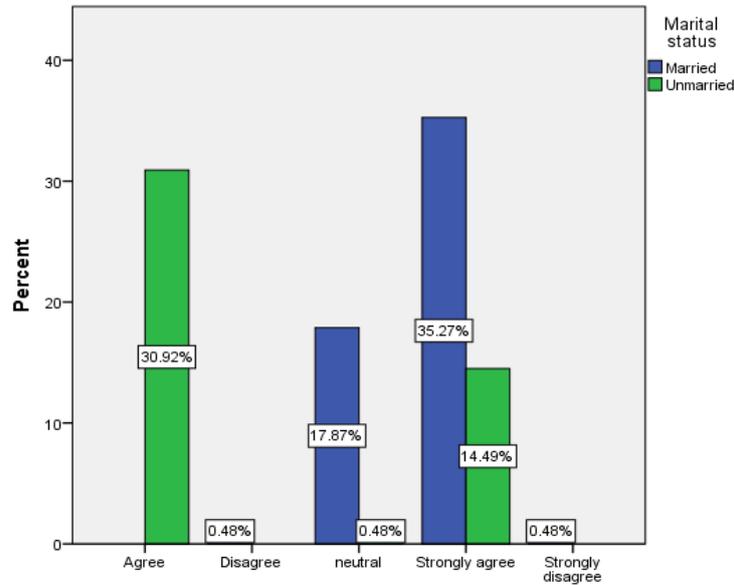
Participants/students were queried about challenges they encountered when unable to access social media. Figure IV illustrates that the majority of respondents employed in the private sector, constituting 34.78% of the sample, affirmed experiencing difficulties when precluded from using social media platforms.



**Figure 4: Challenges Due to the Inability to Access Social Media**

### 5.5 Social Media as an Entertainment

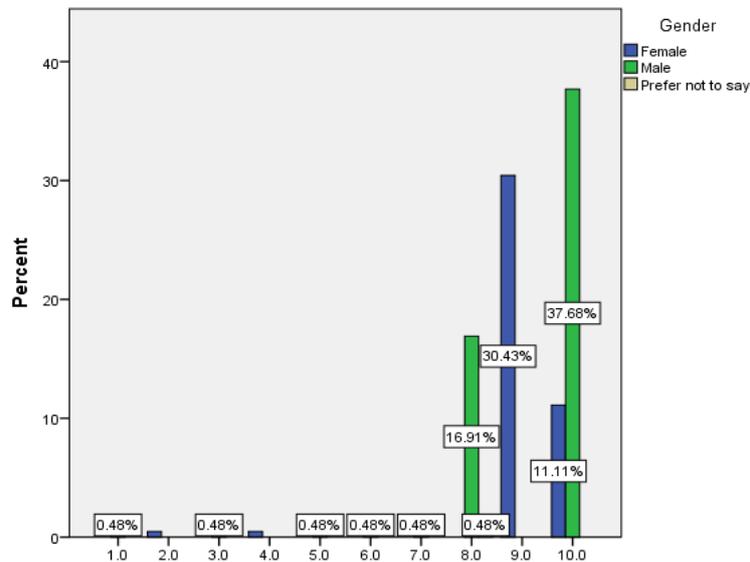
As depicted in Figure V, the predominant response from participants, 35.27% of the sample, strongly agreed with the assertion that young people primarily utilize social media for entertainment purposes.



**Figure 5: Social Media as an Entertainment**

### 5.6 Impact of Social Media on Adolescents

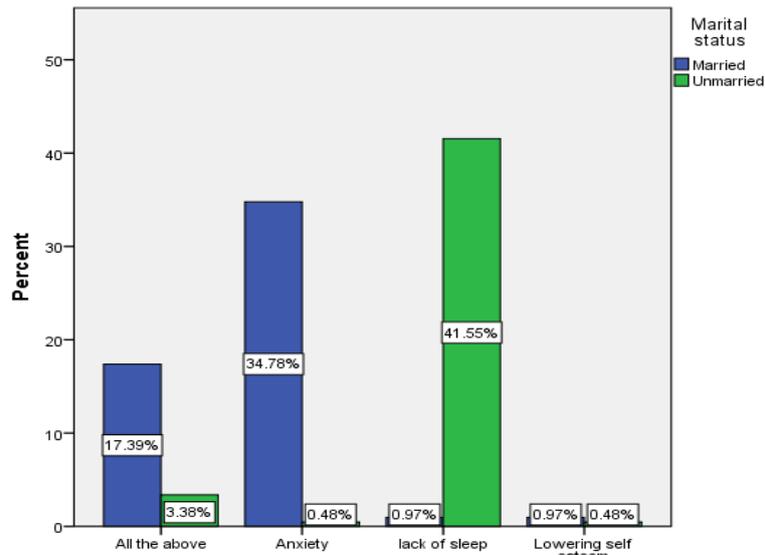
The data represented in the graph indicates that the modal response among male participants, constituting 37.68% of the sample, selected the highest rating of 10 on the scale, suggesting that social media usage exerts a substantial negative impact on adolescent well-being.



**Figure 6: Impact of social media on adolescents**

### 5.7 Lack of sleep

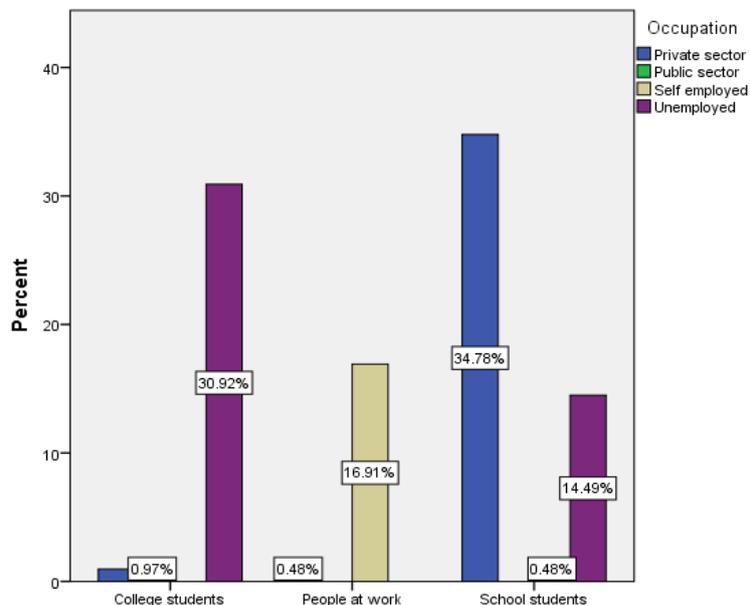
Regarding queries pertaining to sleep deprivation, Figure VII elucidates that the predominant response, comprising 41.55% of participants, emanated from unmarried individuals. This cohort affirmed that social media adversely impacts adolescent health by precipitating a lack of sleep.



**Figure 7: lack of sleep**

### 5.8 Most Addicted (College Students/ People at Work/ School Students)

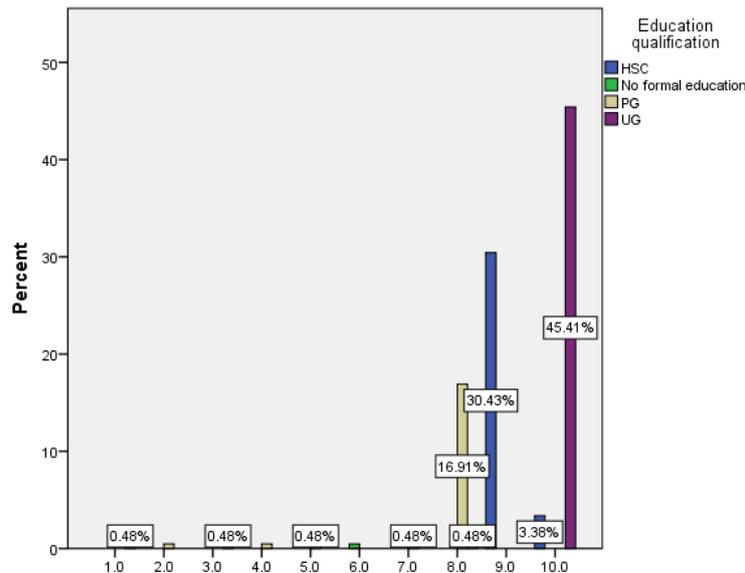
Figure VIII demonstrates that the modal response, constituting 34.78% of participants, originated from those employed in the private sector. This group indicated that school students exhibit the highest inclination for social media addiction.



**Figure 8: Most Addicted (College Students/ People At Work/ School Students)**

### 5.9 Rating the Impact on Participants

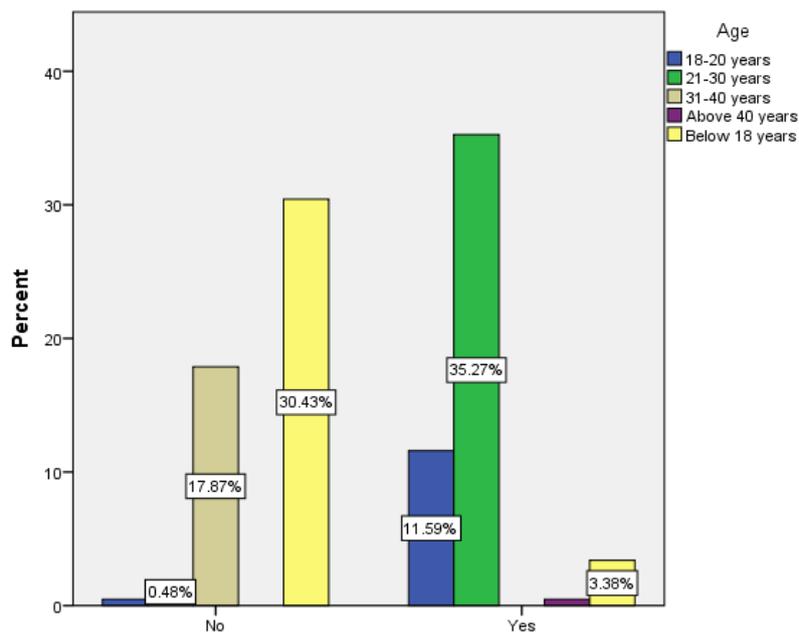
Regarding the linear scale question assessing the impact among participants, the data reveals that the predominant response, comprising 45.41% of the sample, was provided by undergraduate students who selected the highest rating of 10 on the scale. This indicates that this cohort perceives social media usage as exerting a substantial negative effect on adolescent well-being.



**Figure 9: Rating the Impact on Participants**

### 5.10 Difficulties While Not Using Media

Figure X illustrates that the modal response in the affirmative, comprising 35.27% of participants, emanated from the age cohort of 21-30 years. This demographic indicated experiencing difficulties when precluded from accessing social media platforms.



**Figure 10: Difficulties and impact of Students are Unable to use Social Media**

## 6. RESULTS

The data indicate that the demographic cohort most susceptible to social media addiction comprises individuals aged 21-30 years (34.30%, Figure 1). A substantial proportion of unmarried participants (41.55%) affirmed that social media usage adversely impacts adolescent health by precipitating sleep deprivation (Figures 2 &

7). Conversely, 34.78% of undergraduate students posited that cultivating mindfulness can mitigate the negative effects of social media (Figure 3). The private sector employees constituted the modal response (34.78%) acknowledging difficulties when unable to access social media (Figures 4 & 8) and 35.27% of married individuals strongly agreed that younger users primarily utilize social media for entertainment purposes (Figure 5). Furthermore, 37.68% of male participants and 45.41% of undergraduates selected the highest rating, indicating a perceived substantial negative impact of social media on adolescent well-being (Figures 6 & 9). Notably, 35.27% of the 21-30 age group reported experiencing challenges when precluded from using social media (Figure 10).

## 7. DISCUSSION

The findings across the figures provide insights into various facets of social media addiction and its consequences on adolescent health.

Figure 1 suggests that school students are the demographic cohort most susceptible to social media addiction, as mentioned by the majority of respondents aged 21-30 years. This evidence could inform educational institutions and parents in formulating strategies to address the impact of social media on students.

Figure 2 elucidates the effects of social media on adolescent health, with a preponderance of unmarried individuals citing sleep deprivation as the primary concern. These data could guide healthcare professionals and policymakers in developing interventions to mitigate the adverse consequences of social media usage on adolescent well-being.

Figure 3 indicates that undergraduate students perceive mindfulness as a potential panacea for overcoming the negative effects of social media. This perspective could inform the development of educational initiatives aimed at promoting judicious and responsible social media use.

Figure 4 reveals that individuals employed in the private sector encounter difficulties when unable to access social media platforms, a finding that could guide organizational policies delineating acceptable social media usage during work hours.

The data presented in Figure 5 suggest that married individuals perceive social media as a predominantly entertainment-oriented platform for younger users. This insight could inform media literacy programs designed to equip adolescents with the requisite skills for responsible social media engagement.

Figure 6 demonstrates that males predominantly believe social media exerts a significant negative impact on adolescents, a perspective that could inform initiatives promoting digital citizenship and responsible social media use among young males.

Figure 7 reinforces the notion that social media adversely affects adolescent health by inducing sleep deprivation, as reported by unmarried individuals. This finding could guide healthcare providers in developing interventions to mitigate the deleterious effects of social media on adolescent health.

Figure 8 indicates that private sector employees perceive school students as the demographic most susceptible to social media addiction, a perspective that could inform educational programs promoting responsible social media use among students.

Figure 9 shows that undergraduate students predominantly perceive social media as exerting a significant negative impact on adolescents, a finding that could inform educational initiatives promoting responsible social media use among university students.

Lastly, Figure 10 reveals that a substantial proportion of respondents aged 21-30 years encounter difficulties when precluded from accessing social media platforms, a finding that could guide the development of programs aimed at cultivating healthy digital habits and mitigating dependency on social media.

## 8. LIMITATION

The present study is subject to a notable limitation regarding its sampling methodology. The data were collected through a convenience sampling approach, wherein participants were recruited from public venues such as courthouses, malls, libraries and metro stations in Chennai, encompassing individuals across diverse age groups. This sampling strategy raises concerns about the representativeness of the sample and the potential for self-selection bias, as individuals who frequent such locations may exhibit systematic differences from the general population in terms of their demographics, socioeconomic status or other relevant characteristics.

Furthermore, the heterogeneous nature of the sample, comprising respondents of varying ages and backgrounds, poses challenges in interpreting the findings and their generalizability to specific subgroups of interest, such as adolescents or young adults who may be disproportionately affected by social media addiction. The cross-sectional design of the study precludes the establishment of causal relationships or the examination of longitudinal trends in social media usage and its impact on well-being. Moreover, the study acknowledges the inherent difficulty in ensuring respondent engagement and commitment to providing thorough and accurate responses in a survey-based research methodology. Factors such as response biases, including social desirability bias, recall bias or acquiescence bias, may have influenced the validity and reliability of the self-reported data obtained.

In light of these limitations, future research endeavors should employ more rigorous sampling techniques, such as probability-based sampling methods, to ensure representativeness and minimize potential biases. Additionally, larger and more diverse samples would enhance the statistical power and generalizability of the findings. Longitudinal or experimental designs could further elucidate the causal mechanisms underlying the relationship between social media usage and well-being while mitigating potential biases associated with self-reported data.

## 9. CONCLUSION

This study accentuates the significance of mindful social media consumption and its potential ramifications on individual well-being. While social networking sites (SNSs) serve as a viable platform for maintaining interpersonal connections, excessive and addictive usage can precipitate adverse consequences, including mood dysregulation, tolerance, withdrawal symptoms, relapse and interpersonal conflicts. Consequently, it is recommended to practice judicious self-regulation when engaging with social media and adopt preventive measures to circumvent addictive behavioral patterns. Furthermore, the study emphasizes the imperative of governmental intervention to combat cyberbullying, which can profoundly undermine mental health and

psychological well-being. By fostering safer virtual environments, one can cultivate healthy and constructive interactions on social media platforms. Notably, the study elucidates how the fear of missing out (FOMO) and nomophobia (the fear of being without one's mobile device) can contribute to SNS addiction. By enhancing awareness of these predispositions and implementing strategies to manage them effectively, people can mitigate the development of compulsive browsing habits. Collectively, this research provides valuable insights into the potential risks and benefits associated with social media engagement. By promoting responsible usage and positive virtual interactions, one can harness the potential of technology to facilitate interpersonal connections and enhance our overall well-being.

### **Ethical Considerations**

The present study followed all ethical policies regarding participants and responsible institutions, with the consent of those involved.

### **Conflict of Interest**

The authors declare no conflicts of interest.

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