A CORRELATIONAL STUDY ON SOCIAL MEDIA USAGE AND SELECTED TEENAGE BEHAVIOUR AMONG ADOLESCENTS STUDYING IN SELECTED COLLEGES OF PUNE CITY

Mrs. Anu Earatte[1a*], Ms. Samruddhi Gaikwad[2b] Ms. Sakshi Chavan[3b] Ms. Yogita Mohite[4b] Mr. Mayur Pawar[5b]

a. Assistant Professor, D.E. Society's Smt. Subhadra K. Jindal College of Nursing, Pune.
b. Final Year Basic B.Sc Nursing student, D.E. Society's Smt. Subhadra K. Jindal College of Nursing, Pune.
   *Corresponding Author

ABSTRACT

Background of the Study

Adolescence is a critical developmental stage characterized by rapid physical, emotional, and cognitive changes. In today's digital era, social media platforms like Facebook, Instagram, Snapchat, and TikTok significantly influence adolescents' identity formation, social interaction, and mental well-being. While these platforms offer opportunities for self-expression and connection, they also foster unrealistic comparisons, social pressure, and reduced self-esteem. Excessive social media use has been linked to addictive behaviours, emotional instability, and distorted perceptions of reality. Concerns are growing over its impact on adolescent mental health, behaviour, and academic performance. Studies show excessive social media engagement correlates with anxiety, depression, attention problems, poor academic outcomes, and sleep disturbances. Adolescents' unsupervised access to these platforms further complicates monitoring efforts. Mass media acts as a powerful agent of socialization, influencing adolescents' social skills, emotional regulation, and self-concept. Statistics highlight the widespread use of social media among teenagers: Facebook (120.2 million users aged 13–17), Instagram (139 million), and Snapchat (121.9 million). Gender distribution shows slightly higher male participation, except among Snapchat's younger female users. In urban centres like Pune City, where smartphone and internet access is widespread, understanding the relationship between social media usage and adolescent behaviour is crucial. This study explores that correlation among college-going youth, aiming to inform strategies for promoting digital wellness. **Material and Methods**: A quantitative, non-experimental correlational study was conducted with 100 adolescents selected through convenience sampling. Data were collected using a Likert scale for social media use and a validated self-assessment tool for behavioural patterns. **Results and Conclusion:** Findings revealed 90% exhibited some degree of social media addiction. A significant positive correlation ($r = 0.78$, $p < 0.05$) was found between usage and behavioural dysregulation, influenced by age, gender, and academic performance. Early mobile use and moderate behavioural dysregulation were common, highlighting the need for responsible digital engagement.

Keywords: Social media, Mental health, Social networking, Behaviour, Adolescence, Developmental psychology

INTRODUCTION

Adolescence is a critical developmental phase that marks the transition from childhood to adulthood. It is a period of significant physical, cognitive, emotional, and psychosocial transformation, during which individuals begin to prepare for adult roles and responsibilities. According to the World Health Organization (WHO), adolescence typically spans the ages of 10 to 19 years. Biologically, it begins with the onset of puberty and concludes with the attainment of full physical maturity. This stage is characterized by marked changes in sexual characteristics, growth in height and weight, increased muscle mass, and the maturation of reproductive organs. Concurrently, there is substantial brain development, particularly in areas associated with abstract thinking, decision-making, and emotional regulation.

Cognitively, adolescents demonstrate improved logical reasoning, enhanced problem-solving abilities, and a growing capacity for abstract and critical thinking. These developments enable them to process complex ideas and form independent judgments.

During this stage, adolescents undergo a multitude of changes that affect their physical bodies, intellectual abilities, psychological states, and social interactions. These changes occur at varying rates, making adolescence a highly dynamic and, at times, challenging period. It is also a time of growing independence, identity exploration, and moral development, as young individuals begin to form their personal values and beliefs.

Physically, boys may experience broadening of the shoulders and chest, voice deepening, increased body and facial hair, genital development, and the occurrence of spontaneous erections. Girls typically develop breasts, begin menstruation, and experience widening of the hips. Psychologically, early adolescence is marked by the emergence of abstract thought, heightened self-awareness, and the ability to adopt different perspectives. It is also a crucial time for the formation of personal and sexual identity. Emotionally, adolescents often experience heightened sensitivity, mood swings, and intense emotions. These emotional fluctuations, coupled with ongoing brain development, can result in unpredictable behavior and increased conflict with peers and family members. During this period, adolescents are still learning how to regulate and express their emotions effectively.

In summary, adolescence is a multifaceted and transformative period that plays a foundational role in shaping an individual's identity, behavior, and future development.

NEED OF THE STUDY

In recent years, social media has emerged as one of the most pervasive and influential forms of digital interaction, particularly among adolescents. Globally, teenagers are among the most active users of social networking platforms, with the **Pew Research Center (2015)** reporting that **92% of teens access the internet daily**, and a significant portion of this activity is dedicated to social media engagement. This widespread usage reflects the deep integration of digital platforms into the daily lives of adolescents, shaping their communication, entertainment, identity formation, and social interactions.

While social media can offer numerous benefits—such as opportunities for self-expression, creativity, and global peer interaction—it also raises concerns about its potential psychological and behavioral consequences. Platforms like **Instagram, Facebook, Snapchat, and Twitter** expose teenagers to a wide range of content, some of which may be inappropriate, idealized, or psychologically harmful. Studies suggest that **excessive and unregulated social media use** is associated with issues such as **decreased attention span, increased anxiety, depression, poor academic performance, and behavioral dysregulation** (Twenge & Campbell, 2018; Keles, McCrae, & Grealish, 2020).

Moreover, adolescents' responses to online content are influenced by their developmental stage, social environment, and individual psychological characteristics. While some adolescents may benefit from motivational content, positive role models, and educational resources available online, others may be vulnerable to negative peer comparisons, cyberbullying, and exposure to risky behaviors.

In the context of **Indian adolescents**, especially in urban academic settings like **Pune city**, there is a growing need to understand how social media usage correlates with behavioral patterns. The increasing prevalence of smartphones and affordable internet access has amplified adolescents' exposure to digital platforms at an early age. Localized data is essential to inform educators, parents, and mental health professionals about the risks and protective factors associated with adolescent social media usage. Given these dynamics, this study aims to bridge the gap in existing literature by exploring the relationship between social media usage and selected behavioral characteristics among adolescents in selected colleges of Pune. The findings will contribute to evidence-based strategies for promoting healthy digital habits, fostering psychological resilience, and guiding interventions to mitigate adverse behavioral outcomes among youth.

AIM OF THE STUDY

The aim of this study is to investigate the correlation between social media usage and selected behavioral domains—namely academic performance, social intelligence, and health—among adolescents in selected colleges of Pune city. Additionally, the study seeks to understand adolescents' adaptability to social media, their psychological and behavioral responses to restrictions on usage, and their self-perceived positive and negative experiences associated with social media engagement.

Assumptions
1. Adolescents spent more time in social networking.
2. Adolescents behaviour is highly influenced by social media.
3. Uncontrolled social media usage can adversely affect physical and mental health of adolescents.

Hypotheses of study
H0 - There will be no correlation of social media usage and teenage behaviour.
H02 - There will be no significant association of selected demographic variables with social media usage.

H1 - There will be significant correlation between social media usage and selected teenage behavior

H2 - There will be significant association of selected demographic variables with social media usage.

Delimitations of study

 1. The study is delimited to 100 samples.

2. The study is delimited to selected colleges of Pune city.

Ethical aspects of study

1. Study will be conducted after approval from the Ethics Committee.

 2. The permission will be taken from the concerned authority.

 3. informed consents will be taken from the participant.

 4. The information given by samples will be kept confidential.

 5. Data generated during the research process will be use extensively for benefits of profession and society.

RESEARCH METHODOLOGY

Objective of the study

 1. To assess the level of social media usage among adolescents studying in selected colleges.

 2. To find out correlation between social media usage and selected teenage behaviour.

 3. To find out significance association of selected demographic variable with social media usage.

Research Approach

The study adopted a quantitative research approach, which involves the collection and analysis of numerical data to identify patterns, test relationships, and generalize findings to a larger population.

Research Design

This study employed a correlational research design, a type of non-experimental research used to examine the relationship between two variables—in this case, social media usage and teenage behavior.

Setting of the Study

The research was conducted in selected educational institutions of Pune city:

Population and Sample

- **Target Population:** Adolescents aged 15–19 years studying in selected colleges.
- **Accessible Population:** Students from the aforementioned institutions who were present during data collection.
- **Sample:** 100 adolescents meeting the inclusion criteria were selected for the main study, and 10 were selected for the pilot study.

Sampling Technique

A **non-probability purposive sampling technique** was used to select participants who met the inclusion criteria. For the selection of study settings, **simple random sampling** was applied.

Sampling Criteria

- **Inclusion Criteria:**
    - Adolescents aged between 15–19 years.
    - Students able to read and understand English or Marathi.

- o Willingness to participate in the study.
- **Exclusion Criteria:**
  - o Students unwilling to participate in the study.

Development of the Tool

The tool was developed after identifying research goals, objectives, and hypotheses. It comprised a self-structured questionnaire including:

- A Likert scale for social media use.
- A self-behavioural assessment tool to evaluate behavioural issues.

Description of the Tool

The tool consisted of three sections:

- **Section A: Demographic Variables** Structured questionnaire covering age, gender, reasons for social media use, time spent on social media, and frequently used applications.
- **Section B: Likert Scale for Social Media Usage** Contains 20 items rated on a 5-point scale (from *Strongly Disagree* to *Strongly Agree*) to measure levels of social media usage. **Scoring Interpretation:**
  - o 20–40: Normal usage
  - o 41–80: Borderline addiction
  - o 81–100: Severe addiction
- **Section C: Self-Behaviour Assessment Tool** Contains 25 items rated from *Never* to *Very Often* to evaluate behavioural domains such as academic performance, personality changes, and family relations.

  Scoring Interpretation:
  - o 25–50: No behavioural issues
  - o 51–75: Borderline behavioural issues
  - o 76–100: Severe behavioural issues

Content Validity of the Tool

The tool was validated by nursing experts for relevance, clarity, and adequacy. Feedback was incorporated to refine the instrument, and consensus was reached on its appropriateness for the study.

Reliability of the Tool

Reliability was assessed using the **split-half technique**, yielding a reliability coefficient of **r = 0.07**. Although relatively low, the tool was deemed consistent enough for conducting the main study.

Pilot Study

A pilot study was conducted with 10 adolescents using the same tools and sampling method. The study helped identify any practical issues and confirmed the feasibility of the full-scale research.

221

RESULTS

The data was analyzed and presented in the following sections:

SECTION 1: This section deals with analysis of frequency and percentage of demographic data of the samples.

Table no. 1 represents the frequency and the percentage of the demographic variables of the Study samples.

Table No: I **Demographic Variables and Their Distribution**   (n=100)

SR NO	Demographic Variable	Frequency	Percentage (%)
1	**Age**		
a	15-16 Years	27	27%
b	17-18 Years	63	62%
c	19 Years	11	11%
2	**Gender**		
a	Male	60	60%
b	Female	40	40%
3	**Age at which social media usage started**		
a	Below 10 years	42	42%
b	10-15 years	23	23%
c	After 15 years	35	35%
4	**In which class do you study ?**		
a	11th	0	0%
b	12th	53	53%
c	Diploma	47	47%
d	If other specify	0	0%
5	**Average time spent on social media per day ?**		
a	Less than 1 hour	00	00%
b	3-5 hours	18	18%
c	More than 5 hours	82	82%

6	Select the app below that you use the most.		
a	Instagram	27	27%
b	Facebook	21	21%
c	Whatsapp	28	28%
d	Youtube	24	24%
e	LinkedIn	00	00%
f	If others specify	00	00%
7	For what purpose do you use social media ?		
a	For communicating	38	38%
b	For entertainment purpose	26	26%
c	For academic purpose	16	16%
d	To stay updated with trends	21	21%
8	Is social media having negative impact on your studies ?		
a	Yes	18	18%
b	No	82	82%

The study population comprised 100 adolescents, with a balanced gender representation of 52% female and 48% male participants. The majority of respondents (65%) were between 16-17 years of age, while 35% were aged 18-19. Regarding academic performance, 40% reported average grades, 35% reported below-average performance, and 25% had above-average academic records. Furthermore, 60% of respondents resided in urban areas, whereas 40% were from semi-urban or rural backgrounds.

SECTION 2 : Assessment of Social Media Usage Among Adolescents

Quantitative analysis of the pretest data indicates that **90% of the respondents exhibited signs of**
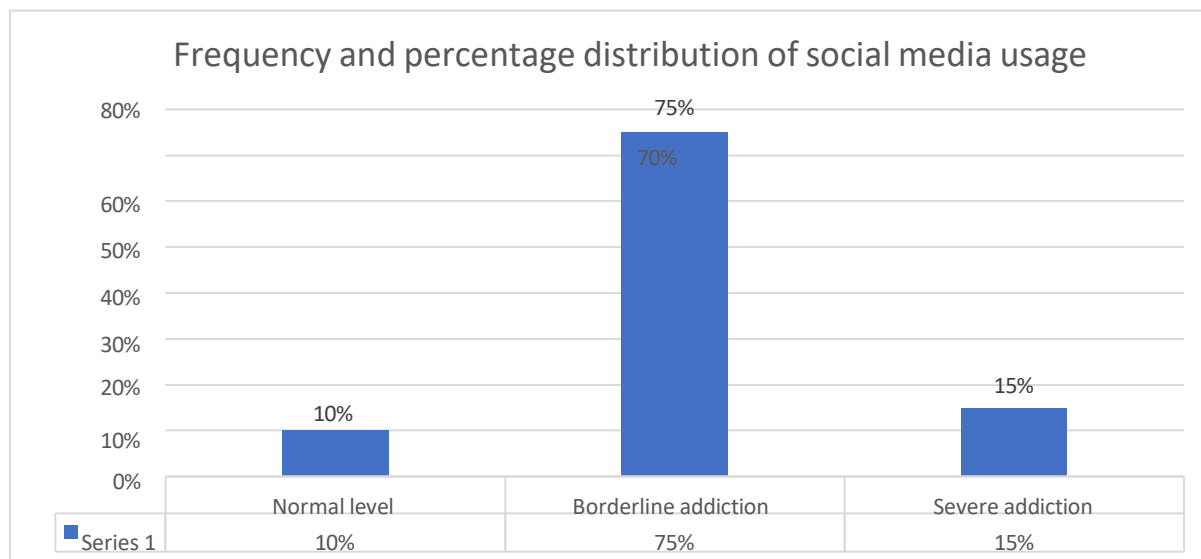
social media addiction, with **75% falling under the category of borderline addiction** and **15% categorized as severe users**. Only **10% demonstrated a normal level of usage**. These findings underscore the pervasive role of social media in adolescent life, reflecting its deep integration into daily routines, academic pursuits, and social interactions. The prevalence of addictive patterns highlights the need for awareness and possible interventions to promote healthier digital habits among youth.

Section 3 : Correlation between Likert Scale and Self behaviour assessment among teenagers in selected colleges in Pune city.

SN	Group	Mean	KARL PEARSON CORRELATION COEFFICENT (r)	P Value	Level of significance
1	Likert scale	57.57 ± 8.48	**0.17**	**<0.0001**	**Significant**
2	Self Behavior	62.20 ± 6.36			

In likert Scale the mean score was 57.57 with SD 8.48 were as in self behaviour assessment mean score was 62.20 with SD 6.36. The correlation was obtained by the Kael Pearson correlation coefficient Formula and r value was 0.17 it was positive correlation. Statistical analysis establishes a strong

224

positive correlation between excessive social media use and adverse behavioral outcomes. Specifically, 70% of respondents exhibit borderline behavioral dysregulation, while 19% manifest severe psychological concerns. The findings indicate that prolonged digital engagement is associated with increased anxiety levels, diminished attention span, mood volatility, and interpersonal conflicts.

DISCUSSION

This correlational study aimed to explore the relationship between **social media usage** and **selected teenage behaviour** among adolescents studying in selected colleges in Pune city. Data was collected from **100 participants** using a **non-probability purposive sampling technique**.

The findings were analyzed and interpreted in alignment with the study's objectives:

Objective 1 (Assessment of Social Media Usage), **90% of respondents exhibited some level of social media addiction**. Among them, **75% were identified as having borderline addiction**, while **15% demonstrated severe addiction**, and only **10% fell under the category of normal social media usage**. This trend reflects the increasing immersion of adolescents in digital environments, potentially affecting various aspects of their daily lives.

Objective 2 Correlation Between Social Media Usage and Teenage Behaviour A statistically significant **positive correlation ($r = 0.17$)** was found between social media usage and teenage behaviour, as calculated using the **Karl Pearson correlation coefficient**. This finding indicates that as social media usage increases, there is a corresponding increase in behavioural challenges among adolescents. These behaviours may manifest across various domains such as academic performance, emotional regulation, social interactions, and family dynamics.

Objective 3 (Association with Demographic Variables), further analysis can help identify specific demographic factors that influence or are influenced by social media usage. While this discussion focuses primarily on usage and behaviour, such associations are crucial for targeted interventions.

The **mean score for social media usage** was **57.57 (SD = 8.48)**, indicating a high average engagement level, and the **mean score for behavioural assessment** was **62.20 (SD = 6.36)**, suggesting moderate behavioural concerns among participants

CONCLUSION

This study concludes that social media usage is highly prevalent among adolescents, with the majority exhibiting signs of addiction. Among the 100 adolescents surveyed:

- **75% were found to have borderline social media addiction**
- **15% demonstrated severe addiction**
- Only **10% had normal usage patterns**

A **positive and statistically significant correlation** was identified between social media usage and teenage behaviour, suggesting that higher digital engagement may contribute to behavioural challenges among adolescents. These findings emphasize the importance of fostering balanced media habits and awareness among students, educators, and parents.

Recommendations

1. **Larger-scale studies** should be conducted to validate and generalize these findings across diverse adolescent populations.
2. Future research may explore the **effectiveness of intervention programs** aimed at reducing behavioural issues linked to excessive social media usage.
3. Comparative studies involving **different age groups, educational settings, and urban-rural populations** may offer broader insights.
4. Educational institutions should consider implementing **awareness and digital wellness programs** to promote responsible media use among students.

Conflict of interest

The authors declare no conflict of interest, financial or non-financial, related to the subject matter or materials discussed in this study.

Funding source

REFERENCES:

1. https://ifightdepression.com/en/young-people/what-is-adolescence
2. https://my.clevelandclinic.org/health/articles/7060-adolescent-development
3. https://www.btg.org.au/social-emotional-changes-in-adolescence/
4. Kaur S.Kaur K. Impact of Social Media on Mental Health of Adolescents .Journal of Pharmaceutical Negative Results ; 13 : (5)
5. https://www.sciencedirect.com/science/article/pii/S1319562X21000103
6. Kaur S.Kaur K. Impact of Social Media on Mental Health of Adolescents .Journal of Pharmaceutical Negative Results ; 13 : (5)
7. https://statusbrew.com/insights/social-media-statistics/.
8. Nunez C , et.al Social media influences to teenagers. International Journal of research science and management 2019; 6(6) :38-47
9. https://www.momjunction.com/articles/positive-and-negative-influences-of-media-on-teenagers_00107975/
10. https://www.forbes.com/advisor/in/business/social-media-statistics/.
11. Dr Priya k Impact of social media on mental health of students. International journal of scientific and technology research 2020 ; 9(3) : 3796 – 3799.

12. Ejaz A ,et.al Influence of social media on youth . Department of software engineering Fatima Jinnah women University Pakistan.

13. Fibrila F, et.al Exposure to pornography through social media on sexual behaviour of high school teenagers . IOSR journal of nursing and health science 2020 ; 9 (6) : 1-8.

14. Anne N, et.al A correlation on social media addiction, social anxiety among students . international journal of psychology and behavioral sciences 2021; 11(4) : 61- 73.

15. Nunez C , et.al Social media influences to teenagers. International Journal of research science and management 2019; 6(6) :38-47.

16. Johnson s. Effect of social media on academic performance and self esteem in female college students . International journal of science and research 2018 ; 8 (5) : 2117- 2122.

17. kreya M , et.al Social media addiction and it's influence on mental health among University students. 2nd Kuala Lumpur international multidisciplinary academic conference 2020 ; 109 -120.

18. http://www.westernsydney.edu.au

19. http://utopia.ut.edu

20. en.m.wikipedia.org

21. http://en.m.wikipedia.org

22. Kapoor k, Tamilmani k, Rana N Advances in social media research: Past, Present and Future. Journal inf syst front; 20:

23. Surani Z, Hivani R, Elias A . Social media usage among health care providers in South Texas. Journal National library of Medicine; 10:

24. Plackett R, Kaushal A, Kassianos A . Use of social media to promote cancer screening and early diagnosis: scoping review. Journal med internet; 22:(1)

25. Alalwan A, Rana N, Dwivedi Y. Social media in marketing a review and analysis of the existing literature . Journal telematics and informatics; 34:(47)