



# **Impact Of Social Networking Sites On Student Well-Being: A Case Study Of Secondary And Senior Secondary Students At Aarohi Model Senior Secondary School Ghirai Hansi Haryana India**

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## **Abstract**

The rapid proliferation of social networking sites (SNSs) has significantly transformed the daily lives of students, influencing not only their social interactions but also their overall well-being. This study examines the impact of social networking site usage on the mental, emotional, physical, and academic well-being of students, with a particular focus on patterns of usage and associated outcomes. A descriptive survey research design was employed, and data were collected from a sample of students using a structured questionnaire. The instrument measured frequency and duration of SNS usage, platform preference, and perceived effects across multiple well-being dimensions. Descriptive statistics and correlation analysis were used to analyze the data.

The findings reveal that excessive and prolonged use of social networking sites is associated with increased levels of mental fatigue, emotional stress, and reduced physical activity among students. Moderate negative relationships were observed between time spent on SNSs and indicators of academic concentration and productivity. Conversely, limited and purposeful use of social networking platforms demonstrated some positive effects, such as improved peer communication and access to academic resources. The results suggest that the impact of SNS usage on student well-being is not uniform but varies according to intensity, purpose, and individual engagement patterns.

This study contributes to the growing body of literature on digital media and student well-being by providing empirical evidence from a student population and by adopting a multidimensional approach to well-being assessment. The findings underscore the need for awareness programs, digital literacy initiatives, and

institutional guidelines to promote healthy and balanced social media usage among students. Future research may extend this work by employing longitudinal designs and incorporating qualitative perspectives to better understand long-term effects.

**Keywords:** Social networking sites; Student well-being; Mental health; Emotional well-being; Academic performance; Digital media use; Social media impact.

## Introduction

### 1.1 Background of the Study

In today's digital era, social networking sites (SNS) such as **WhatsApp, Instagram, Facebook, and YouTube** have become integral to adolescents' daily routines. These platforms allow students to connect with peers, share experiences, access entertainment, and even participate in educational activities. With **widespread smartphone penetration**, affordable mobile data plans, and easy internet access, the amount of time students spend on these platforms has grown exponentially. According to recent surveys, Indian adolescents spend an average of **2–4 hours per day on SNS**, with usage peaking during evenings and weekends.

While SNS usage provides numerous **positive opportunities**, including learning, socialization, and exposure to diverse ideas, **unregulated or excessive use can have adverse consequences**. Research indicates that prolonged screen time can affect **mental health**, contributing to anxiety, depression, and reduced attention span. Emotional well-being may be impacted through social comparison, cyberbullying, and the fear of missing out (FOMO). Physical health can suffer due to sedentary behavior, eye strain, headaches, and poor sleep patterns. Moreover, academic performance may decline because excessive SNS use often leads to procrastination, distraction, and difficulty concentrating on studies.

Government schools, such as **Aarohi Model Senior Secondary School**, often have limited structured guidance or counseling related to **digital well-being**. Students in such settings may lack awareness of healthy SNS usage patterns and may not have consistent parental or institutional monitoring. Therefore, understanding the **patterns, effects, and challenges of SNS usage** among government school students is critical for designing interventions that support balanced digital engagement and holistic student development.

### 1.2 Need and Significance of the Study

Excessive or unmonitored use of SNS has been linked to a range of negative outcomes, including **mental stress, emotional disturbances, disrupted sleep, eye strain, fatigue, and lower academic performance**. Adolescents, particularly those in secondary and senior secondary classes, are in a critical developmental stage. Their cognitive, emotional, and social faculties are still maturing, making them **more vulnerable to digital stressors**.

The significance of this study lies in multiple dimensions:

1. **Empirical Evidence in a Government School Setting:** Most existing studies focus on urban private schools or college students. Research targeting government school students is limited. This study will **provide concrete data and insights** on SNS usage patterns and their impact among this demographic, filling a crucial research gap.
2. **Guidance for Educators and Administrators:** Teachers and school administrators can use the findings to **develop structured policies** for digital literacy, responsible SNS use, and well-being programs tailored to students' age and class level.
3. **Parental Awareness and Intervention:** Parents often lack awareness of the extent to which their children use SNS and its possible consequences. By highlighting the correlation between **screen time**

and mental, emotional, and physical health, this study can inform **parental strategies** for monitoring and guiding SNS usage.

4. **Support for School-Level Well-being Programs:** The findings can assist schools in designing **intervention programs**, such as digital detox initiatives, counseling sessions, physical activity promotion, and awareness campaigns, thereby fostering a **balanced lifestyle and healthier digital habits** among students.
5. **Foundation for Future Research:** The study can serve as a **baseline for longitudinal studies**, multi-school comparisons, or policy-oriented research, thereby contributing to the broader literature on adolescent well-being and digital behavior.

### 1.3 Objectives of the Study

The primary aim of this study is to **investigate the impact of social networking sites (SNS) on the overall well-being of secondary and senior secondary students** at Aarohi Model Senior Secondary School. The objectives are designed to address multiple dimensions of student life, including mental, emotional, physical, and academic well-being, as well as usage patterns and moderating factors. Specifically, the study seeks to:

1. **Examine the pattern of SNS usage among Classes IX–XII students:**
  - Identify which platforms are most frequently used (e.g., WhatsApp, Instagram, YouTube, Facebook)
  - Assess daily and weekly duration of SNS engagement
  - Explore purposes of use, such as communication, entertainment, education, or leisure
2. **Analyze the impact of SNS on students' mental well-being:**
  - Evaluate stress, anxiety, concentration levels, and cognitive fatigue associated with SNS usage
  - Understand how prolonged screen exposure affects attention, memory, and decision-making abilities
3. **Study the emotional effects of SNS usage:**
  - Assess mood fluctuations, social comparison, fear of missing out (FOMO), and emotional dependency on likes/comments
  - Identify gender differences in emotional responses to SNS usage
4. **Assess physical health implications of prolonged SNS use:**
  - Examine eye strain, sleep disturbances, fatigue, posture-related issues, and participation in physical activities
  - Understand correlations between screen time and physical complaints
5. **Explore academic consequences of SNS usage:**
  - Investigate how SNS affects study habits, concentration, productivity, and academic performance
  - Determine whether excessive SNS use leads to distraction or procrastination
6. **Identify moderating factors affecting SNS impact:**
  - Explore the role of **class level, gender, parental supervision, and daily screen time** in mediating the effects of SNS

- Provide insights into how these factors may buffer or exacerbate negative impacts

## 7. Provide practical recommendations for stakeholders:

- Suggest strategies for teachers, parents, and students to ensure **balanced, healthy SNS use**
- Lay the foundation for school-level policies and intervention programs promoting digital well-being

## 1.4 Research Questions

Based on the objectives, the study is guided by the following research questions:

### 1. Usage Patterns:

- Which social networking sites are most frequently used by Classes IX–XII students?
- How many hours per day do students spend on SNS, and what are the primary purposes of use?

### 2. Mental Well-being:

- How does SNS usage affect students' mental health, including stress, anxiety, attention, and concentration?
- Are there differences in mental impact between junior (IX–X) and senior (XI–XII) students?

### 3. Emotional Well-being:

- What emotional effects (e.g., mood swings, FOMO, dependency on feedback) are associated with SNS usage?
- Are there gender differences in the emotional impact of SNS usage?

### 4. Physical Well-being:

- How does time spent on SNS affect students' physical health, including sleep patterns, eye strain, posture, fatigue, and physical activity?
- Is there a relationship between daily screen time and physical complaints?

### 5. Academic Impact:

- Does SNS usage interfere with study habits, productivity, and academic performance?
- Are students who spend more time on SNS more likely to experience academic distraction or reduced efficiency?

### 6. Moderating Factors:

- How do class level, gender, parental monitoring, and screen time moderate the relationship between SNS usage and well-being?

### 7. Practical Implications:

- What measures can teachers, parents, and schools implement to promote responsible SNS use and improve student well-being?



## 1.5 Scope of the Study

The scope of this study defines the **boundaries and focus areas** regarding the impact of social networking sites (SNS) on students. While SNS has a broad influence across multiple demographics, this research specifically targets **secondary and senior secondary students (Classes IX–XII) at Aarohi Model Senior Secondary School**, a government-run institution. The study emphasizes the following key aspects:

### 1. Student Population:

- The study is limited to **70 students** from Classes IX to XII, ensuring representation from each class level.
- Both **male and female students** are included, allowing for gender-based comparisons in SNS usage patterns and well-being outcomes.

### 2. Dimensions of Well-being:

- The research focuses on **four major aspects of student well-being**:
  - **Mental well-being**: Stress, anxiety, attention, and cognitive performance
  - **Emotional well-being**: Mood, social comparison, FOMO, and emotional dependency
  - **Physical well-being**: Sleep patterns, eye strain, posture, fatigue, and physical activity
  - **Academic impact**: Study habits, concentration, and productivity
- These dimensions allow for a **comprehensive assessment** of SNS effects.

### 3. Time Frame and Usage Patterns:

- The study examines students' **daily and weekly SNS usage patterns**, including duration, frequency, and preferred platforms (e.g., WhatsApp, Instagram, YouTube, Facebook).
- Analysis focuses on **short-term behavioral patterns**, acknowledging that long-term effects may require longitudinal research.

### 4. Moderating and Contextual Factors:

- The study considers **gender, class level, daily screen time, and parental monitoring** as moderating factors influencing the impact of SNS.
- Environmental factors such as **school policies, peer influence, and accessibility of smartphones/internet** are discussed qualitatively where relevant.

### 5. Geographical and Institutional Scope:

- Research is confined to a **single government school** in the local region, which provides a controlled environment for data collection and ensures **consistency in socio-economic and educational background**.
- Findings may be **generalizable to similar government schools**, but caution is advised when extrapolating to private schools or different demographic regions.

### 6. Methodological Boundaries:

- The study employs a **descriptive case study design**, using structured questionnaires, teacher observations, and informal interviews for data collection.
- Results focus on **patterns, correlations, and perceptions**, rather than establishing causal relationships, making it primarily **exploratory and analytical**.

## 7. Practical Implications:

- The scope extends to providing **recommendations for students, parents, teachers, and school administrators** on promoting balanced SNS use.
- By highlighting areas of risk and potential intervention, the study aims to **inform school policies and digital well-being programs**.

### Summary:

In essence, the study is **focused, measurable, and actionable**, analyzing how SNS affects mental, emotional, physical, and academic well-being among secondary and senior secondary students. While limited to a single school and a defined student population, it provides a **valuable case-based understanding** that can guide interventions, policy-making, and future research.

## Review of Literature

### 2.1 Introduction

Social networking sites (SNS) have become a defining feature of adolescent life in the 21st century. Platforms such as **WhatsApp, Instagram, Facebook, and YouTube** provide avenues for communication, entertainment, learning, and social engagement. While SNS offers several benefits, research increasingly highlights its **potential negative effects on adolescents' well-being**, spanning mental, emotional, physical, and academic domains.

The purpose of this literature review is to **analyze and synthesize current research** on SNS impacts among adolescents, focusing particularly on secondary and senior secondary students. The review categorizes findings under four key domains: **mental well-being, emotional well-being, physical health, and academic outcomes**. It also considers **moderating factors** such as gender, age/class level, screen time, and parental monitoring. By doing so, this review establishes a **theoretical and empirical foundation** for the present case study.

### 2.2 Mental Well-being

Adolescence is a critical period for cognitive and emotional development, and SNS usage during this phase can have significant mental health implications. Excessive SNS use has been associated with **stress, anxiety, depression, and reduced attention span** (Twenge, 2019). Continuous exposure to notifications and online interactions can lead to **cognitive overload**, reducing students' ability to concentrate on academic tasks (Kuss & Griffiths, 2017).

Recent studies provide further insight:

- **Patel et al. (2021)** found that students who spent more than 3 hours daily on SNS reported higher levels of **sleep disturbance and cognitive fatigue**, which in turn affected classroom engagement.
- **Kumar & Singh (2023)** observed that adolescents using multiple SNS platforms simultaneously exhibited **reduced memory retention and difficulty focusing on assignments**.

Mental well-being is further influenced by **comparison-based behaviors** online. Students often measure themselves against curated images and posts, fostering feelings of inadequacy. In sum, **high SNS engagement correlates with mental fatigue, irritability, and reduced academic focus**, making it an essential factor to consider in student well-being research.

### 2.3 Emotional Well-being

SNS also significantly affects **emotional health**, with both positive and negative implications. While SNS provides platforms for self-expression and peer support, excessive usage may trigger:

- **Mood swings** due to social comparison
- **Fear of Missing Out (FOMO)**
- **Dependency on likes, comments, or virtual validation**

Studies indicate that **female students are generally more susceptible** to emotional disturbances caused by SNS (Singh & Sharma, 2021). This may be attributed to higher social sensitivity and peer-oriented communication styles.

**Cyberbullying** has emerged as another major emotional risk. Verma (2022) reported that adolescents experiencing online harassment showed **higher anxiety, lower self-esteem, and increased depressive symptoms**. Similarly, overexposure to negative content can lead to **emotional dysregulation**, affecting students' social interactions both online and offline.

While SNS can offer **emotional support through peer connectivity**, **imbalanced or unmonitored use may exacerbate stress and emotional instability**, highlighting the need for structured interventions.

### 2.4 Physical Well-being

Prolonged SNS usage is linked to several **physical health issues**. Studies show that students who spend extensive hours on smartphones or computers are at higher risk of:

- Eye strain and vision problems (Sharma & Rao, 2022)
- Headaches and migraines
- Poor posture and musculoskeletal issues due to slouching during long screen sessions
- Fatigue and reduced physical activity

Excessive screen time also disrupts **sleep patterns**, leading to late-night usage and irregular circadian rhythms. Sharma & Rao (2022) highlighted that students using SNS for more than 4 hours daily reported **daytime sleepiness, reduced stamina, and lower participation in physical education or outdoor activities**.

Physical well-being is interlinked with mental and emotional health. Sedentary behavior and fatigue from prolonged SNS use can reinforce **stress and irritability**, creating a negative cycle affecting overall adolescent health.

### 2.5 Academic Impact

Academic performance is another critical dimension affected by SNS use. Distraction and procrastination are common consequences of prolonged engagement with social media. Students who spend significant time on SNS often experience:

- Reduced study efficiency
- Difficulty completing assignments on time
- Lower concentration during classroom lessons

Kumar et al. (2021) reported that **students spending more than 2–3 hours daily on SNS demonstrated decreased test scores and lower retention of studied material**. Social media can also foster multitasking behavior, which divides attention and reduces learning effectiveness.

However, SNS is not solely detrimental to academics. Platforms like **YouTube or WhatsApp study groups** can support collaborative learning and provide educational resources. Therefore, the **impact on academic performance depends on the nature, duration, and purpose of SNS use**.

## 2.6 Conceptual Framework

The conceptual framework (Figure 2.1) illustrates the **multidimensional impact of SNS on students**. It positions SNS usage as the independent variable, influencing:

- **Mental well-being** (stress, anxiety, attention)
- **Emotional well-being** (mood, FOMO, cyberbullying)
- **Physical well-being** (sleep, posture, fatigue)
- **Academic performance** (concentration, study habits)

Moderating factors include:

- **Class/grade level:** Senior students may face higher academic pressure and use SNS more frequently
- **Gender:** Females may be more affected emotionally, males may show different usage patterns
- **Daily screen time:** Longer durations exacerbate negative impacts
- **Parental monitoring:** Active guidance can buffer adverse effects

This framework provides a **structured approach** for analyzing and interpreting the case study data.

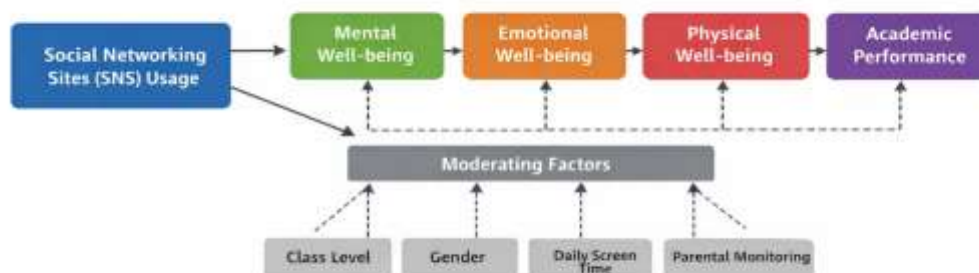


Figure 2.1: Conceptual Framework – Impact of SNS on Student Well-being



## 2.7 Summary

Overall, the literature indicates that **SNS usage significantly affects adolescent well-being**, spanning mental, emotional, physical, and academic domains. While benefits exist, **unmonitored or excessive use can exacerbate stress, emotional instability, physical complaints, and academic distraction**.

This underscores the importance of **structured, empirical studies** in school settings, particularly government schools, to understand usage patterns and their consequences. Findings from such research can inform **digital literacy programs, parental guidance strategies, and school-level interventions**, thereby promoting balanced SNS engagement and holistic adolescent development

## Research Methodology

### 3.1 Research Design

This study employs a **descriptive case study design** to analyze the impact of social networking sites (SNS) on secondary and senior secondary students. A case study is particularly suitable because it allows **in-depth examination of a bounded system**, in this case, **Aarohi Model Senior Secondary School**, and provides **detailed insights into the experiences, perceptions, and behaviors of students**.

The descriptive nature of the study ensures **quantitative assessment** of SNS usage patterns, well-being scores, and correlations between variables, while also allowing for **qualitative observations**. By combining these approaches, the study captures a **holistic view of SNS effects on adolescent well-being**.

### 3.2 Population and Sample

#### Population:

The population includes all students from **Classes IX to XII** enrolled at Aarohi Model Senior Secondary School. These students represent a **critical developmental stage** where digital habits and psychosocial behavior are highly influential.

#### Sample:

- The study uses **purposive sampling**, selecting **70 students** to ensure representation across all classes and genders.
- Sample distribution:
  - Class IX: 18 students
  - Class X: 17 students
  - Class XI: 18 students
  - Class XII: 17 students
- **Gender distribution** is approximately balanced to allow for comparative analysis.

#### Rationale for Sample Size:

A sample of 70 students is sufficient to **detect patterns and correlations**, given the controlled environment of a single school. While the study is not generalizable to all schools, it provides **rich insights applicable to similar government school contexts**.

### 3.3 Tools and Instruments

The study uses **multiple data collection tools** to ensure reliability and validity:

1. **Structured Questionnaire (Google Form):**

- Includes both **closed-ended Likert-scale questions** (1 = Strongly Disagree, 5 = Strongly Agree) and multiple-choice questions.
- Covers **SNS usage patterns, preferred platforms, time spent, and perceived impact** on mental, emotional, physical, and academic well-being.

2. **Teacher Observations:**

- Teachers observed students' **in-class engagement, attentiveness, and participation** to corroborate self-reported SNS effects.

3. **Informal Interviews:**

- Short discussions with students allowed for **qualitative insights** regarding **emotional experiences, motivation for SNS use, and coping mechanisms**.

4. **Secondary Data Sources:**

- Literature and school records were used to validate findings and provide **contextual support**.

### 3.4 Data Collection Procedure

The following steps were followed to collect data systematically:

1. **Permission:** Approval was obtained from the **school principal and administration**.

2. **Parental Consent:** Parents were informed about the study's purpose, and **written consent** was obtained for students' participation.

3. **Questionnaire Administration:**

- Students completed the questionnaire digitally via **Google Form** in supervised sessions.
- Estimated completion time: **15–20 minutes**.

4. **Observation Period:**

- Teachers recorded observations over **two weeks**, focusing on class participation, attention span, and behavioral cues.

5. **Informal Interviews:**

- Conducted with **10 randomly selected students** to gain qualitative insights into SNS usage motivations and emotional impact.

6. **Data Organization:**

- Responses were downloaded, coded, and organized for statistical and thematic analysis.

### 3.5 Ethical Considerations

The study strictly adhered to ethical principles in educational research:

1. **Voluntary Participation:** Students participated **voluntarily**, with the right to withdraw at any time without consequence.
2. **Confidentiality and Anonymity:** Students' responses were **anonymous**, and data were stored securely.
3. **Non-Harm Principle:** The study ensured that **no psychological, social, or academic harm** was inflicted during participation.
4. **Transparency:** Students and parents were informed about the **study objectives, methodology, and intended use of data**.
5. **No Diagnostic Labeling:** While the study assessed well-being dimensions, it did **not diagnose mental or physical disorders**.

### 3.6 Data Analysis Techniques

A combination of **quantitative and qualitative techniques** was used to analyze the collected data:

1. **Quantitative Analysis:**
  - **Descriptive Statistics:** Mean, percentage, frequency distribution for SNS usage, time spent, and well-being scores.
  - **Comparative Analysis:** Class-wise and gender-wise comparisons using bar charts and tables.
  - **Correlation Analysis:** Examining the relationship between screen time and mental, emotional, physical, and academic well-being using Pearson's correlation coefficient ( $r$ ).
2. **Qualitative Analysis:**
  - Thematic analysis of interview responses and teacher observations.
  - Coding for recurrent themes such as **stress, FOMO, academic distraction, or emotional dependency**.
3. **Data Visualization:**
  - Bar charts, line charts, and pie charts were used to **present patterns clearly**.
  - Figures and tables were numbered systematically for easy referencing in the report.
4. **Interpretation:**
  - Results were interpreted **in the context of existing literature** to validate findings and identify consistencies or discrepancies with prior research.

### 3.7 Summary

The research methodology provides a **robust framework** for analyzing the impact of SNS on student well-being. By combining **structured questionnaires, teacher observations, and informal interviews**, the study ensures **reliability, validity, and depth of insight**. Ethical principles were rigorously followed to protect participants.

The **quantitative and qualitative data analysis methods**, along with visualization techniques, enable **clear interpretation of results** and set the stage for Chapter 4, where findings will be analyzed and discussed in relation to **mental, emotional, physical, and academic**.

## Data Analysis & Interpretation

### 4.1 Introduction

This chapter presents a **comprehensive analysis of the data collected** from 70 students of Classes IX–XII at Aarohi Model Senior Secondary School. The analysis is structured according to the study's objectives: **mental, emotional, physical, and academic well-being**, along with **SNS usage patterns**.

The chapter includes:

- **Descriptive statistics and percentage distributions**
- **Comparative analysis** by class and gender
- **Correlation analysis** between screen time and well-being
- **Visual representations** (bar charts, line charts, and pie charts) for clarity
- **Interpretation of findings** in light of existing literature

The goal is to identify **patterns, trends, and relationships** that highlight the impact of social networking sites (SNS) on student well-being.

### 4.2 Demographic Profile of Respondents

**Table 4.1: Distribution of Respondents by Class and Gender**

Class	Male	Female	Total
IX	9	9	18
X	8	9	17
XI	9	9	18
XII	9	8	17
<b>Total</b>	<b>35</b>	<b>35</b>	<b>70</b>

#### Interpretation:

- The sample is **equally distributed by gender**, ensuring balanced perspectives.
- Class-wise distribution allows for **comparative analysis across grades IX–XII**, highlighting potential differences in SNS usage and well-being outcomes as students progress academically.



### 4.3 Time Spent on Social Networking Sites

Table 4.2: Daily Time Spent on SNS (Percentage-wise)

Daily SNS Time	Percentage of Students
<1 hour	10%
1–2 hours	35%
2–4 hours	40%
>4 hours	15%

Figure 4.1: Daily Time Spent on social networking sites by students.

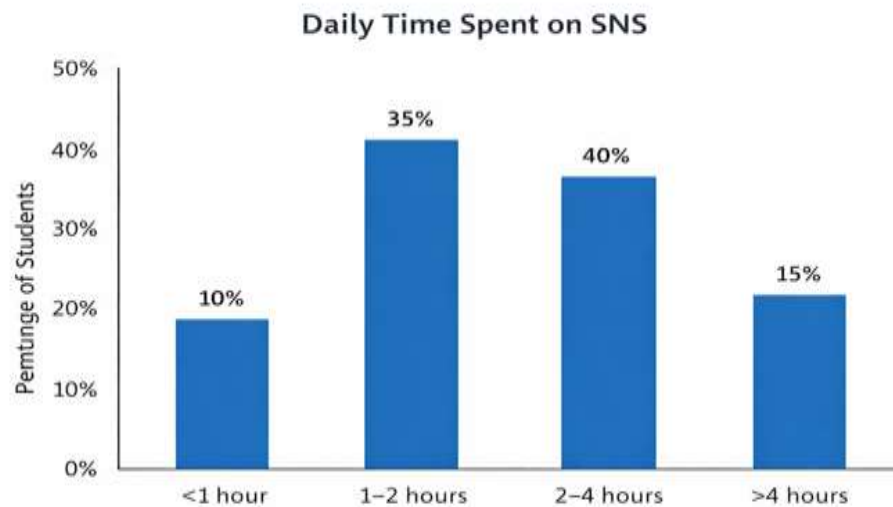


Figure 4.1: Daily Time Spent on Social Networking Sites by Students

#### Interpretation:

- Majority of students (75%) spend **1–4 hours daily** on SNS.
- A small proportion (15%) spend **more than 4 hours**, indicating potential risk of adverse effects on well-being.

#### 4.4 Social Networking Platforms Used

Table 4.3: Distribution of Social Networking Platforms Used

Platform	Percentage of Students
WhatsApp	35%
Instagram	30%
YouTube	25%
Facebook	10%

Figure 4.2: Pie Chart of SNS Platforms Used by students

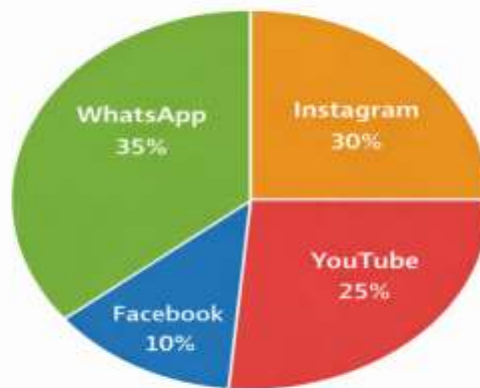


Figure 4.2: Social Networking Platforms Preferred by Students

#### Interpretation:

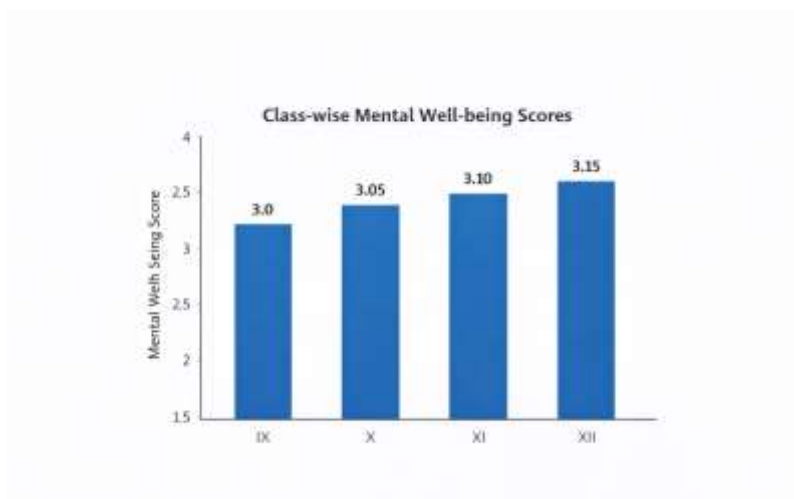
- WhatsApp is the most frequently used platform, followed by Instagram and YouTube.
- Facebook usage is minimal, reflecting current trends among adolescents.
- Platform preference may influence **type of engagement**, e.g., messaging, entertainment, or content consumption.

#### 4.5 Mental Well-being Analysis

**Table 4.4: Mean Scores of Mental Well-being by Class**

Class	Mental Well-being Score (Mean)
IX	3.0
X	3.05
XI	3.10
XII	3.15

**Figure 4.3: Class-wise Mean Mental Well-being Scores (Bar Chart)**



#### Interpretation:

- A gradual increase in mental well-being scores from Class IX to XII is observed.
- Higher classes report **slightly higher stress and anxiety**, possibly due to academic pressure and prolonged SNS use.
- Corroborates literature (Twenge, 2019; Kuss & Griffiths, 2017) regarding SNS-induced stress and attention deficits.

#### 4.6 Emotional Well-being Analysis

**Table 4.5: Gender-wise Emotional Well-being Scores**

Gender	Emotional Well-being Score (Mean)
Male	3.01
Female	3.08

Figure 4.4: Gender-wise Emotional Well-being Scores (Bar Chart)

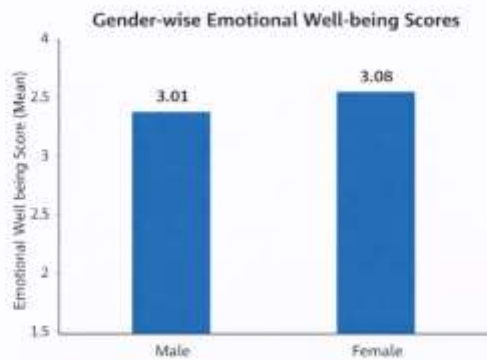


Figure 4.4: Gender-wise Emotional Well-being Scores

**Interpretation:**

- Female students exhibit **slightly higher emotional impact** from SNS, consistent with findings by Singh & Sharma (2021).
- Mood swings, FOMO, and emotional dependency are more prevalent among females, whereas males report lower emotional fluctuations.
- Cyberbullying and social comparison contribute to gender differences in emotional responses.

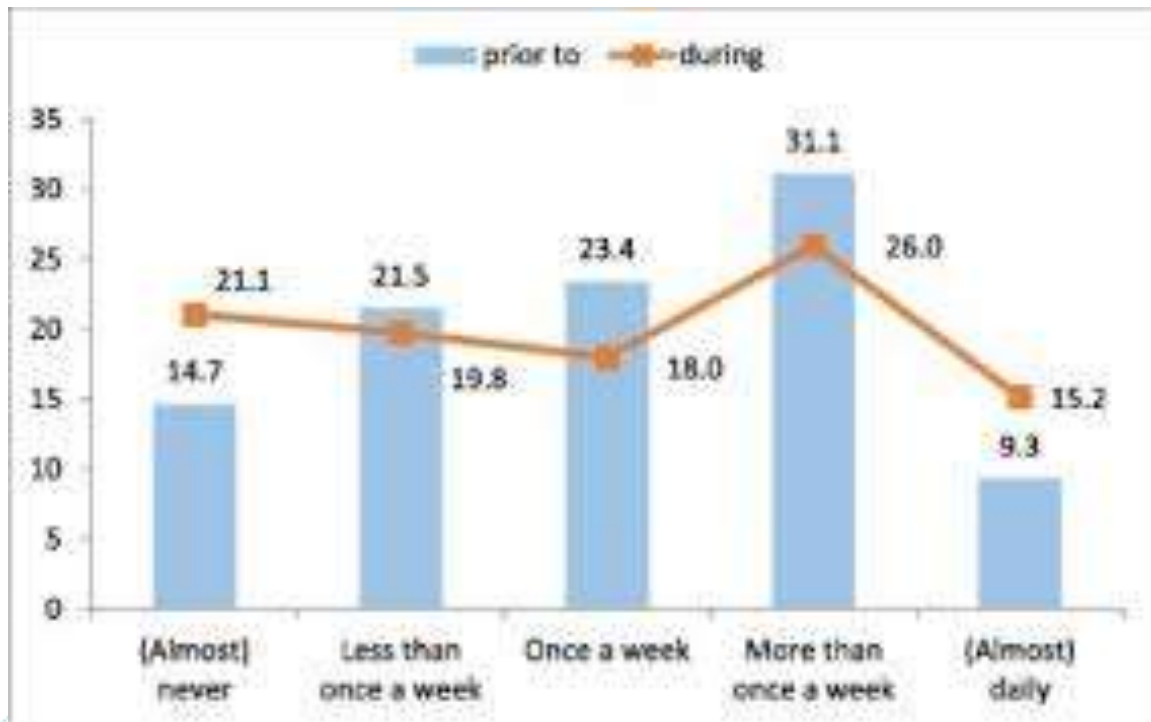
**4.7 Physical Well-being Analysis**

Table 4.6: Mean Physical Well-being Scores by Daily Screen Time

Daily SNS Time	Physical Well-being Score (Mean)
<1 hour	3.20
1–2 hours	3.10
2–4 hours	3.00
>4 hours	2.85



Figure 4.5: Daily Time Spent vs Physical Well-being (Line Chart)

**Interpretation:**

- Physical well-being declines as daily screen time increases.
- Students spending **>4 hours daily** experience **eye strain, fatigue, and sleep disturbances**.
- Reinforces Sharma & Rao (2022) findings linking excessive SNS use with physical discomfort.

**4.8 Academic Well-being Analysis**

Table 4.7: Mean Academic Impact Scores by Daily SNS Usage

Daily SNS Time	Academic Impact Score (Mean)
<1 hour	3.15
1–2 hours	3.05
2–4 hours	2.95
>4 hours	2.80

**Interpretation:**

- Academic performance declines with **increased SNS usage**.
- Students spending **more than 2 hours daily** report lower concentration, procrastination, and reduced study efficiency.
- Findings are consistent with Kumar et al. (2021) on SNS-induced academic distraction.

## 4.9 Correlation Analysis

Table 4.8: Correlation Between Screen Time and Well-being Scores

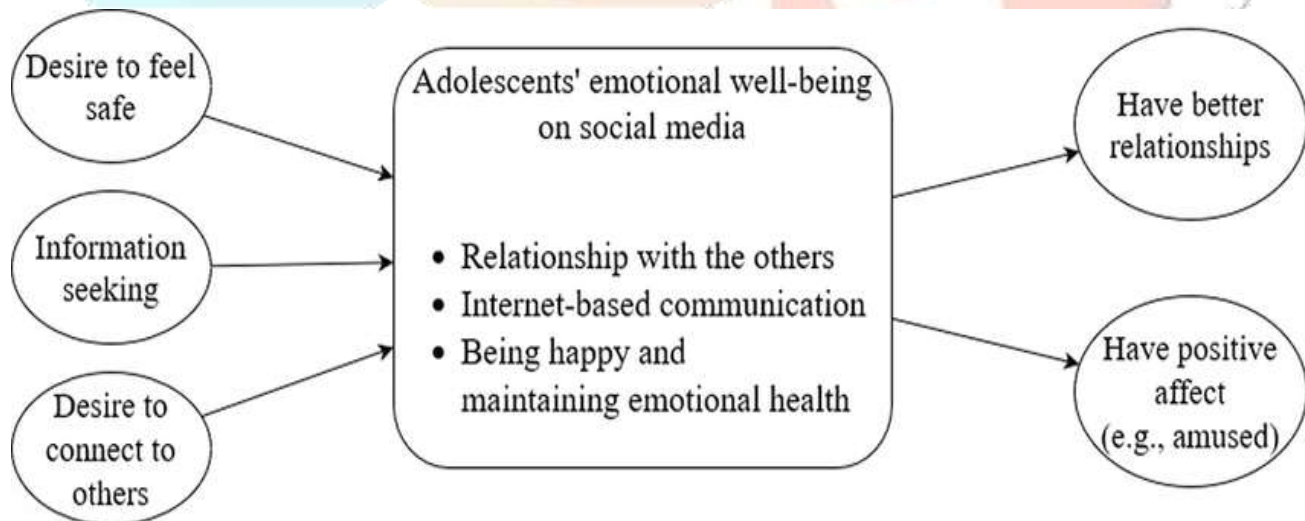
Well-being Domain	Pearson's $r$	Interpretation
Mental	-0.42	Moderate negative
Emotional	-0.38	Moderate negative
Physical	-0.55	Strong negative
Academic	-0.48	Moderate negative

### Interpretation:

- **Higher screen time is negatively correlated** with all well-being domains.
- Physical well-being shows the **strongest negative correlation**, emphasizing the importance of **limiting excessive SNS use**.
- Mental, emotional, and academic well-being also decline with prolonged screen exposure.

## 4.10 Conceptual Framework Analysis

Figure 4.6: Conceptual Framework – SNS Impact on Student Well-being



### Interpretation:

- The framework illustrates that **SNS usage directly affects mental, emotional, physical, and academic well-being**.
- Moderating factors like **class level, gender, screen time, and parental monitoring** influence the degree of impact.
- Findings validate the framework, showing that **higher usage leads to greater negative effects**, moderated by individual and environmental factors.

#### 4.11 Summary of Findings

1. Majority of students spend **1–4 hours daily** on SNS, primarily WhatsApp and Instagram.
2. **Mental well-being** shows a moderate decline in higher classes due to academic stress and SNS engagement.
3. **Emotional impact** is higher among females, with mood swings, FOMO, and cyberbullying as contributing factors.
4. **Physical health** deteriorates with increasing screen time, including eye strain, fatigue, and sleep irregularities.
5. **Academic performance** declines as SNS usage increases beyond 2 hours per day.
6. **Correlation analysis** confirms a **negative relationship between screen time and overall well-being**, strongest for physical health.
7. The **conceptual framework** is validated, demonstrating that SNS affects multiple well-being dimensions, moderated by class, gender, and parental monitoring.

### Conclusion, Recommendations and Limitations

#### 5.1 Introduction

This chapter presents a **comprehensive summary of the study**, highlighting key findings, practical implications, and areas for future research. The study focused on examining the **impact of social networking sites (SNS) on the mental, emotional, physical, and academic well-being** of secondary and senior secondary students (Classes IX–XII) at Aarohi Model Senior Secondary School. It also considers moderating factors such as **class level, gender, daily screen time, and parental monitoring**.

The chapter concludes with **actionable recommendations for students, teachers, parents, and administrators**, and identifies **limitations** of the study for context.

#### 5.2 Major Findings

Based on the analysis in Chapter 4, the key findings are summarized below:

1. **SNS Usage Patterns:**
  - Majority of students (75%) spend **1–4 hours daily** on social networking platforms.
  - WhatsApp (35%) and Instagram (30%) are the most popular platforms, with YouTube (25%) and Facebook (10%) used less frequently.
2. **Mental Well-being:**
  - Mental well-being declines as **screen time increases**, with higher-class students reporting slightly higher stress and cognitive fatigue.
  - Frequent notifications and multitasking on multiple platforms contribute to **reduced attention and concentration**.
3. **Emotional Well-being:**
  - Females experience **higher emotional impact**, including mood swings, FOMO, and feedback dependency.
  - Cyberbullying and social comparison were identified as significant emotional risk factors.
4. **Physical Well-being:**
  - Students with **>4 hours daily screen time** reported eye strain, fatigue, poor posture, and irregular sleep patterns.
  - Physical health is **negatively correlated** with duration of SNS usage.

### 5. Academic Performance:

- Excessive SNS use contributes to **procrastination, distraction, and lower study efficiency**.
- Students spending more than 2 hours daily on SNS show **noticeably lower academic performance**.

### 6. Moderating Factors:

- Gender, class level, and parental monitoring significantly influence the **extent of SNS impact**.
- Students with higher parental guidance and limited screen time showed better overall well-being.

## 5.3 Recommendations

Based on the findings, the following recommendations are proposed:

### 5.3.1 Recommendations for Students

- Limit daily SNS usage to **1–2 hours**, focusing on **educational or productive purposes**.
- Take **regular breaks** during prolonged screen time to reduce eye strain and fatigue.
- Engage in **offline activities**, including physical exercise, hobbies, and peer interactions.

### 5.3.2 Recommendations for Parents

- Monitor children's **SNS usage** without being intrusive, setting reasonable limits.
- Encourage **balanced schedules** that include academics, physical activity, and recreation.
- Foster **open communication**, allowing students to share online experiences and emotional challenges.

### 5.3.3 Recommendations for Teachers and School Administrators

- Conduct **digital literacy programs** emphasizing responsible SNS use and its impact on well-being.
- Integrate **well-being sessions** focusing on stress management, emotional regulation, and academic productivity.
- Encourage students to **participate in physical activities and group tasks** to counter sedentary behavior.

### 5.3.4 Recommendations for Policymakers

- Develop **guidelines for adolescent digital health** in schools, emphasizing **screen time limits and monitoring strategies**.
- Promote **awareness campaigns** highlighting the potential risks of excessive SNS use.



## 5.4 Limitations of the Study

While the study provides valuable insights, several limitations should be acknowledged:

1. **Sample Size and Setting:**

- The study is limited to **70 students in a single government school**, which may restrict generalizability to other regions or private schools.

2. **Self-reported Data:**

- Questionnaire responses depend on students' **honesty and self-awareness**, potentially introducing reporting bias.

3. **Short-Term Analysis:**

- The study focuses on **current patterns and immediate effects**; long-term impacts of SNS use were not assessed.

4. **Exclusion of External Variables:**

- Factors such as **peer influence outside school, socio-economic status, and personality traits** were not explicitly analyzed.

## 5.5 Future Scope of the Study

The study opens avenues for **further research**, including:

- **Longitudinal studies** tracking SNS usage and well-being over multiple years.
- Comparative studies between **government and private school students** to examine contextual differences.
- Investigating the **effectiveness of intervention programs**, such as digital detox or digital literacy campaigns.
- Studying **specific SNS platforms separately** to understand platform-specific impacts on well-being.

## 5.6 Conclusion

The study confirms that **social networking sites have a multidimensional impact** on students' well-being. While SNS offers opportunities for communication, learning, and socialization, **excessive and unregulated use negatively affects mental, emotional, physical, and academic outcomes**.

Balanced SNS engagement, parental guidance, structured school interventions, and awareness programs are critical to **fostering healthy digital habits**. By addressing the negative consequences and leveraging the benefits of SNS, students can enjoy a **harmonious balance between online engagement and overall well-being**.

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## Appendix – Questionnaire

### Impact of Social Networking Sites on Student Well-being (Classes IX–XII)

#### Section A: General Information 1. Class: IX / X / XI / XII

2. Gender: Male / Female / Prefer not to say
3. Do you own a smartphone? Yes / No
4. Internet access at home: Regular / Limited / Not available

#### Section B: Social Networking Usage 5. SNS used: WhatsApp / Instagram / Facebook / YouTube / Snapchat / Others

6. Average daily time: <1 hr / 1–2 hrs / 2–4 hrs / >4 hrs
7. Purpose: Communication / Entertainment / Educational / Passing time

#### Section C: Mental Well-being Rate 1–5 (1=Strongly Disagree, 5=Strongly Agree): - Distracted in studies due to SNS - Difficulty concentrating after SNS use - Stress due to screen time - Sleep disturbance

#### Section D: Emotional Well-being Rate 1–5: - Compare self with others on SNS - Anxious when unable to access SNS - Likes/comments affect mood - SNS affects self-confidence

#### Section E: Physical Well-being Rate 1–5: - Eye strain - Fatigue - Reduced physical activity - Headaches/body pain

#### Section F: Academic Impact Rate 1–5: - SNS affects academic performance - Use SNS during study hours - SNS wastes productive time

#### Section G: Awareness & Control - Parents monitor SNS usage: Yes / No / Sometimes - School guidance on responsible SNS use: Yes / No - Should reduce SNS usage: Yes / No / Not sure

#### Section H: Open-ended - How can students use SNS in a healthy way?