

Impact of social media on the mental health of the youth

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Abstract - Social media platforms such as Instagram, YouTube, and Snapchat have become an integral part of daily life among college students. While these platforms provide communication, learning opportunities, entertainment, and social connectivity, excessive usage has been increasingly linked to anxiety, stress, mental fatigue, distraction, sleep disturbance, and reduced academic focus. This study examines the psychological impact of social media usage among college students aged 18–24 and evaluates whether a structured digital detox intervention can improve emotional well-being and cognitive functioning.

An experimental research design was proposed involving three groups: a control group with no usage changes, a self-restricted group limiting usage to 30 minutes per day, and an app-restricted group using automated blocking tools. Data were collected using Google Form surveys before and after a 14-day detox period and analyzed descriptively through visual interpretation using Microsoft Power BI. A pilot study of 30 students revealed high daily usage (4–8 hours), frequent early-morning checking habits, and common emotional effects such as anxiety, fatigue, reduced concentration, and social comparison pressure.

Post-detox findings showed a significant reduction in daily screen time, particularly among students using app-based restrictions, who demonstrated 30–70% usage reduction. Participants reported improved sleep quality, better focus, enhanced emotional stability, improved time management, and increased productivity. Many students expressed confidence in maintaining reduced usage and showed interest in adopting regular mini-detox practices, although minor rebound behavior was observed after the intervention period.

The study concludes that while social media offers important benefits, excessive use negatively impacts students' mental health. Structured digital detox interventions—especially those supported by app-based controls—can significantly reduce psychological strain and promote healthier digital habits. The findings highlight the importance of digital hygiene in modern education and recommend the integration of digital wellness programs in colleges to support long-term behavioral change.

Key words - Social Media, Digital Detox, Mental Health, College Students, Anxiety, Mental Fatigue, Overuse, Screen Time

1. Introduction

Social media has grown rapidly over the past decade and has become one of the most dominant influences on student life. From early morning to late at night, digital platforms offer endless content, connection, entertainment, information, and social comparison. According to recent surveys, more than 95% of students between 13–24 years actively use social media daily, with many spending 3–8 hours per day online

1.1 History of Social Media

The concept of digital networking first emerged in the early 2000s with platforms such as Friendster and MySpace, which allowed users to create online profiles and connect virtually. In 2004, Facebook revolutionized online interaction by promoting real-name identity and personal sharing. YouTube (2005) introduced video-based education and entertainment, transforming how students learn and consume digital information.

The rise of smartphones and affordable data made social media continuously accessible. Instagram (2010), Snapchat (2011), and TikTok (2016) popularized short-form visual content and instant notifications, which increased habitual and repetitive usage. In India, digital growth accelerated after low-cost internet plans became widely available in 2016, resulting in massive adoption of platforms among students.

Today, social media use is deeply embedded in daily routines including study breaks, meals, commuting, and late-night usage, making digital behavior an important subject of psychological and academic research. [1]

1.2 Positive Side of Social Media

Social media provides academic and personal benefits:

- Career guidance

Social media platforms provide access to career-related information, internship opportunities, professional networking, and mentorship resources. Students can follow industry experts and organizations to gain insights into career paths and skill requirements.

- Skill development

Many platforms offer tutorials, workshops, and educational content that help students develop technical, creative, and communication skills. Online learning communities also encourage peer-to-peer knowledge sharing.

- Online tutorials and learning

Educational videos, live sessions, and informational posts enable students to learn new subjects outside the classroom. Platforms such as YouTube provide free academic resources that support self-paced learning.

- Peer communication

Social media enhances connectivity among classmates and friends by enabling instant messaging, group discussions, and collaborative learning. It supports academic coordination and strengthens social relationships.

- Digital communities

Students can join communities based on shared interests, academic fields, or hobbies. These communities provide emotional support, knowledge exchange, and a sense of belonging.

- News and awareness

Social media allows rapid access to global news, social issues, and trending topics. It increases awareness about current events and encourages civic engagement among youth.

1.3 Negative Effects

Excessive usage introduces multiple psychological challenges:

- Distraction

Constant notifications and engaging content divert students' attention from academic tasks. Frequent interruptions reduce productivity and make it difficult to complete assignments efficiently.

- Reduced concentration

Excessive multitasking between apps shortens attention span and weakens deep focus. Continuous scrolling habits make sustained academic engagement more challenging.

- FOMO (Fear of Missing Out)

Students may feel anxious when they perceive others enjoying experiences or achievements online. This comparison-driven anxiety can lead to emotional dissatisfaction and compulsive checking behavior.

- Time wastage

Large amounts of time are spent on non-productive browsing, entertainment, and scrolling. This reduces time available for studying, hobbies, and personal development.

- Addiction-like patterns

Social media platforms are designed to encourage repeated engagement through likes, comments, and notifications. Over time, students may develop dependency symptoms such as irritability when unable to access their devices.

- Emotional instability

Exposure to negative comments, comparison pressure, and online criticism can trigger mood swings and emotional distress. Students may experience increased anxiety or feelings of inadequacy.

- Low self-esteem due to comparisons

Seeing curated and idealized images of peers can lead students to compare their appearance, achievements, or lifestyle negatively. This often lowers self-confidence and self-worth.

1.4 Academic Impact

Academic performance often reduces when:

- More time is spent online instead of studying

Excessive social media engagement reduces the time allocated for academic preparation. Students may procrastinate important tasks due to digital distractions.

- Sleep schedules are disrupted

Late-night scrolling and screen exposure interfere with healthy sleep patterns. Poor sleep quality negatively affects memory, focus, and overall academic performance.

- Focus shifts to digital entertainment

Students may prioritize entertainment content over educational activities. This shift reduces academic motivation and learning engagement.

- Students struggle to self-regulate usage

Many students find it difficult to control their screen time despite being aware of its negative impact. Lack of self-discipline leads to habitual overuse and academic decline.

1.5 What is Digital Detox?

Digital detox refers to the intentional and structured reduction or temporary elimination of digital device usage particularly social media platforms to restore psychological balance, improve focus, and reduce mental strain. In the context of modern student life, where smartphones and platforms such as Instagram, YouTube, and Snapchat play a constant role, digital detox has emerged as a self-regulation strategy to counter excessive screen dependency.

Unlike complete digital isolation, digital detox does not necessarily mean permanently quitting social media. Instead, it involves consciously setting boundaries such as limiting usage to a fixed duration per day, disabling notifications, avoiding early-morning and late-night scrolling, uninstalling certain applications temporarily, or using app-based blocking tools. The core objective is to regain control over digital habits rather than allowing algorithm-driven platforms to control attention and time.

Psychologically, digital detox aims to reduce overstimulation caused by constant notifications, social comparison, and continuous content consumption. Frequent exposure to curated images, achievement posts, and lifestyle portrayals often leads to comparison pressure, fear of missing out (FOMO), and validation-seeking behavior. Over time, this can

contribute to anxiety, emotional exhaustion, and reduced self-esteem. A detox period allows the brain to recover from cognitive overload and excessive dopamine-driven reward cycles associated with social media engagement.

From an academic perspective, digital detox can improve concentration, time management, and sleep quality. Many students habitually check their phones immediately after waking up and before sleeping, disrupting natural cognitive rhythms. By eliminating or restricting such patterns, students may experience clearer thinking, improved productivity, and healthier daily routines.

Research suggests that structured detox interventions especially those supported by app timers or automated restrictions are more effective than relying solely on self-control. This is because digital platforms are intentionally designed to encourage repeated engagement through notifications, infinite scrolling, and personalized recommendations.

In summary, digital detox represents a preventive and corrective strategy for promoting digital hygiene. As digital technology continues to dominate student life, understanding and implementing controlled usage practices becomes essential for protecting mental well-being and sustaining academic performance.

2. Motivation Of Research

Excessive use of social media has become a common part of daily life among students and young adults. While platforms like Instagram, YouTube, and Snapchat provide communication, information, and entertainment, they also contribute to stress, anxiety, distraction, reduced sleep quality, and mental fatigue.[2]

Most students are unaware of how much time they spend online or how it affects their psychological well-being. Although digital detox is increasingly suggested as a solution, limited studies examine whether structured detox methods truly reduce emotional strain, improve concentration, and promote healthier digital habits among Indian college students.

Therefore, there is a need to assess the real impact of social media usage on students' mental health and analyze whether planned digital detox interventions can lead to measurable improvement in emotional stability, focus, and lifestyle balance.[3]

3. Aim Of Study

We intended our research paper with the primary objective of examining the pattern and intensity of social media usage among college students aged 18–24 and analysing its psychological impact on their mental well-being. The study specifically aims to investigate how excessive engagement with platforms such as Instagram, YouTube, and Snapchat contributes to stress, anxiety, comparison pressure, mental fatigue, reduced concentration, and sleep disturbances.

Furthermore, this research seeks to evaluate the effectiveness of a structured digital detox intervention in reducing negative emotional and cognitive effects associated with prolonged screen exposure. By comparing self-controlled usage restriction with app-based automated restriction methods, the study aims to determine which approach produces more consistent and measurable improvements in students' emotional stability, focus, and productivity.

In addition, the research intends to assess whether behavioral changes achieved during the detox period are sustainable beyond the intervention phase and to identify possible rebound effects. Overall, the study aspires to contribute to the understanding of digital hygiene practices and provide evidence-based recommendations for promoting healthier social media habits among college students.

1. To examine the current pattern of social media usage among college students aged 18–24.

2. To evaluate the psychological impact of social media usage, particularly related to stress, anxiety, comparison pressure, and mental fatigue.
3. To determine whether digital detox can effectively reduce negative emotional and cognitive effects.
4. To compare the effectiveness of self-controlled detox and app-restricted detox methods.
5. To assess whether reduced usage patterns continue after the detox period.

4. Literature Review

Over the past decade, social media has evolved from a communication tool into a dominant influence on youth lifestyle, identity formation, and psychological well-being. Platforms such as Instagram, YouTube, Snapchat, and TikTok have significantly transformed how students interact, learn, and perceive themselves. With the rapid growth of smartphone accessibility and affordable internet services, daily engagement with social media has become nearly universal among individuals aged 18–24.[4]

Global Usage Trends:

Recent global surveys indicate that over 95% of teenagers and young adults actively use social media, with a substantial proportion reporting near-constant engagement throughout the day. Studies conducted in the United States, Europe, India, and Southeast Asia show similar patterns of prolonged screen time ranging between 3 to 8 hours daily. This high frequency of use has shifted social media from a recreational activity to a habitual behavioral pattern embedded in daily routines such as waking up, commuting, studying, and before sleeping.[5]

Social Media Addiction and Behavioral Dependence:

One of the most significant contributions to understanding problematic social media use is the development of the Bergen Social Media Addiction Scale by Andreassen. This framework identifies six core components of addictive behavior: salience, mood modification, tolerance, withdrawal, conflict, and relapse. These symptoms mirror patterns observed in other behavioral addictions, suggesting that excessive social media use may function similarly to compulsive behaviours[6].

Research shows that students often experience mood enhancement or temporary stress relief while using social media. However, prolonged exposure can lead to dependency, where individuals feel discomfort, irritability, or anxiety when unable to access digital platforms. This dependency cycle contributes to loss of self-regulation and difficulty in reducing screen time despite awareness of negative consequences.[7]

Psychological Impact on Mental Health:

Multiple empirical studies consistently associate excessive social media use with increased levels of anxiety, depression, stress, and loneliness. Hunt et al. (2018) demonstrated that limiting social media use to 30 minutes per day significantly reduced feelings of loneliness and depressive symptoms among university students. Similarly, global mental health reports emphasize that continuous exposure to curated online content intensifies emotional vulnerability, particularly among adolescents and young adults.[8]

The psychological strain often stems from several mechanisms:

- Constant social comparison

Frequent comparison with peers' curated achievements and lifestyles increases dissatisfaction and negatively affects self-perception.

- Fear of Missing Out (FOMO)

The anxiety of being excluded from rewarding experiences motivates compulsive checking and emotional distress.

- Validation-seeking through likes and comments

Dependence on online approval reinforces self-worth based on digital feedback rather than intrinsic confidence.

- Exposure to unrealistic standards of success and appearance

Idealized portrayals of beauty, wealth, and achievement create unrealistic benchmarks that lower self-esteem.

- Cyberbullying and online criticism

Negative interactions and harassment on digital platforms contribute to stress, anxiety, and emotional vulnerability.

These factors contribute to reduced self-esteem and emotional instability.

Social Comparison and Self-Esteem:

Social comparison theory suggests that individuals evaluate themselves based on others' achievements and lifestyles. Platforms such as Instagram heavily emphasize visual representation, making users more likely to compare body image, academic success, material possessions, and social popularity.[9] Research indicates that repeated upward comparison where individuals compare themselves to seemingly "better" peers leads to dissatisfaction, reduced confidence, and increased anxiety.

Students are particularly vulnerable because identity development and peer validation are central during late adolescence and early adulthood.[10] Studies in Asian and Western contexts show that comparison pressure significantly predicts lower self-worth and increased emotional distress.

Mental Fatigue and Cognitive Overload:

Continuous scrolling and multitasking between platforms create cognitive overload. Kocak (2020) identified a direct relationship between excessive social media usage and mental fatigue among university students. Constant exposure to notifications, rapid information shifts, and high-volume content consumption reduces attention span and weakens deep concentration abilities.[11]

Mental fatigue manifests as:

- Reduced focus during academic tasks

Excessive digital engagement weakens sustained attention required for effective learning.

- Difficulty making decisions

Cognitive overload from constant information exposure impairs clear thinking and judgment.

- Shortened attention span

Habitual scrolling conditions the brain for rapid content shifts, reducing tolerance for long-form concentration.

- Emotional exhaustion

Continuous stimulation and comparison pressure result in mental burnout and decreased emotional resilience.

This cognitive strain directly impacts academic productivity and learning efficiency.

Digital Detox and Intervention Studies:

Digital detox refers to a deliberate reduction or temporary cessation of social media usage to restore emotional balance and cognitive clarity. Existing intervention-based studies provide promising yet mixed results. Hunt et al. (2018) found that structured limitation significantly improved psychological well-being. However, some studies report short-term discomfort, including increased FOMO or rebound overuse after detox periods.

Most research emphasizes self-reported emotional improvement but lacks structured comparison between self-controlled and app-restricted detox methods. Additionally, many studies focus on Western populations, leaving limited evidence from Indian academic contexts.

Despite extensive literature on social media usage and mental health, several gaps remain:

- Many studies establish correlation rather than experimental cause-and-effect relationships.
- Mental fatigue is often discussed indirectly rather than measured as a primary variable.
- Few studies compare different detox enforcement methods.
- Limited research specifically addresses Indian college students.
- Long-term sustainability and rebound effects are not widely analyzed.

Therefore, the present study attempts to bridge these gaps by experimentally comparing structured detox groups and assessing both psychological and behavioral changes among college students.

5. Scope Of Research

The literature reveals several gaps:

1. Most studies show correlation, not cause-and-effect improvement after detox.
Many existing studies identify associations between social media usage and mental health outcomes, but they do not use experimental designs to confirm whether reducing usage directly improves psychological well-being. There is limited evidence demonstrating measurable cause-and-effect changes after structured detox interventions.
2. Limited research focuses on mental fatigue specifically.
Although anxiety and depression are widely studied, mental fatigue is often mentioned only indirectly. Few studies treat cognitive exhaustion, reduced clarity, and attention depletion as primary variables, leaving this area insufficiently explored.
3. Few studies involve structured detox comparison groups.
Most detox-related research relies on general self-reports without comparing different restriction methods. There is a lack of structured comparison between self-controlled detox and app-enforced limitations to determine which approach is more effective.
4. Research rarely focuses on Indian college students who experience different academic pressures.
Much of the literature is based on Western populations, which may not fully reflect the academic stress, cultural expectations, and digital usage patterns of Indian students. This creates a contextual gap in region-specific understanding.
5. Rebound behaviour after detox is not widely analyzed.
While short-term improvements are documented, limited research examines whether reduced usage habits are sustained over time. The possibility of relapse or increased usage after detox remains under-investigated.

This research aims to address these gaps.

6. Working Of Module

The working of our research module follows a clear input–process–output framework, designed to evaluate the psychological and behavioural effects of a structured digital detox on college students.



1. Inputs

The primary input for the system was the pre-detox assessment form completed by each participant. This form captured baseline measures of social media usage and psychological state before the intervention, including:

- Daily screen time and platform usage patterns (hours per day, frequently used apps).
- Self-reported emotional and cognitive effects (stress, anxiety, distraction, sleep disturbance, mood fluctuations).
- Behavioural patterns such as checking phones immediately after waking up, during study times, or at night.

This baseline data provided a quantitative and qualitative snapshot of the participants' digital habits and mental wellbeing before any intervention began

2. Working / Process

	Pre-Detox (Input)	Post-Detox (Output)
Daily Screen Time	 4–8 hrs (High Usage)	 1–3 hrs (70% Reduction)
Emotional State	 Elevated Anxiety / FOMO	 Increased Stability
Cognitive Focus	 High Mental Fatigue	 Sharper Concentration
Sleep Quality	 Disrupted (Night Scrolling)	 Improved Rest Cycles

The working module had two major components:[1]

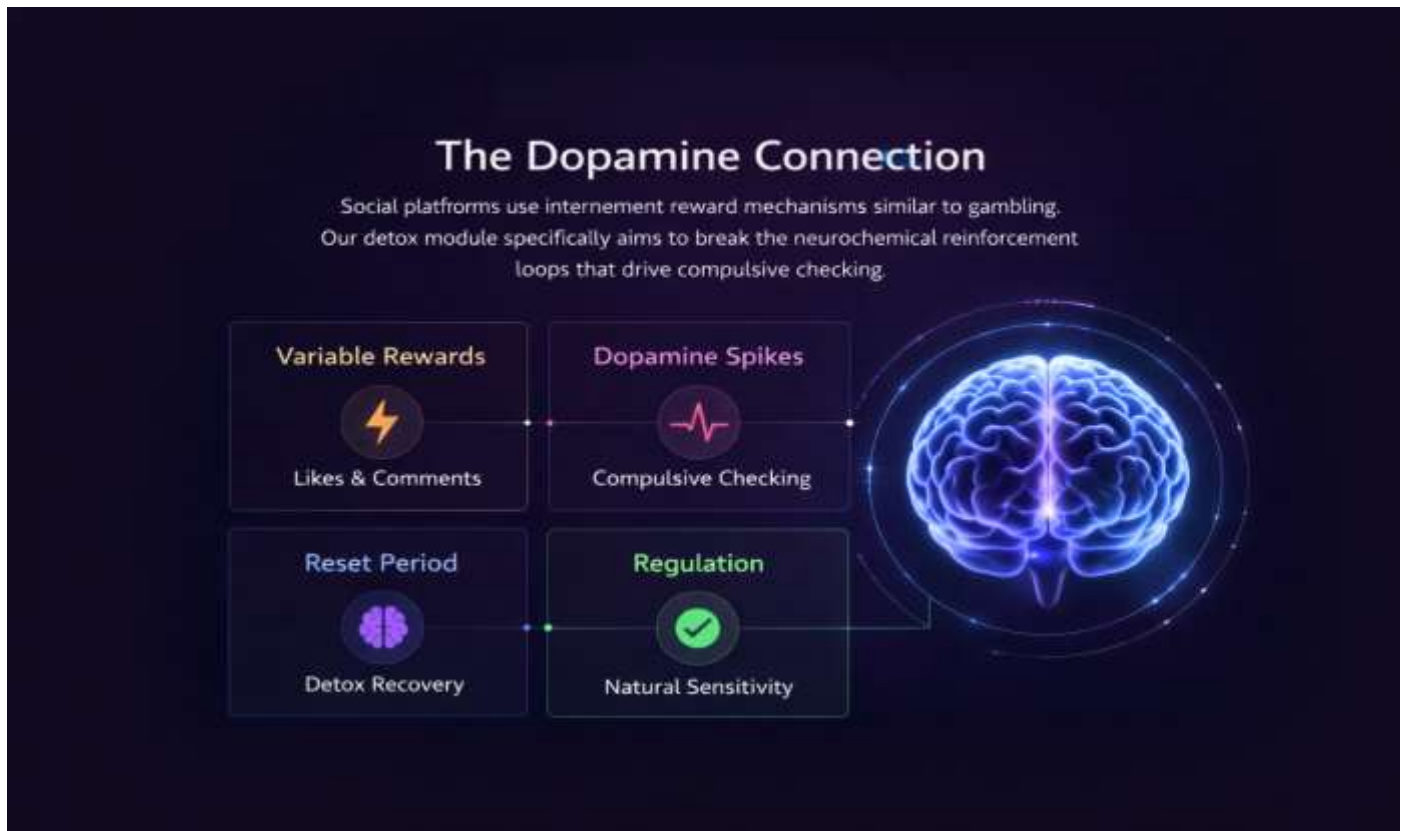
A. Digital Detox Intervention (Process Phase)

The digital detox strategy implemented in this study was informed by techniques described on *How to do a digital detox* (Lifeline toolkit), which emphasises intentional behaviour change rather than complete disconnection. Key procedural elements included:

- Goal Setting: Each participant set clear, achievable detox goals (e.g., limiting social media usage to 30 minutes per day, disabling notifications, phone-free study periods).
- Behavioural Restrictions: Students either manually limited usage (self-restricted group) or used automated blocking tools (app-restricted group).
- Environmental Modifications: Simple strategies such as removing addictive apps from the home screen, turning off non-essential notifications, or keeping phones in another room while studying were adopted.
- Duration: The detox intervention lasted 14 days, a period considered appropriate for breaking habitual behaviour and allowing cognitive recovery.

These strategies were chosen because chronic exposure to social media creates habitual engagement driven by dopamine spikes and reward feedback loops where unpredictable rewards (likes, comments, new content) release dopamine in the brain's reward circuits, reinforcing compulsive checking behaviour.

Research shows that this constant dopamine release and its sudden absence after disengagement can contribute to negative affective states (craving, irritability, mood instability), highlighting the importance of intentional detox strategies to reduce neurochemical reinforcement of social media use.



B. Post-Detox Assessment

After completing the detox period, participants filled out a post-detox questionnaire designed to measure changes in:

- Average daily screen time
- Sleep quality and patterns
- Ability to focus during academic tasks
- Emotional well-being (stress, anxiety, overall mood)
- Self-reported productivity and time management

These measures provided quantitative data for comparing pre- and post-detox states.

C. Data Analysis and Output

Once both questionnaires were collected, the next step was statistical analysis of the pre- and post-detox responses:

- Descriptive statistics were generated to summarise usage patterns, emotional scores, and behavioural measures.
- Comparative analysis between pre- and post-detox scores revealed the degree of change across key variables (e.g., reduction in screen time, sleep improvement, decreased self-reported anxiety).
- Trends were visualised using tools such as Microsoft Power BI to clearly show changes between groups (control, self-restricted, app-restricted).

The output of the system can be summarised as follows:

Metric	Pre-Detox (Input)	Post-Detox (Output)
Average Daily Screen Time	High (4–8 hrs)	Significantly Reduced (varied by method)
Stress and Anxiety Levels	Elevated	Lowered in detox groups
Sleep Quality	Disrupted	Improved
Focus During Study	Poor	Better Focus Reported
Productivity	Low	Increased

These outputs formed the core of the statistical analysis and supported the conclusions that structured digital detox methods particularly app-based restrictions led to significant improvements in participants' psychological wellbeing and behavioural control.

Key Insight: The Dopamine Connection

A foundational theoretical basis for this module is the neurological understanding of social media addiction. Social platforms are engineered to trigger intermittent dopamine rewards a mechanism similar to gambling reinforcement where unpredictable positive feedback (likes, comments, novelty content) drives repeated engagement.

These dopamine spikes reinforce compulsive checking behaviour, making self-regulation difficult. When usage is restricted (as in a digital detox), users may experience temporary dopamine withdrawal, but this leads to:

- Reduced compulsive engagement over time,
- Restoration of natural reward sensitivity,
- Improved emotional regulation and cognitive control.

Thus, our module's detox strategies were designed to counteract the neurochemical reinforcement patterns that sustain habitual social media use.

7. Research Methodologies

Methodologies Used:-

1. Experimental Research Method

This study adopted an experimental research design to examine the cause-and-effect relationship between social media usage and mental health outcomes. The method was chosen because it allows comparison between control and intervention groups, making it possible to measure the actual impact of digital detox. It was implemented by dividing participants into three groups (control, self-restricted, and app-restricted) and observing changes over a 14-day period.

2. Survey-Based Descriptive Method

A structured survey method was used to collect primary data regarding students' usage patterns, emotional experiences, and perceptions of digital detox. This method was selected because it enables efficient data collection

from a larger group in a standardized format. It was implemented using Google Forms before and after the detox period, and responses were analyzed using descriptive and visual techniques through Excel and Microsoft Power BI.

Research Design:-

An experimental design lasting 14 days was proposed with three groups:

- Group A – No change (Control Group)
- Group B – Self-restricted usage (30 mins/day)
- Group C – App-restricted detox (automated blocking)

Population:-

Undergraduate and postgraduate students aged 18–24 with regular smartphone usage.

Data Collection Tools

For this study, data was collected using the following methods:

1. Google Form Survey:

A structured online questionnaire was prepared and shared with college students. The survey included questions on daily social media usage, emotional impact, comparison behaviour, stress, and students' awareness of digital detox.

2. Reference to Previously Published Research:

Findings and patterns observed in earlier research papers were reviewed to support the interpretation of results and understand global usage trends.

These sources provided both primary and secondary data required for the study.

Process:-

The research process consisted of the following steps:

Stage 1 – Data Collection

Students were given a Google Form to fill out. The form collected:

- Daily screen time
- Platforms used
- Emotional responses such as stress, comparison, or fatigue
- Opinions on digital detox

Survey Questionnaire (Pre-Detox)

The following questions were included in the first Google Form to assess social media usage patterns and their psychological impact on students:

1. How many hours per day do you spend on social media?
2. Which social media platform do you use most often?
3. What is your primary reason for using social media?
4. Is social media the first thing you check in the morning?

5. Have you ever felt anxious, stressed, or upset after using social media?
6. How often do you compare yourself to others on social media?
7. To what extent has social media affected your self-esteem?
8. Have you ever experienced cyberbullying or harassment online?
9. How important or useful do you find social media in your life?
10. Do you feel that social media distracts you from your schoolwork or responsibilities?
11. Do you think social media has had a negative impact on your mental health?

Stage 2 – Data Tabulation

Responses from Google Forms were exported into an Excel sheet for further processing.

Stage 3 – Data Visualization

The collected data was analyzed visually using Microsoft Power BI.

The following charts were used:

- Pie charts – to show distribution (e.g., percentage of students using each platform).
- Bar charts – to compare responses (e.g., how many students feel stress, comparison pressure, lack of focus).

Stage 4 – Interpretation

Based on the visual charts, trends and patterns were identified to understand how digital usage affects students' mental health.

Stage 5 – Result Analysis

Data analysis in this study was:

- Descriptive
- Visual
- Based on chart interpretation

Power BI was used to create:

- Bar charts
- Pie charts
- Comparison visuals

These visuals helped understand:

- Which platforms are most used
- How many students feel negative impact
- How many believe digital detox can help

No advanced statistical tests were used because the study is based on survey observations and visual interpretation rather than formal controlled experimentation.

Do you think social media has had a negative impact on your mental health?

103 responses

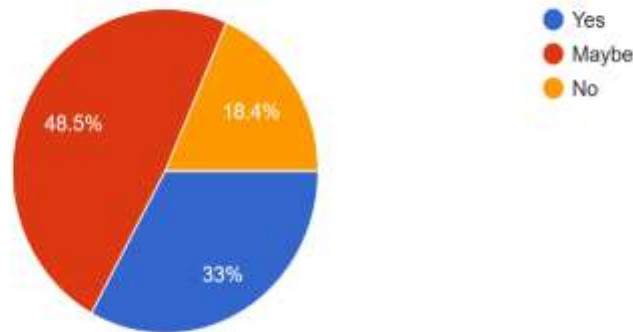


Figure 1: Negative Impact of social media

Pilot Study Findings

A pilot study involving 103 students was conducted:

Usage Patterns

- Most students used social media 4–8 hours/day

How many hours per day do you spend on social media?

103 responses

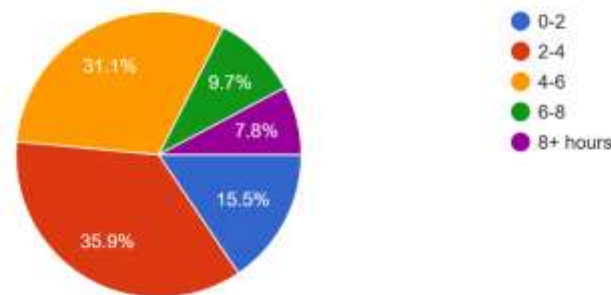


Figure 2: Time Spent On Social Media

- Instagram and YouTube were most used

Which social media platform do you use most often?

103 responses

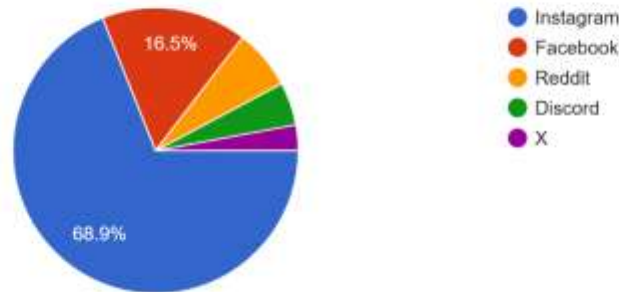


Figure 3: Most Often Used Social Media Application

- Mobile checking habit started early morning

Emotional Findings

Students reported:

- Fatigue
- Lack of focus
- Anxiety
- Social pressure

Have you ever felt anxious, stressed, or upset after using social media?

103 responses

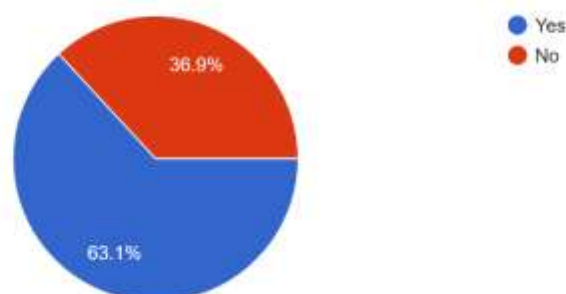


Figure 4: Symptoms Of Over-Usage of Social Media

How often do you compare yourself to others on social media?

103 responses

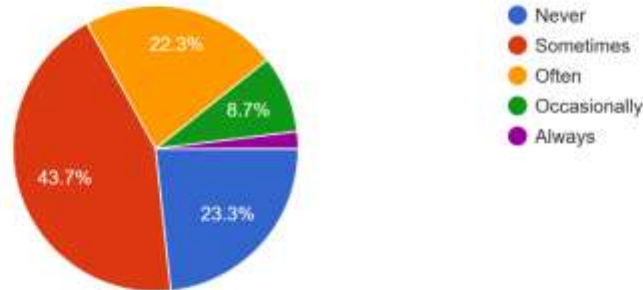


Figure 5: Comparison Amongst Youth Due To Social Media

Do you feel that social media distracts you from your schoolwork or responsibilities?

103 responses

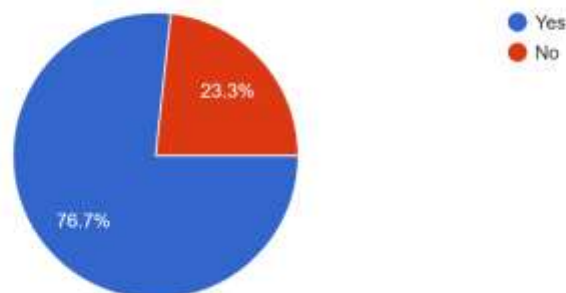


Figure 6: Distractions Caused By Social Media

Post-Detox Feedback Analysis

After the detox process, an additional feedback form was collected from participants to measure real-life behavioural changes, perceived benefits, and willingness to continue reduced digital usage. The feedback form included questions on screen time, emotional changes, usage patterns, and practical detox methods adopted by students.

Survey Questionnaire (Post-Detox)

After participants completed the digital detox period, a second Google Form was used to measure changes in social media behaviour, emotional well-being, and overall effectiveness of detox methods. The following questions were included:

1. What was your average daily screen time (in hours) on social media platforms before starting the detox?
2. What was your primary goal for reducing your social media use/screen time during the detox?
3. During the detox, what was your average daily screen time (in hours) spent on social media platforms?
4. Please rate your agreement with the following statement:
"The social media detox method significantly helped me reduce my overall daily screen time."

5. In which specific parts of the day did you notice the most reduction in social media usage?
6. Did you use any specific device features to enforce your detox?
7. How did you utilize the time saved from reduced screen usage?
8. Now that the detox is over, how confident are you in maintaining your reduced screen time habits?
9. Do you plan to include regular mini-detoxes or permanent screen limits in your daily life?

1. **Change in Screen Time**

Most participants reported a decrease in daily social media usage. Many reduced usage to less than 1–3 hours per day, indicating successful behavior modification during the detox period.

2. **Most Effective Detox Methods**

Students reported using:

- Built-in screen time limits
- Do Not Disturb mode during work or classes
- Uninstalling or temporarily disabling apps
- Turning off notifications
- Practicing offline hobbies

3. **When Students Noticed the Biggest Change**

The highest reduction in mobile usage was observed:

- Immediately after waking up
- During study/lecture hours
- Before sleeping at night

This suggests that detox methods helped reshape high-usage periods of the day.

4. **Use of Time Saved**

Students utilized reclaimed time to:

- Pursue hobbies
- Connect with friends and family offline
- Complete assignments
- Engage in outdoor activities

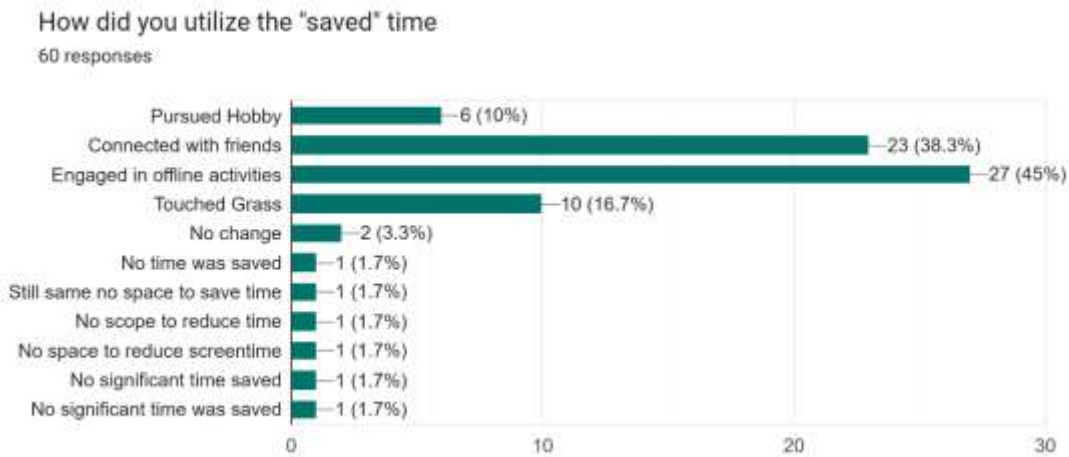


Figure 7: Hobbies Persuaded in the time span of the usage of social media

This demonstrates positive lifestyle shifts.

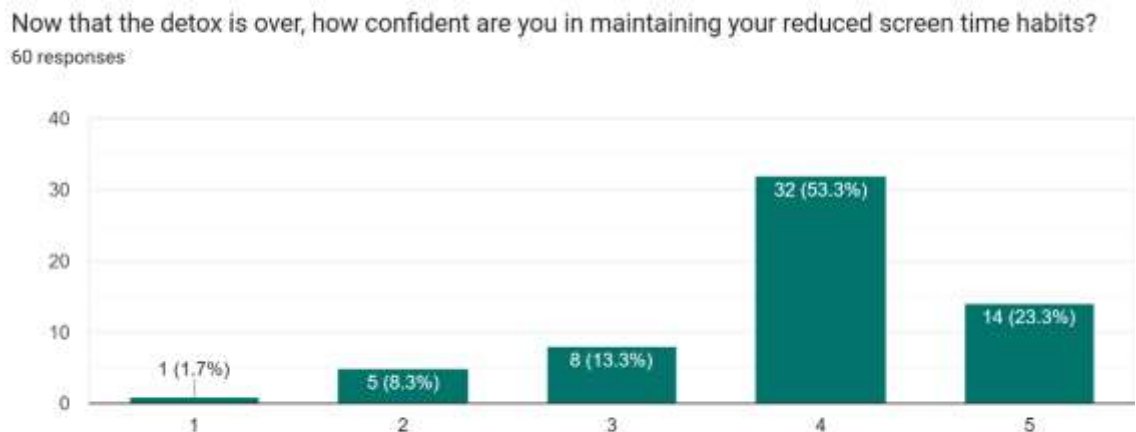


Figure 8: Confidence amongst youth after reducing screen time

5. Confidence in Maintaining Change

Many students expressed moderate to high confidence in maintaining reduced screen time. However, some reported the possibility of relapse, showing that long-term digital discipline needs reinforcement.

6. Future Adoption

A majority of participants showed interest in:

- Continuing reduced usage
- Adding “mini detoxes” weekly
- Maintaining app-based time limits

This indicates that detox has potential as a sustainable digital wellness strategy.

Do you plan to incorporate regular 'mini-detoxes' or other permanent screen time limits into your life?

60 responses

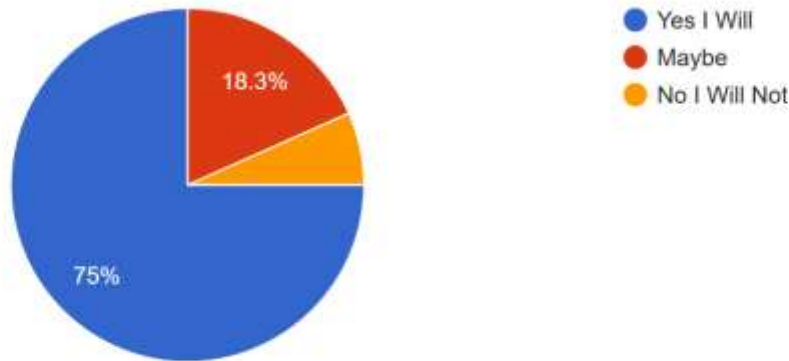


Figure 9: Impact Of Digital Detox

Data Interpretation & Analysis

Observation 1 – High Daily Usage

Most students reported 4–8 hours of daily social media use, especially Instagram and YouTube. This indicates habitual digital dependence rather than intentional usage.

Observation 2 – Mental Fatigue is Real

Participants reported:

- **Overthinking:**
Participants experienced repetitive thoughts and self-comparison after prolonged scrolling. Continuous content exposure increased mental clutter and emotional strain.
- **Reduced concentration:**
Frequent checking habits disrupted study sessions and reduced sustained attention. This directly affected academic focus and productivity.
- **Lack of mental clarity:**
Students reported feeling mentally drained and unfocused after high screen time. Excessive digital stimulation contributed to cognitive overload.

Observation 3 – Detox Helps

Positive benefits included:

- **Better sleep:**
Reduced night-time usage improved sleep quality and morning alertness. Limiting screen exposure supported healthier rest cycles.
- **Improved emotional stability:**

Participants felt calmer and less reactive after reducing comparison-based browsing. Emotional fluctuations decreased during the detox phase.

- **Better productivity:**
Time saved from scrolling was redirected to assignments and hobbies. Students showed improved task completion and time awareness.
- **Reduced anxiety:**
Lower notification exposure reduced stress triggers and comparison pressure. Students reported feeling less socially overwhelmed.

Observation 4 – App Restrictions Work Best

Students using app timers showed:

- **30–70% reduction in usage:**
App-based timers significantly reduced daily screen time compared to self-control alone. Automated blocking minimized impulsive checking behavior.
- **Higher discipline:**
Participants followed digital limits more consistently with enforced restrictions. External controls strengthened behavioral regulation.
- **More consistent improvement:**
Emotional and focus-related benefits were more stable in the app-restricted group. Structured limits produced clearer measurable outcomes.

Observation 5 – Some Rebound

A follow-up showed a slight increase in usage after detox, suggesting that:

- Long-term habits require routine reinforcement.

Discussion Of Findings:-

The pilot confirmed that:

- Overuse is linked to psychological strain
- Students rarely realize usage until measured
- Detox leads to measurable emotional benefits
- External controls (apps) are more effective than willpower
- Digital hygiene is as important as physical hygiene in modern education

8. Limitations Of The Study

This study has certain limitations:

- Small pilot sample size
- Short detox duration (14 days)
- Self-reported data may include response bias
- No advanced statistical testing

Future research with larger samples and longer intervention duration is recommended.

9. Conclusions

Social media has undeniable advantages, but excessive usage negatively affects college students' mental well-being. This research shows that structured digital detox can:

- **Reduce anxiety**
Limiting exposure to notifications and comparison-based content decreased stress and emotional pressure among students. Participants reported feeling calmer and less socially overwhelmed during the detox period.
- **Improve concentration**
Reducing digital interruptions helped students maintain longer attention spans during lectures and study hours. Focus and academic engagement improved when screen time was controlled.
- **Lower mental fatigue**
Decreased screen exposure reduced cognitive overload and mental exhaustion. Students experienced clearer thinking and improved mental freshness after detox.
- **Promote better time management**
Awareness of screen habits encouraged students to reallocate time toward academics, hobbies, and offline interaction. Structured limits improved daily routine discipline.

Effectiveness improves when digital limits are enforced through apps rather than self-control alone. The study encourages students to practice disciplined digital behavior to improve academic and personal health.

Post-detox feedback confirmed that students not only reduced their screen time but also experienced improved focus, emotional stability, and better use of personal time. Many participants expressed willingness to continue weekly or monthly mini-detoxes, showing long-term behavioural impact. This supports the conclusion that structured detox interventions can positively influence digital hygiene among college students.[12]

Impact Of Social Media on Mental Health Of Youth and Reasons Behind it:

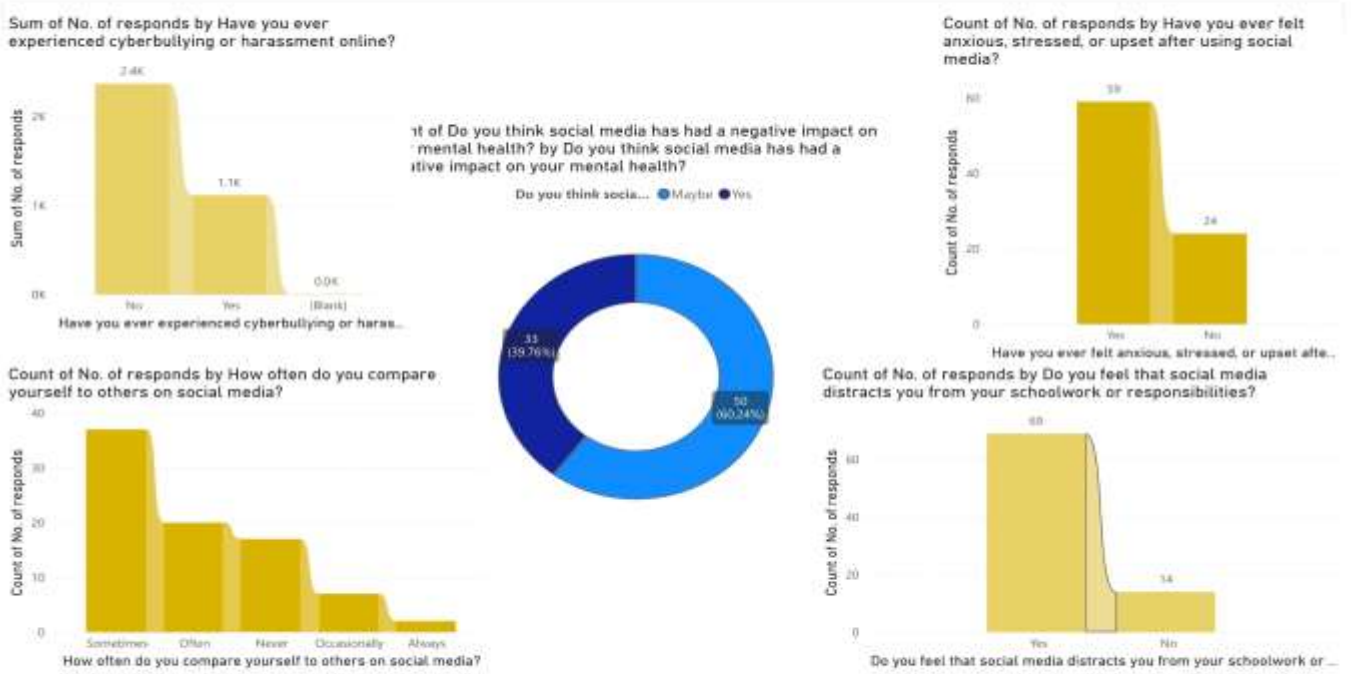


Figure 10: Overall Analysis of Social Media's Impact

Please rate your agreement with the following statement: "The social media detox method significantly helped me reduce my overall daily screen time."

60 responses

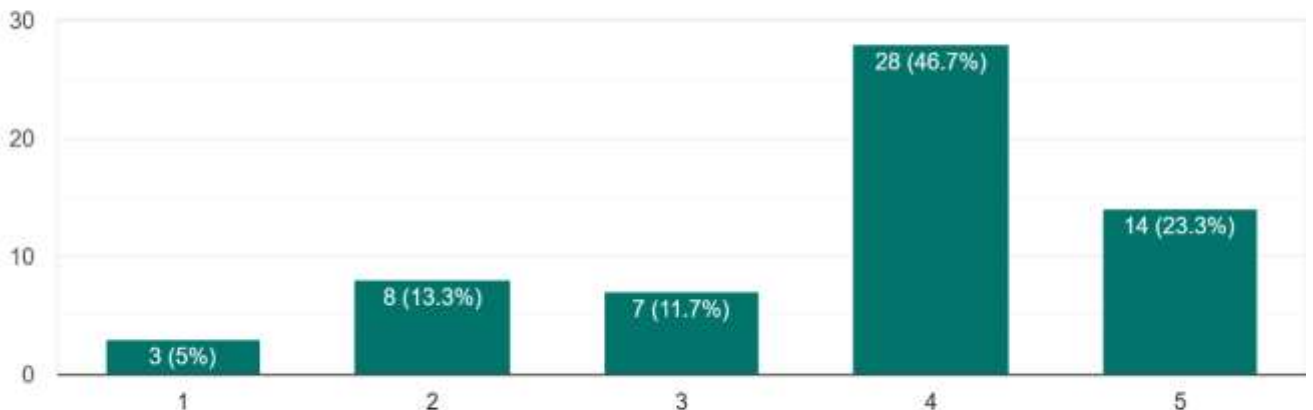


Figure 11: Improvements After Detoxification Method

Recommendations

1. Students should consciously limit screen time.
2. App-based blocking tools should be used when self-control fails.
3. Colleges should introduce digital wellness programs.
4. Students should avoid early-morning mobile checks.
5. Parents and teachers should encourage offline engagement.
6. Long-term studies should be conducted to measure sustained behavior change.

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