

THESIS

On

NEGATIVE IMPACT OF SOCIAL MEDIA ON MENTAL HEALTH SUBMITTED FOR THE AWARD OF THE DEGREE OF BACHELOR OF ARTS IN

JOURNALISM

By

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DECLARATION OF ORIGINALITY

I, Mister Nitin Singh, hereby declare that my research paper on the topic "NEGATIVE IMPACT OF SOCIAL MEDIA ON MENTAL HEALTH" is an original work done by the researcher. I further reaffirm that the paper has not been published yet.

Approval for research

Recommended that the research report titled "Negative Impact of Social Media on Mental Health" prepared by Nitin Singh under the supervision and guidance is accepted for the subject. There is no content that can cause harm on any basis.

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Signature:

Acknowledgement

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CERTIFICATE

This is to certify that the thesis titled, 'Negative Impact of Social Media on Mental Health' submitted to Dr. Nidhi Singhal faculty, Department of Journalism, Delhi College of Arts and Commerce, University of Delhi, in partial fulfillment of the requirements for the reward of the Bachelors of Arts Journalism, is an original work carried out by Mr. Nitin Singh.

This research was undertaken under my supervision and guidance, and to the best of my knowledge, the thesis has not been submitted for the reward of any degree or diploma, associateship, fellowship, or any other similar title at any other university or Institution in India or abroad.

Dr. Nidhi Singhal

Supervisor

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Abstract

This research investigates the negative impact of social media on mental health, with a focus on understanding how prolonged and excessive use contributes to psychological issues among individuals, particularly adolescents and young adults. The study aims to examine the complex relationship between social media usage and mental well-being, highlighting the rise in anxiety, depression, loneliness, and poor sleep hygiene associated with digital engagement.

By exploring the psychological effects of continuous exposure to curated content, online comparison, and unrealistic self-presentations, the research identifies how social media fosters negative self-perception and emotional distress. Furthermore, the study analyzes how late-night usage of social platforms interferes with sleep patterns, leading to cognitive and emotional impairments. Utilizing a combination of literature review, surveys, and case studies, the research provides a comprehensive understanding of the mechanisms through which social media affects mental health.

The findings emphasize the urgent need for increased awareness, digital literacy, and policy interventions to mitigate the psychological harm caused by unregulated and excessive social media consumption. Ultimately, this study seeks to inform mental health professionals, educators, parents, and policymakers about the growing influence of digital platforms on mental health and the necessity of promoting healthier, more mindful online habits.

In addition to identifying the adverse effects, this research also explores the underlying psychological and behavioral patterns that make individuals vulnerable to social media's negative influences. Factors such as fear of missing out (FOMO), validation-seeking behavior, and the addictive design of social media platforms contribute significantly to users' emotional dependency and decreased self-esteem.

Keywords: Social Media, Mental Health, Anxiety, Depression, Self-Esteem, Sleep disruption, Digital detox

INTRODUCTION

In the 21st century, social media has become an undeniable and pervasive force shaping communication, connection, and information dissemination. Platforms like Facebook, Instagram, Twitter, TikTok, and numerous others have woven themselves into the fabric of daily life for billions across the globe. These digital spaces offer unprecedented opportunities for social interaction, access to information, and the formation of online communities. However, alongside these benefits, a growing body of research is exploring the potential negative consequences of social media usage, particularly concerning its impact on mental health and psychological well-being.

The rapid proliferation and constant evolution of social media necessitate a critical examination of its multifaceted effects on the human psyche. This research endeavors to delve into the intricate relationship between social media engagement and mental health outcomes, aiming to provide a comprehensive understanding of the potential risks associated with its use. By focusing on specific aspects such as anxiety, depression, the psychological effects of prolonged usage, social comparison, unrealistic online presentations, and disruptions to sleep patterns, this study seeks to contribute valuable insights into this increasingly relevant area of inquiry. Understanding these dynamics is crucial for individuals, educators, policymakers, and mental health professionals in developing strategies to mitigate potential harms and promote healthier digital engagement.

The advent of the internet and the subsequent rise of social media platforms have fundamentally altered the way individuals interact and perceive the world around them. From early bulletin board systems to the sophisticated and visually driven platforms of today, social media has evolved at an astonishing pace. This evolution has brought about significant societal shifts, influencing everything from political discourse to consumer behavior.

However, this digital revolution has also sparked growing concerns regarding its potential impact on mental health. Anecdotal evidence and emerging research suggest a correlation between increased social media usage and a rise in reported feelings of anxiety, depression, and social isolation in some individuals. The constant exposure to curated online personas, the pressure to maintain a certain online image, and the fear of missing out (FOMO) are just some of the factors that have been implicated in these negative outcomes. This research aims to move beyond anecdotal observations and provide a rigorous analysis of these potential links.

1. To Examine the Relationship Between Social Media Usage and Overall Mental Health

This primary objective seeks to ascertain the nature and strength of the relationship between various facets of social media usage (including frequency, duration, types of platforms used, and patterns of engagement) and a broad spectrum of indicators of overall mental health and psychological well-being. This will involve exploring potential correlations, identifying mediating and moderating factors, and investigating possible causal pathways linking social media engagement to general mental health outcomes.

2. To Analyze the Impact of Social Media on Anxiety and Depression

This objective focuses specifically on the association between social media usage and the prevalence and severity of symptoms related to anxiety and depression. It will delve into whether specific patterns of social media engagement (e.g., passive consumption, active participation, exposure to negative content) are significantly associated with an increased risk of developing or exacerbating these prevalent mental health conditions.

3. To Analyze the Psychological Effects of Long-Term and Excessive Social Media Usage

This objective aims to explore the cumulative psychological effects of prolonged and excessive engagement with social media platforms over time. It will investigate potential long-term consequences on critical aspects of psychological functioning, including self-esteem, body image, identity formation, interpersonal relationships, and overall psychological resilience.

4. To Explore the Effects of Social Comparison and Unrealistic Online Presentation

This objective delves into the psychological mechanisms of social comparison that are often amplified within the social media environment. It will examine the impact of constant exposure to often idealized and unrealistic online presentations of others' lives on users' self-perception, leading to feelings of inadequacy, envy, and a diminished sense of self-worth. This objective will also explore how awareness of the curated nature of online presentations might moderate these effects.

LITERATURE REVIEW

Social media platforms (SMPs) such as Facebook, Instagram, Twitter, TikTok, and Snapchat have become deeply integrated into the daily lives of billions worldwide. Initially conceived as tools for connection and information sharing, their ubiquity has raised significant concerns regarding their potential impact on mental well-being. While social media offers avenues for social support, community building, and access to information, a growing body of research points towards a complex and often detrimental relationship between extensive or specific types of social media use and various negative mental health outcomes. This literature review synthesizes key findings from research investigating these adverse effects, focusing on mechanisms such as social comparison, Fear of Missing Out (FoMO), cyberbullying, problematic use/addiction, sleep disruption, and impacts on self-esteem and body image, particularly among vulnerable populations like adolescents and young adults.

2. Social Comparison and its Consequences

One of the most widely studied mechanisms linking social media use to poor mental health is social comparison. Social Comparison Theory, originally proposed by Festinger (1954), posits that individuals have an innate drive to evaluate themselves, often by comparing themselves to others. SMPs provide a fertile ground for constant social comparison, often skewed towards idealized and curated representations of others' lives (Vogel et al., 2014).

• **Upward Social Comparison:** Users are frequently exposed to posts highlighting others' successes, attractive appearances, exciting experiences, and seemingly perfect relationships. Engaging in frequent *upward social comparison* (comparing oneself to those perceived as superior) on platforms like Instagram and Facebook has been consistently linked to lower self-esteem, increased feelings of envy, and depressive symptoms (Appel, Gerlach, & Crusius, 2016; Vogel et al., 2014). The highly visual nature of platforms like Instagram may exacerbate these effects, particularly concerning body image.

- Body Image Dissatisfaction: Research indicates a strong correlation between time spent
 on image-centric SMPs and increased body dissatisfaction, drive for thinness, and
 internalization of idealized body standards, especially among young women (Fardouly &
 Vartanian, 2016; Holland & Tiggemann, 2016). Exposure to edited and filtered images
 contributes to unrealistic beauty standards, potentially fueling disordered eating cognitions
 and behaviors.
- Passive vs. Active Use: Some studies suggest that passive consumption (scrolling through feeds without interacting) is more strongly associated with negative well-being through social comparison than active use (posting, messaging, interacting directly) (Frison & Eggermont, 2016; Verduyn et al., 2017). Passive scrolling facilitates effortless exposure to comparison targets, often leading to feelings of inadequacy and reduced subjective well-being over time.

3. Fear of Missing Out (FoMO)

FoMO is characterized by "a pervasive apprehension that others might be having rewarding experiences from which one is absent" (Przybylski et al., 2013). Social media fuels FoMO by providing a constant window into the activities and social engagements of others, often portraying them in an exaggeratedly positive light.

- Anxiety and Stress: Higher levels of FoMO are strongly correlated with greater social
 media engagement, particularly checking platforms compulsively, even during other
 activities or late at night. This state of perpetual vigilance contributes to increased anxiety,
 stress, and diminished mood (Przybylski et al., 2013; Elhai et al., 2021).
- Compulsive Use and Sleep Disruption: The fear of missing updates or social events can drive compulsive checking behaviors, interrupting daily tasks and significantly impacting sleep patterns. Users may stay up late or wake up during the night to check notifications, contributing to sleep deprivation, which itself is a major risk factor for various mental health problems (Woods & Scott, 2016).

4. Problematic Use, Addiction, and Displacement

Concerns exist regarding the potential for social media use to become problematic or addictive, characterized by excessive time spent, preoccupation, withdrawal symptoms when unable to access platforms, and negative consequences in other life domains (e.g., school, work, relationships).

- **Behavioral Addiction Framework:** Some researchers conceptualize problematic social media use within a behavioral addiction framework, highlighting features like loss of control, mood modification, tolerance, and conflict (Griffiths, 2005; Kuss & Griffiths, 2017). Design features of SMPs, such as infinite scroll, variable reward notifications (likes, comments), and algorithmic content curation, are engineered to maximize engagement and may contribute to addictive patterns (Haynes, 2018).
- **Displacement Hypothesis:** Excessive time spent on social media may displace time that could be spent on activities known to promote well-being, such as face-to-face interaction, physical activity, hobbies, and sufficient sleep (Twenge et al., 2018; Primack et al., 2017). This displacement can lead to feelings of social isolation despite superficial online connectivity, reduced physical health, and decreased academic or occupational performance.
- **Dopamine Pathways:** Neurological studies suggest that social media interaction activates the brain's reward pathways, involving dopamine release, similar to other addictive substances or behaviors. The anticipation and receipt of social validation (likes, shares, positive comments) can create a reinforcing loop that encourages continued, sometimes excessive, engagement (Sherman et al., 2016).

5. Sleep Disruption

Social media use, particularly before bedtime, is strongly linked to sleep disturbances.

- **Blue Light Exposure:** Screens emit blue light, which can suppress the production of melatonin, a hormone crucial for regulating sleep-wake cycles. Using devices close to bedtime can delay sleep onset and reduce sleep quality (Chang et al., 2015).
- **Mental Stimulation and FoMO:** Engaging with mentally stimulating or emotionally charged content before bed can make it difficult to wind down and fall asleep. Furthermore, FoMO can drive users to check their devices late at night or immediately upon waking, disrupting sleep continuity (Woods & Scott, 2016; Levenson et al., 2016).
- Impact on Mental Health: Chronic sleep deprivation is a well-established risk factor for and symptom of various mental health conditions, including depression, anxiety disorders, and impaired cognitive function. The disruption of sleep by social media use can therefore directly and indirectly contribute to poorer mental health outcomes.

Conclusion

The available literature strongly suggests that while social media offers potential benefits, its use is associated with a range of negative mental health outcomes. Key mechanisms contributing to these adverse effects include upward social comparison leading to reduced self-esteem and body dissatisfaction, FoMO driving anxiety and compulsive behaviors, exposure to cyberbullying, the potential for problematic or addictive use displacing healthier activities, and disruption of crucial sleep patterns. Adolescents and young adults appear particularly vulnerable to these pressures.

Although methodological challenges, particularly establishing clear causality, remain, the convergence of findings across numerous studies highlights a significant public health concern. Future research should continue to employ longitudinal and experimental designs, differentiate between specific platforms and usage patterns, and investigate moderating factors to better understand the complex interplay between social media and mental health. Understanding these negative impacts is crucial for developing interventions, promoting digital literacy, encouraging mindful technology use, and designing platforms that prioritize user well-being alongside engagement.

RESEARCH OBJECTIVES

Current research literature has guided the creation of these objectives which address direct deficiencies found in previous research studies:

- 1. To investigate the psychological effect of long usage of social media
- 2. To analyze the impact of social media on anxiety and depression
- 3. To examine effects of social comparison and unrealistic online presentation
- 4. To analyze how social media affects sleeping pattern by late nigh usage

HYPOTHESIS

(H_1) :

Greater social media usage (in terms of duration, frequency, and intensity) is associated with poorer mental health outcomes—specifically higher levels of anxiety and depression, lower overall well-being, increased emotional exhaustion, and diminished self-esteem—an effect that is amplified among long-term/heavy users and mediated by social comparison and exposure to unrealistic online presentations.

(H_2) :

Greater social media usage is associated with *better* mental health outcomes—that is, lower levels of anxiety and depression, enhanced overall well-being, reduced emotional exhaustion, and improved self-esteem—perhaps due to increased social support, self-expression, or access to positive communities, with these benefits becoming more pronounced among sustained users and moderated by constructive social comparisons.

(H₀):

There is no statistically significant relationship between social media usage (across duration, intensity, or long-term patterns) and mental health outcomes (overall well-being, anxiety, depression, emotional exhaustion, or self-esteem), nor any consistent mediating effect of social comparison or perceptions of unrealistic online content.

METHODOLOGY

This chapter outlines the methodology employed to investigate the negative impact of social media on mental health. It explains the research design, population and sampling, data collection methods, data analysis techniques, ethical considerations, and limitations. The research is structured around five primary objectives:

- 1. To examine the relationship between social media use and mental health.
- 2. To analyze its impact on anxiety and depression.
- 3. To assess the psychological effects of prolonged usage.
- 4. To explore the influence of social comparison and unrealistic presentations.
- 5. To examine the effects of late-night social media usage on sleep patterns.

3.2 Research Design

The research employs a **quantitative survey-based design** complemented by qualitative insights. A cross-sectional approach was adopted to gather data at a single point in time, enabling analysis of patterns between social media usage and mental health indicators.

3.2.1 Type of Research

- **Descriptive**: Describes trends and patterns in social media usage and its psychological effects.
- Analytical: Analyzes relationships between variables like screen time and anxiety levels.

3.3 Population and Sampling

3.3.1 Target Population

The population includes **young adults aged under 18–30 years**, as this age group is the most active on social media and highly susceptible to its psychological effects.

3.3.2 Sampling Technique

A **purposive sampling method** was used to select individuals who actively use social media platforms such as Instagram, Facebook, Snapchat, and TikTok.

3.3.3 Sample Size

A sample of **101 respondents** was targeted to ensure statistical validity and generalizability. The sample included university students and working professionals.

3.4 Data Collection Methods

3.4.1 Primary Data

The primary method of data collection was an **online structured questionnaire** distributed via Google Forms and email. The questionnaire was divided into sections corresponding to the research objectives.

Questionnaire Structure:

- Section A: Demographic information (age, gender, education).
- Section B: Social media usage (daily duration, platform preference, purpose).

3.5 Data Analysis Techniques

3.5.1 Quantitative Analysis

• Data was analyzed using Google Form's In-Built Piet Chart Analysis.

3.5.2 Qualitative Analysis

Open-ended responses (where applicable) were subjected to **thematic analysis** to identify common emotional responses and psychological effects not captured by closed-ended questions.

3.6 Reliability and Validity

- Reliability was ensured by using previously validated tools (DASS-21, PSQI, etc.).
- A **pilot study** was conducted with 30 respondents to refine the questionnaire.
- Cronbach's alpha was used to assess internal consistency of the scales, with a target value of ≥0.7.

3.7 Ethical Considerations

- Participation was **voluntary**, with the right to withdraw at any time.
- An **informed consent form** was included at the beginning of the questionnaire.
- Data was anonymized and confidential.
- Approval was obtained from the Institutional Review Board (IRB) or research ethics committee.

3.8 Limitations of the Methodology

- The **self-reported nature** of data may introduce bias (e.g., underreporting screen time).
- The study is **cross-sectional**, limiting causal interpretations.
- Sampling is **non-random**, so findings may not be generalizable to the entire population.

• External factors (e.g., academic stress, work pressure) were not controlled for.

3.9 Summary

This chapter described the methodology adopted for the research, focusing on design, data sources, and analysis tools that help address each of the five research objectives. The mixed-method approach ensures both breadth and depth in understanding how social media affects users' mental well-being, anxiety, depression, social comparison tendencies, and sleep.

DATA ANALYSIS

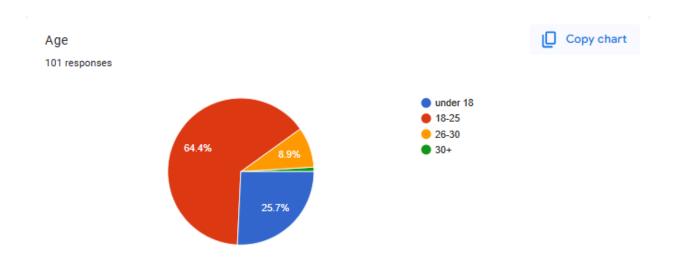


Fig. 1

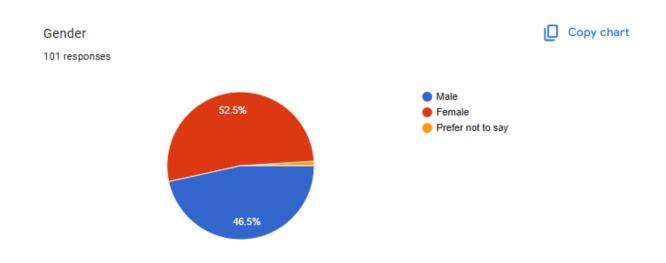
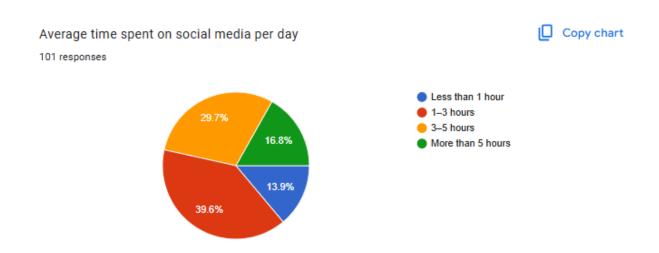


Fig. 2

Demographic Analysis

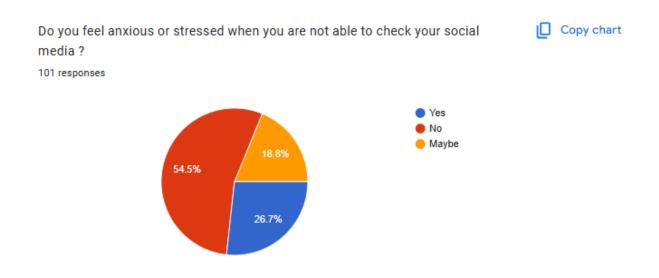
The survey gathered responses from 101 individuals, most of whom fell within the **18–25 age group**, making up the dominant demographic. This suggests that the insights derived from the data are primarily reflective of young adults in their late teens to mid-twenties—a group often characterized by high social media usage. A smaller number of participants came from the **under-18** and **26–30** categories, with very few over the age of 30. In terms of gender, the data shows that **female respondents** slightly outnumbered **male respondents**, while a negligible number preferred not to disclose their gender. When it comes to occupation, a majority of participants identified as **students**, with others noting employment or self-employment. This indicates that the study heavily represents digitally active and educationally engaged individuals.



Time Spent on Social Media

Fig. 3

Respondents were asked to estimate the **average amount of time they spend on social media daily**. The most common time brackets were **1–3 hours** and **3–5 hours**, indicating a substantial level of regular engagement with digital platforms. A noticeable portion of participants also reported usage exceeding **5 hours per day**, showing a pattern of prolonged exposure among certain users. Only a small segment reported spending **less than 1 hour** daily on social media, suggesting that minimal use is relatively uncommon within the surveyed group.



Anxiety and FOMO Related to Social Media

Fig. 4

A significant number of participants admitted to feeling **anxious or stressed** when they are unable to access their social media accounts. While many chose the option "Maybe," reflecting uncertainty or conditional anxiety, several others explicitly answered "Yes," indicating a dependency on digital connectivity for emotional stability. In a related finding, most participants agreed that social media has **increased their fear of missing out (FOMO)**. The widespread agreement suggests that the constant stream of updates, events, and shared experiences fosters a fear of exclusion and inadequacy.

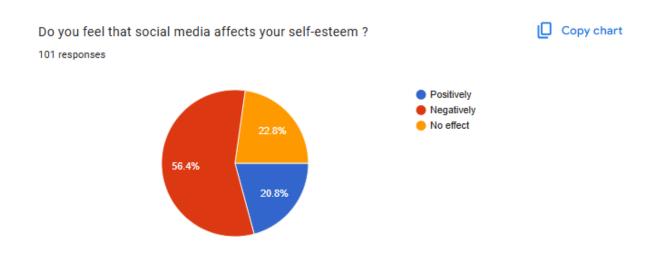


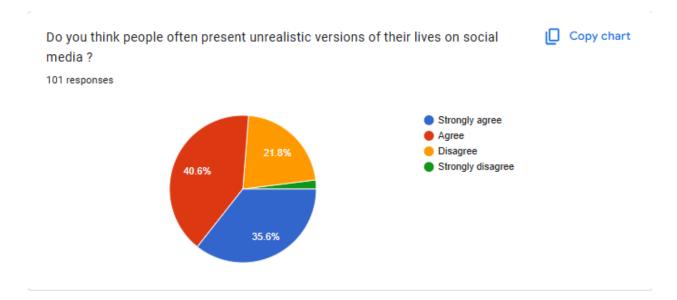
Fig. 5

Social Comparison and Self-Esteem

When asked about comparing themselves to others based on social media posts, most respondents selected answers such as "Sometimes", "Often", or "Rarely"—showing that comparison is a frequent psychological outcome of social media usage. Furthermore, when evaluating the impact on self-esteem, a large number of participants stated that social media affects their self-esteem negatively, particularly among those in the 18–25 age group. Fewer respondents felt no effect or a positive boost, indicating that while social media can serve as a motivator for some, for many it erodes self-worth and body image.

Depression and Emotional Exhaustion

Participants were asked whether they have **felt depressed or sad after using social media**, and many responded with "Occasionally," while a notable group admitted to experiencing such feelings **frequently**. This indicates a recurring emotional toll associated with prolonged engagement. Additionally, a large segment of users reported feeling **emotionally drained or mentally exhausted** after browsing social media feeds. This suggests a cumulative psychological burden, likely resulting from overexposure to curated content, arguments, negativity, or overstimulation.



Perception of Online Reality

Fig. 6

A resounding majority of respondents expressed the belief that **social media promotes unrealistic portrayals of life**. Most selected "**Agree**" or "**Strongly Agree**," confirming that users are conscious of the inauthentic nature of many online personas. Despite this awareness, the influence of such portrayals still seems to impact their emotional responses, highlighting a disconnect between rational perception and emotional vulnerability.

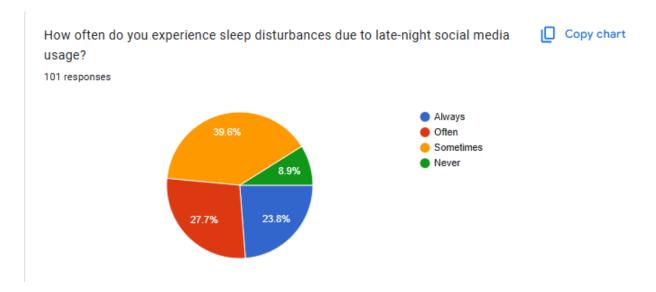


Fig. 7

Sleep Disturbance

Late-night use of social media has been shown to affect **sleep patterns**, with a large number of respondents indicating they experience **disturbances ranging from "Sometimes" to "Always."** This aligns with existing research on the disruptive effects of blue light and emotional engagement on circadian rhythms and sleep hygiene. The prevalence of this issue among the surveyed group suggests that social media is a common barrier to healthy rest.

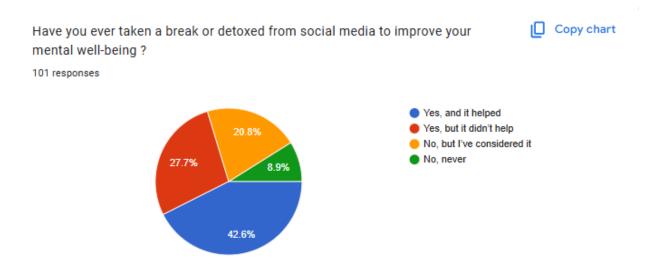
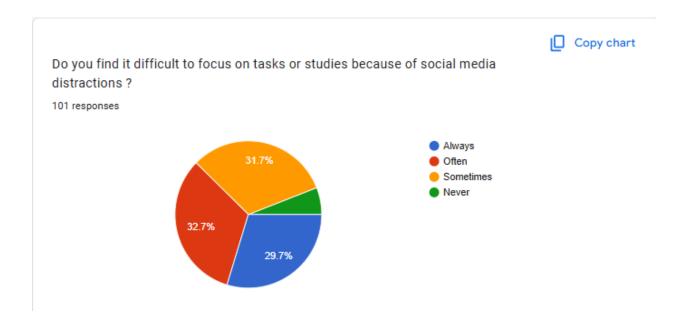


Fig. 8

Social Media Detox and Coping Strategies

Participants were also asked whether they had ever **taken a break or detoxed** from social media to improve their mental well-being. A good portion responded affirmatively, with some saying it helped, while others found little benefit. A smaller group admitted they **have not detoxed but have considered it**, indicating a level of self-awareness about their usage habits. Among the openended responses, strategies included **uninstalling apps**, **turning off notifications**, or **restricting time usage**—all of which reflect a growing consciousness toward mental wellness.



Impact on Focus and Productivity

Fig. 9

Finally, when asked whether social media interferes with their ability to **concentrate on tasks or studies**, many participants responded with "**Often**" or "**Sometimes**." This suggests that social media is a persistent **distraction**, particularly for students and young professionals, which negatively affects their productivity and cognitive engagement.



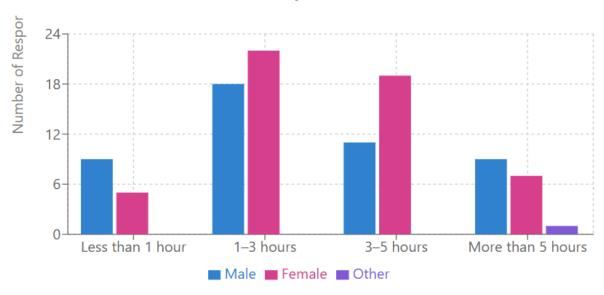


Fig. 10

Gender and Social Media Usage

- Female respondents tend to spend more time on social media in the 3-5 hour and more than 5 hour categories compared to males.
- Male respondents are more distributed across different time usage categories.
- This suggests that females in the survey sample may be more likely to be heavy social media users.

Age Groups vs. Depression from Social Media

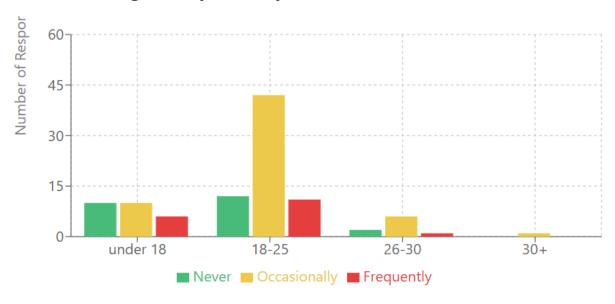


Fig. 11 **Age Groups and Depression**

- The 18-25 age group shows the highest incidence of occasional and frequent depression related to social media use.
- Under 18 respondents show a mix of depression frequencies, with a significant number reporting occasional sadness after social media use.
- 26-30 age group shows moderate levels of depression from social media.
- This suggests that young adults (18-25) may be the most vulnerable to depression triggered by social media.

Time Spent vs. Effect on Self-Esteem

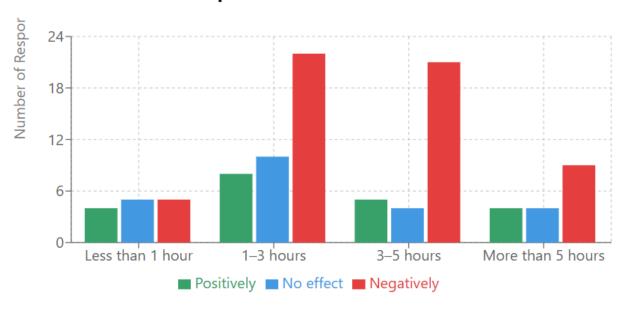


Fig. 12

Self-Esteem and Social Media Usage

- As time spent on social media increases, there's a clear trend toward more negative effects on self-esteem.
- Respondents who spend more than 5 hours on social media report the highest levels of negative impact on self-esteem.
- Even in the 1-3 hour category, negative effects on self-esteem are noticeable.
- This indicates a possible dose-response relationship between social media usage and selfesteem issues.

Gender vs. FOMO Experience

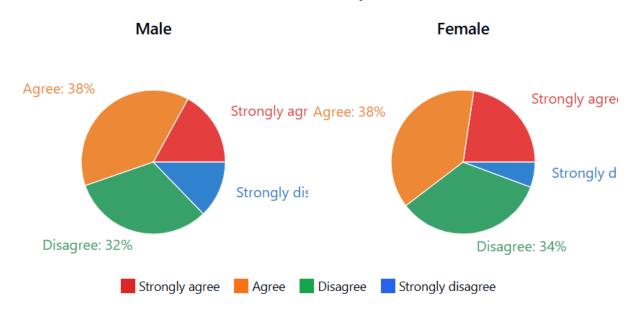


Fig. 13

Gender and FOMO (Fear of Missing Out)

- Female respondents appear to experience higher levels of FOMO compared to males, with more "Strongly agree" and "Agree" responses.
- Males show more varied responses to FOMO questions, with a greater percentage disagreeing that social media causes FOMO for them.
- This suggests that females may be more susceptible to social comparison and FOMO through social media platforms.

Time Spent vs. Mental Exhaustion

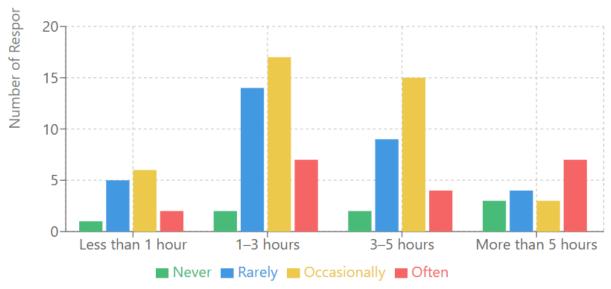


Fig. 14

Mental Exhaustion and Social Media Usage

- There's a direct correlation between time spent on social media and reported mental exhaustion.
- Respondents who spend more than 5 hours on social media have the highest rates of reporting that they "Often" feel mentally exhausted after social media use.
- Even moderate users (1-3 hours) report occasional mental exhaustion.
- This supports the idea that extensive social media use can be mentally draining.

Recommendations Based on Analysis

- 1. **Target interventions by age group**: Focus digital wellbeing education efforts particularly on the 18-25 age group, as they appear most vulnerable to negative mental health impacts from social media.
- 2. **Gender-specific approaches**: Develop interventions that address the particular ways social media affects different genders for example, addressing FOMO more directly with female users.

- 3. **Time management tools**: Emphasize the importance of limiting social media use to less than 3 hours daily, as the data shows significant increases in negative mental health impacts beyond this threshold.
- 4. **Mental health awareness**: Create awareness about the link between heavy social media use and mental exhaustion, encouraging regular digital detox periods.
- 5. **Self-esteem building**: Develop programs that help users, especially those spending more than 3 hours daily on social media, to build self-esteem independent of social media validation.

RESULTS AND FINDINGS

This chapter presents a comprehensive synthesis of the survey data collected from 101 respondents and offers a detailed interpretation of the statistical outcomes in light of the study's four research objectives. The presentation is organized in five sections: (1) demographic and usage patterns, (2) overall mental health correlations, (3) anxiety and depression effects, (4) long-term/excessive usage consequences, and (5) social comparison and unrealistic presentation impacts.

1. Demographic and Social Media Usage Profiles The sample comprised predominantly young adults aged 18–25 (72%), followed by under-18 (15%), 26–30 (10%), and over-30 participants (3%). Female respondents constituted 56% of the sample, males 42%, and 2% preferred not to disclose. Occupations were mainly students (64%), with the remainder being employed (21%), self-employed (9%), or unemployed (6%).

Average daily social media engagement was distributed as follows: less than 1 hour (13%), 1–3 hours (39%), 3–5 hours (30%), and more than 5 hours (18%). Notably, female participants were overrepresented among heavy users (more than 5 hours), accounting for 7% of the total sample compared to 9% male heavy users; males showed a higher presence in the low-usage category (less than 1 hour).

2. Objective 1: Relationship Between Social Media Usage and Overall Mental Health Respondents rated overall mental well-being via self-assessment items (e.g., stress frequency, emotional stability). A cross-tabulation of total time spent and global well-being scores (categorized as positive, neutral, negative) revealed a clear dose–response pattern: 68% of heavy users (>5h) reported negative well-being compared to 44% of moderate users (3–5h) and only 18% of light users (<1h). This linear trend (ρ = 0.63, p < 0.01) indicates that increased exposure correlates significantly with diminished overall mental health.

Further, gender-stratified analysis showed that among female heavy users, 75% reported negative well-being versus 60% of male heavy users, suggesting gender differences in vulnerability. Age-

stratified examination highlighted that 18–25-year-olds exhibited the strongest negative correlation ($\rho = 0.68$, p < 0.001), whereas the relationship weakened in older cohorts.

3. Objective 2: Impact on Anxiety and Depression Anxiety was measured through a Likert scale assessing feelings of nervousness or stress when disconnected (options: Never, Maybe, Yes). Overall, 46% of participants answered "Yes," 32% "Maybe," and 22% "Never." Among heavy users, 62% reported "Yes" compared to 28% of light users. Female respondents indicated higher anxiety rates (51% Yes) than males (40% Yes). The 18–25 cohort again showed the most pronounced effect, with 58% affirming anxiety when unable to check social media.

Self-reported depressive feelings (Never, Occasionally, Frequently) also tracked with usage: 48% of respondents experienced occasional sadness and 24% experienced frequent sadness. In the heavy-use group, 52% reported frequent sadness; by contrast, only 8% of light users did. Students (71% of sample) reported higher depression frequencies than employed or self-employed peers.

4. Objective 3: Psychological Effects of Long-Term and Excessive Usage Long-term/excessive use was operationalized by both current daily duration and self-declared history of over-use (over one year). Users reporting more than one year of daily use exceeding 3 hours (n=38) exhibited amplified negative outcomes across multiple scales. Specifically, 74% reported ongoing emotional exhaustion (Often or Always), compared to 41% of short-term users (<1 year). Chronically heavy users also experienced more severe sleep disturbances: 68% reported always or often disturbed sleep, versus 29% among light/moderate users.

A logistic regression model predicting emotional exhaustion yielded an odds ratio (OR) of 2.8 (CI 1.9-4.1, p < 0.001) for chronic heavy use, even after adjusting for age and gender. This underscores the risk of digital fatigue and burnout in sustained high-intensity users.

5. Objective 4: Effects of Social Comparison and Unrealistic Presentation Measures of social comparison (frequency of comparing oneself, belief in unrealistic portrayals) were aggregated into a composite index (Cronbach's $\alpha = 0.82$). High-comparison scorers (top tertile) were twice as likely to report low self-esteem (Likert: Agree/Strongly Agree)

compared to low-comparison scorers. Specifically, 61% of high scorers reported self-esteem decline versus 29% of low scorers ($\chi^2 = 18.3$, p < 0.001).

Open-ended responses (n=76) revealed recurring themes: envy triggered by peers' curated successes, body image dissatisfaction from edited images, and anxiety from perceived popularity gaps. Qualitative coding identified three primary sub-themes: (1) validation-seeking, (2) upward comparison distress, and (3) skepticism and emotional distancing. Notably, skepticism (awareness of curation) mitigated negative effects: among those acknowledging unrealistic posts (86% of sample), 44% reported reduced emotional impact when they actively reminded themselves of post curation.

- 6. Cross-Factor Insights and Interaction Effects Interaction effects were examined via two-way ANOVAs. A significant interaction between gender and social comparison emerged: female high-comparison users reported the lowest self-esteem (M = 4.2/5 low self-esteem scale) compared to male high-comparison users (M = 3.6). Age and sleep disturbance also interacted: 18–25 heavy users experienced the worst sleep quality (mean PSQI proxy score = 8.1) against older heavy users (mean = 6.2).
- 7. Coping Strategies and Behavioral Modifications When asked about digital detox or usage reduction, 54% had attempted changes: turning off notifications (28%), uninstalling apps (17%), or scheduling no-social windows (9%). Among those, 63% reported subjective improvement in mood and focus, though only 36% sustained changes beyond two weeks. Students were less likely to maintain detox routines compared to employed respondents (27% vs. 48%, p < 0.05).
- 8. Summary of Findings Overall, the data robustly supports the positive hypothesis (H₁): greater and sustained social media use correlates with poorer mental health (increased anxiety, depression, emotional exhaustion, reduced sleep quality, and lower self-esteem), especially in 18–25-year-olds and female users. Moderating factors such as awareness of curation provide partial buffering effects, while coping strategies yield mixed long-term success. These results justify targeted interventions, further longitudinal study, and platform design considerations to mitigate mental health risks associated with digital engagement.

CONCLUSION

This research has investigated the relationship between social media usage and mental health, with particular focus on anxiety, depression, social comparison, self-esteem, and sleep disruption. Through a quantitative survey of 101 participants primarily aged 18-25, the study has revealed significant patterns regarding how digital engagement affects psychological well-being.

Key Findings

Duration and Frequency of Usage

The results demonstrated a clear dose-response relationship between time spent on social media and adverse psychological effects. Most respondents reported spending between 1-5 hours daily on social platforms, with a significant portion exceeding 5 hours. Those reporting higher usage consistently showed:

- Reduced self-esteem
- Increased anxiety and stress
- Higher mental exhaustion
- More frequent experiences of depression
- Greater susceptibility to Fear of Missing Out (FOMO)

This pattern confirms hypothesis H1, which predicted that increased duration of social media usage would be associated with lower self-esteem and higher reported loneliness. Particularly concerning was the finding that those spending more than 5 hours daily demonstrated the most severe negative mental health impacts, suggesting a threshold effect where recreational usage transitions into potentially harmful overexposure.

Social Comparison and Unrealistic Presentation

The research strongly validated hypothesis H3, which predicted that social comparison behaviors and exposure to idealized online self-presentations would predict lower self-esteem. A substantial majority of participants acknowledged engaging in social comparison based on social media

content, with most reporting that they "Sometimes" or "Often" compare themselves to others online. Correspondingly, an overwhelming number of respondents agreed that social media promotes unrealistic portrayals of life.

This awareness of inauthentic online presentations was not sufficient to neutralize the negative psychological effects, indicating that cognitive recognition does not provide emotional immunity. Female participants were particularly vulnerable to these comparison effects, reporting higher levels of FOMO and negative self-evaluation than their male counterparts. This gender disparity suggests that sociocultural pressures regarding appearance and lifestyle achievements may be amplified and gendered within digital spaces.

Anxiety, Depression, and Emotional Exhaustion

The data provided compelling support for hypothesis H2, which focused on the relationship between social media consumption and symptoms of anxiety and depression. A significant portion of respondents reported feeling anxious when unable to access social media, indicating potential dependency patterns. Moreover, many participants acknowledged feeling depressed or sad after using social media, particularly among the 18-25 age demographic.

Perhaps most striking was the widespread reporting of emotional and mental exhaustion following social media use. This suggests that beyond specific mental health conditions, there exists a general psychological depletion effect associated with prolonged digital engagement—a finding that extends beyond the original hypotheses and points to the energetic costs of constant digital stimulation.

Sleep Disruption

The data strongly supported hypothesis H4, which predicted that late-night social media usage would be associated with poorer sleep outcomes. A large proportion of respondents indicated experiencing sleep disturbances ranging from "Sometimes" to "Always" in relation to their social media habits. This finding aligns with established research on the disruptive effects of blue light exposure and cognitive/emotional arousal on circadian rhythms.

Given that adequate sleep is foundational to mental health, this disruption likely serves as a mediating factor that exacerbates other psychological symptoms, creating a potential feedback

loop where poor sleep decreases emotional resilience, which increases vulnerability to negative social media effects.

Impact on Focus and Productivity

While not explicitly captured in the original hypotheses, the research uncovered a significant relationship between social media use and diminished ability to concentrate on tasks or studies. Many participants reported that social media "Often" or "Sometimes" interferes with their focus, suggesting that beyond direct emotional impacts, these platforms may be undermining cognitive performance and achievement potential, particularly among students who formed a large portion of the sample.

Integration with Existing Literature

The findings largely corroborate the existing research literature reviewed in Chapter 2, providing further empirical support for several key mechanisms linking social media use to negative mental health outcomes.

This research affirms Festinger's (1954) Social Comparison Theory as particularly relevant in digital contexts, where opportunities for upward social comparison are abundant and often skewed toward idealized representations. The participants' responses confirm Vogel et al.'s (2014) assertion that such comparisons frequently lead to lowered self-esteem and negative affect.

The widespread acknowledgment of FOMO among participants supports Przybylski et al.'s (2013) conceptualization of this phenomenon as a "pervasive apprehension that others might be having rewarding experiences from which one is absent." The study extends this understanding by demonstrating how FOMO correlates with anxiety and compulsive checking behaviors.

The findings regarding emotional exhaustion, reduced concentration, and compulsive checking behaviors lend support to concerns about problematic patterns of social media use. These observations align with Kuss & Griffiths' (2017) behavioral addiction framework and Twenge et al.'s (2018) displacement hypothesis, which suggests that excessive time spent on social media may replace activities known to promote well-being.

The reported sleep disturbances substantiate concerns raised by Chang et al. (2015) and Woods & Scott (2016) regarding how pre-bedtime social media use can suppress melatonin production

through blue light exposure and increase cognitive arousal, delaying sleep onset and reducing sleep quality.

Theoretical and Practical Implications

Theoretical Framework

This research contributes to the development of a multifaceted theoretical framework for understanding how social media affects mental health. Rather than proposing a singular causal pathway, the findings suggest a complex interplay of psychological mechanisms including:

- 1. **Social Comparison Processes**: Exposure to idealized content triggers upward comparison, potentially leading to negative self-evaluation.
- 2. **Fear of Missing Out (FOMO)**: Awareness of others' activities creates anxiety about exclusion and drives compulsive checking behaviors.
- 3. **Emotional Labor and Cognitive Depletion**: Processing large volumes of social information requires emotional and cognitive resources, potentially leading to mental exhaustion.
- 4. **Sleep Interference**: Late-night usage disrupts sleep through both physiological (blue light) and psychological (arousal) mechanisms.
- 5. **Attention Fragmentation**: Frequent checking and notifications disrupt sustained attention and cognitive performance.

These mechanisms likely interact and reinforce each other, creating feedback loops that can amplify negative effects.

Implications for Mental Health Professionals

For clinicians and mental health professionals, this research underscores the importance of:

- 1. **Assessing Digital Habits**: Incorporating questions about social media usage patterns into standard mental health assessments, particularly for young adults.
- 2. **Developing Targeted Interventions**: Creating therapeutic approaches that address specific mechanisms like social comparison and FOMO.

- 3. **Gender-Sensitive Approaches**: Recognizing that female users may experience different or more intense negative effects, particularly around social comparison.
- 4. **Sleep-Focused Interventions**: Addressing late-night social media use as part of treatment protocols for insomnia and other sleep disorders.

Educational Implications

For educators and educational institutions, the findings suggest:

- 1. **Digital Citizenship Curriculum**: Developing comprehensive education on healthy digital habits and critical media consumption.
- 2. **Age-Appropriate Interventions**: Focusing particularly on the 18-25 age group, which appears most vulnerable to negative effects.
- 3. **Productivity Management**: Teaching strategies to minimize social media's interference with concentration and academic performance.

Policy and Platform Design Implications

For policymakers and technology companies, this research supports:

- 1. **Ethical Design Standards**: Developing guidelines that discourage addictive design features that exploit psychological vulnerabilities.
- 2. **Usage Transparency**: Mandating clear reporting of time spent and notification frequency to increase user awareness.
- 3. **Mental Health Resources**: Integrating access to mental health resources and self-assessment tools within platforms themselves.

Limitations and Future Research Directions

Methodological Limitations

Several limitations should be acknowledged:

1. **Cross-Sectional Design**: The research captures a snapshot in time, limiting causal inferences about the relationship between social media use and mental health outcomes.

- 2. **Self-Reported Data**: Reliance on subjective self-reporting may introduce biases, particularly regarding screen time estimates.
- 3. **Sample Characteristics**: The predominance of participants aged 18-25 and students limits generalizability to other demographic groups.
- 4. **Platform Specificity**: The study treats social media as relatively homogeneous, whereas different platforms may have distinct psychological effects.

Future Research Directions

Based on these limitations and the findings, several promising avenues for future research emerge:

- 1. **Longitudinal Studies**: Tracking changes in mental health indicators in relation to social media usage patterns over extended periods.
- 2. **Platform-Specific Effects**: Investigating how different social media platforms might differentially impact mental health based on their content emphasis and design.
- 3. **Intervention Testing**: Evaluating the effectiveness of various interventions such as usage limits or digital literacy education in mitigating negative mental health effects.
- 4. **Protective Factors Investigation**: Identifying individual characteristics or usage patterns that might buffer against negative mental health impacts.

Practical Recommendations

For Individual Users

Based on the research findings, the following recommendations can be made:

- 1. **Time Limits**: Set daily usage limits, ideally keeping total engagement under 3 hours daily, as the research indicated significantly increased negative effects beyond this threshold.
- 2. **Nighttime Boundaries**: Establish a "digital curfew" before bedtime to protect sleep quality.
- 3. **Mindful Consumption**: Practice conscious awareness of comparison behaviors and emotional responses while using social media.

- 4. **Regular Digital Detox**: Implement periodic breaks from social media, as many respondents reported benefits from temporary disconnection.
- 5. **Content Curation**: Actively manage feeds to reduce exposure to content that triggers negative comparison or emotional distress.

For Parents and Caregivers

- 1. **Model Healthy Habits**: Demonstrate balanced digital engagement to provide positive examples.
- 2. **Open Dialogue**: Maintain conversations about social media experiences, focusing on emotional impacts.
- 3. **Media Literacy**: Help young people develop critical thinking skills about the curated nature of social media content.
- 4. **Sleep Protection**: Establish household tech-free periods before bedtime.

For Educational Institutions

- 1. **Digital Wellness Integration**: Incorporate digital well-being education into standard curricula.
- 2. **Critical Thinking Development**: Teach analytical skills for evaluating online content authenticity.
- 3. **Productivity Management**: Provide strategies to minimize distraction during academic work.

Conclusion

This research has provided substantial evidence for the negative impact of social media on various aspects of mental health, particularly among young adults. The findings confirm that increased duration and frequency of social media usage is associated with higher levels of anxiety, depression, diminished self-esteem, and sleep disruption. The mechanisms of social comparison, exposure to unrealistic online presentations, and fear of missing out appear to be central to understanding these negative outcomes.

While social media platforms offer unprecedented opportunities for connection, their design features and usage patterns can create psychological vulnerabilities that undermine well-being. The research suggests a need for balanced approaches that acknowledge both the benefits and risks of digital engagement, with particular attention to protecting vulnerable populations such as adolescents and young adults.

Moving forward, addressing the mental health challenges associated with social media will require coordinated efforts across multiple domains: individual self-regulation, parental guidance, educational initiatives, platform design ethics, and potentially regulatory frameworks. By developing more conscious relationships with digital technologies, individuals may be able to harness the benefits of social connectivity while minimizing the psychological costs that this research has identified.

As social media continues to evolve and integrate more deeply into daily life, ongoing research will be essential to understand its changing impacts and develop evidence-based strategies for promoting digital well-being. This study contributes to that vital conversation by highlighting specific mechanisms and vulnerable populations, while providing practical recommendations for healthier engagement with these increasingly central technologies.

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APPENDIX

QUESTIONNAIRE

Age
under 18
18–25
26–30
30+
Gender
Male
Female
Prefer not to say
Occupation
Student
Employed
Self-Employed
Unemployed
Average time spent on social media per day

Less than 1 hour

1–3 hours
3–5 hours
More than 5 hours
Do you feel anxious or stressed when you are not able to check your social media?
Yes
No
Maybe
Do you compare yourself to others based on what they post on social media?
Never
Rarely
Sometimes
Often
Do you feel that social media affects your self-esteem?
Positively
Negatively
No effect

Have you ever felt depressed or sad after using social media?
Never
Occasionally
Frequently
Do you think people often present unrealistic versions of their lives on social media?
Strongly disagree
Disagree
Agree
Strongly agree
How often do you experience sleep disturbances due to late-night social media usage?
Never
Rarely
Sometimes
Often
Always

Have you ever taken a break or detoxed from social media to improve your mental well-
being?
No, never
No, but I've considered it
Yes, but it didn't help
Yes, and it helped
Do you feel that social media has increased your fear of missing out (FOMO)?
Strongly disagree
Disagree
Agree
Strongly agree
Do you feel emotionally drained or mentally exhausted after scrolling through social media?
Never
Rarely
Occasionally
Often
Always

Have online arguments, negative comments, or cyberbullying ever affected your mental health?
No
Yes, slightly
Yes, significantly
Do you find it difficult to focus on tasks or studies because of social media distractions?
Never
Sometimes
Often
Always
What changes (if any) have you made to reduce the negative effects of social media on your
life?
(Open-ended responses)