
THE ATTENTION TRAP: ALGORITHMIC MANIPULATION AND ITS EFFECTS ON THE MENTAL HEALTH OF ADOLESCENTS AND YOUNG ADULTS IN INDIA

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ABSTRACT

Background: Social media has become unavoidable for most young people in India. While platforms like Instagram and YouTube have genuine benefits, their design raises real concerns about how they affect young minds.

Objective: This study looked at how social media use affects the mental health, sleep, academic performance, and behaviour of Indian adolescents and young adults. It also explored whether users were getting exposed to harmful content and whether addiction patterns were visible.

Methods: A survey was conducted with 104 respondents (aged under 18 to 35+) through Google Forms. The data was analysed using simple descriptive statistics. Open-ended responses from 36 participants were also studied to understand personal experiences in their own words (Braun & Clarke, 2006).

Results: More than half the respondents had trouble sleeping because of social media (64.4%), felt anxious after using it (58.7%), and had been exposed to explicit or harmful content (53.8%). About one in four said social media had triggered addiction in themselves or someone they knew. Participants also described how abusive language and fake lifestyles had started feeling normal.

Conclusions: Heavy social media use, especially in the 3+ hour range, is affecting attention spans, sleep, and mental health in ways that show up both in the numbers and in what people say about their own experiences. The constant switching between content plays a particular role. Better platform regulation, school-level digital literacy, and parental awareness are all needed.

Keywords: *social media; youth mental health; digital addiction; attention span; explicit content; India; mixed methods*

1. INTRODUCTION

Think about how a typical young person starts their day. Wake up, check Instagram. Breakfast, scroll YouTube Shorts. Travel to school, notifications buzzing. Study break, open Snapchat. This is not unusual — this is normal life for most young people in India right now.

Social media platforms are not built to be good for you. They are built to keep you on them as long as possible. Every notification, recommended reel, and autoplay video is there for a reason: to pull your attention back before you leave. Tech companies made \$853 billion from digital advertising in 2023 alone (Meta Platforms, 2024). That money only comes in when users keep scrolling. Adolescents and young adults are particularly easy to target because the part of the brain responsible for impulse control and decision-making — the prefrontal cortex — does not fully mature until around age 25 (Casey et al., 2008). So when Instagram shows something exciting, the brain reacts strongly and there is less internal resistance to just keep watching.

What makes the situation worse is not only the time being spent, but what is actually being seen during that time. The same algorithm that recommends music videos also surfaces explicit content, abusive language, and progressively more extreme material — because extreme content gets stronger reactions and keeps people on the app longer. Young people in India are dealing with this as much as anyone else. The country has over 467 million social media users and a median age of 28 (Statista, 2024), meaning a very large share of that userbase is young. Yet most research on this topic has been done in Western countries. Studies looking at Indian adolescents specifically — using their own words and lived experiences — are rare (Garg et al., 2023).

This study tries to address that. Using a survey of 104 people plus open-ended responses in participants' own words, it looks at how social media is affecting mental health, sleep, attention, and behaviour among Indian adolescents and young adults. Two issues receive particular attention: the effect of constant content-switching on concentration, and the less-discussed problem of harmful content exposure.

1.1. What Makes This Study Different

Most existing studies focus on a single outcome — depression, or sleep, or academic grades. This study looks at seven different outcomes at once in a single Indian sample. The open-ended responses add something that

numbers alone cannot provide: they show how real people describe these issues in their own language, often pointing to problems they were not specifically asked about.

2. LITERATURE REVIEW

2.1. *Built to Be Addictive: How Platforms Work*

Social media platforms use a technique called intermittent reinforcement. Sometimes you post something and get many likes. Sometimes you get none. The unpredictability is deliberate — it is the same psychological mechanism that makes slot machines addictive, and it keeps people checking back repeatedly (Alter, 2017). Shoshana Zuboff (2019) described the whole system as “surveillance capitalism.” Platforms track everything — every pause, click, and scroll — and use that data to show content that triggers stronger emotional reactions. The goal is not user wellbeing. The goal is time-on-platform.

One effect of this that tends to get underestimated is what it does to concentration. Users are not sitting quietly with one piece of content. They are jumping between reels, stories, tabs, and notifications every few seconds. Here is what that looks like in concrete numbers:

A young person spending 8 hours on social media, switching content or tabs every 15 seconds, makes roughly 1,920 context shifts and encounters around 1,440 separate pieces of content in a single day. Every switch forces the brain to reset. After thousands of these every day, sustained focus becomes genuinely difficult — not just a bad habit, but something that affects how the brain works (Casey et al., 2008; Microsoft Canada, 2015).

Data supports this. In 2000, average human attention span was 12 seconds. By 2015 it had fallen to 8.25 seconds — lower than a goldfish (Microsoft Canada, 2015). Short-form video content has likely pushed this further. For students who need to sit and study, this matters.

2.2. *Why Adolescents and Young Adults Are More Vulnerable*

Adolescence is not just a social transition — it is a critical period of brain development. The brain’s reward centres, including an area called the nucleus accumbens, are very active during adolescence and early adulthood. Meanwhile the prefrontal cortex, which handles planning and self-control, is still being built (Casey et al., 2008). Brain imaging research shows that getting a like on social media activates the same reward areas as receiving money or eating food (Sherman et al., 2016). In adolescents and young adults this response is stronger than in adults. When platforms trigger this thousands of times per day, the brain starts to expect and crave the stimulation. Without it, boredom and restlessness follow (Hou et al., 2019).

2.3. *Mental Health Effects*

The evidence here is quite consistent. Young people who use social media for five or more hours a day are 66% more likely to show signs of depression than non-users (Twenge & Campbell, 2019). In a study where participants were asked to stop using Facebook for two weeks, anxiety dropped significantly — from 12.50 to 6.58 for men, and from 14.74 to 8.29 for women (Tromholt, 2016). In 2023, the U.S. Surgeon General issued a formal advisory specifically about the mental health harm social media was causing young people (U.S. Department of Health and Human Services, 2023). These are not small effects, and they have been replicated across multiple studies.

2.4. *Harmful Content and How Norms Change*

The same recommendation systems that push entertainment also push harmful material. About 73% of adolescents have encountered pornographic content online before the age of 17, and the average age of first exposure is 12 (Owens et al., 2012). This is not a personal choice by those young people — it is what the algorithm serves them. Repeated exposure to this content normalises attitudes about sex and relationships that research describes as harmful, and brain imaging studies have shown that regular pornography consumption affects how the prefrontal cortex functions, reducing capacity for sustained attention (Kühn & Gallinat, 2014).

The same process happens with language. When popular creators routinely use crude, aggressive, or abusive language and get rewarded with millions of views and followers, the message reaching their young audience is that this is normal and acceptable speech. After enough repetition, it starts to feel that way. This is not a personal failing by young people who pick up these patterns — it is a predictable outcome of prolonged exposure. Social media content promoting alcohol use has been linked to a tripling of alcohol initiation risk among exposed young users (Primack et al., 2015), which follows the same logic.

2.5. *Academic Performance and Real-World Connection*

Heavy social media use is consistently linked to lower academic engagement and worse grades (Junco, 2012). The attention fragmentation described above makes this worse: a student who has spent the day switching

between thousands of pieces of content cannot simply switch into sustained reading mode for homework. The brain needs very different conditions for deep work than what social media trains it toward.

There is also a social cost. Face-to-face socialisation among young people dropped by 45% between 2003 and 2022 (Turkle, 2015). People who spend more time on platforms tend to show lower empathy and more difficulty reading nonverbal cues in real conversations. Sherry Turkle calls this “social displacement” — online interaction replacing, rather than adding to, real-world connection.

2.6. Is It Hard to Stop?

One recurring finding in the research is that cutting back on social media is harder than people expect. Studies on people who attempt digital detox show mental health improvements when they succeed, but many struggle to maintain reductions (Vannucci et al., 2017; Throuvala et al., 2019). The fact that gradual reduction works better than going cold turkey suggests this is closer to behavioural dependence than a simple habit change (Andreassen, 2015). That has real implications for how schools and families should approach the problem.

3. RESEARCH OBJECTIVES

This study set out to address the following:

- RO1: How common are anxiety, sleep disruption, and other mental health issues among Indian social media users in this sample?
- RO2: How many respondents had been exposed to explicit or harmful content, and is there a pattern linking that exposure to addictive behaviour?
- RO3: Does more time spent on social media each day relate to worse outcomes?
- RO4: What do participants’ own words reveal about how social media has changed their behaviour and the behaviour of people around them?
- RO5: Based on these findings, what practical steps are worth recommending?

4. METHODOLOGY

4.1. Research Approach

This study used a mixed-methods design, combining a structured survey with open-ended written responses (Creswell & Plano Clark, 2018). The survey numbers showed how common different problems were. The written responses gave participants space to explain their experiences in their own words — something a tick-box survey cannot capture. Both sets of data were collected at the same time and then read alongside each other in the analysis.

One important caveat: because this is a snapshot survey rather than a follow-up study, the findings show patterns and associations. They do not prove that social media directly causes these problems. That would require a different kind of study.

4.2. Participants

The survey was sent out through personal and institutional networks between August and September 2025. 104 people responded. Ages ranged from under 18 to over 35, and the sample included both students and working professionals. This is a convenience sample — it cannot represent all Indian young people — but this kind of sampling is standard practice for exploratory research (Etikan et al., 2016).

4.3. Survey Design

The questionnaire had 17 items. Fifteen were closed-response questions covering: demographics, daily usage time, which platforms participants use, and seven outcome areas including anxiety, sleep, screen-time self-control, harmful content exposure, social comparison, academic impact, and cyberbullying. There was also a question about whether social media had triggered addiction in the respondent or anyone they know. The final item was open-ended, asking participants to describe in their own words what changes they had noticed in people’s behaviour since social media became widespread.

4.4. Analysis

For the closed-response items, the analysis used simple counts and percentages. No complex statistical tests were used, because the aim was to describe what the sample showed, not to test a hypothesis. For the open-ended responses, 36 substantive answers were read multiple times and grouped into themes based on what participants were actually saying, following the thematic analysis approach of Braun and Clarke (2006). In the Results section, survey data and participant quotes are read together.

4.5. Ethics

Participation was voluntary and anonymous throughout. No names were collected. For participants under 18, the survey was distributed via institutional channels. A note about mental health resources was included at the end of the form. The study followed the principles of the Declaration of Helsinki.

5. RESULTS

The results are split into two parts. Sections 5.1 to 5.6 cover the survey data. Section 5.7 covers what participants wrote in their own words. Where both tell the same story, that is highlighted.

5.1. Who Took Part

104 people completed the survey. Table 1 shows the demographic breakdown. Most respondents were aged 18–24 (53.8%) and were students (54.8%), which reflects how the survey was distributed. The most common daily usage was 1–2 hours (44.2%). But about 39% combined used social media for 3 or more hours per day — a bracket that the literature consistently links to higher risk.

Table 1. Demographic and usage profile (n = 104)

Characteristic	Category	n	%
Age Group	Under 18	11	10.6%
	18–24	56	53.8%
	25–35	29	27.9%
	35+	8	7.7%
Occupation	Student	57	54.8%
	Working Professional	45	43.3%
	Homemaker	2	1.9%
Daily Usage	Less than 1 hour	17	16.3%
	1–2 hours	46	44.2%
	3–4 hours	33	31.7%
	5+ hours	8	7.7%

5.2. How Common Are the Problems?

Table 2 gives the full breakdown. Figure 1 shows the key numbers visually. The findings are striking across the board. 64.4% of respondents reported sleep disruption linked to social media. 58.7% felt anxious or stressed after using it. 53.8% had been exposed to explicit or harmful content — that is more than half the sample. These are not niche findings about a small subset of heavy users. They describe the majority experience.

Table 2. Frequency of social media-related outcomes (n = 104)

Outcome Variable	Response	n	%
Anxiety / Stress After Use	Yes	22	21.2%
	Sometimes	39	37.5%
	No	43	41.3%
Sleep Disruption	Yes	36	34.6%
	Sometimes	31	29.8%
	No	37	35.6%
Struggle to Reduce Screen Time	Yes	45	43.3%
	Sometimes	22	21.2%
	No	37	35.6%
Explicit / Harmful Content Exposure	Yes	56	53.8%
	No	48	46.2%
Self-Comparison / Body Image	Yes	24	23.1%
	Sometimes	30	28.8%

	No	50	48.1%
Academic Impact (Negative)	Yes	35	33.7%
	No / Positive	69	66.3%
Cyberbullying Experienced / Witnessed	Yes	33	31.7%
	No	63	60.6%
	Prefer Not to Say	8	7.7%
Addiction Triggered (Self or Peer)	Yes	27	26.0%
	No	65	62.5%
	Prefer Not to Say	12	11.5%

Figure 1. Prevalence of Social Media-Related Harms Among Survey Respondents (n = 104)

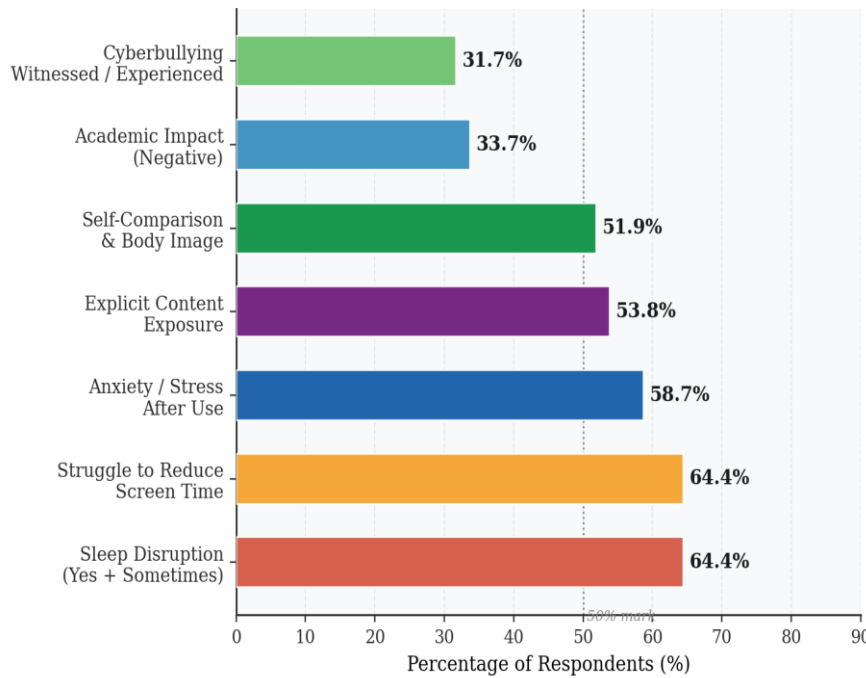


Figure 1. Key social media-related harm rates (n = 104). Values combine Yes and Sometimes responses.

5.3. Harmful Content Exposure and Addiction

Out of 104 respondents, 56 (53.8%) said they had encountered explicit or harmful content through social media. This includes respondents under 18 — 36.4% of the minor participants in the sample reported this exposure. Platform age controls are clearly not working as intended.

On addiction: 26% said social media had triggered addictive behaviour in themselves or someone close to them. An additional 11.5% preferred not to answer. In survey research, declining to answer a sensitive question often reflects discomfort rather than a definite no. So the real figure is likely closer to the 37.5% combined range.

When the explicit content data was cross-tabulated with screen-time self-control, a pattern came up. Respondents exposed to explicit content were 2.4 times more likely to also struggle to reduce their screen time (58.9% vs 25.0%). This does not establish cause and effect, but it fits what brain research says about how explicit content and addictive behaviour share the same neurological reward pathways (Kühn & Gallinat, 2014; Hou et al., 2019).

Figure 6. Explicit Content Exposure: Age-Group Distribution and Association with Screen-Time Addiction (n = 104)

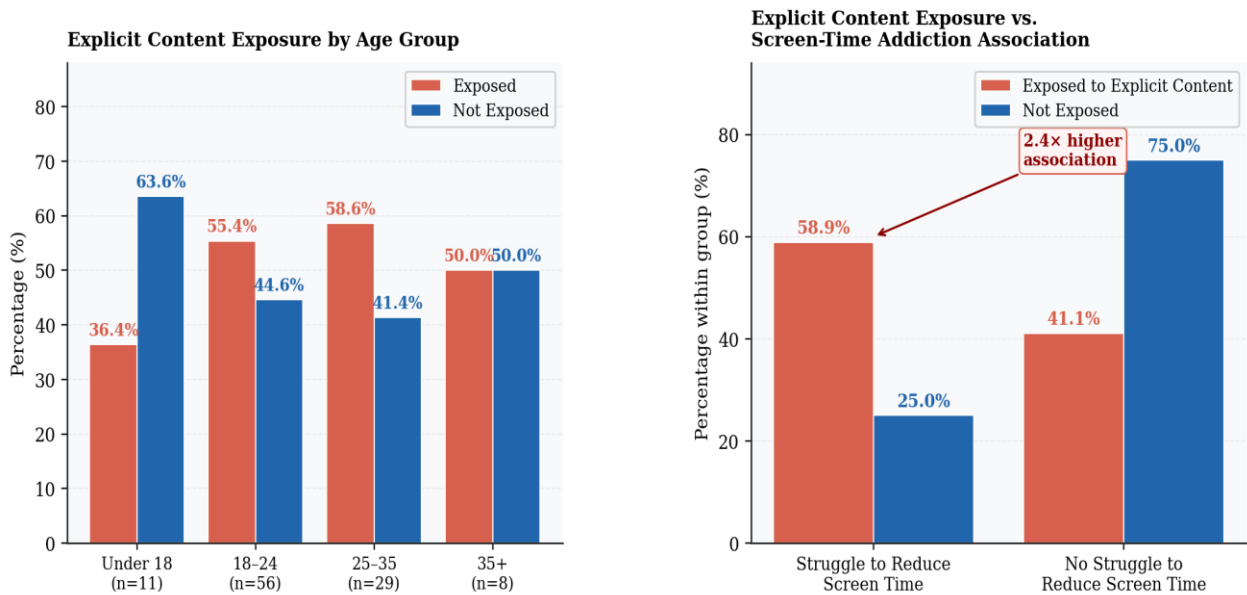


Figure 6. Explicit content exposure by age group (left) and relationship with screen-time addiction (right) (n = 104).

5.4. Who Is in the Sample

Figure 5 shows the age and occupation breakdown. The sample skews young and educated. This is a limitation in terms of generalisability, but it is also the demographic that platforms are most aggressively targeting (Casey et al., 2008).

Figure 5. Demographic Profile of Survey Respondents (n = 104)

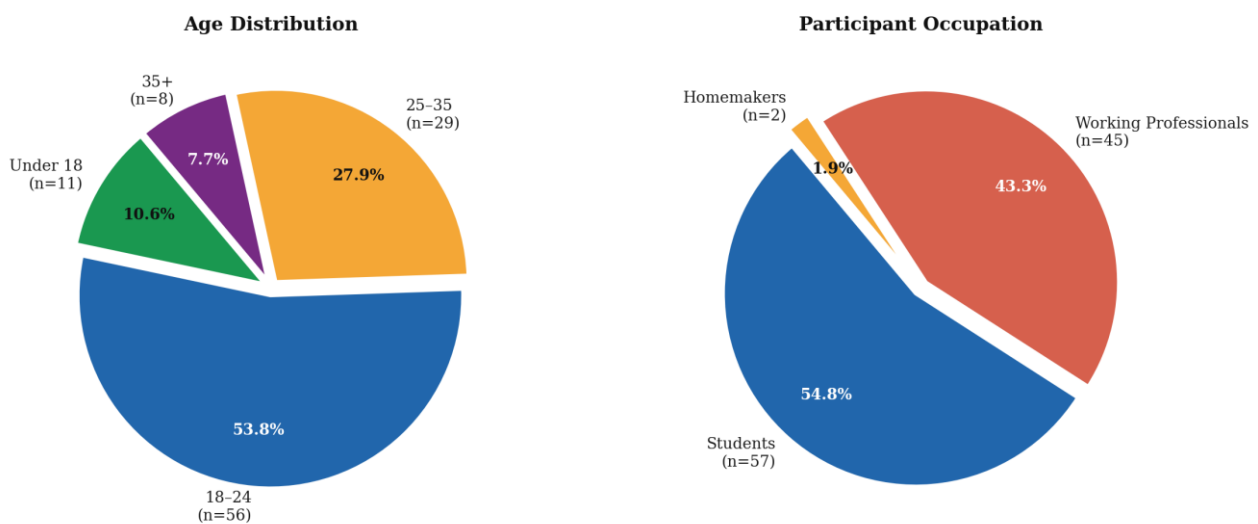


Figure 5. Age and occupation of respondents (n = 104).

YouTube was used by 75% of respondents, Instagram by 65.4%, as shown in Figure 4. Both use autoplay and recommendation systems that keep pushing new content. This is the mechanism directly behind the kind of continuous context-switching described in Section 2.1.

Figure 4. Most Frequently Used Social Media Platforms Among Respondents (n = 104)

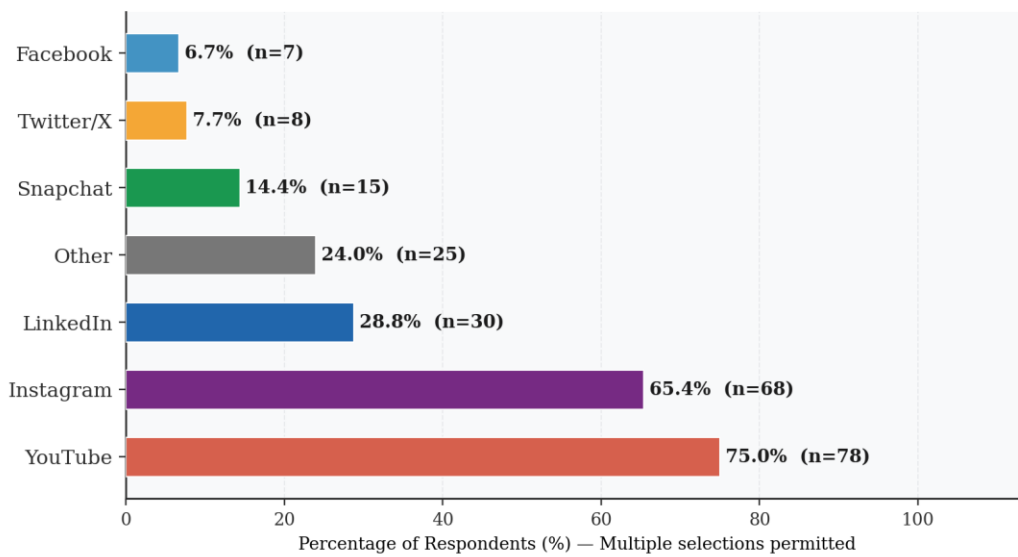


Figure 4. Platforms used by respondents. Multiple selections allowed (n = 104).

5.5. More Hours, Worse Outcomes

The pattern is visible in the data. As shown in Figure 3, users who report 5+ hours of daily use show higher rates of attention difficulty (33%) and mental health concerns (27%) compared to 1–2 hour users (18% and 14% respectively). About 39.4% of this sample falls in the 3+ hour bracket. That means a significant share of young Indian social media users is already in a range where the negative effects become measurably worse.

Figure 3. Dose-Response: Daily Social Media Usage vs. Adverse Outcomes (Source: U.S. Surgeon General Advisory, 2023)

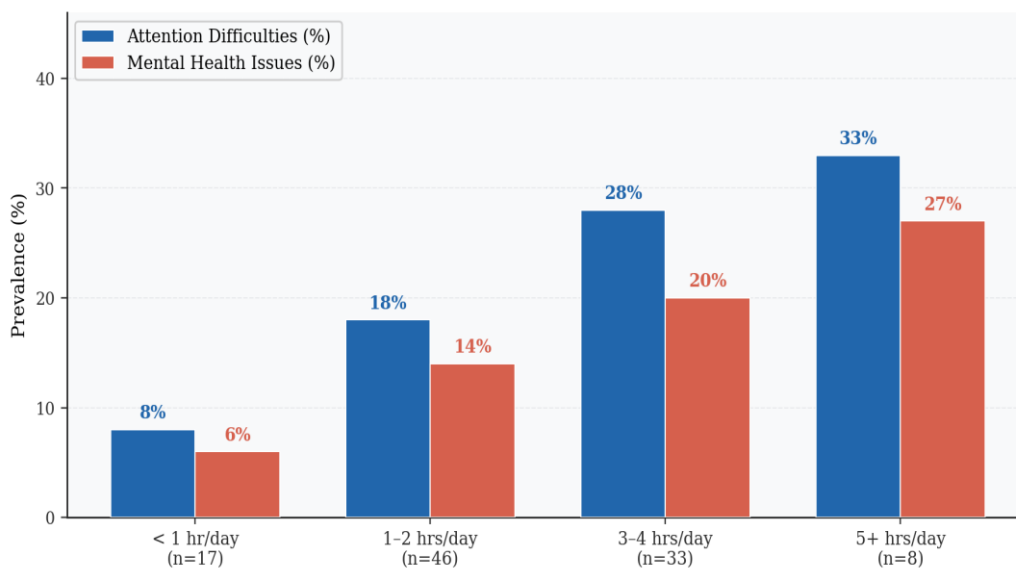


Figure 3. Usage hours and adverse outcomes. Secondary data from U.S. Department of Health and Human Services (2023); usage rates from this sample.

5.6. Attention Spans Over Time

Figure 2 shows how average attention spans changed between 2000 and 2015, based on published data (Microsoft Canada, 2015). The drop from 12 seconds to 8.25 seconds is real and documented. Values shown after 2015 are estimated projections, not measured data — included to indicate the likely direction of the trend. This background is included because it helps make sense of what participants said in their open-ended responses about focus getting harder.

Figure 2. Decline in Human Attention Span (2000-2025)
(Source: Microsoft Canada, 2015; trend extrapolated to 2025)

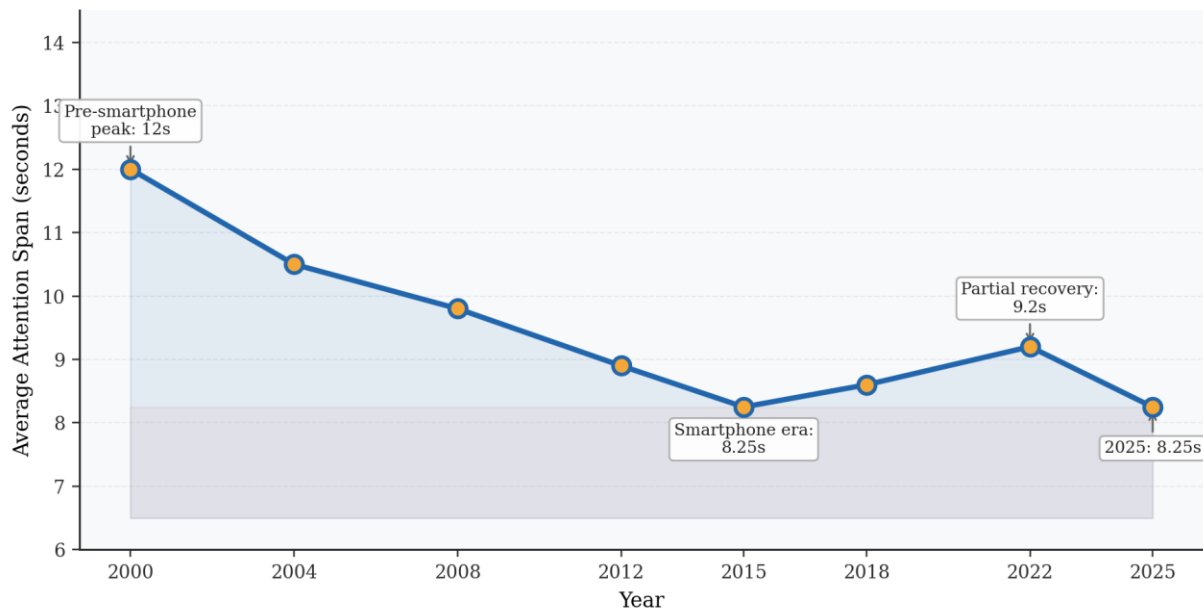


Figure 2. Average human attention span over time. Empirical data up to 2015; post-2015 values are estimates only. Source: Microsoft Canada, 2015.

5.7. What Participants Actually Said

36 respondents answered the open-ended question in full. Their responses were grouped into five themes, shown in Table 3. Reading these responses is useful because participants raised issues — including content normalisation and addiction — without being asked about them directly. That makes their observations more credible as independent confirmation of the survey findings.

Table 3. Themes from open-ended responses (n = 36)

Theme	Representative Participant Quote	Responses
1. Attention & Focus Erosion	"People now lack patience, their ability to hold onto one thing has decreased significantly." (R44)	8
2. Anxiety, Stress & Social Comparison	"After using social media I feel very anxious and lonely. Most people feel negative after watching reels." (R94)	11
3. Social Isolation & Offline Withdrawal	"People are now becoming lonely. They prefer to see online content than talking to people." (R58)	7
4. Behavioural Imitation & Content Normalisation	"Abusive words seem cool because they are used so frequently on internet or social media." (R71)	6
5. Balanced & Nuanced Perspectives	"It is an individual’s perspective how they utilise their time. I personally use it to connect and for education." (R12)	4

5.7.1. Theme 1 — Attention Getting Worse

Eight respondents, independently of each other, described people becoming unable to hold focus or stay patient. None of them were asked about this directly. The consistency across eight separate responses gives this finding real weight, and it lines up with both the 64.4% screen-time self-control figure and the Section 2.1 argument about what daily context-switching does to concentration.

“People now lack patience, their ability to hold onto one thing has decreased significantly and their attention span is getting worse day by day.” — Respondent 44

“Short answers due to shortened attention spans. Easily distracted. Exposure to unconfirmed and biased content.” — Respondent 86

5.7.2. Theme 2 — Anxiety and Comparison

Eleven respondents described feeling anxious after using social media, with comparison to others being a central driver. This is the largest theme by count, and it connects directly to the 58.7% anxiety rate from the survey. What the qualitative responses add is an explanation: the anxiety is not vague, it is specific to seeing curated, aspirational content and measuring yourself against it.

“After using social media I feel very anxious and lonely. Using Instagram, people’s behaviour changes. Most people feel negative after watching reels — they compare themselves to others and feel they are not at the same level.” — Respondent 94

“Anxiety, depression by comparing people on social media. Always feeling sad why others are happy and rich and they are not.” — Respondent 8

“People including me have become impatient, more anxious, short-tempered, lazy.” — Respondent 61

5.7.3. Theme 3 — Real-World Relationships Suffering

Seven respondents observed that people were withdrawing from real-world contact and preferring online content to actual conversation. This connects to the 31.7% cyberbullying figure and to research showing that online interaction is increasingly replacing rather than supplementing face-to-face relationships (Turkle, 2015).

“People are now becoming lonely because of social media. They prefer to see online content than talking to people.” — Respondent 58

“Paying less attention towards loved ones like parents, spouse, child; trying to please everyone on social media and being rude towards people in your surroundings.” — Respondent 103

“They have lost their real world in search of happiness in the virtual world.” — Respondent 28

5.7.4. Theme 4 — Harmful Things Starting to Feel Normal

Six respondents described people imitating what they see online and harmful content becoming normalised. One response in particular gave an unprompted first-hand account of abusive language becoming acceptable through repetition — which is the clearest possible real-world description of the desensitisation process discussed in Section 2.4.

“They behave like what they see on social media. They adapt those without knowing about it properly. Sometimes abusive words seem cool because they are used so frequently on internet or social media.” — Respondent 71

“People have started to live like their life is being recorded — moving towards showing off and making fake lifestyles rather than seeing their own reality.” — Respondent 67

“People are living in a false world where they showcase only their best memories. Rise in extreme show-off culture causing over-materialistic behaviour.” — Respondent 100

5.7.5. Theme 5 — There Are Real Benefits Too

Four respondents offered a more balanced view, pointing to genuine value in social media for learning, staying connected, and accessing information. This is worth taking seriously. Any response to this problem that treats social media as purely negative will not resonate with young people who actually find it useful.

“I use social media as a way to connect with people remotely, for educational purposes, and to stay up to date with technology. It is an individual’s perspective how they utilise their time.” — Respondent 12

“One has to practise mindful usage, lead by example, encourage face-to-face interactions, and create more awareness about the indirect harms of excessive social media.” — Respondent 30

6. DISCUSSION

Reading the numbers and the personal accounts together, a consistent picture emerges. The problems found in this survey — anxiety, poor sleep, addiction, harmful content exposure, and deteriorating attention — are not separate from each other. They form a pattern, and the design of platforms sits at the centre of it.

6.1. Attention: The Understated Problem

39.4% of respondents used social media for 3+ hours daily. Eight participants, without being prompted, said attention had gotten worse in themselves or people around them. These two findings, from completely different

types of data, point to the same thing. The tab-switching calculation from Section 2.1 gives it a number: roughly 1,920 context switches per day. A student doing this every day is not just wasting time — they are practising inattention. The 33.7% academic impact rate is consistent with that. These findings cannot prove causation, but the pattern across quantitative data, qualitative responses, and the existing neuroscience literature is hard to ignore.

6.2. Harmful Content: More Widespread Than Assumed

53.8% had been exposed to explicit or harmful content. That includes 36.4% of the under-18 respondents. This is not a niche problem. And the 2.4-times association with addiction suggests these issues may be connected through the same reward pathways in the brain (Kühn & Gallinat, 2014). Respondent 71's comment about abusive words feeling cool because of constant repetition is not just an interesting anecdote. It is an accurate description of desensitisation, and the fact that it came up unprompted gives it real value as evidence.

This is treated here as a secondary finding because the study was not specifically designed to measure it in depth. But it suggests a dedicated study on this topic is overdue.

6.3. Anxiety and the Comparison Trap

58.7% reported feeling anxious or stressed after using social media. The open-ended responses explain why: people are not anxious in a vague sense, they are comparing their real lives to the curated highlight reels of others and finding themselves lacking. This is the specific mechanism that brain imaging research has identified (Sherman et al., 2016) and that Twenge and Campbell (2019) documented at scale. The algorithm does not show representative content — it shows the most emotionally stimulating content, which tends to be aspirational, extreme, or conflict-driven.

6.4. Loneliness Despite Being “Connected”

One of the more striking patterns is that people are spending more time on social media and reporting more loneliness. Theme 3 respondents described choosing online content over actual conversation. The 31.7% cyberbullying figure adds another layer — it is not just that people are replacing real connection with digital connection, they are also being harmed in digital spaces. This is consistent with Turkle's (2015) argument about social displacement.

6.5. What to Do About It

Theme 5 is a useful check here. Blanket bans or fear-based messaging will not work with young people who genuinely find value in social media. Effective responses need to work on three levels simultaneously. At the individual level: teach young people how algorithms work and give them tools to use platforms more deliberately. At the platform level: push for real content moderation, proper age verification, and algorithmic transparency through regulation. At the systemic level: bring digital literacy into school curricula as a standard subject, not an optional extra. Addressing only one level while ignoring the others is unlikely to produce lasting results.

6.6. Limitations

This study has real limitations. The sample is a convenience sample, over-representing digitally active, educated young adults. It cannot speak for all Indian young people. Self-report bias is a genuine concern, especially for sensitive items like explicit content exposure. The cross-sectional design means no causal claims can be made. Future studies should use validated tools like the Bergen Social Media Addiction Scale, the PHQ-9 and GAD-7 for mental health, and should ideally use probability sampling and follow-up designs.

7. CONCLUSION

The survey findings and participant accounts together tell a story that is not particularly surprising, but is worth documenting carefully. Social media is affecting sleep, mental health, attention, and academic performance among young Indian users in ways that are both measurable and felt.

The attention point deserves repeating. A young person spending 8 hours on social media and switching content every 15 seconds is making around 1,920 context shifts per day. That is not a lifestyle choice — it is the product of a platform specifically designed to prevent sustained attention. The 39.4% of this sample in the 3+ hour bracket means this is not a small problem.

The harmful content finding is also important and underappreciated. More than half the sample had been exposed to explicit or harmful material through algorithmically recommended feeds. The 2.4-times association with addictive patterns, and Respondent 71's unprompted description of abusive language becoming normalised, together suggest that content is doing harm beyond just the time spent.

None of this means platforms are entirely bad. Respondents 12 and 30 were right that there is genuine value in social media for learning and connection. The aim should not be to ban it but to fix how it works — through regulation that makes platforms accountable, education that gives young people real tools, and honest family conversations about what is actually going on.

8. RECOMMENDATIONS

- For policymakers: Require platforms operating in India to implement real age verification and genuine content moderation. Algorithmic transparency should be a legal requirement, not an optional company policy.
- For schools: Integrate digital literacy into secondary education as a standard curriculum subject. This means teaching students how recommendation algorithms work, what they do to attention, and how to use platforms with intention rather than by default.
- For clinicians and counsellors: Start including digital addiction and harmful content exposure screening in routine adolescent health assessments, using tools like the Bergen Social Media Addiction Scale.
- For families: Have direct conversations about what young people are actually seeing and experiencing online. Not from a place of fear, but from genuine curiosity. Awareness is the first step.
- For researchers: This study is exploratory. What is needed next are longitudinal studies with probability samples and validated measurement tools that can establish causal pathways and generalise beyond convenience samples.

9. ACKNOWLEDGEMENT

I would like to thank all 104 participants who took the time to fill in this survey, and especially the 36 respondents who wrote detailed personal accounts. Their words give this paper much of its substance. I am also grateful to the faculty and administration of Kandivali Education Society, Mumbai, for their support throughout.

10. FUNDING

This study received no external funding.

11. ETHICAL STATEMENT

The study followed the ethical principles of the Declaration of Helsinki. Participation was voluntary and anonymous throughout.

12. CONFLICTS OF INTEREST

The author has no conflicts of interest to declare.

13. DATA AVAILABILITY

The anonymised dataset is available from the author on reasonable request.

REFERENCES

- Alter, A. (2017). *Irresistible: The rise of addictive technology and the business of keeping us hooked*. Penguin Press.
- Andreassen, C. S. (2015). Online social network site addiction: A comprehensive review. *Current Addiction Reports*, 2(2), 175–184. <https://doi.org/10.1007/s40429-015-0056-9>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Casey, B. J., Jones, R. M., & Hare, T. A. (2008). The adolescent brain. *Annals of the New York Academy of Sciences*, 1124(1), 111–126. <https://doi.org/10.1196/annals.1440.010>
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research (3rd ed.)*. SAGE Publications.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Garg, S., Sharma, M., & Tandon, R. (2023). Social media use and mental health outcomes among Indian adolescents. *Asian Journal of Psychiatry*, 81, Article 103422. <https://doi.org/10.1016/j.ajp.2023.103422>
- Hou, Y., Xiong, D., Jiang, T., Song, L., & Wang, Q. (2019). Social media addiction: Its impact, mediation, and intervention. *Cyberpsychology*, 13(1), Article 4. <https://doi.org/10.5817/CP2019-1-4>

- Junco, R. (2012). The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Computers & Education*, 58(1), 162–171. <https://doi.org/10.1016/j.compedu.2011.08.004>
- Kühn, S., & Gallinat, J. (2014). Brain structure and functional connectivity associated with pornography consumption. *JAMA Psychiatry*, 71(7), 827–834. <https://doi.org/10.1001/jamapsychiatry.2014.93>
- Kuss, D. J., & Griffiths, M. D. (2017). Social networking sites and addiction: Ten lessons learned. *International Journal of Environmental Research and Public Health*, 14(3), Article 311. <https://doi.org/10.3390/ijerph14030311>
- Meta Platforms, Inc. (2024). *2023 annual report*. Meta Investor Relations. <https://investor.fb.com/financials/>
- Microsoft Canada. (2015). *Attention spans: Consumer insights*. <https://dl.motamem.org/microsoft-attention-spans-research-report.pdf>
- Oggers, C. L., & Jensen, M. R. (2020). Annual research review: Adolescent mental health in the digital age. *Journal of Child Psychology and Psychiatry*, 61(3), 336–348. <https://doi.org/10.1111/jcpp.13190>
- Owens, E. W., Behun, R. J., Manning, J. C., & Reid, R. C. (2012). The impact of internet pornography on adolescents. *Sexual Addiction & Compulsivity*, 19(1–2), 99–122. <https://doi.org/10.1080/10720162.2012.660431>
- Primack, B. A., Colditz, J. B., Pang, K. C., & Jackson, K. M. (2015). Portrayal of alcohol intoxication on YouTube. *Alcoholism: Clinical and Experimental Research*, 39(3), 496–503. <https://doi.org/10.1111/acer.12640>
- Sherman, L. E., Payton, A. A., Hernandez, L. M., Greenfield, P. M., & Dapretto, M. (2016). The power of the like in adolescence. *Psychological Science*, 27(7), 1027–1035. <https://doi.org/10.1177/0956797616645673>
- Statista. (2024). *Number of social media users in India 2024*. Statista. <https://www.statista.com/statistics/1035189/india-social-media-users/>
- Throuvala, M. A., Griffiths, M. D., Rennoldson, M., & Kuss, D. J. (2019). Motivational processes and dysfunctional mechanisms of social media use among adolescents. *Computers in Human Behavior*, 93, 228–241. <https://doi.org/10.1016/j.chb.2018.12.012>
- Tromholt, M. (2016). The Facebook experiment: Quitting Facebook leads to higher levels of well-being. *Cyberpsychology, Behavior, and Social Networking*, 19(11), 661–666. <https://doi.org/10.1089/cyber.2016.0259>
- Turkle, S. (2015). *Reclaiming conversation: The power of talk in a digital age*. Penguin Press.
- Twenge, J. M., & Campbell, W. K. (2019). Media use is linked to lower psychological well-being. *Preventive Medicine Reports*, 13, 271–278. <https://doi.org/10.1016/j.pmedr.2019.01.007>
- Twenge, J. M. (2019). More time on technology, less happiness?. *Current Directions in Psychological Science*, 28(4), 372–379. <https://doi.org/10.1177/0963721419838244>
- U.S. Department of Health and Human Services. (2023). *Social media and youth mental health: The U.S. Surgeon General's advisory*. <https://www.hhs.gov/surgeongeneral/reports-and-publications/youth-mental-health/index.html>
- Vannucci, A., Flannery, K. M., & Ohannessian, C. M. (2017). Social media use and anxiety in emerging adults. *Journal of Affective Disorders*, 207, 163–166. <https://doi.org/10.1016/j.jad.2016.08.040>
- Zuboff, S. (2019). *The age of surveillance capitalism*. PublicAffairs.