Digital Overload and Emotional Marginalization: A Study on Student Productivity and Well-being in Mumbai Colleges

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ARTICLE DETAILS	ABSTRACT
	From laptops to AI, digitalization has a far-reaching impact on the educational and social life of students in terms of access, communication and efficiency in learning. But this endless screen time has also resulted in digital overload: the exhaustion, anxiety and inability to focus that can come with nonstop exposure to technology. In this paper, we see how emotional marginalization of college-going students (youth) who are connected round the clock, is caused by excessive dependence on the virtual world in Mumbai, while they still feel stressed and lonely. Although 'marginalization' most often refers to social and economic exclusion, this paper investigates a new form of psychological marginalization that is increasingly emerging in response to the digital saturation and overconnectivity. The research adopts a multi-method approach where data is collected with the help of structured survey questionnaires and supplemented by content analysis of semi-structured interviews. Studies show that extended periods in front of screens and juggling multiple platforms can lead to reduced concentration, poor sleep and negativity. Those students who participated in voluntary digital detox enjoyed better focus, mood regulation and academic productivity. Overall, the research highlights that emotional marginalization, rather than traditional economic exclusion, stems from psychological fatigue within a highly connected society. This subtle form of marginalization demonstrates the cognitive

burden faced by students as they strive to maintain balance in a digitally overloaded environment. The paper ends by underscoring the importance of digital wellness education and pragmatic interventions in promoting mindful technology use, appropriate breaks from the tech world, and sustainable patterns of academic engagement among young adults.

Introduction

The digital revolution has forever changed the way people learn, communicate and engage, altering almost every facet of contemporary student life. Technology is not just a tool for today's learners; it is a way of life in the ways they learn, socialize, and engage. Smartphones, notebooks and online resources are employed as classrooms' extensions for achieving limitless information access, virtual cooperation, and immediate feedback. In an increasingly linked collegiate world, the definition of success is digital literacy.

But the very things that empower students also ensnare them. What we're experiencing right now is hyper vigilance on a societal level. Attention spans are dwindling, anxiety bubbling up and the barrier between genuine engagement and digital dependence is breaking down. For pupils in a high-velocity urban hub like Mumbai where academic competition is intense and digital access ubiquitous, the screen has become both gateway and trap.

Thanks to a digital landscape as confining as this one, what counts as productive screen time and poor digital habits blurs. Now the very devices that were meant to liberate and empower us are instead more often cited as sources of emotional exhaustion, environmental discomfort and reduced concentration. This paradox of digital advancement is the focus of this report: to explore how short-term withdrawal from digital technologies what we refer to as a digital detox might serve as a counterbalance that can be used by students for recalibrating, refocusing and enhancing their well-being in an era where they are constantly connected.

Literature Review

The unstoppable growth of digital technology has transformed the way people communicate, learn and socialize – especially students. While digital devices give children unprecedented access to information, there is a substantial body of evidence that too much screen time adversely impacts well-being, attention

and school performance. Stiglic and Viner (2019) stress that the excessive amount of time spent on screens are linked to lower psychosocial health and sleep disturbance in adolescents. Similarly, Prado et al. (2021) concluded that excessive screen time use before bedtime decreased sleep duration, which indirectly leads to poor academic performance.

Earlier research performed by Kirschner and Karpinski (2010), Junco (2012) has shown that excessive use of social-networking platforms, i.e. Facebook is associated with poorer academic performance and less focus. Cain & Gradisar (2010) also found that electronic media use directly before sleep results in later bedtimes and greater fatigue, as well as Twenge, Martin, & Spitzberg's (2018) conclusion that more time spent on screen devices is associated with lower levels of psychological wellbeing.

More recent work has focused on voluntary digital simplification or "digital detox." Provisions of planned detox interventions were associated with greater focus and less perceived stress (Brockmeier, Johnson & Davis, 2025). El-Khoury, Haddad, and Salameh (2020) pointed out that the pupils who had a digital cleanse reported they felt better emotionally and were more productive. Research carried out by Amez and Baert (2020) as well as Wang, Chen and Zhang (2022) verified that heavy smartphone use disrupts learning efficiency and cognitive investment in higher education.

These studies collectively show that overuse of digital devices does not only affect cognitive performance, it also induces emotional depletion and mental effort. The current study further this discussion by looking into emotional marginalization, a new form of psychological exclusion stemming from the digital overload among Mumbai's college students, and how brief digital detoxes can bring back equilibrium, attention, and well-being.

Aim

A study to explore and compare the impact of digital detox on the productivity and emotional well-being of undergraduate students across Mumbai. Its focus is on how diving off digital devices for a limited period affects our ability to focus, manage time and keep ourselves sane in this digital world.

Objectives

1. To examine the digital consumption habits of college students in Mumbai. This objective focuses on understanding students' daily screen time, multitasking patterns, and dependence on digital devices for both academic and recreational use.

2. To assess digital detox as a strategy for time and resource management. This objective studies how voluntary breaks from technology help students manage time more effectively, enhance focus, and improve academic productivity.

**3. To analyse the psychological and behavioural responses during digital detox.** This objective examines the withdrawal symptoms, emotional adjustments, and coping mechanisms students experience while reducing or limiting screen use.

Research Methodology

This paper is organised according to the mixed methods research approach, aiming to gain understanding of the impact of digital overload on student productivity and emotional well-being. The study was carried out on 100 students from different faculties of colleges in Mumbai belonging to various streams. A structured questionnaire was used to gather quantitative information about screen time, concentration, sleep quality, anxiety and academic record. The questions were formulated using Likert scales and measured frequency and intensity of behaviours. Qualitative information was also collected in the form of brief interviews that followed semi-structured questions, which provided insight into students' personal experiences on topics relevant to digital detox and its perceived effect on emotional stability. The responses were then collated, summarized and interpreted to identify themes and glean insights. This approach also supported a holistic view of how chronic digital engagement leads to emotional marginalization and the role played by voluntary digital detoxing as a means for students to refocus or enhance productivity and well-being.

Data Analysis and Findings

*Average non-academic screen time per day*
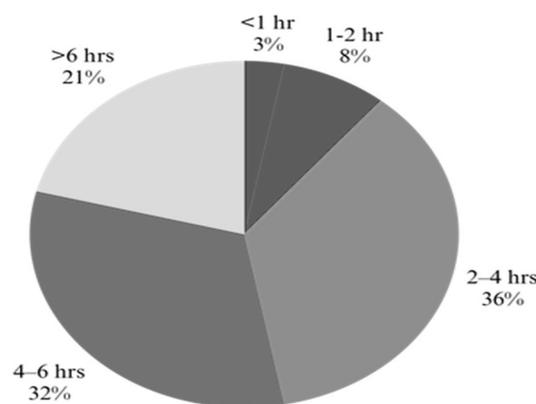
Figure 1

This distribution is also visually clear (in the pie chart, most of them stay between 2h and 6h/day) while just few belong to the youngest class (<2h/day, 11%). It means that both of our participants are often required for high screen use on a daily basis but not solely necessary to academic purpose (insinuating life style pattern now oriented toward entertainment or social media than academic orientated activity which may certainly has impact on health, productivity and well-being).

Percentage of Unproductive Screen Time
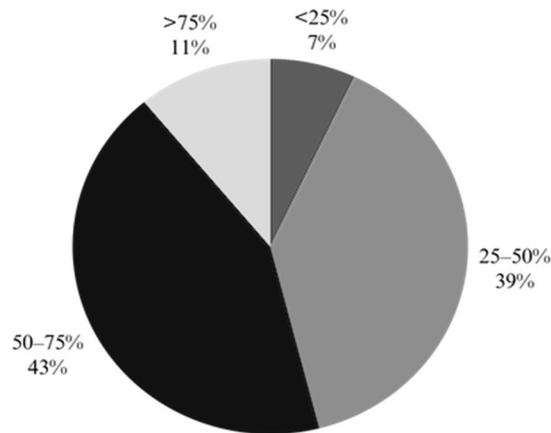
Figure 2

The responses reveal that most students feel that much of their daily screen time is 'wasted'. And 43% of schoolchildren reported they accomplished nothing with between 50 and 75 per cent of their screen time, while 39% said that when it comes to screen use, 25-50% is lost. Just 11% said over 75% of time spent on the screen was wasted – a sign of high addiction. Only 7% believed they spent less than a quarter of their screen time unproductively.

These numbers suggest that most students know they have an issue with digital-device overuse: You have enough self-awareness (when 77 percent of people agree between a quarter and three quarters their screen time is wasted) to know you could do better. This underscores the need for digital detox interventions to improve student productivity.

Average Unproductive Screen Time Per Day

Category of Unproductive Screen Time	Number of Students	Percentage	Remarks
Less than 25%	7	7%	Very few students keep screen use largely productive
25–50%	39	39%	Common level of distraction, moderate digital overuse
50–75%	43	43%	Majority group, significant time lost to distractions
More than 75%	11	11%	Severe dependency and high level of unproductive use
Total	**100**	**100%**	—

Table 1

*Analysis of Unproductive Screen Time Among Students*
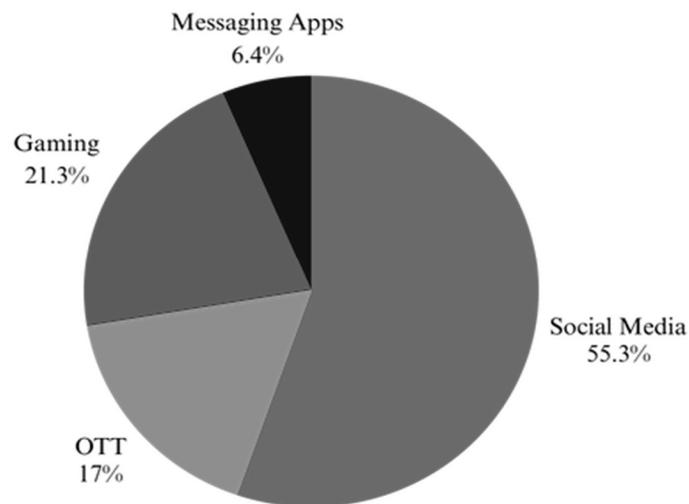
Figure 3

Roughly 43% said between half and three-quarters of the time they spent in front of a screen was wasted, while 39% said between a quarter to half. More than 90% said that a lot of their digital use does not create value. Because students know that too much streaming, social media scrolling, and general internet browsing suck away time and attention so the same should be said for 'digital detox' being a preventive approach against procrastination and wasted productivity.

Analysis of Student Focus Levels While Studying
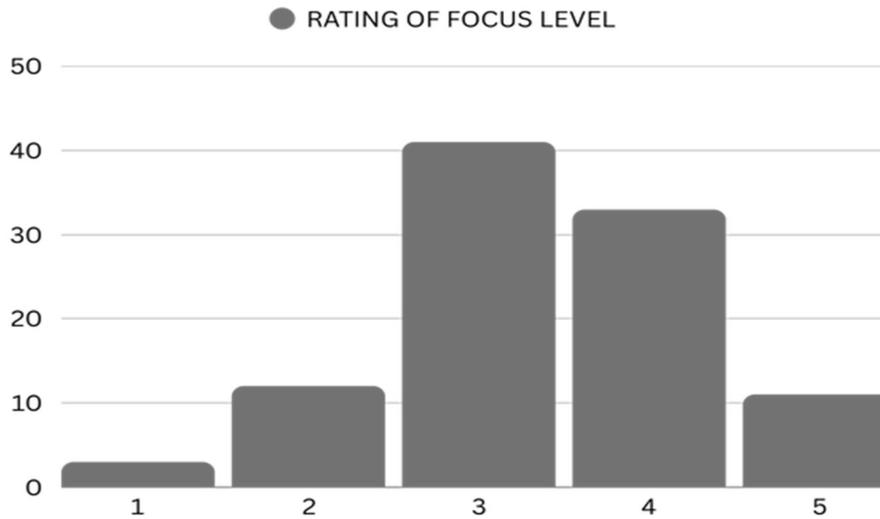
Figure 4

The majority of students rated their concentration as poor (32% at level 1), fair (41% at level 3) or good (33% at level 4) while only a minority reported having a near perfect study focus. 15% admitted to poor focus at the lower end. That such focus could happen, even with many students only able to sustain some amount of attention at a moderate level, indicates that few reach deep focused engagement. It is not coincidental that digital distractions may have much to do with their ineffectiveness in focusing.

Student Focus Levels While Studying

Rating	Number of Students	Percentage	Remarks
1 (Very Poor)	3	3%	Severe lack of focus, frequent distractions

Rating	Number of Students	Percentage	Remarks
2 (Poor)	12	12%	Below-average focus, easily disturbed by digital use
3 (Average)	41	41%	Moderate concentration but inconsistent
4 (Good)	33	33%	Strong focus with occasional lapses
5 (Excellent)	11	11%	Very high concentration and discipline
Total	**100**	**100%**	—

Table 2

Screen Time and Sleep Duration: An Inverse Relationship
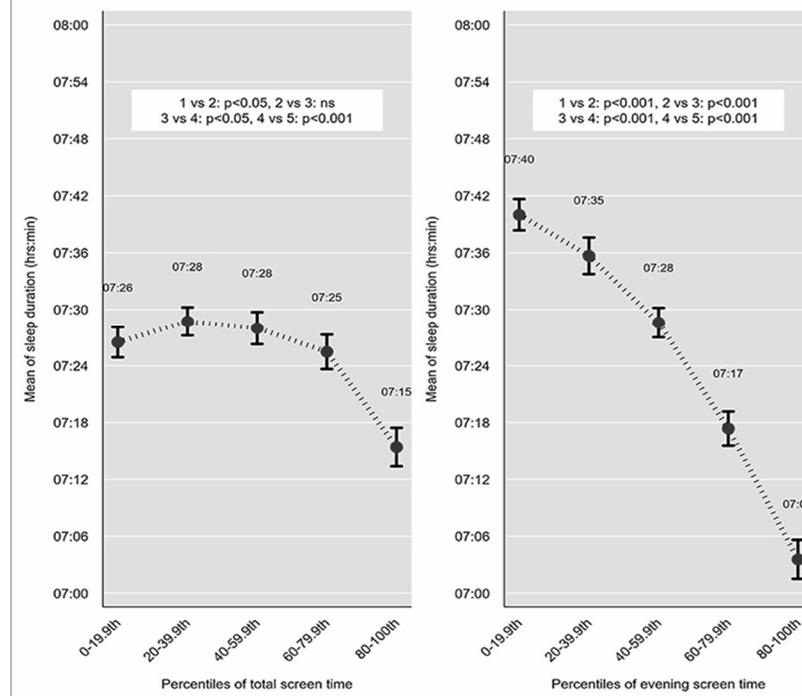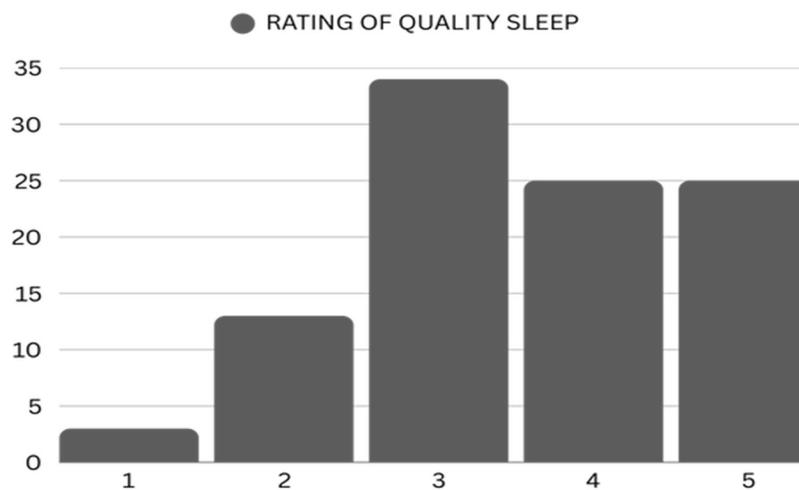

Figure 5

It is found by Stiglic & Viner (2019) that increased screen time is associated with decreased sleep duration among adolescents. Average sleep, for instance, fell to 7 hours 12 minutes at 12 hours of use from around 8 at the eight-hour point. The pattern was more pronounced in the evening: students who used screens within a few minutes of bedtime were sleeping about 7 hours 40 minutes, compared to students whose evening screening time was around two hours, and who got only 7 hours 3 minutes of sleep. Put another way, the more students gazed into their screens, especially at night, the less sleep they got.

Source: Stiglic, N., & Viner, R. M. (2019). *Effects of screen time on the health and well-being of children and adolescents: A systematic review*. BMJ Open, 9(1), e023191.

Analysis of Student Sleep Quality in the Past Week

Figure 6

Students widely varied in quality of sleep, according to respondents. Roughly 34 percent rated their sleep as fair, and a quarter each described getting good or excellent rest. On the other hand, 16% had below-average or poor sleep. These data suggest that while many students sleep quite well, a substantial fraction of students battle with atypical or inadequate sleep. Because exposure to screens at night can interfere with healthy sleep patterns, unplugging could be an effective part of digital detox (with special emphasis on device use in the evening) which would contribute to enhancing the quality of sleep.

Student Sleep Quality in the Past Week

Rating	Number of Students	Percentage	Remarks
1 (Very Poor)	3	3%	Indicates severe disturbance in sleep cycle
2 (Poor)	13	13%	Reflects irregular patterns and fatigue
3 (Average)	34	34%	Suggests moderate rest but scope for improvement
4 (Good)	25	25%	Represents balanced and fairly consistent sleep
5 (Excellent)	25	25%	Signifies healthy routines and strong rest quality
Total	**100**	**100%**	—

Table 3

More Screen Time Tied to Higher Stress, Depression, and Less Activity
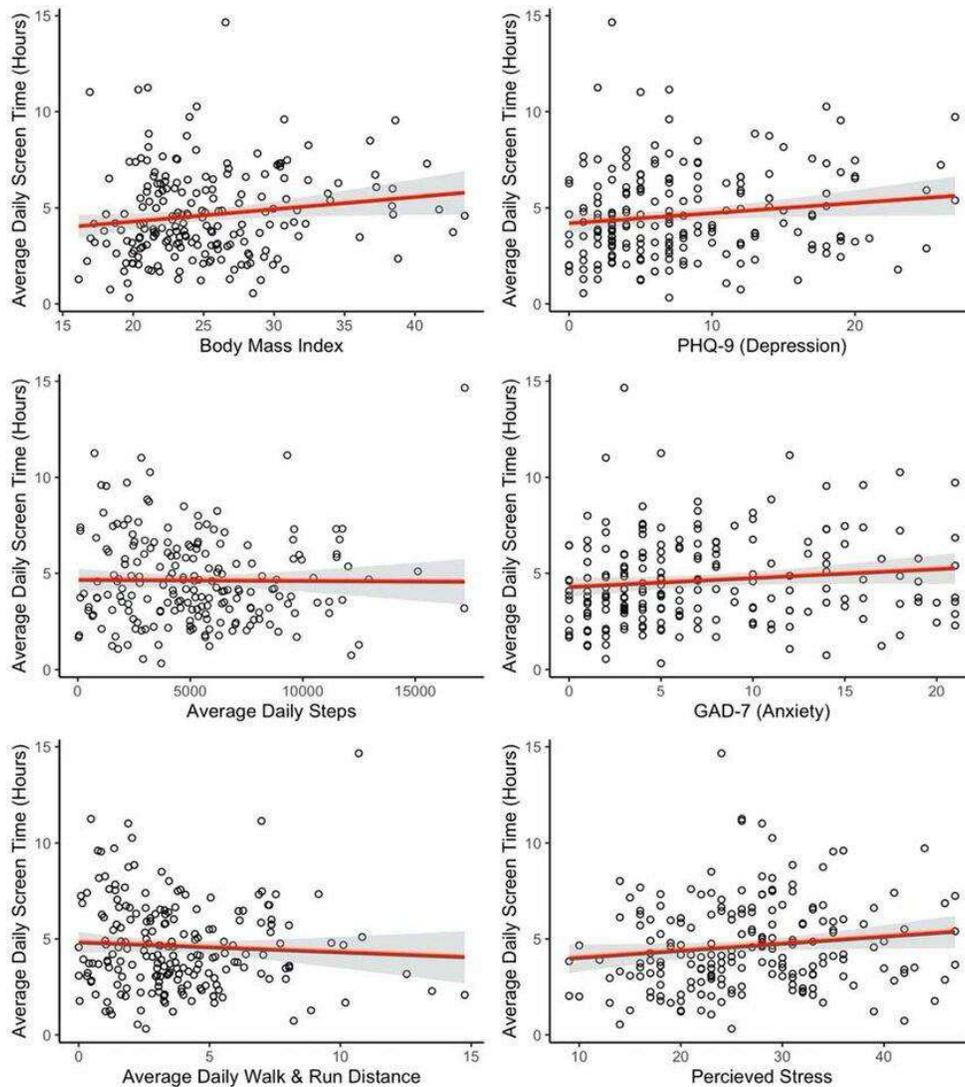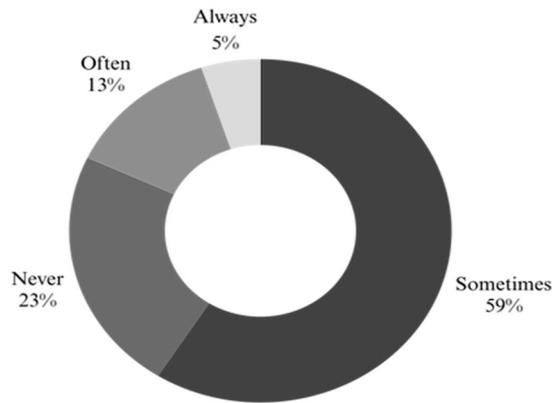
Figure 7

People who say they spend more than six hours a day on screens also are more likely to report that they experience depression, anxiety and stress and have slightly higher body weight. The more physically active are meanwhile free to take more steps while running and walking and generally spend somewhat less time on screens. The patterns are not exactly rock solid, but the overall evidence to this point suggests that heavy screen time isn't terribly good for you and is linked to poorer mental health and less physical activity.

Source- Shaw, H., Ellis, D. A., Geyer, K., Smith, A., et al. (2020). *Quantifying smartphone "use": Choice of measurement impacts relationships between "usage" and health*.

Analysis of Anxiety and Restlessness Away from Phones

Figure 8

Findings suggest that fear of the phone is common for some students. And though 59% sometimes feel uneasy without their phones, and 13% this way often, the share that feels this way all the time is just 4%. About 23% remain unaffected. These results show students reliance on their devices for comfort and companionship. The fact that so far more than two-thirds admitted to sometimes feeling uneasy demonstrates how those digital ties can also dull attention, emotional balance and productivity. It highlights the need for programs aiming to manage dependency in student population and mindset association of tolerance toward phubbing with smartphone anxiety from nearly constant connection.

Age differences in screen time
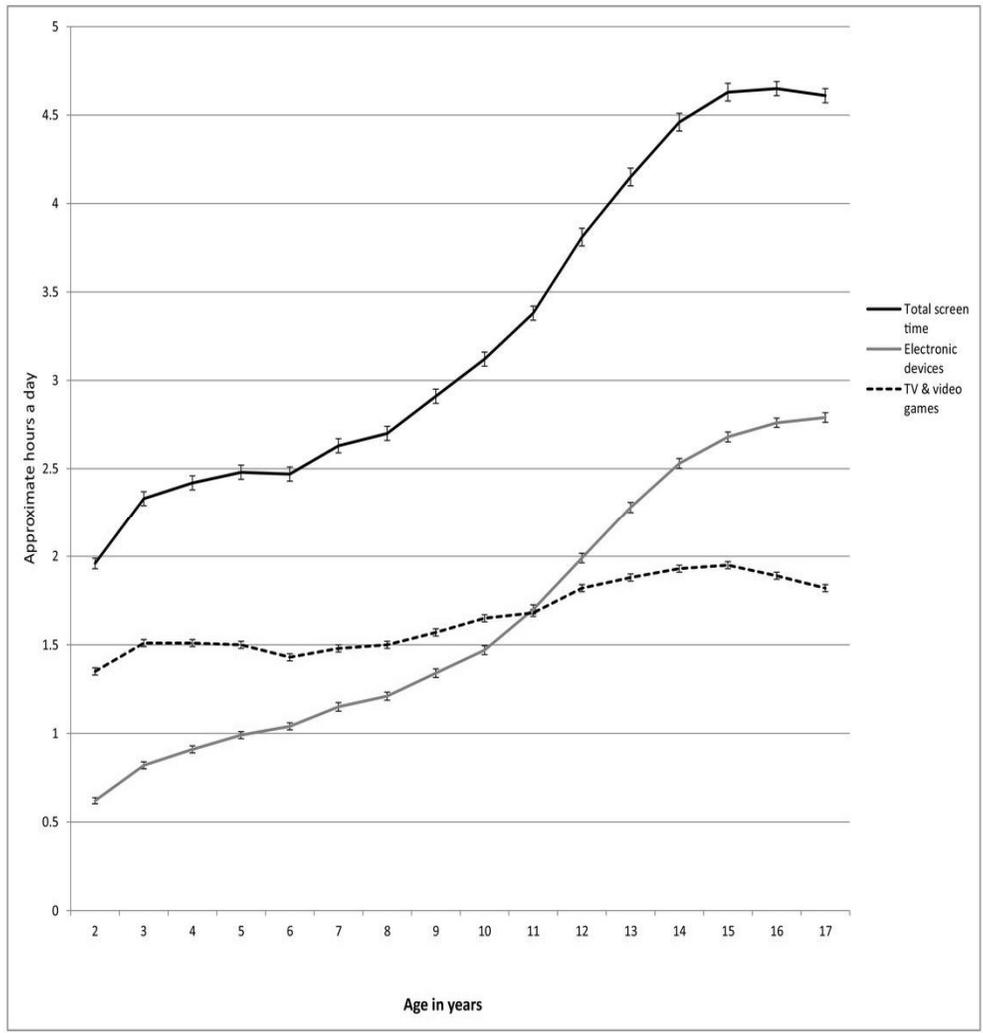
Figure 9

Source - Jean M. Twenge, W. Keith Campbell, Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study, Preventive Medicine Reports, Volume 12, 2018, Pages 271-283, ISSN 2211-3355

The mean time of total screen time was 3,20 h per day (and increased with the child's age mainly due to watching electronic devices. Elementary and middle school was when screen time increased the most. By high school (ages 14 to 17), that number was four hours and 35 minutes per day. This demonstrates the necessity to investigate its impact on high-school and college-age students.

Impact of Digital Detox on Productivity

EFFECTIVENESS OF DIGITAL DETOX IN PRODUCTIVITY
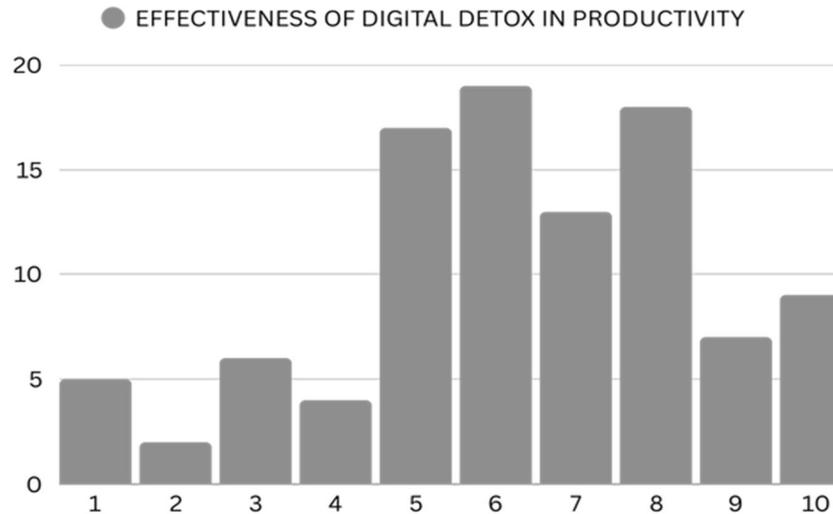
Figure 10

The findings from the feasibility study indicate that overall, digital detox was perceived as effective in enhancing productivity. Although 13% rated it not very helpful (scores 1–3, m =2.77), 40% of patients considered the relationship moderately effective and had scored it between 4 and 6; whereas more than half rated their relationships highly effective (47%, scores 7-10). The average score was 5, while the most common gross scores were 6 (19%), 8 (18%), and 5 (17%); only 9% rated a perfect score of 10. When all was said and done, almost everyone felt some improvement in both paying attention and managing time, although the degree to which students benefitted varied.

Impact of Digital Detox on Productivity

Effectiveness Rating (1–10)	Number of Respondents	Percentage (%)	Key Insight
1–3 (Low effectiveness)	13	13%	A small portion experienced minimal improvement in productivity.
4–6 (Moderate effectiveness)	40	40%	The majority experienced moderate productivity gains.
7–10 (High	47	47%	Nearly half found digital detox

effectiveness)			highly effective in boosting productivity.

Table 4

Analysis of Withdrawal Symptoms During Digital Detox
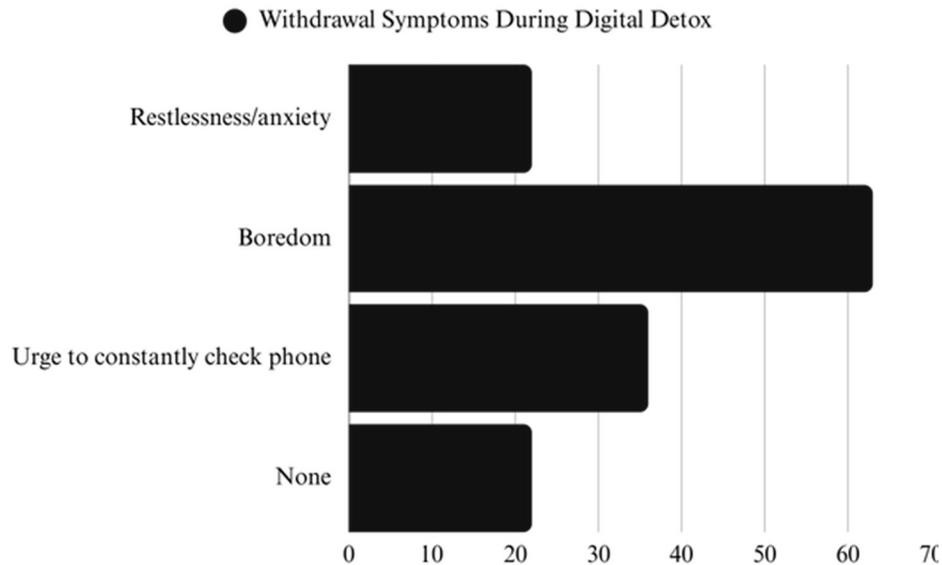
Figure 11

The most frequent withdrawal symptom was boredom, experienced by 63% of participants, showing that digital technologies are an important source of entertainment for many people. A constant need to check their phones, indicating habitual or even compulsive use, was reported by 36%, and 22% said they felt anxious, upset or fidgety when they are cut off from their phones. Notably, 22% of users said that they had no withdrawal symptoms, indicating there may have been less dependence on the drug or a faster adjustment to detox. In sum, although the digital detox can evoke some transitory boredom and habitual urges, most students found they could handle it, supporting its acceptability as a mixed focus/emotion intervention strategy.

Withdrawal Symptoms During Digital Detox

| Withdrawal	Number of	Percentage (%)	Key Insight

Symptom	Respondents		
Boredom	63	63%	The most common symptom; indicates lack of alternative engagement during detox.
Urge to constantly check phone	36	36%	Shows habitual dependence on devices.
Restlessness / Anxiety	22	22%	Psychological discomfort experienced by some participants.
No Withdrawal Symptoms	22	22%	A significant portion managed detox without any noticeable withdrawal effects.

Table 5

How Social Media Affects Our Behaviour

The research found a clear correlation between use of digital devices and length of concentration. The higher the screen time, the poorer students were at remaining so narrowly focused for long, a pattern of degradation that was close to linear and accelerating. Put another way: Excessive extended digital usage over time undermines attention. The constant notifications, the multitasking, and the addiction to hopping between apps or media compound this decline until it becomes difficult for minds to focus on or finish something. Further digital saturation has the potential to produce even shorter spans of attention and shallower levels of cognitive engagement in future generations.

Attention Span vs Digital Device Usage

Inversely Proportional Relationship: Attention Span vs Digital Device Usage
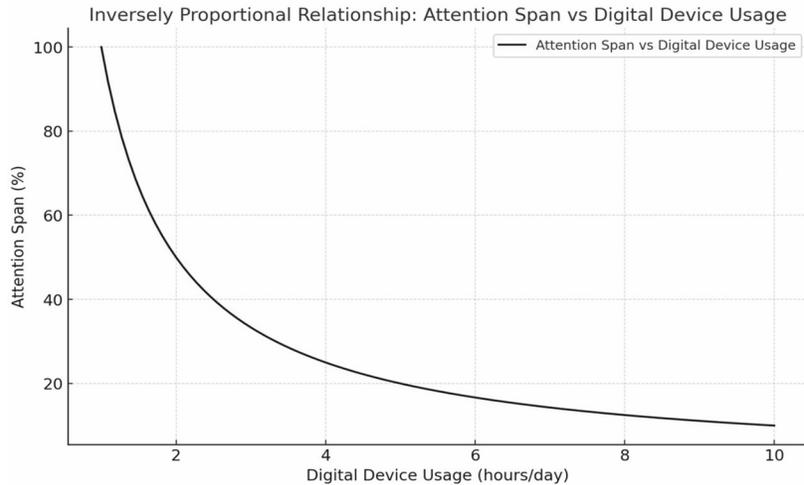
Figure 12

And we found that the more people use digital tools, the more impulsive decisions they make. We found in our graph about impulsivity and gadget behaviour that time-hungry users of gadgets are more likely to make fast, unreflective decisions. And, eventually, so does their ability to make conscious, reasoned choices. It suggests that maybe constant buzzing and updates from our digital devices may be creating a new kind of overreaction in the brain to minor stressors. And that could potentially make it more difficult for people to stop and think about what choice they should end up making, rather than just making choices compulsively.

Impulsive Decision Making vs Digital Device Usage

Directly Proportional Relationship: Impulsive Decision Making vs Digital Device Usage
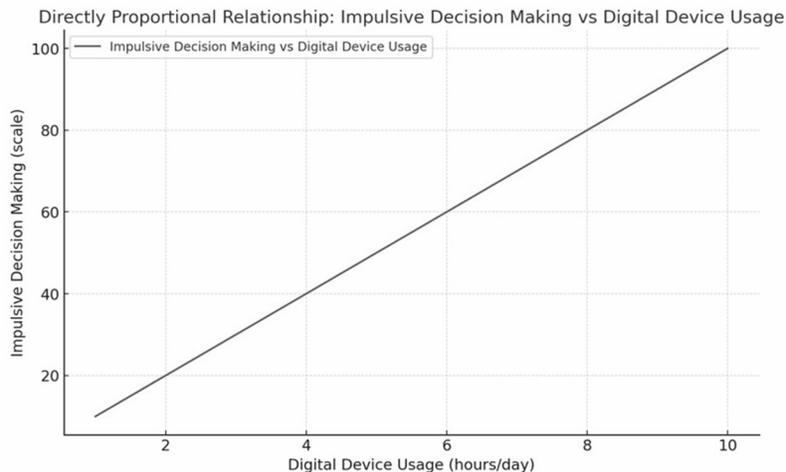
Figure 13

There were a few distractions in it in terms of just kind of measuring how long you could delay instant gratifications by virtue of technology, and when I lined up sort of all the gratifications that can be sorted along on line between an instant and mediated gratification curve as to how much technology enabled them to have that kind of happen, there was a pretty much one-to-one correspondence. And the more we're teaching our brains to work with technology, and particularly social media, the harder we're reinforcing that desire for immediate response. It is likes and notifications, more instantly gratifying than more abstract forms of approval, which are harder for people to resist.

Technology Usage vs Instant Gratification
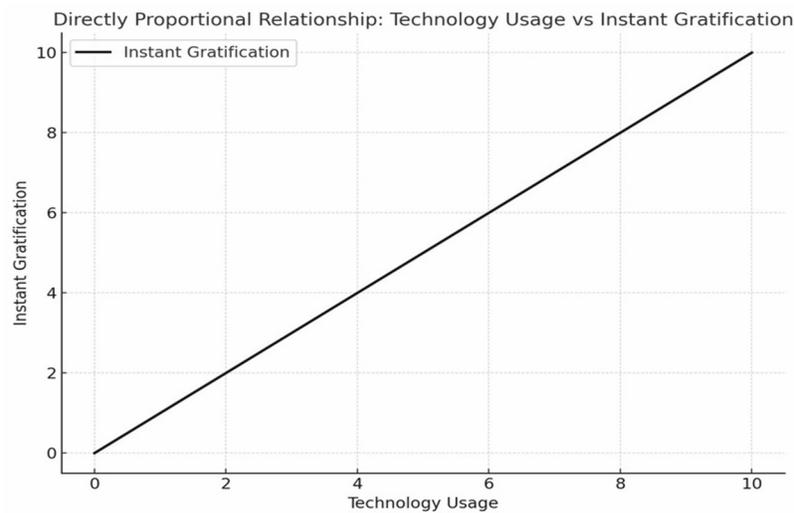
Figure 14

It also demonstrated that people who use more digital devices are less likely to have social contacts. Reverse ratio was calculated by subsequent statistical comparison of social interaction vs. device use (negative correlation) All other statistical analyses were performed on long formatted data. Because as people are on our devices more, there is less time in the physical world during the real life events that they're discussing dudes being held by their social bonds. Continued gadget use seems to have discounted the value of in-person interplay over lifespan and created differences that make transitions and having diverse relationships more competitive.

Social Relationships vs Digital Device Usage

Impact of Increased Digital Usage on Social Relationships
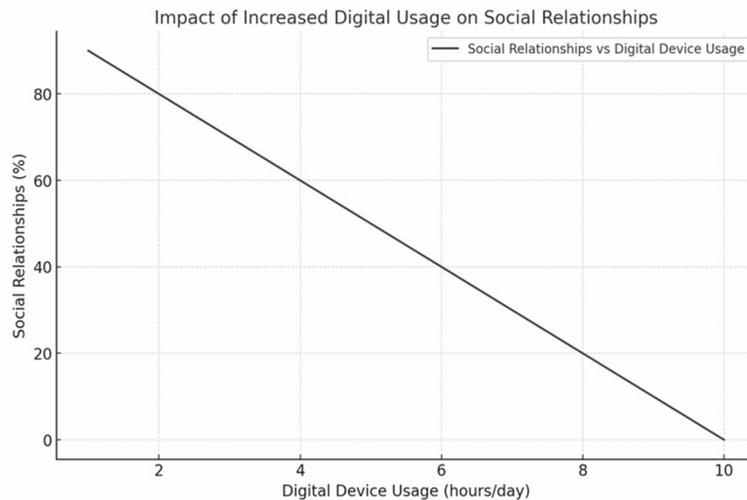
Figure 15

Conclusion

This study suggests that students benefit greatly from having control over technology use, and limitations to using digital tools can lead to increased focus, productivity, and emotional wellbeing for young learners. Results reveal that living in a state of total connection leads to psychological tiredness and emotional exclusion, whereas short periods of digital detox bring the students clarity, discipline and wellness. When they were more mindful of their screen time, participants said that they felt more focused, slept better and were less stressed. Beyond the academic achievement, the practice had valuable effects on mindfulness and healthier habits offline. The results indicate digital detox may be a viable way to cope with emotional distress in the age of hyper connection, enabling students to make more strategic decisions about how they use technology and achieve balance in their mental well-being and academic performance.

Limitations and Future Research

Limitations of the study included a relatively small and urban sample that may limit generalizability to colleges other than Mumbai. The information was based on self-report, and thus users may not accurately recall the amount of time or degree of negative feelings they had experienced. The limited length of the observation period also restricts conclusions on the long-term maintenance of digital detox effects. Future research could include larger, more diverse samples from different regions and utilize digital tracking software to improve precision. Future research can investigate the evolution of

emotional marginalization over time and the long-term effect of structured digital wellness programmes implemented in academia.

Recommendations

The study suggests that colleges include digital wellness education in their student development programs in order to encourage mindful and intentional use of technology. Institutions may host awareness workshops, facilitated digital detox challenges and peer-run support groups to promote better digital behaviours. Faculty could model balanced digital behaviour by including tech-free reflection times or brief "offline learning windows" in class to encourage students to re-engage their attention. Counselling cells need to have emotional regulation and time management modules related with screen dependency and anxiety. Policymakers and educators should see digital detox not as deprivation but restoration, a way to fortify focus, resilience and emotional balance. Future institutional strategies need to focus on developing digital mindfulness, and work to ensure that technology becomes an instrument for learning instead of distraction or psychological stress.

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