

(RESEARCH ARTICLE)



## Effect of social media on mental health: A cross-generational observation

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### Abstract

The impact of social media on mental health has been widely debated, with particular focus on its role in deteriorating mental well-being among younger generations. Since the advent of Web 2.0 in 1999, attention spans have significantly decreased—from 12 seconds in millennials to just 8.25 seconds in Gen Z by 2015, a figure now shorter than that of a goldfish. This may become a very alarming issue with the proliferation of Web 3.0 and highly sophisticated algorithms of social media platforms.

It presents research on how India's increase in cases of mental disorders is interrelated with increased internet usage on social media. There are 104 respondents to give data with the aid of a questionnaire that has proven to be compact and reflective across generations.

**Keywords:** Social Media; Younger generation; Mental disorders; Proliferation; Gen Z; Web 2.0

### 1. Introduction

Social media has become an integral part of modern life, evolving through milestones like the introduction of the internet in 1983, the rise of Web 2.0 in 1999, and now the advent of Web 3.0. The latest revolution, driven by augmented reality, blockchain, decentralized cryptocurrencies, and 5G, offers unparalleled opportunities but also poses significant challenges.

Even though the internet has revolutionized education, research, and communication, it has brought about some negative mental health impacts. The human attention span is reported to have declined from 12 seconds in 1999 to 8.25 seconds by 2015 and might decline further as technology improves. The overuse of social media contributes to anxiety, depression, low self-esteem, and loneliness partly due to the "comparison trap" that allows the users to be exposed only to idealized versions of others' lives [1][2][5].

However, the rise of misinformation and emotionally manipulative content shows that there is a need for a balanced and mindful approach to the rapidly advancing digital age [3].

### 2. Literature review

The social human lives on empathy, support, and interaction; as such, media has harnessed this primary quality to come up with means by which a human being connects people all over the world, markets himself publicly, or even showcases the products he may be dealing in [4][6]. Started initially for developing connectivity, it has today taken an entirely new position as one of the principal means of communication across the internet [3].

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Social media firms are constantly trying to improve algorithms, interfaces, and the user experience toward maximum engagement. Such efforts have some unintended consequences - addiction and further deterioration of mental, physical, emotional, and spiritual well-being among users [6]. Many users face difficulties in using these addictive features, which engage users more than their well-being [7][8].

This paper examines such issues, backed by insights gained from previous literature and perspectives. It also presents findings of an online survey conducted in India with over 100 respondents across different generations and age groups.

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### 3. Methodology

This research examines the impact of emerging technologies like Web 3.0, 5G, and augmented reality, alongside the societal effects of social media. As Chamath Palihapitiya noted, social media's "dopamine-driven feedback loops" are eroding civil discourse and spreading misinformation globally [5][9].

An online survey in July 2023 collected over 100 responses, mainly from Gen-Z, aged 14–34 years, and input from older age groups. The survey involved questions on the use of social media, problems encountered, and emotional experiences. Insights drawn from the survey, along with earlier research, illustrate the impact of social media on public opinion and mental health.

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### 4. Results from overtime surveys

This research examines the impact of social media on mental health, drawing from historical data, expert insights, and a recent online survey. Studies show that Facebook's early use (2004–2006) correlated with a 7% rise in severe depression and a 20% increase in anxiety among college students [7][9]. Psychologists attribute such trends to the "comparison trap," where users compare their lives to curated content, leading to low self-esteem and mental health challenges.

The survey, conducted in July 2023, received over 100 responses, primarily from Gen Z (14–34 years old). Key findings include:

- **Usage patterns:** WhatsApp, Instagram, and YouTube were the most used platforms, with the majority using social media for 1–2 hours daily.
- **Mental health:** Over 50% reported feeling connected or curious post-use, but many also felt lazy, lonely, or anxious. Around 25% reported a negative impact on self-confidence due to social media.
- **Sleep and screen time:** While most had healthy sleep habits (6+ hours), over 50% had screen times exceeding 3 hours daily, often linked to professional or addictive use.
- **Attention span:** 38.5% felt occasionally distracted, while 6.7% reported constant distraction, likely due to overconsumption of short-form content.

Overall, the findings underscore the need for mindful social media use to mitigate its adverse effects on mental health.

The Survey received over 100 responses by the time the observations were recorded. The survey was mostly responded to by Gen Z (age group 14-34) and there were few responses from millennials and baby boomers (age group 29-42 and 42-58). Out of all the responses received mostly were from the male audience and then from the female audience with and only 1 response from genders other than specified.

Over 65% of people feel that they receive productive feedback upon using social media even though there were competitively lesser votes for productive use cases like information gathering, research gathering, etc. About 25% of people voted for that they don't receive any positive feedback upon using social media. And the rest of the people vote that they don't always receive positive or negative feedback. And a small number of candidates selected the other option and elaborated on the reason when they received productive or nonproductive feedback, based on the social media platform they are using.

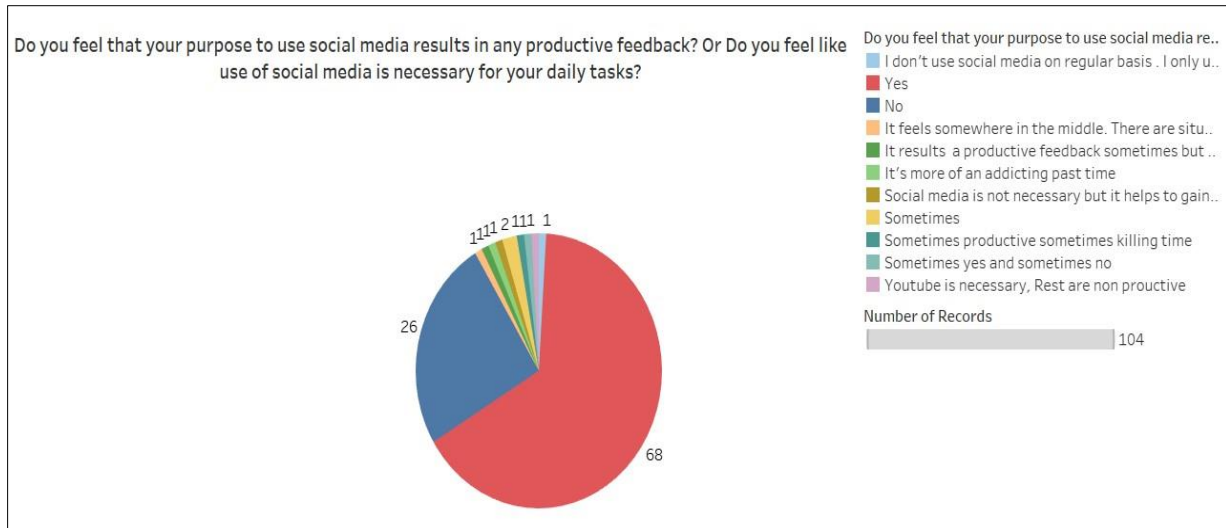


Figure 1 Usage of Social media

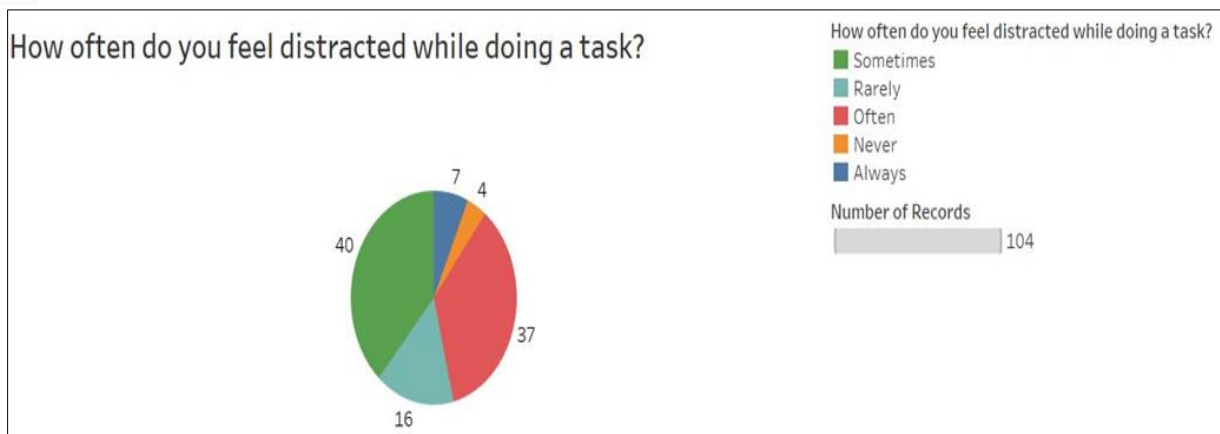


Figure 2 Distraction from social media

## 5. Conclusion

This research paper discussed various perspectives on how the use of social media can affect the mental well-being of a person, where some effects were positive in case someone uses it for productive work/tasks, but also results in extremely negative effects if not used carefully. The objective of this research was to study the behaviour of how today's generation is adapting to rapidly advancing internet applications and social media platforms' features and functionalities. On observing the results of the survey, we can conclude that young generations are adapting well to the recent advancements and the results were nearly parallel to the survey reports conducted by other researchers.

Although social media has also provided countless opportunities to a lot of people, it also has become the primary source of revenue for some. The main issue is about those who use it for wrongdoing, or to harm others. As we proceed with time, cyberbullying criminals and hackers have also become equipped with modern technology. Even being targeted in such situations can cause serious health issues in some.

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