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Review Paper

Rise in the Use of Social Media Due to COVID-19 and Its Consequences: An Integrated Review

Vivek Kumar[1]*

ABSTRACT

The COVID-19 pandemic significantly transformed global communication patterns, leading to an unprecedented rise in social media usage. This integrative review critically examines the extent of this increase and its multifaceted consequences, among people specially in school going adolescents. Drawing upon interdisciplinary literature published between 2020 and 2025, the study synthesizes findings related to digital media consumption, information dissemination, misinformation (infodemic), mental health outcomes, online addiction and safety measures adopted by countries to address the concern. The findings reveal a paradoxical role of social media: while it facilitated rapid awareness and social connectivity, it simultaneously amplified misinformation, psychological distress, and digital dependency. It concludes by emphasizing the urgent need for media literacy, healthy device use, and a regulatory framework by governments that should couple restrictions with responsible use of smartphones to prevent similar crises in the near future.

Keywords: *COVID-19, Social Media, Infodemic, Mental Health, Adolescents*

On December 31, 2019, the World Health Organization was informed about the cases of pneumonia of unknown etiology (unknown cause) detected in Wuhan City, Hubei Province of China. It issued its first guidance on novel coronavirus, which is developed concerning other coronaviruses, such as SARS and MERS. It defined this disease (COVID-19) as an infectious disease caused by a newly discovered coronavirus. International Committee on Taxonomy of Viruses (ICTV) announced "severe acute respiratory syndrome coronavirus 2 (SARS-COV-2)" as the name of the new virus (initially known as 2019- nCoV) as this virus is genetically related to the coronavirus responsible for the SARS outbreak of 2003 (WHO, 2020). On March 11, 2020, WHO declared COVID-19 as a pandemic which is the first-ever pandemic caused by a coronavirus with 118,000 cases reported globally in 114 countries. The outbreak of COVID-19 marked a turning point in the global communication landscape. As governments enforced lockdowns and physical distancing measures, individuals increasingly relied on digital technologies to maintain social interaction, access information, and cope with uncertainty. Among these technologies, social media platforms such as Facebook, Twitter, Instagram, and WhatsApp emerged as dominant tools for communication and information exchange. Social media enabled individuals to produce and share information in real time, thereby challenging the authority

[1]Senior Research Fellow, Punjabi University, Patiala
*Corresponding Author

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of traditional media institutions. One of the most critical challenges arising from this shift was the phenomenon of the "infodemic," defined as the rapid spread of excessive and often misleading information during a crisis (Eysenbach, 2020). Young people are keen consumers of social media. Adolescents or members belonging to generation Z are more likely to engage with social media compared to any other group. For adolescents living in developed and developing nations, digital technology has become an integral aspect of their culture, their education, and more broadly, their life.

Many surveys show a big increase in social media use in India during the COVID-19 pandemic. The crisis made people use digital tools much faster than before. Lockdowns made millions depend on the Internet for work, talking to others, fun, and getting important services. The number of active Internet users jumped from 574 million in 2019 to 759 million in 2022. This fast growth in Internet use would have taken years otherwise. In rural India, Internet use grew by 13%, more than the 5% growth in cities. This shows the gap between rural and urban areas is getting smaller. Most people used the internet for fun, talking, and social media. About 72% used social media, and 85% watched online entertainment, showing how digital media helped people deal with being alone. This rise was not only exclusive to India and other developing countries, but also observed in some developed European and American countries.

Individuals engage with digital environments to construct their identities, establish connections with peers, and seek relaxation. Conversely, they encounter challenges such as increased screen time, disruption of daily routines, and exposure to misinformation. These issues are parallel to other challenges within the digital realm, including online scams and mental health concerns. Social media and other digital platforms facilitate information sharing and connectivity. However, the associated problems have been perceived as potentially detrimental to public health, comparable to the impact of a virus. Contrary to the common perception that social media usage alleviates stress; excessive engagement can intensify stress levels. Several psychological studies have now proved that continued social media use may elevate the risk of emotional disturbances and adversely affect mental health. Therefore many countries are banning use of smartphones and other tech devices in schools/junior colleges for teens under 16.

The objectives of this research paper aims to provide a systematic and an integrative review of rise in social media use due to the pandemic by focusing on its statistical data, information credibility, mental health impact and various government legislations to tackle this menace.

METHODOLOGY

This study adopts an integrative review methodology to synthesize findings from diverse academic sources. The integrative review does not merely report on previous literature but critically analyses and synthesises research in the current field such that new perspectives on the topic are generated (Elsbach & Van Knippenberg, 2020). The integrative approach allows for the inclusion of both empirical and theoretical studies thus providing a comprehensive understanding of the research problem.

Data Sources

Relevant literature was collected from databases such as Google Scholar, PubMed, and Top News websites using keywords "COVID-19," "Social media," "Infodemic," "Adolescents," and "Mental health."

Inclusion Criteria

- Peer-reviewed articles (2020–2025)
- Studies focusing on usage of social media during COVID-19
- Interdisciplinary research (journalism, communication, psychology, pediatrics)

Exclusion Criteria

- Methodology not clear, Data insufficient
- Studies unrelated to COVID-19
- Duplicate publication

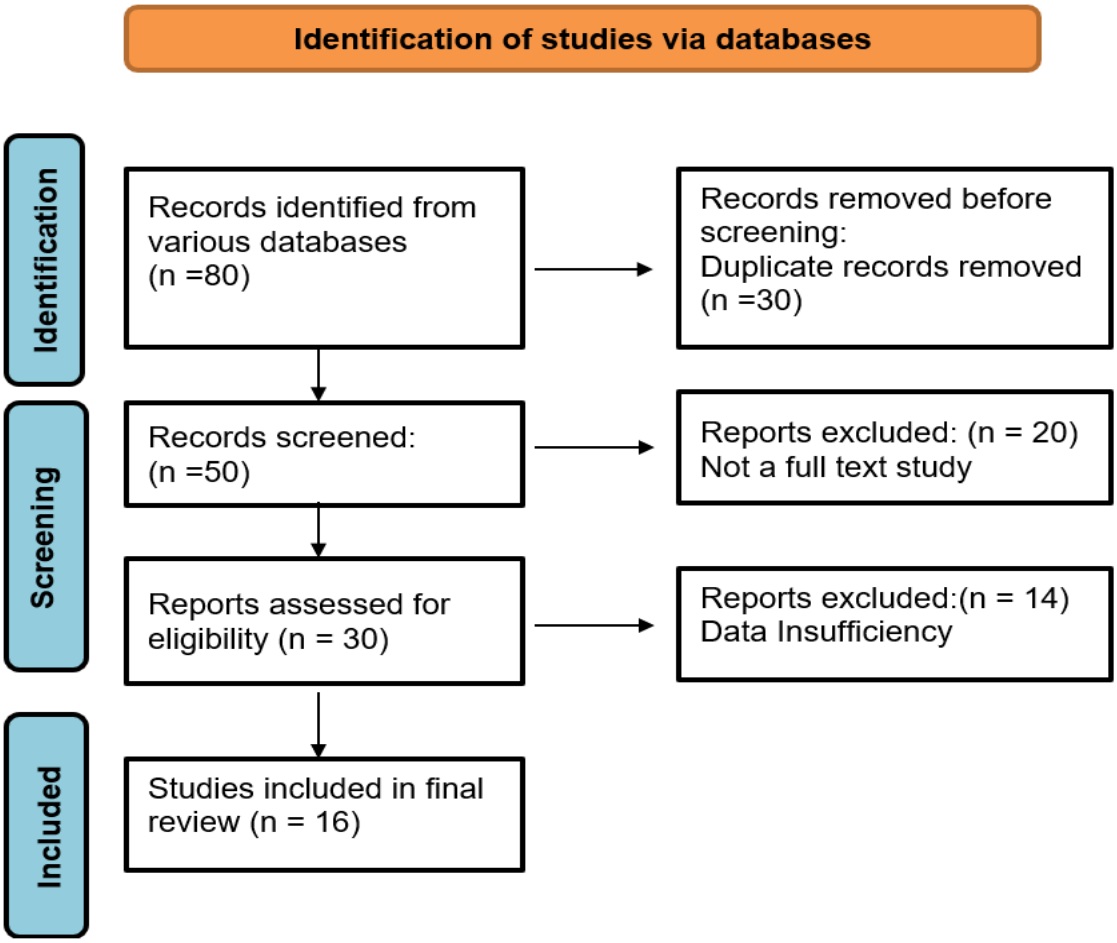


Figure1: PRISMA Flow diagram for Study selection.

THEMATIC ANALYSIS

Rise in Social Media Usage

The COVID-19 pandemic led to a dramatic increase in social media usage worldwide. Lockdowns, remote work, and restricted physical interaction compelled individuals to depend heavily on digital platforms. According to a survey conducted by Hammerkopf Consumer Survey (2020) in Tier -1 cities it is reported that in the first week of lockdown, Indians spent more than four hours every day on social media. This is an 87 per cent increase from a week before lockdown. Before the lockdown, social media usage was on average 150 minutes per day. However, in the first week of lockdown, the figures jumped to

280 minutes per day. The survey added that 75 per cent people were spending more time on Facebook, Twitter and WhatsApp compared to the week before.

On social media, people were largely consuming news and communicating with their friends and families as coronavirus grappled the country. Besides, television, Internet browsing and streaming platform have also seen a rise in viewership, according to the survey. Internet browsing saw a 72 per cent spike during the first week of lockdown (Business Today, 2020).

This rise was not only exclusive to India and other developing countries, but also observed in some developed European and American countries. A popular longitudinal study conducted in Canada reported an increase in social media usage among Canadian adolescents.

Madigan et al. (2022) conducted a comprehensive review examining changes in daily screen time among children and adolescents of Canada before and during the COVID-19 pandemic. They looked at 46 studies with 29,017 participants aged 18 or younger. Findings shows that daily screen time increased by 52%, which is about 84 more minutes each day (from 2.7 hours to 4.1 hours) during the pandemic. Adolescents (12–18 years) had the biggest increase, with 110 more minutes per day as compared to younger children (primary school), who had a smaller increase of about 1.1 hours per day. Screen time on handheld devices and computers went up a lot.

This surge reflects the growing centrality of social media as a communication infrastructure. Notably, the increase was observed across both urban and rural populations, indicating a narrowing digital divide. Adolescents and young adults emerged as the most active users, engaging with multiple platforms simultaneously.

Positive Role of Social Media

Despite its challenges, social media played a crucial role in facilitating communication during the pandemic. Governments and organizations such as WHO utilized these platforms to disseminate health guidelines and updates. Social media also enabled access to online education, telemedicine, and essential services.

During COVID-19 pandemic, people excessively used social media for not only following recent information about COVID-19 but also in terms of obtaining emotional and peer support. Due to its reach, social media has become a powerful platform to spread information and affect on people's behavioural patterns. In addition, participants had started following new information channels in social media to gain up-to-date information on pandemics. They faced also the polarized opinions visible in social media, where they also acknowledged the spreading of pandemic-related misinformation and conspiracy theories.

Social media was not only used to spread official public health messages, but also e.g. humorous COVID-19 memes, reels and other entertaining stuff. Humorous memes have also found to provide a coping mechanism for the pandemic, especially for individuals suffering from anxiety. Increased screen time goes hand in hand with addictive social media use, which is positively linked to the burden of COVID19. A study conducted by WHO and the University of Melbourne in 24 countries, it was found that scientific news and content were deemed to be the most share-worthy of information compared to personal information, images, articles, and other kinds of information that is potentially concerning in nature.

These findings contradict the commonly held belief that funny, entertaining, and emotional content is more likely to be shared.

From a general perspective, social media democratized information by allowing diverse voices to participate in public discourse. This participatory culture enhanced engagement and expanded the reach of information.

Misinformation and Infodemic

One of the most significant consequences of increased social media use was the spread of misinformation. False claims regarding COVID-19 treatments, vaccines, and origins circulated widely, often spreading faster than verified information.

Social media platforms like YouTube and Twitter give people direct access to a huge amount of content. They can also spread rumors and questionable information. Algorithms, which consider what users like, help promote and spread this content. This change from traditional news affects how people see things and how stories are told. When there is a lot of division, misinformation can spread easily. Some studies show that fake news can spread faster and wider than true news (Cinelli *et.al*, 2020). Two survey studies with more than 1,700 U.S. adult respondents give evidence that people share false claims about COVID-19 partly because they simply fail to think sufficiently about whether the content is accurate or not (Pennycook *et al*., 2020).

Also, a relatively large number of researches have been published about COVID-19 misinformation on social media. Indeed, for this the parallel spread of misinformation, the term infodemic has emerged (Eysenbach,2020). The term infodemic, has been coined to outline the perils of misinformation phenomena during the management of disease outbreaks (WHO).

The concept of the "infodemic" highlights the dangers of excessive and unverified information. Algorithms on social media platforms prioritize engagement, which often amplifies sensational content.

This phenomenon posed serious challenges in the field of health communication, as traditional gatekeeping mechanisms were weakened. The rapid spread of misinformation-undermined public trust and complicated crisis communication efforts.

Mental Health Implications

Excessive use of social media, which is often thought to help reduce stress, can actually have the opposite effect. Studies have shown that spending too much time on social media can increase the risk of emotional problems and harm mental health (Abbas *et al.,* 2021). The COVID-19 pandemic and lockdowns have affected adolescents emotional and behavioral health in different ways. Internal problems are most common, but external behaviors are also a concern for some (Bera *et al*.,2022).

The BBC *Children in Need* report (2020) provides early insight into how the COVID-19 pandemic affected children and young people in the UK, especially those already living a disadvantaged life. Many important issues are raised up in this report. First, children experienced isolation, missing regular social contact with friends, peers, and trusted adults. Second, there was increased emotional distress like anxiety, fear, and stress both among children and their parents. Third, family relationships came under strain, with rising conflict

and reduced respite opportunities. Fourth, children faced more danger at home and online because they had fewer safe places and spent more time on the Internet. Fifth, loss of access to school education and extracurricular activities hurt their growth and learning.

Divya Gandhi, in her article "Children of the Web" (2023), quoted an advisory report given by U.S. Surgeon General Vivek Murthy which warned of the profound risk of harm, including exposure to self-harm content and addiction, that social media poses to the mental health of children and adolescents. Research shows that frequent social media use can cause brain changes similar to those seen in substance and gambling addictions.

In a report titled *Teens, screens, and mental health* by World Health Organization (2024) provides one of the most comprehensive assessments of adolescent digital habits and their health consequences across Europe, Central Asia, and Canada. They survey nearly 280,000 adolescents and highlight alarming increases in problematic social media use and gaming. The findings show that digital connectivity is very prevalent among adolescence. More than a third of them say they are always online with friends, and 34% play video games every day. Being online can help them connect socially, but the report warns that too much or uncontrolled use can lead to problems like poor sleep, lower life satisfaction, and poorer academic performance. It also points out differences in how boys and girls, of different ages, use screens. The WHO urges governments, schools, and families to teach digital skills to protect teenagers' well-being. The report is a timely reminder that while digital technologies is here to stay, we need to take action to prevent a mental health crisis among adolescents.

Excessive usage of the Internet not only impacted adolescents' health but also affected their parent's health adversely. This caused problems in their family lives. A survey, conducted by Cybermedia Research (2024), highlights the adverse effect of excessive smartphone use on parent–child relationships in India. Parents spend an average of over five hours daily on smartphones, while children spend more than four hours, with social media and entertainment dominating their screen time. The study reveals that 66% of parents and 56% of children recognize negative changes in their personal relationships due to this overuse. Furthermore, both of the groups admit that smartphones are a frequent source of conflict between them. Even though they want closer family ties, but both parents and children are not ready to change their habits that shows they rely heavily on smartphones (PTI, 2024).

The phenomenon of "doom scrolling," characterized by continuous consumption of negative news, further exacerbated mental health issues. These studies highlight the need for balanced digital consumption and mental health awareness.

Nations banning social media for teenagers

The UNESCO Global Education Monitoring Report titled, 'Technology in Education: A Tool on Whose Terms' 2023, cautions against the uncritical adoption of digital tools in schools, highlighting limited independent evidence of their effectiveness. While some companies have promoted their products through self-funded studies, findings show excessive screen time negatively impacts academic outcomes and emotional stability. The report endorses restricting or banning smartphones in schools, noting that proximity to devices reduces learning performance, with bans especially benefiting low-performing students. A study of children aged 2–17 years found that high screen time reduces curiosity, self-control, and well-being lead to increase anxiety and depression. There are also big concerns about children's data privacy, with only 16% of countries having laws to protect it. It urges governments to prioritize learner's rights and enact stronger safeguards.

On Nov 29, 2024, the Australian federal government amended the Online Safety Act to ban children younger than 16 years from having social media accounts. The amendment requires platforms to take reasonable steps to enforce the ban, with fines of up to AUD$50 million for non-compliance. (Fardouly, 2025).

However, Australia is not a single country in this fray; many European and American countries partially ban or restrict the use of social media by adolescents under 16.

France has taken a strong step by passing a law in 2023 that makes platforms check the age of users and get parental consent for children under 15. In 2024, Spain raised the age for children to open social media accounts from 14 to 16. Norway is considering rising the minimum age from 13 to 15, while Italy already requires parental consent for children under 14. At the European Union level, the GDPR (General data protection act) allows each country to set its own age limit.

In U.S.A. there isn't a nationwide ban on social media in schools, but a growing number of states are implementing policies or passing laws to restrict smartphone use during the school day, with some explicitly targeting social media platforms by blocking access (Associated Press, 2025).

If we look at the Indian scenario currently, there is no outright social media ban for adolescents in India. But according to the draft rules of the Digital Personal Data Protection Act, 2023 outlined by Ministry of Electronics and Information Technology (MeitY) of the GOI mandates verifiable parental consent for individuals under 18 to create social media accounts.

Suhas (2025) in a Lancet article titled *India needs a national social media policy for children, adolescents, and young adults* argues the urgent need for India to develop a national policy on social media use among children and adolescents. With platforms like Instagram and YouTube Shorts dominating daily life, young people are increasingly drawn to content creation for fame and financial gain. This environment fosters sensationalism, insecurity, and anxiety.

Table 1: Summary of Key Studies

Author	Year	Focus Area	Key Findings
Kantar/ICUBE survey	2022	Surge in social media use	Active Internet users rose sharply from 574 million in 2019 to 759 million in 2022
Cinelli *et al.*	2020	Infodemic	Fake news spreads faster than real news
Pennycook *et al.*	2020	Misinformation	Users share without verification
Madigan *et al.*	2022	Screen Time	52% increase among adolescents
Abbas *et al.*	2021	Mental Health	Increased anxiety and stress
UNESCO GEM Report	2023	Technology in Education	Cautions against the adoption of digital tools in schools, advocates to ban them
BBC	2020	Children in Need (Report)	Children experienced isolation and emotional distress
World Health	2024	Teens, screens, and	Excess use of social media can

Author	Year	Focus Area	Key Findings
Organization		mental health	lead to poor sleep and academic performance.
Associated press	2025	Social media ban for minors	EU and U.S.A. considering limited ban on social media use in schools
Satish Suhas (Lancet)	2025	Social media policy for India	Urges India to make a national social media policy like Australia
McAlister *et al.*	2024	How to regulate social media use	Empowering adolescents with digital literacy rather than banning
Bottger and Zierer	2024	To Ban or Not to Ban social media in schools	Implementing bans should be coupled with educational measures.

DISCUSSION

The findings of this review reveal the dual nature of social media during the COVID-19 pandemic. On one hand, social media served as an essential tool for communication, education, and emotional support. On the other hand, it contributed to misinformation, digital fatigue, and mental health challenges.

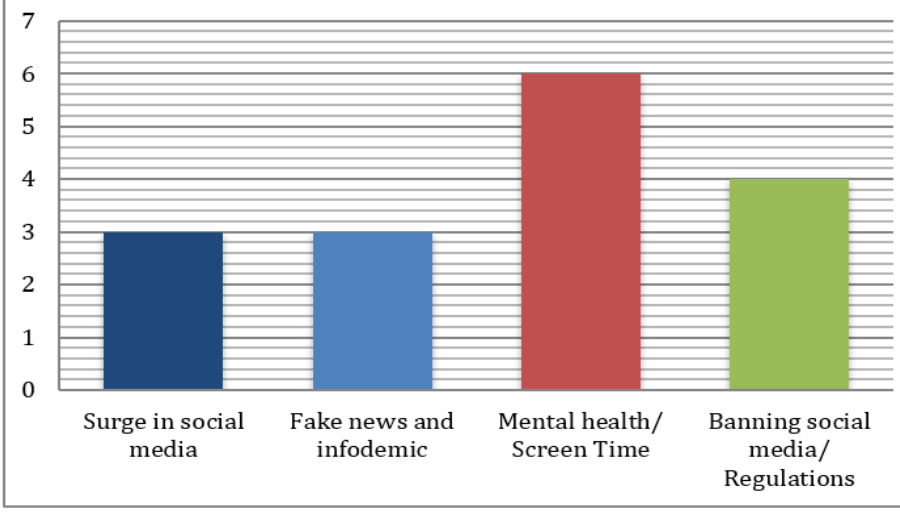
The role of algorithms in shaping information flows further complicates this landscape. By prioritizing engagement over accuracy, social media platforms contribute to the spread of misinformation, fake news and other sensationalism. Together, they combine and give birth to a term called Infodemic. This highlights the need for ethical standards and technological interventions to ensure credible communication. Other important by product of the pandemic was dependence on smart devices at home, which leads to digital addiction among adolescents. The over usage not only hinders their actual growth but also creates trouble in their family lives. Parents-children relationship suffers the most in this whole episode of lockdown.

Therefore a Unesco (2023) report endorses restricting or banning smartphones in schools, noting that proximity to devices reduces learning performance, with bans especially benefiting low-performing students. It states that children of aged 2–17 years having high screen time reduces their curiosity, self-control, and well-being which results in anxiety and depression. There are also big concerns about children's data privacy, with only 16% of countries having laws to protect it. It urges governments to prioritize learner’s rights and enact stronger safeguards Australia and many European nations banned the use of smartphones and other modes of digital education in schools but these regulations are somehow very difficult to monitor. Students can easily hoodwink the system and access them very often.

Bottger and Zierer (2024) in their meta-analysis, examines whether smartphone bans in schools influence students social well-being and academic outcomes. Their analysis revealed a small but statistically significant effect for smartphone bans, the positive impact was more noticeable for social happiness than for academic performance. They alarmed that limited sample size of studies and irregularity in methodologies might hide or reduce possible academic benefits.

Overall, the studies selected for this review highlight that the rise in social media usage has posed many serious challenges both mental and physical among pupils. The increase usage gave birth to addiction, which deteriorates physical and mental health. To avoid this and safeguard future generations, various countries passed legislative orders to curb this menace. But a blanket ban on something is not always a solution. The next crucial step for policymakers is to comprehend that implementing bans should be paired with educational measures including promoting media literacy, responsible device use and regular evaluations to understand long-term and context-specific outcomes.

Table 2: Net no.of papers/articles reviewed



CONCLUSION

The COVID-19 pandemic significantly increased reliance on social media, transforming it into a central platform for communication and information dissemination. While it provided numerous benefits, it also introduced significant challenges, including misinformation and mental health concerns. This integrative review underscores the importance of responsible journalism, digital literacy, and regulatory frameworks. It is evident from the studies and research reports mentioned above that Internet usage increased sharply during and after the pandemic. This rise was not limited to any single country or continent; rather was observed across all major regions of the world, affecting people of diverse backgrounds. The upsurge in social media use also diminished traditional boundaries of age, gender, educational level, and socio-economic status among users.

The review also stressed that the advantages of digital media usage are abundant, but they come up with heavy risks like anxiety, depression, physical inabilities, online scams, peer comparisons, etc. To mitigate these risks, the government and other social organizations must promote digital media literacy coupled with healthy device use. Parents, teachers and other responsible institutions have to upgrade their role and redefine their duties.

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Conflict of Interest

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