

The Impact Of COVID-19 Pandemic On The Academic Experiences Of Indian School-going Students: A Scoping Review

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Abstract: The COVID-19 pandemic caused unprecedented disruptions in the education sector, significantly impacting the academic experiences of Indian school-going students. This scoping review examines the direct and indirect factors that contributed to challenges encountered by students during the pandemic. A systematic search across PubMed and Scopus identified 367 articles. Following the screening process, a total of 12 articles were analysed. The key themes emerging from the review include challenges posed by technology and online classes, lack of motivation, limited educational resources, self-management difficulties, and emotional distress. Additionally, factors such as the absence of socialization and motivation, increased screen time, and rising reliance on social media were significant contributors to negative academic experiences. The shift to online learning environments intensified pre-existing inequalities, particularly for marginalized and low-income students, amplifying disparities in their educational access. The findings emphasize the need for strengthened mental-health support, integration of cognitive and behavioural skills into curricula, and equitable access to educational resources to address both immediate and long-term difficulties. Consequently, the study calls for future research that prioritises regional and cultural inclusivity to develop strategies that support students' academic recovery and overall well-being. Such efforts are essential in creating a resilient and inclusive educational framework that alleviates the lingering effects of the pandemic.

Keywords: COVID-19, academic experience, online learning, educational challenges, mental-health support.

In December 2019, Wuhan, China, served as the coronavirus disease (COVID-19) epicentre, which rapidly spread worldwide, leading to the global pandemic. According to the World Health Organisation, COVID-19 is an infectious disease resulting from the SARS-CoV-2 virus (World Health Organisation [WHO], 2020). The virus caused millions of cases and fatalities, destroying lives and livelihoods all around the world (WHO, 2020). It wreaked enormous social and psychological effects on individuals and communities, overwhelmed healthcare systems and disrupted economies (Holmes et al., 2020). COVID-19 not only altered the course of history but also the way we live today (Zhu et al., 2020).

The Indian government declared a nationwide lockdown on March 23, 2020, leading to the temporary closure of all educational institutions. According to Dayal and Pratibha (2023), India had the second-longest school closure period, lasting 82 weeks, second

behind Uganda, which lasted 83 weeks. The shutting down of schools disrupted the academic experiences of millions of Indian students. The abrupt transfer from traditional in-person classroom interactions to remote, online learning presented challenges. Students expressed fears and concerns about their academics and reported experiencing stress due to difficulties encountered in adjusting to the prolonged restrictions that came with the pandemic (Chhetri et al., 2021).

The present study focuses on school students, recognizing them as a vulnerable population that has been severely affected by the pandemic. The closure of schools and the sudden shift to online learning during this critical development phase can have long-term impacts on students' academic achievements and their overall growth.

Appropriate provisions must be made in the post-pandemic period, given the pandemic's enduring

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consequences and the apprehensions it has raised about the possibilities of imparting education through innovative methods (Panakaje et al., 2022). SARS-CoV-2 infection has been linked to long-term repercussions, particularly in brain regions associated with the olfactory cortex, a modestly accelerated reduction in the overall volume of the brain, and increased cognitive decline (Douaud et al., 2022). This suggests that even mild cases of COVID-19 can lead to long-lasting detrimental effects on brain structure and function. Similarly, the transition to online learning prompted by lockdown measures has shown to adversely affect the academic and cognitive development of students across all age groups (Colvin et al., 2022).

Although online learning was a necessary response to the pandemic, there appears to have been a prominent impact on the academic experiences of the students which cannot be overlooked. Therefore, the current scoping review aims to elucidate the significant factors influencing the academic experiences of school-going students during the pandemic in India with the following objectives:

- a) To identify the direct factors affecting the academic experiences of Indian school-going students during COVID-19.
- b) To examine the indirect factors influencing the academic performance of Indian school students during the COVID-19.

Methodology

To identify the relevant studies, a scoping review methodology was employed to synthesize existing literature on factors affecting the academic experiences of school-going students during the pandemic in India. The review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines for scoping reviews to maintain transparency and systematic reporting.

Arksey and O'Malley's (2005) framework, with some modifications proposed by Levac et al. (2010) and Peters et al. (2015) was used. The five-stage approach to

conducting a scoping review given by the authors encompasses:

- Identifying the research question
- Identifying relevant studies
- Study selection
- Charting the data
- Collating, summarizing and reporting the results.

Search Strategy

An extensive and systematic search of literature was conducted across two major electronic databases—PubMed and Scopus. The search was performed in August and September 2023. The search strategy combined relevant keywords to ensure the comprehensive retrieval of the research studies.

The keywords and Boolean operators (AND, OR) used were:

- Pandemic-related terms: Coronavirus, COVID-19, COVID-2019, pandemic.
- Academic experience terms: Mathematical abilities, arithmetical abilities, numeracy skills, literacy, academic attainment, education, online education, student performance.
- Population terms: Indian students, school-going children, primary students, secondary school students, higher secondary students.

Study Selection

The initial search yielded 367 articles among which, 304 studies were extracted from PubMed while 63 studies were obtained from Scopus. To ensure the relevance of the studies included, specific inclusion and exclusion criteria were adopted.

The inclusion criteria of the study encompassed peer-reviewed articles published in English between March 2020 and August 2023 that investigated the impact of various factors on academic experiences among Indian students during the pandemic. Further, the research included only the general population of typically developing children who exhibit age appropriate physical, cognitive, social, and emotional changes without any diagnosed neurodevelopmental or psychological disorders. The children were enrolled in either primary, secondary, and/or high school. The focus of the study was on the Indian setting, hence only

articles analysing data from India were included in the study.

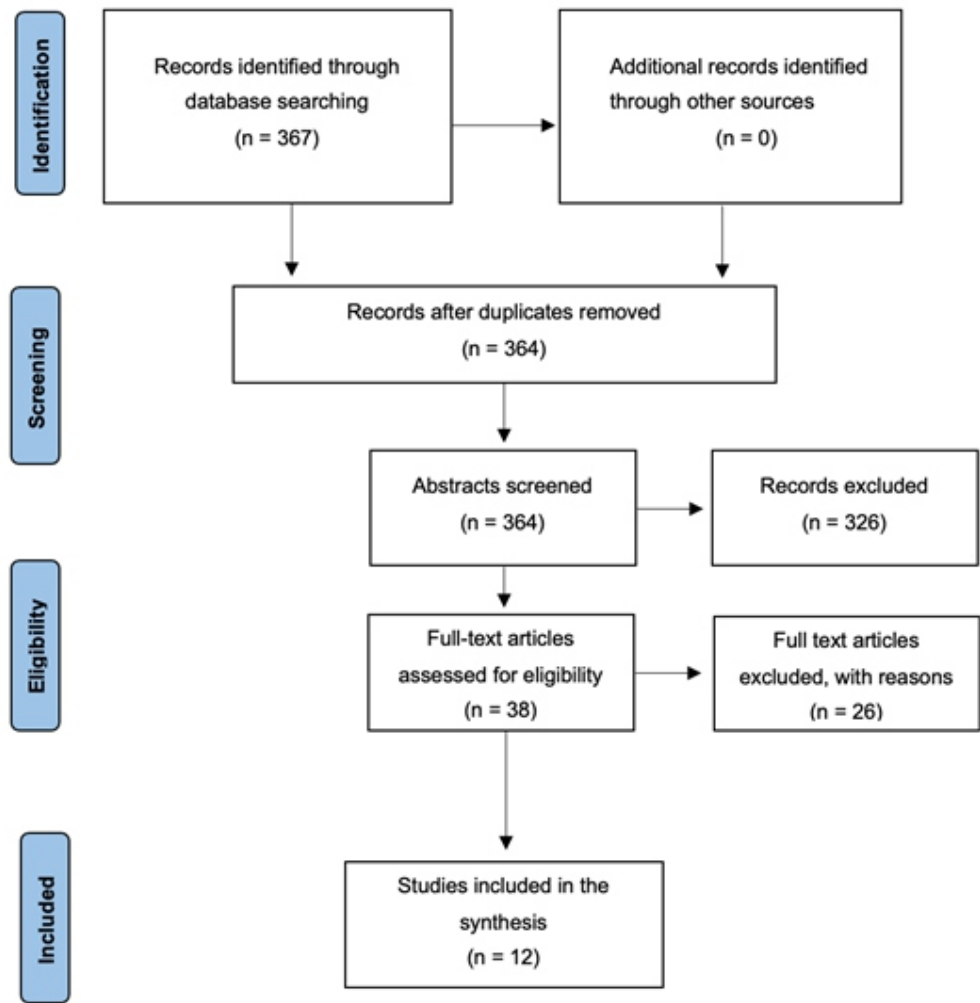
Articles were excluded from the study if they: (i) did not assess academic experiences; (ii) consisted of specific sub-groups rather than the general population; (iii) were review articles; or (iv) were unpublished articles, reports, conference proceedings, or case studies.

Figure 1 illustrates the PRISMA Flow chart, depicting the review and selection process of articles

for the current study. The initial search yielded 367 articles. These articles were inserted into Covidence for further screening resulting in the removal of 3 articles for duplication. Following this, 364 articles were further screened based on their title and abstracts in accordance with the aforementioned inclusion and exclusion criteria. The process resulted in the retrieval of 38 articles. Of these, 26 articles were excluded during the full text review since they did not meet the selection criteria. Finally, the review resulted in the selection of 12 studies, consistent with the selection criteria and objectives of the current research.

Figure 1

PRISMA Flowchart Illustrating the Review and Selection of Studies



Data Extraction and Analysis

The information extracted from the final 12 articles included—the name and identity of the article, name of the authors, year of publication, the geographic area in which the study was conducted, the timeline of data collection, study design, target population, the sample size, age range of participants, the sample selection criteria, method of data collection, tools/questionnaires used in the studies, the associations with the COVID-19 pandemic in conjunction with academic experiences, the outcomes obtained, statistical analysis, and the main findings reported. The process was carried out by two researchers. Any disagreements were discussed and addressed thorough deliberation to resolve potential discrepancies.

Thematic Synthesis

Data from the 12 studies was analysed through the

Table 1

Recurring Factors Identified Across the Twelve Studies

Major Categories	Recurring Factors
Online classes and technical challenges	• Online class as a major hurdle. • Lack of proper internet connectivity. • Technical glitches during academic activities. • Differing class schedules. • Network connectivity issues. • Electricity issues/Technical difficulties. • Lack of awareness of proper use of technology. • Failure to accept e-learning. • Insufficient access to high-speed internet services and the absence of technological devices. • Online classes rendered several subjects more difficult than in-person classes.
Stress and academic pressure	• Negative impact on the mental health of students. • High pressure. • Ongoing academic activities leading to stress. • Significant percentage of the sample has high and mild stress. • Fear and worry, in addition to violation of guidelines. • Gender differences: females experienced more stress than males. • Fear of vulnerability.

process of thematic synthesis. The data was reviewed line by line and colour-coded manually to develop analytical themes pertinent to the academic experiences of Indian school-going students. Two reviewers independently carried out the coding process to guarantee consistency and reliability. Similar codes were grouped together into broader categories, thus leading to the development of descriptive themes while remaining authentic to the findings reported in the original studies.

The reviewers then evaluated the descriptive themes to identify overarching patterns and relationships, which were synthesized into broader analytical themes. For instance, findings related to technical glitches during academic activities, lack of awareness of proper technology use, and non-availability of gadgets were synthesized into the theme of “Online classes and technical challenges”. Through this process, a total of six themes, or categories, were obtained.

Self-management and adaptation difficulties	• Increasing number of days in lockdown causing worries about education, growth, and careers. • Stress caused by gradually losing attention in their online classes during confinement. • Non-opening of educational institutions. • Students face self-management problems. • Inability to adapt to the new paradigm of teaching and learning. • In people with anxiety online classes cause mild to severe stress. • Adaptation to chaotic working hours. • Inadequate individual attention. • Delay in response from teachers. • Students did not have enough time to refresh in between classes.
Resource scarcity and lack of motivation	• Lack of proper resources (in institutes). • Students do not find online exams beneficial. • Students tend to take help from online available information to write their tests, making them more casual. • Unavailability of proper mobile network in rural or remote areas. • Increased expenses for the internet. • Non-availability of gadgets. • Sufficient resources, such as smartphones, laptops, and desktops, are not available to attend classes online.
Increase in social-media and online gaming use	• Lack of physical activity. • Heavy usage of social media accounts. • Students get engaged in multiplayer online games, impacting their attention towards online classes. • Students played online games to relieve stress. • Increase in playing time after the lockdown. • Long-term social media use impairs academic performance. • Students who spent more time on social media for academics saw decreased academic performance. • Addiction to phones and laptops at an early age, affected students' eyes and overall health.
Lack of socialization and emotional distress	• Loneliness and sedentary lifestyle. • Parents and students barely interact, leading to feelings of loneliness in students. • Not meeting friends in person affected academic focus. • Lack of face-to-face interactions leading to reduced focus on academics and concentration. • Physical presence of friends and teachers seen as important for enhanced learning, obstructed by online classes.

Results

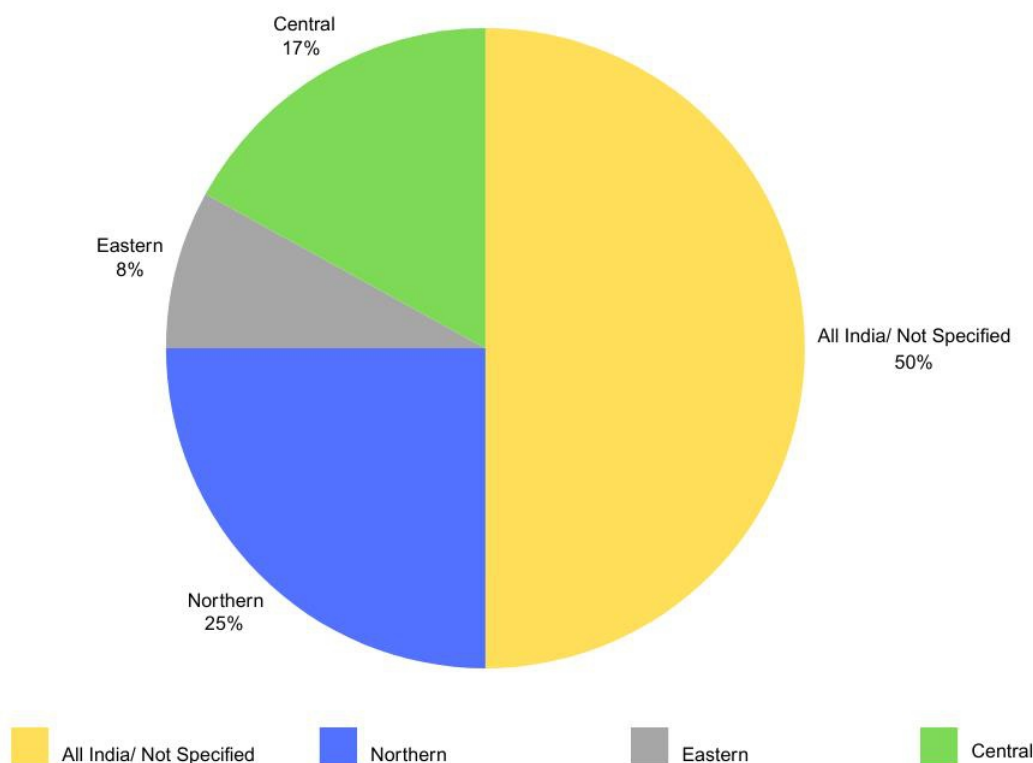
Characteristics of studies included

The final twelve studies that were included in the review comprised of participants from different regions of India. Herein, the percentage of studies with exclusive representation from various regions encompass— 25% of the

studies focusing on the northern representation, 8% on eastern regions, 17% on the central regions and 50% represented all-India data or did not specify a particular region. The participants were school students between the ages of 6 and 18 years, with a mean age of 14 years and the sample sizes ranged from 101 to 3,120 students.

Figure 2

Pie-Chart Illustrating the Percentage of Studies with Exclusive Representation from Indian Regions



The twelve studies mostly utilised cross-sectional survey methods to investigate school-going students' academic experiences during the pandemic. The primary method of gathering data was online surveys, using tools like Google Forms that were disseminated via email and social media sites like Facebook and WhatsApp (Barupal et al., 2022; Chhetri et al., 2021; Chockalingam et al., 2020; Datta & Kundu, 2021; Kaur et al., 2022; Khattar et al., 2020; Kulkarni & Velhal, 2022; Selvaraj et al., 2021; Yadav, 2021). Offline data collection techniques, like questionnaires and interviews, were employed in certain studies to ensure inclusiveness, particularly in regions with limited access to the internet (Kar & Kar, 2023; Rannaware et al., 2022). Snowball sampling (Chhetri et al., 2021; Datta & Kundu, 2021), convenience sampling (Kaur et al., 2022), simple random sampling (Rannaware et al., 2022), and multistage sampling (Kar & Kar, 2023) were among the strategies used in the studies. Since the included studies had samples from both urban and rural areas it covers students from diverse geographical regions and socio-economic backgrounds in India.

A comprehensive summary of the 12 articles is provided in Table 2.

Table 2*Main Table Summary of the 12 Articles Reviewed*

Sr. No.	Author Names (Year of Publication)	Sample Characteristics	Location of Target Population	Direct Factors Affecting Academic Experiences	Indirect Factors of COVID-19 on Academic Experiences
1	Barupal et al. (2022)	Total: 3120 students. School: 873 students and rest college students	Rajasthan, Delhi, West Bengal, Maharashtra, and Tamil Nadu.	1. Lack of proper resources (in institutes.) 2. Lack of proper internet connectivity. 3. Lack of awareness of proper use of technology. 4. Differing class schedules. 5. Students do not find online exams beneficial. 6. Students tend to take help from online available information to write their tests- making them more casual.	1. Heavy usage of social media accounts. 2. Parents and students barely interact with one another- makes the students feel lonely or alone.
2	Chhetri et al. (2021)	450 students. 35 (15-18) and rest college students	Sikkim, Delhi, Haryana, and other states.	1. Online class as major hurdle. 2. Self-management problems. 3. High pressure. 4. Technical glitches during academic activities. 5. Ongoing academic activities leading to stress. 6. Failure to accept e-learning. 7. Stress is induced by gradually losing attention in their online classes during their confinement period. 8. Unable to adapt to the new paradigm of teaching-learning. 9. Individuals more anxious about studying online experience mild to severe stress. 10. Non-opening of educational institutions.	1. Significant percentage of the sample have high and mild stress. 2. Fear and worries along with violation of guidelines 3. Consuming alcohol and violation of policies. 4. Gender difference: females experienced more stress than males. 5. Essentials like food and medicine. 6. Fear of vulnerability. 7. The increasing frequency of lockdown days, as well as other government regulations, may cause students to feel apprehensive about their education, development, and careers.

3	Chockalingam et al. (2020)	101 school students (18 and below	Not specified.	1. Getting engaged in multiplayer online games: important reason for not giving proper attention towards the online classes.	1. Interaction with friends: through playing online. 2. Played online games to relieve stress. 3. Increase in playing time after the announcement of lockdown.
4	Datta & Kundu (2021)	183 school students (12-17 years	All India.	1. Not meeting friends in person- affected focus on academics. 2. Lack of face-2-face interactions: leading to reduced focus on academics and reduced concentration. 3. Not personally interacting with friends has lowered their focus in interest in academics and concentration. 4. Physical presence of friends in enhancing learning- appreciated as an important factor. 5. Physical presence of a teacher said to enhance learning- obstructed by mere presence of material, video or class on a screen.	1. COVID-19 has altered our regular lives. 2. Adverse effects observed on mental and physical health. 3. A delay in going to bed was discovered during the pandemic lockdown. 4. There was a significant delay in wake-up time during lockdown. 5. Parents' relative tolerance about phone use may be responsible for increased use of social media. 6. A lack of physical exercise. 7. Loneliness and sedentary behavior. 8. Increased screen time.

5	Kar & Kar (2023)	Government school students: 412 Private school students: 405. (12-17 years)	Odisha: Secondary Schools of Bhubaneswar Municipal Corporation region proportionately representing the 3 administrative zones of BMC	2. Low level of acceptance and assimilation of the alternate online mode of teaching. 4. Government schools' students were more affected by COVID-19 than private school students. 5. Students significantly agreed that lockdown had impeded their education. (68.7% in Govt. and 53.9% in Pvt schools.)	1. Students agreed that post pandemic reopening of schools has reduced their stress. 2. Students who practiced COVID-19 appropriate behaviours, significantly felt safer about their schools' preparedness. 3. Students were under stress due the pandemic.
6	Kaur et al. (2022)	277 School students (14-18 years)	Jammu and nearby regions	1. The sudden transition to online mode of learning entailed along with difficulties in learning new technology. 2. Difficulty with procurement of e-learning gadgets. 3. Prolonged screen time. 4. School students were affected most with the sudden transition from real physical class-rooms to 'virtual-classrooms' 5. Moderate level of perceived stress	1. Lack of socialisation and sedentary lifestyles. 2. Adaptation to chaotic working hours
7	Khattar et al. (2020)	583 School (Classes 9-12) and college students	Delhi-NCR, Uttar Pradesh, Haryana and various other states and union territories	1. Students have faced significant disruptions in teaching and learning. 2. Key concerns include the unknown timetable of forthcoming examinations, admissions to higher-level courses, and summer internships. 3. Students believe that online teaching can augment classroom instruction, but it cannot	1. Virtual meeting places are not a substitute for personal interactions for young students.

replace the experience and learning in the classroom, as well as the face-to-face interactions that occur there.

8	Kulkarni & Velhal (2022)	1103 School students (Class 10)	Western part of Maharashtra state of India.	1. Students were more comfortable with online teaching activities than attending schools.	1. Strong correlation among depression, anxiety and stress scores. 2. Online education may prove to be a risk factor for early obesity and need simultaneous health promotional measures to prevent it. 3. DAS scores were more among girls than boys
9	Mithuna et al. (2022)	368 School students (11-18 years)	Not specified.	1. Long-term ignorant social media use impairs academic performance	1. Students who spent more time on social media for academics, their academic performance decreases. 2. Female participants had the habits of using mobile more than male participants.
10	Rannaware et al. (2022)	Government school students: 81. (Classes 1-7)	Maharashtra: Urban slum areas of Mangalwarpeth, Pune.	1. Increased distraction in surroundings during classes. 2. Non-availability of the resources. 3. Increased expenses over the internet. 4. Decreased peer interaction/ social interaction. 5. Physical discomfort during online classes (burning of eyes, backache, headache.)	1. Increased screen time experienced by most children. 2. Most parents and students do not prefer online classes. 3. The lack of motivation and distractions during classes.

			6. Lack of high-speed internet services and non-availability of gadgets.	
11	Selvaraj et al. (2021)	Sample size unspecified, school students (Classes 1-12.	All India.	1. Network connectivity issues. 2. Electricity issues/Technical difficulties. 3. Less social interactions. 4. Non-availability of gadgets. 5. Inadequate individual attention. 6. Delay in response from teachers. 7. Lack of preparation, a prevalent belief that online sessions are insufficient, and obstacles encountered by teachers owing to student misbehavior may have inhibited successful information transmission. 8. One of the most significant issues continues to be the lack of direct engagement between students and teachers. 9. Online classes have made several things more challenging than in normal classes.
				1. Students have reported physical and mental discomforts such as severe headaches, eye strain and irritation, and difficulty concentrating. 2. Regular classes enhance students' ability to clarify their doubts. 3. Most students believed regular classes were more efficient, had more interaction, and provided a better overall comprehension. 4. Students were not given adequate time to rest in between classes.
12	Yadav (2021)	792 students. School students.	Not specified.	1. Online classes create mental pressure on students from government basic school. 2. Sufficient facilities like smartphones, laptops and computers are not available to access online classes.
				1. Students' eyesight and health suffered as a result of their early addiction to phones and laptops. 2. The majority of survey respondents believed that

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| 3. Unavailability of proper mobile network in rural or remote areas. | children from low-income families face emotional stress. |
| 5. Online teaching creating panic among the students | 3. Cause of mental stress and other health problems in students at this critical era. |
| 6. Negative impact on the mental health of students. | 4. Discrimination between wealthy and poor students contributes to disillusionment. |
| | 5. Online lessons put extra mental burden on poor students. |

Themes

Based on the findings of the present scoping review, it is evident that the transition to online learning due to the pandemic caused a profound impact on the school students. Most studies reviewed emphasized the educational setbacks experienced by the students due to a variety of reasons. There exists a clear preference for the traditional classroom methods that were in place in the pre-pandemic era (Barupal et al., 2022). A new reality has been created by this shift in the way education is delivered, offering students challenges and opportunities in the post pandemic era. While the students have definitely benefitted from increased flexibility in accessing educational resources, removal of geographical barriers, and the comfort of learning from home, it is crucial to acknowledge that school students, being a more vulnerable age group, may struggle to effectively make use of such resources. This challenge is further intensified, taking an emotional toll primarily owing to the difficulties of online learning, including the digital divide (Kaur et al., 2022), lack of supportive services (Kar & Kar, 2023) and the absence of a sense of belonging (Datta & Kundu, 2021) that is typically present in the physical classrooms.

The findings of this scoping review shed light on the complex challenges faced by school-going students in India. Several key patterns emerged across the reviewed studies, and are presented below —

Technical Challenges and Online Classes

For many students the transition to online learning during COVID-19 brought significant technological difficulties. A persistent problem identified by Yadav (2021) and Barupal et al. (2022) was the unreliability of access to technology, particularly for students in the underprivileged and rural areas. The poor access to e-learning platforms, unreliable technology and underwhelming internet connectivity were problems that many students struggled with. In certain instances, students lacked the necessary tools (e.g. smartphones, computers and laptops) to even participate in online classes (Rannaware et al., 2022; Yadav, 2021;).

Given the lack of a physical classroom setting, students perceived online learning to be less effective than traditional in-person teaching processes (Kar & Kar, 2023). Students were less receptive to online learning, with a large percentage (81%) stating that they preferred in-person classroom education (Rannaware et al., 2022). This suggests that students are dissatisfied with and have concerns about the effectiveness of virtual learning.

Stress and Academic Pressure

The shift to online learning was accompanied by significant stress and academic pressure, exerting a

detrimental impact on many students' mental health and their ability to engage in their studies. According to Chhetri et al. (2021), stress levels among students were high because of pandemic-related concerns, including fears about examinations, grades, and their academic future. Furthermore, technical difficulties during exams and academic activities compounded the stress (Selvaraj et al., 2021). This transition caused panic and stress among students.

Students felt that their learning experiences were significantly enhanced by the physical presence of their teachers and peers (Khattar et al., 2020), showcasing the importance of interpersonal interactions. Herein, data indicated a high prevalence of cheating and reduced concentration during online classes.

Further, connectivity issues, technical difficulties, and decreased social interaction were among the obstacles that led to stress and dissatisfaction. Many students believed the preferred pandemic was impeding their studies and a significant majority of students (95%) preferred traditional school-based learning to online education (Selvaraj et al., 2021). Additionally, Datta & Kundu's (2021) study revealed that students' stress levels increased as a result of feeling isolated and disengaged from one another.

Self-Management and Adaptation Difficulties

Following the abrupt shift, students had to develop new self-management and adaptation skills. Many, however, found it extremely difficult to adapt to the new learning environment. Without the regimented school day, students were challenged to manage time effectively, as noted by Kar and Kar (2023) and Chhetri et al. (2021). The absence of a clear schedule and lack of immediate feedback from teachers made it challenging to stay motivated.

Self-management became hard during the pandemic, resulting in difficulties such as a sedentary lifestyle, loneliness, and a lack of physical activity (Datta & Kundu, 2021). This led to disruption in daily routines, further complicating time management and task prioritisation.

Resource Scarcity and Lack of Motivation

One major obstacle to effective online learning was a lack of resources, specifically the restricted availability of devices and reliable internet connectivity. Many students, particularly those from lower-income households, had trouble getting the required technological amenities in both urban and rural areas (Barupal et al., 2022; Yadav, 2021). In remote areas and government schools, the lack of access to dependable smartphones, tablets, and computers proved especially troublesome.

Many students experienced a sense of disengagement due to the switch to virtual learning, finding it difficult to maintain their motivation in the absence of their instructors and peers. According to Rannaware et al. (2022), motivation and academic responsibility were further reduced in online classes due to decreased interaction and increased distractions.

The resource scarcity was compounded by chaotic class schedules, excessive homework and unreliable internet services (Kar & Kar, 2023). Personalized support and student-teacher interactions were crucial for fostering student motivation and academic success. However, structural barriers and unequal access to online learning forced students to face significant educational disparities.

Increase in Social-Media and Online Gaming Use

Social isolation brought on by the pandemic boosted the usage of social media and online gaming as coping mechanisms which distracted students from their studies while serving as a major reason in their failure to pay attention in online classes (Chockalingam et al., 2020). While these platforms helped to alleviate the boredom brought on by the lockdown by offering entertainment and connections to friends and loved ones, extensive screen time and distractions caused academic disengagement. As compared to the pre-COVID era, there was a burgeoning increase in the screentime experienced by 77% of the students (Chockalingam et al., 2020). The prevalence of gadget and online gaming addiction, which increased during the pandemic had a significant impact on students'

academic performance (Mithuna et al., 2022).

Lack of Socialization and Emotional Distress

A significant consequence of the shift to online learning was the absence of socialisation which caused a damaging impact on students' emotional well-being. The absence of everyday peer interactions and social support networks intensified feelings of alienation and detachment among the students (Datta & Kundu, 2021). Research by Kar and Kar (2023) and Chhetri et al. (2021) highlighted how the lack of social engagement during the pandemic negatively affected students' mental health, with many reporting increased feelings of worry, sadness, and anxiety. Moreover, limited social connections, reduced physical activity and increased screen time contributed to physical and psychological distress for students during.

Discussion

This scoping review examined the factors affecting students' academic experiences during the pandemic. The themes identified included reduced socialisation, stress, technical difficulties, and resource scarcity. These challenges extended beyond the pandemic period, exerting a long-term impact on the students' academic and personal well-being. The disruption to traditional learning systems triggered physical, mental and behavioural difficulties that continue to shape and dictate school students' trajectories.

Owing to increased screen time and inadequate ergonomic setups, students experienced severe physical side effects including headaches, backaches (Barupal et al., 2022). Disturbed sleep habits, including delayed bedtimes and lower-quality sleep led to fatigue and difficulty focusing on academics (Datta & Kundu, 2021).

Significant effects of the pandemic were also seen in students' mental health, with some exhibiting symptoms of post-traumatic stress disorder and others experiencing anxiety, stress, depression, and anger (Chhetri et al., 2021). While the worries about academic growth and career prospects have increased anxiety, prolonged stress exposure has been associated

with chronic psychological problems (Selvaraj et al., 2021; Yadav, 2021).

Among younger children, behavioural and social changes were particularly apparent. Overuse of devices increased the prevalence of screen addiction in children under the age of 14, while behavioural problems were made worse by peer pressure, substance misuse, and unsupervised activities (Selvaraj et al., 2021; Yadav, 2021;).

Students from low socio-economic backgrounds faced amplified difficulties due to economic instability and limited access to technology, which reduced their motivation and worsened educational disparities (Rannaware et al., 2022). While it is important to consider that some students demonstrated adaptability and flexibility by developing their digital skills and resilience, these advantages have been unfortunately outweighed by the pervasive and long-lasting challenges that still surface.

The findings of this review align with India's National Education Policy (NEP), which promotes flexible education models, digital literacy and hybrid learning. Although the NEP provides certain potential solutions to the academic disruptions caused by the pandemic, its efficacy is contingent upon addressing socioeconomic disparities and gaps in digital accessibility (Roy & Sharma, 2023). Herein, the policy's emphasis on technology-driven education must be integrated with effective mental health programs and teacher training initiatives to mitigate adverse consequences outlined in this study.

A key takeaway from the pandemic is the necessity of a flexible educational system that can combine online and in-person instruction effectively. The rapid transition to digital platforms highlighted both the strengths and weaknesses of online education. Therefore, future policies must incorporate blended learning strategies to ensure that online education complements traditional methods rather than replacing them.

Conclusion

The current scoping review gives a thorough picture of the various facets causing disruption in the academic experiences of Indian school-going students during and beyond the pandemic.

There is a large gap in literature regarding the academic experiences of Indian school going students. By addressing several crucial elements such as technological challenges, mental and physical health issues, disrupted routines, socioeconomic disparities and profound impact on students' academic engagement, this review sought to bridge that gap. The shift to virtual learning led to physical discomfort, emotional distress, and behavioural changes, with marginalized groups facing greater setbacks due to financial and resource constraints.

The pandemic left an indelible mark on the vulnerable school student population who continue to grapple with its lingering effects. The post-pandemic era has seen the emergence of hybrid learning as a viable option, offering flexibility, comfort and new pedagogical tools. However, the findings reveal a clear preference for in-person classroom learning which is essential for students to develop the necessary skills required for real-world challenges and to continually acquire practical knowledge that the traditional classroom experiences offer.

This review highlights the necessity of pragmatic measures that institutions, educators, and policymakers may implement. By improving digital accessibility, offering students structured mental health services and integrating digital learning resources with in-person instructions, schools should focus on developing hybrid models of learning. In addition, the government and education policymakers must take measures to bridge the digital divide so that students from disadvantaged backgrounds have the necessary resources required to engage in both online and offline learning.

Furthermore, to actively engage students and promote better academic performance, face-to-face communication, hands-on learning opportunities, and

direct interactions with peers and teachers are essential. Ensuring equitable access to educational resources, integrating cognitive and behavioural skills development into school curricula, and giving mental health care top priority are essential to address the pandemic's long-term consequences. This review does, however, recognise certain limitations, including the small body of research on the academic experiences of Indian schoolchildren and the regional disparities, with most studies focusing on North India. This lack of comprehensive representation makes it difficult to capture the diverse challenges encountered by students across various cultural and regional contexts. Future research must address such methodological and regional variations to offer a more comprehensive picture of the ongoing academic challenges in the post-COVID era.

It is imperative to strengthen mental health programs and support systems in educational institutions. The nation needs policies that promote stress-free learning and prioritize the mental health of students by providing them the resources they need to improve their overall well-being and academic experiences.

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