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Opportunities and Challenges of Online Education among the Adolescent School Going Children Especially during COVID-19 Pandemic: A Gender Perspective

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Abstract: *The sudden change to online learning globally as a result of the COVID-19 pandemic has affected traditional schooling. For students in adolescence, it presented opportunities as well as challenges due to access to online sources of information and support from the family, the teaching style and norms of social interaction. This paper looks at such experiences among 240 secondary and higher secondary school students in Karaikudi, Thiruppathur Taluk, Sivaganga District of Tamil Nadu, India with respect to gender differences on access to devices, participation in class room activities as part of virtual instruction to study matters at home; parents' support and assistance; and teacher's help besides well-being. A descriptive survey design was employed, using semi-structured interview schedule that investigated demographics, access to digital equipment and the internet, experiences with learning and parental or teachers support, stress level as well perceptions of gender equity. Findings show that online learning was conducive to educational continuation and contributed to students' digital and self-learning competencies. But the problems students encountered were numerous - ranging from limited devices and patchy internet, to less teacher contact, screen fatigue and psychological strain. Girls, in particular, were more dependent on shared devices and parental support and were also assuming extra household burdens. Parents, particularly mothers, and teachers were instrumental in maintaining students' motivation. The paper highlights that gender-responsive, gender-inclusive and supportive approaches in digital education are critical to ensure equal access to quality learning opportunities and well-being for all students.*

Key Words: *Online Learning, Opportunities, Challenges, Gender differences, Parental Support, Teacher Engagement and Student well-being.*

1. INTRODUCTION:

The pandemic led to one of the most abrupt and widespread disruptions in modern education. Millions of students across India were yanked out of schools almost overnight and had to rely on digital platforms for continued learning. Such a paradigm shift was not just one of pedagogy but also the manner in which students could access and 'experience' learning. Adolescence is a critical stage of development, involving rapid cognitive growth, emotional sensitivity, and increasing academic demands. Beyond academics, schools provide structure, social interaction, and emotional support. Transferring learning into homes disrupted these supports, and students, families and teachers have had to adjust on the fly.

Learning online provided flexibility and a chance to practice those digital skills, but there were other challenges. Many suffered from unreliable internet, limited device access, less interaction with teachers and increased screen time that affected both learning and mental health. Gender was an important factor in determining how these experiences were understood. Girls were often expected to contribute to chores or caregiving in the home, while boys were more likely to gain private study time and those expectations, coupled with socio-economic and geographic considerations, shaped how students interacted within the online classroom.
Teachers had to navigate the double duty of reformatting lessons for online delivery while also offering emotional support to students and guidance for parents. Without their interventions to help keep children motivated, constraints

at home sometimes interfered with progress. This paper seeks to explore the possibilities and challenges of online learning during adolescent among students from Karaikudi and Thiruppathur Taluk in Sivaganga District, Tamil Nadu, India concentrating on gender gaps, home space constraints, parental care, support of teachers as well as psychosocial health. The results seek to influence more equitable and inclusive practices in digital and blended learning.

1.1. Conceptual and Theoretical Background

Online learning is not simply a technological solution; it is bound up with social, cultural and family ones. The constructivist learning theory highlights the importance of student's active involvement, interaction with peers and feedback from a teacher in the process for learning. Traditional classrooms support these dynamics naturally. Such an interaction becomes minimized in home-based online learning, shifting the onus back to students and families.
Feminist theories of education demonstrate that norms and power structures will interfere with access to learning. Girls are more likely to be doing excessive amounts of housework, which impact focus and attentiveness. This has become especially clear during the pandemic, which exposed the link between domestic duties and academic success. Conceptually, the digital divide model describes the variation in device and connectivity access, and in digital literacy. A child's gender, socio-economic status, parents' education and place of residence combined to produce inequitable educational experiences. Teachers' roles also changed. Teachers did everything from adapting lessons to staying in touch with students and parents to simply providing emotional support. There was a pedagogical flexibility and attentiveness that was necessary for online teaching to be effective, a bridging between home disruption and academic expectation.

2. LITERATURE REVIEW:

The rapid transition from in-person to online learning during the COVID-19 pandemic has been of interest to researchers globally. There were several studies on the effectiveness, equity, and inclusion of teaching during this time. According to Dhawan (2020), online learning was perceived as a quick fix at the time of crisis in keeping learners educated while schools were locked down. But the research also identified issues like weak digital infrastructure and teachers not well-prepared for the shift that ultimately led to the diminished quality of learning. Similarly, Hodges et al. (2020) warned against confusing emergency remote teaching with thoughtfully designed online education, underlining that both institutions and lecturers, as well as students were generally not prepared for abrupt change.

Unequal experiences of learning between students were found in studies carried out in the Indian setting. Kapasia et al. (2020) found that it was challenging for a lot of learners who did not have digital devices, good internet access and an appropriate home environment to learn in. Likewise, Mishra et al. (2020) noted that while online platforms have been able to keep academic continuity, the lack of digital skills and inadequate pedagogical readiness were very difficult issues for teachers and students.
Gender inequality became more evident in online learning. Karmakar and Sengupta (2021) found the digital gender gap also broadened during the pandemic, as girls became more reliant on shared devices and had access time limitations. Similarly, Chakraborty and Das (2021) observed that due to additional household chores adolescent girls faced, they had little access to online classes or much scope for independent learning.

Multiple researchers explored psychological and emotional implications associated with extended online learning. Rana et al. (2021) reported that prolonged hours in front of screen and academic stress with an absence of socialising amongst peers exacerbated the mental health implications in students. The results were consistent with the study by Dong et al. (2020) found that parents noticed increased stress, decreased motivation, and less engagement from their children in online learning.

The parental involvement was found to be a critical aspect which shaped the online learning of students. Singh and Tripathi (2021) underscored the supportive role of parents, especially mothers, to assist children in coping with academic work and technical glitches. Similarly, Trust and Whalen (2020) stressed the importance of proper teacher preparation for effective online teaching and student engagement during emergency remote teaching.

From a more general gender framework, research has highlighted the link between education, equity and empowerment. Sen (1999) through the capability approach, examined how gender disparities in access to education limit opportunities for girls. Stromquist (2002) found education as an empowering tool for women well as Unterhalter, 2005 and Leach,

2003 posit that without active intervention, schools/homes continue to replicate the gender disparity rather than promoting them.

These arguments are reinforced by school-level empirical studies. Secondary school students encountered problems like lack of concentration, little interaction with teachers, and low academic support as they learned online (Priya 2020). Similarly, Kumar (2021) traced the digital divide as a foremost contributor to education-being-gendered especially regarding rural students and economically disadvantaged households.

On a policy note, school shutdowns have been criticized for their long-term effects on children by various international bodies. UNESCO (2020, 2021) and UNICEF (2021) alerted about the long-term risks of school closures, the loss of learning and increasing gender disparity in education. In India, the Ministry of Education (2020) rolled out the PRAGYATA guidelines for encouraging inclusive and structured online teaching–learning but differences intervened in access and implementation across regions.

In general, existing literature indicates that ONLINE LEARNING was very relevant to help maintain education continuity and to improve digital competences during COVID-19 pandemic. It also deepened pre-existing inequalities around gender, digital access and mental well-being. We can conclude that there is a need for gender-specific research among adolescent students in schools and it needs to be applied in order to frame fair and inclusive policy decisions especially within the regional perspective of Tamil Nadu during the post-pandemic era.

3. OBJECTIVES OF THE STUDY:

- To explore the experience of online learning among adolescent students in terms of strengths and weaknesses.
- To explore disparities between boys and girls in terms of access to digital devices, joining online classes and involvement in household work.
- To understand how parents and teachers were helping students through virtual learning.
- To investigate the impact of online learning on students' stress, behaviour and well-being.
- To provide actionable guidance in building equitable, supportive and effective online or blended learning systems.

4. METHODOLOGY:

4.1 Research Design

This study employed a descriptive research design to ascertain the experiences of adolescent school learners enrolled in online learning during the COVID-19 lockdown period. This design was appropriate as it enabled accessing students' digital resources, experiences learning, parental and teacher support, gender differences, remain general well-being in their everyday life settings.

4.2 Study Area and Sample

The study was carried out on IX, X and XI standard students of Karaikudi and Thiruppathur Taluk in Sivaganga district, Tamil Nadu, India. Two hundred-forty high and higher secondary school students participated in the study. The sample was representative of both boys and girls, allowing meaningful comparison between sexes. Participants were drawn from rural and urban areas in which a majority had been recruited from rural backgrounds, mirroring the access constraints often experienced in rural localities.

4.3 Sampling Technique

This was a cross-sectional survey and sampling of the participants was done using simple random sampling. This approach provided an equal chance for the selection and reduced sampling bias. Participation was entirely voluntary, and students and their parents had given prior consent before the data collection began.

4.4 Tools for Data Collection

Information was gathered through semi-structured interview schedule and sex segregated FGDs. These tools were selected to gain an in-depth insight into how students experience. The semi-structured interview guide allowed for students to provide their thoughts in an unbound manner, and included pertinent topics such as: emotional well-being, academic pressure, coping mechanisms practices, social disengagement and family support. The FGDs were held

independently for boys and girls both consisting of five to six discussants. This method was designed to facilitate a familiar environment , ensuring open discussion without embarrassment or peer pressure.

4.5 Data Collection Procedure

Data collection took place after the period of pandemic in the schools. FGDs and interviews took place face-to-face among the students including both sex separately for obtaining data comfortably. In all sessions, participants gave their informed consent. Conversations were recorded with consent and then transcribed. Secrecy was preserved, and students were invited to express themselves honestly. The extended period of listening to student voices in interview is one means by which the researcher formed a rapport with participants, who became increasingly accustomed and happy to speak frankly about their experiences.

4.6 Data Analysis

Qualitative data collected were meticulously analysed and categorised using thematic analysis. Responses were coded and thematic analysis was performed on the following categories; digital access, gender disparities, learning difficulties, parental support, emotional health and well-being. The findings were interpreted to highlight patterns and variations in students' experiences across gender.

4.7 Ethical Considerations

Ethical principles were strictly observed during the study. Participation was voluntary, and students were clearly informed about the purpose of the research. Personal identities were kept confidential, and the information collected was used only for academic and research purposes.

5. RESULTS AND FINDINGS:

5.1. Demographic Profile

Table 1: Demographic Profile of Respondents (N = 240)

Variable	Category	Frequency	Percentage
Gender	Boys	120	50.0
	Girls	120	50.0
Age Group	14–15 years	98	40.8
	16–17 years	142	59.2
Place of Residence	Rural	134	55.8
	Urban	106	44.2

The demographic profile reveals carefully balanced sample, with an equal representation of boys (50%) and girls (50%). This gender balance strengthens the reliability of gender-wise comparisons throughout the analysis. Most respondents belonged to the 16–17 years' age group (59.2%), indicating that the majority were in senior secondary classes, where academic pressure and examination expectations are relatively high.

More than half of the respondents (55.8%) resided in rural areas, while 44.2% were from urban settings. This rural dominance is significant, as it reflects the realities of online learning in non-urban contexts, where access to stable internet connectivity, digital devices, and learning support is often limited. From a gender perspective, rural settings tend to intensify traditional household roles, especially for girls, which become relevant in understanding later findings related to study space, household responsibilities, and psychological stress.

5.2 Access to Digital Devices

Table 2: Type of Device Used for Online Learning by Gender (N = 240)

Device Type	Boys (%)	Girls (%)	Total (%)
Mobile phone	62.5	71.7	67.1
Laptop/Desktop	25.0	16.7	20.8
Tablet	12.5	11.6	12.1
Total	100.0	100.0	100.0

The findings indicate that mobile phones were the primary device used for online learning by both boys and girls. However, significantly much higher in girls (71.7%) than boys (62.5%) was evident with mobile phones like structure of this dependent use. By gender, this constitutes a "tiered" access to technology as boys are more likely to have high-functioning devices like laptops (25 %) while girls may resort in small (16 %), shared or less effective mobile interfaces which further enhances digital disparity.

This trend reveals an obvious gendered disparity in the nature of digital access. Mobile phones are, however, less conducive to long-term academic engagement despite their ubiquity because they have a small screen size and are limited in functionality but tended to be shared resources within households. Greater dependence on mobile phones among girls indicates limited access to personal digital devices, either because the devices are shared by family members or are directed towards male children. That's in line with larger cultural norms about gender that factors into how education resources are dispersed inside the family, particularly during crises like the pandemic.

5.3 Learning Environment at Home

Table 3: Access to Separate Study Space at Home (N = 240)

Response	Boys (%)	Girls (%)	Total (%)
Yes	58.3	42.5	50.4
No	41.7	57.5	49.6
Total	100.0	100.0	100.0

Access to a separate study space varied considerably by gender. Roughly 58.3% boys had an exclusive study area vis-à-vis only 42.5% girls. Spatial politics in the household indicate an added handicap for girls, 57.5 % of whom do not have their own study space as opposed to 41.7 % boys. This reflects more traditional family arrangements in which a girl's presence is often seen as collective/community or supplemental help, while boys are given the privacy and physical "space"; needed to concentrate on their studies.

This contrast implies that girls were more likely to work in communal or loud spaces, including living rooms and kitchens. It is hard to focus and actively participate in Internet classes in such surroundings. Gender-wise it represents the imbalance in distribution of home space and privacy; girl's educational requirements are many a time adapted to suit with house hold activities rather than being given precedence. Girls are structurally disadvantaged in learning situations online when no place of one's own is available for accompanying study.

5.4 Workload at Home during an Online Class

Table 4: Household Responsibilities during Online Classes (N = 240)

Level of Responsibility	Boys (%)	Girls (%)	Total (%)
None	46.7	18.3	32.5
Moderate	38.3	44.2	41.3
High	15.0	37.5	26.2
Total	100.0	100.0	100.0

Household responsibilities showed the strongest gender disparity among all variables studied. Almost half of the boys (46.7%) reported having no household responsibilities during online classes, whereas only 18.3% of girls reported the same. A stark gender divide exists in domestic labour; 37.5% of girls reported "High"; levels of responsibility compared to only 15.0% of boys. This "double burden"; balancing formal education with domestic chores—highlights how traditional gender roles persisted during the pandemic, forcing girls to prioritize household maintenance over their own synchronous learning.

These findings clearly demonstrate that girls were expected to balance academic activities with domestic work, even during class hours. Responsibilities such as cooking, cleaning, and caring for siblings reduced girls' ability to concentrate, attend classes regularly, and engage fully in learning. This unequal burden reflects deeply rooted gender norms that assign domestic roles to girls, reinforcing educational inequality in the context of online schooling.

5.5 Parent Support in Online Learning

Table 5: Parental Support in Online Learning (N = 240)

Type of Support	Boys (%)	Girls (%)	Total (%)
Technical assistance	35.0	48.3	41.7
Academic guidance	40.8	52.5	46.7
Minimal/No support	24.2	–	11.6
Total	100.0	100.0	100.0

Parental support played a crucial role in students' online learning experiences. Interestingly, girls received higher levels of technical (48.3%) and academic (52.5%) support from parents than boys. While this indicates strong family involvement, it also suggests that girls may be socialized toward greater 'dependence' on others to navigate the digital landscape, whereas boys are encouraged (or expected) to exercise more technical autonomy. Boys, on the other hand, were more likely to report minimal or no parental support (24.2%).

While higher parental involvement may appear positive, in the case of girls it also indicates greater dependence on family members for managing online learning. This dependence may be linked to limited digital skills, restricted device access, or lack of confidence in handling technology independently. It also suggests that parents perceived girls as needing closer supervision, reflecting protective attitudes that can unintentionally limit autonomy and self-directed learning.

5.6 Interaction with Teachers

Table 6: Interaction with Teachers During Online Classes (N = 240)

Interaction Level	Boys (%)	Girls (%)	Total (%)
High	42.5	36.7	39.6
Moderate	38.3	41.7	40.0
Low	19.2	21.6	20.4
Total	100.0	100.0	100.0

Both boys and girls reported moderate levels of interaction with teachers during online classes. Interaction levels were largely moderate across both groups, but girls reported slightly lower "High" interaction (36.7%) than boys (42.5%). This marginal gap can be interpreted as a by-product of the technical and domestic constraints previously mentioned, where girls engagement is limited by their lack of private space and competing household duties. Girls were marginally more represented in the low interaction category (21.6%) than boys (19.2%).

Reduced interaction among girls may be influenced by multiple factors, including limited device access, shared learning spaces, hesitation to speak in online settings, and interruptions due to household responsibilities. These constraints can discourage girls from asking questions or participating actively, thereby affecting their learning engagement and academic confidence.

5.7 Psychological Stress and Well-being

Table 7: Psychological Stress Experienced During Online Learning (N = 240)

Stress Level	Boys (%)	Girls (%)	Total (%)
Low	30.0	22.5	26.3
Moderate	45.0	40.8	42.9
High	25.0	36.7	30.8
Total	100.0	100.0	100.0

Psychological stress levels differed noticeably between boys and girls. The data shows that 36.7% of girls experienced "High" stress compared to 25.0% of boys. This heightened psychological strain is a direct consequence of the gendered

intersection of academic pressure, prolonged screen time on inferior devices, and the relentless demands of domestic labour. Conversely, low stress levels were reported more frequently by boys (30%) than girls (22.5%).

The higher stress among girls can be attributed to a combination of academic pressure, prolonged screen time, domestic workload, and reduced personal study space. Managing multiple roles simultaneously placed emotional and mental strain on girls, affecting their overall well-being. These findings underline the gendered nature of stress during online learning, where girls faced compounded pressures both inside and outside the classroom.

5.8 Opportunities Perceived for Online Learning

Table 8: Perceived Opportunities of Online Learning (N = 240)

Opportunity	Boys (%)	Girls (%)	Total (%)
Flexibility in learning	58.3	54.2	56.3
Improvement in digital skills	62.5	59.2	60.8
Self-learning ability	47.5	43.3	45.4
Total	100.0	100.0	100.0

Both boys and girls acknowledged several opportunities associated with online learning. Both genders recognized digital skill improvement as a primary benefit (60.8% total). From a feminist perspective, this represents a potential "equalizer" as the acquisition of digital literacy can provide girls with the tools necessary to bypass traditional social barriers, despite the minimal gender difference in this perceived advantage. Gender differences in this area were minimal, suggesting that students across genders recognized the potential advantages of digital education.

This finding indicates that despite challenges, online learning contributed positively to skill development and self-learning abilities. However, the extent to which students could benefit from these opportunities depended largely on access, support, and learning conditions, which varied significantly by gender.

5.9 Major Issues in Online Learning

Table 9: Major Challenges Faced in Online Learning (N = 240)

Challenge	Boys (%)	Girls (%)	Total (%)
Internet connectivity	55.8	61.7	58.8
Lack of devices	32.5	45.0	38.8
Limited teacher interaction	28.3	34.2	31.3
Eye strain and fatigue	35.8	41.7	38.8
Total	100.0	100.0	100.0

Internet connectivity emerged as the most common challenge for both boys and girls, Girls consistently reported higher levels of difficulty across all major challenges, particularly in internet connectivity (61.7%) and lack of devices (45.0%). This confirms that the "gendered digital divide"; is not just about having a device, but about the quality, reliability, and frequency of access, which remains significantly lower for adolescent girls.Lack of devices was also reported more frequently by girls (45%) than boys (32.5%). Challenges such as eye strain, fatigue, and limited teacher interaction were consistently higher among girls.

These findings reinforce the presence of gender-based inequalities in online learning experiences. Girls faced overlapping challenges related to technology, health, and learning engagement. The cumulative effect of these difficulties limited their ability to participate fully and benefit equally from online education during the pandemic.

6. DISCUSSION:

The present study explored how adolescent school students experienced online learning during the COVID-19 pandemic, with special attention to gender differences, household conditions, and emotional well-being. Insights gathered through interviews and focus group discussions reveal that online learning was not experienced in the same

way by all students. Their accounts show a mix of adjustment, struggle, and gradual adaptation shaped largely by home environments and social expectations.

6.1 Digital Accessibility and Realities of Everyday Learning

The majority of students referred to learning online as their first extended experience with remote education. Some students said they were excited to use technology, but others said they had faced logistical challenges in regularly attending classes. In interviews, several students said the processes of learning on a mobile phone were frustrating, particularly when screens were small or devices had to be shared with family members.

Girls in particular mentioned waiting their turn to use a device. One girl admitted that she often arrived late to classes as the phone was shared by sibling of her family. Boys were more likely to have uninterrupted access, with the effect especially pronounced in households with fewer devices. It is clear that technology access is closely associated with family decisions and gender roles in the home – observations which lend traction to the notion that paying particular attention to potential users are would-be clients. It is observed rural students to be less likely to discuss their digital difficulties where issues had become institutionalised within everyday life.

6.2 Family and Home Duties

A common thread that emerged from the conversations was how difficult it is to have your home used as a place for study. Many students said they took online classes from living rooms or kitchens amid noisy and interrupted conditions. Girls spoke openly with one another about how their families still expected them to help at home, often during class hours.

One participant in a focus group had a group of girls nodding when she said she listened to lessons while cooking or taking care of younger siblings. “I had to go to school and at the same time help my mother,” said a 16-year-old girl student. This type of occurrence certainly impacted focus and involvement. Washing dishes and other chores were rarely reported by boys, which highlighted that domestic tasks were not equally shared.

Girls spoke of these issues in a quiet voice as if such tasks were natural and not open to question, the researcher noted. It’s how deeply gender roles can be ingrained in everyday family life.

6.3 Learning Engagement and Instructor Interaction

Students’ experiences with online classes ran the gamut. Students liked teachers who were patient in explaining lessons and called or messaged to keep in touch. Others found that online classes were too hurried and didn’t provide them much opportunity to ask questions.

Girls in particular were nervous about talking in virtual lessons because of the possibility they could be interrupted at home or have technical issues. One student told that she even felt the need to be quiet when something was unclear to her. Boys were more apt to say they spoke up in class.

From the author’s point of view, face-to-face interaction was stripped away and students’ confidence or emotional attachment to their teachers had been eroded, making learning a distant and mechanical process.

6.4 Emotional Stress and Mental Health

Many students expressed feelings of fatigue, monotony and stress after months of online learning. More time in front of screens led to tired eyes and headaches, while being cut off from friends had brought on feelings of loneliness. Girls often discussed feeling emotionally overloaded by the stress of their studies combined with household chores.
One girl said in an interview that she felt guilty when she was not able to do schoolwork or study because of her family obligations. These statements mirror the emotional stress that teenage girls are coping with during the pandemic.

It is noted that students often smiled when they were discussing stress, perhaps moving emotional distress to the background or to a place of resignation.

6.5 Parental Support as a Protective Buffer

Parental Involvement Parenting has also been a significant factor in students online learning experiences. Several students, especially girls, mentioned the importance of their mothers' support in organizing schedules and assignments and with technical issues. By comparison, a few boys mentioned being left to their own devices as far as parents were concerned.

These results indicated that parental support provided an alternative to weak digital access and learning environments. Yet, dependence on parental help was also due to differences in learning independence for boys and girls.

6.6 Opportunities and the Shift to Online Learning

Even with its challenges, students cited some positives about online learning. A number of students said they became savvier about using smartphones, apps and digital platforms. Some liked being able to attend courses from home and replay recorded lessons.

Interestingly, positive effects of these benefits were expressed by boys and girls to same extent, suggesting that if the access is available an adequate adjustment to and learning with such material is possible for students.

6.7 Reflections of the Author and General Implications

According to the researcher's views, online learning during times of COVID-19 has acted as a mirror that reflects already existing inequalities within families and communities. Technology facilitated learning at a distance, but also infiltrated these private household worlds into educational domains.
Girls' experience exposed how education, gender roles and domestic responsibilities collided in the time of crisis. This research emphasizes the call for education systems to acknowledge these truths and develop pedagogical models that are responsive to students' social realities.

7. CONCLUSION AND RECOMMENDATIONS

7.1 Conclusion

With the pandemic, there was a sudden shift in schooling which caught many of these students off guard and required them to suddenly undertake their studies online at home. The results of the current study indicate that while online learning was able to maintain education during school closure, it also exposed underlying profound iniquities in terms of gender, digital access, home environment and emotional health.

The research makes clear that all students did not have equal access to online education. Many teenagers, and particularly girls, were reliant on mobile phones or shared devices and unable to fully engage with online lessons. With no private or study space and frequent distractions at home, their focus on studies, especially among the girls came under additional pressure. These issues were particularly pronounced in the countryside, where people had little internet access and few digital resources available to them.

Domestic duties were identified as a major impediment to learning. Girls were also more likely to participate in household tasks during the time classes were conducted, curtailing their sense of control over learning and increasing stress. Compared to boys, household disruptions were lower and there was more time to concentrate on academic related activities. This demonstrates that traditional gender norms also influenced education, even when it took place in digital learning spaces.

Parents and teachers played a huge factor in maintaining students' attention for online learning. Parental support, especially from mothers, was what helped students cope with technical problems and schoolwork. However, dependence on help from a caregiver also reflected an inequality in learning autonomy. Teacher interaction, while in existence, was largely mediocre and many times stifled by technology barriers and lack of immediate connectivity.
The research also highlights the emotional and psychological toll of extended periods of online learning. Many students felt stressed, fatigued by the screen and isolated. Girls reported more emotional stress from the double load of

schoolwork and domestic duties. Despite these challenges, some students reported positive effects including enhanced digital skills, flexible learning and more use of online resources.
In general, the findings indicated that online learning during the pandemic served as both a support and stress. Although it facilitated educational continuity, it increased social and gender disparities already in place. These experiences highlight the need for education models that are both digitally knowledge as well as socially and gender sensitive.

7.2 Recommendations

According to the results and observations made by the researcher, we recommend for future online and blended learning as follows:

- **Make sure everyone can access digital content**

Governments and education institutions should put a premium on ensuring all students, especially those from rural and low-income families with girls taking priority have access to digital devices and affordable internet connections.

- **Promote gender-sensitive learning practices**

Schools must understand how domestic responsibilities affect girls' learning and adopt flexible school hours, recorded classes as well as supportive policies that make it possible for students to juggle their academic and domestic commitments.

- **Enhance teacher training for digital learning**

There should be on-going training for teachers about online pedagogy, student engagement tools and digital assessment methods in order to increase interaction and learning effectiveness.

- **Support parental awareness and involvement**

The conduct of awareness programmes should be the part and parcel (Gender sensitivity Training, Life skills training) which motivates the families to provide equal learning environment for both boys and girls, to bring down gender-related expectations during study times.

- **Combine mental health and well-being support**

Schools need to teach how to manage stress, to provide counselling services and screen time guidance and to support healthy habits in general.

- **Adopt blended learning models**

A smart balance of virtual classes and in-person teaching would help to carry over the benefits of digital learning while reintroducing social interaction, peer learning and emotional support.

- **Include the students in policy planning.**

Student experiences and perceptions should inform the design of future digital education policies that recognise and are responsive to learners' actual needs.

REFERENCES

Journal Papers

1. Online learning: A panacea in the time of COVID-19 crisis (2020): *Journal of Educational Technology Systems*, 49(1), 5–22.
2. Hodges C., Moore S., Lockee B., Trust T., and Bond A. (2020): The difference between emergency remote teaching and online learning. *Educause Review*, 27(1), 1–12.
3. Karmakar S., and Sengupta P. (2021): Gender gap in access to digital education during COVID-19: Evidence from India. *Journal of Social and Economic Development*, 23(2), 353–370.
4. Chakraborty P., and Das M. (2021): Gendered experiences of online education during COVID-19 in India. *Gender, Work & Organization*, 28(S2), 101–116.

5. Kapasia N., Paul P., Roy A., Saha J., Zaveri A., Mallick R., and Chouhan P. (2020): Impact of lockdown on learning status of students during COVID-19 pandemic in India. *Children and Youth Services Review*, 116, 105194.
6. Mishra L., Gupta T., and Shree A. (2020): Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open*, 1, 100012.
7. Rana K., Rajesh M., and Mishra D. (2021): Impact of online education on mental health of students during COVID-19 pandemic. *Journal of Education and Health Promotion*, 10, 1–7.
8. Singh V., and Tripathi P. (2021): Role of parents in online education during COVID-19 pandemic. *Asian Journal of Education and Social Studies*, 17(4), 1–9.
9. Trust T., and Whalen J. (2020): Should teachers be trained in emergency remote teaching? Lessons learned from the COVID-19 pandemic. *Journal of Technology and Teacher Education*, 28(2), 189–199.
10. Dong C., Cao S., and Li H. (2020): Young children's online learning during the COVID-19 pandemic: Parents' beliefs and attitudes. *Children and Youth Services Review*, 118, 105440.

Proceedings Papers

11. Bozkurt A., and Sharma R.C. (2020): Emergency remote teaching in a time of global crisis due to Coronavirus pandemic, *Proc. Asian Association of Open Universities Annual Conference*, 1–6.

Books

12. Sen A. (1999). *Development as freedom*. Oxford: Oxford University Press.
13. Stromquist N.P. (2015). *Women's empowerment and education: Linking knowledge to transformative action*. Luxembourg: European Union Publications.
14. Tisdell E.J. (2012). *Themes and variations of adult learning: A reflective dialogue*. San Francisco: Jossey-Bass.

Chapters in Books

15. Unterhalter E. (2017). Gender, education and inequality. In S. Klees, S. Smith, and N. Stromquist (Eds.), *The world yearbook of education* (pp. 65–80). London: Routledge.
16. Leach F. (2016). Gender and education in developing countries. In R. Griffin (Ed.), *Education and social change* (pp. 112–128). London: Palgrave Macmillan.

Theses / Dissertations

17. Priya R. (2021). *A study on challenges faced by secondary school students in online learning during COVID-19 pandemic*, unpublished Master's thesis, University of Madras, Chennai, India.
18. Kumar S. (2020). *Digital divide and gender disparity in school education in India*, doctoral dissertation, Jawaharlal Nehru University, New Delhi, India.

Web / Institutional Reports

19. UNESCO (2020). *Education in a post-COVID world: Nine ideas for public action*. Paris: UNESCO.
20. UNESCO (2021). *Global education monitoring report: Gender review*. Paris: UNESCO.
21. UNICEF (2021). *COVID-19 and school closures: One year of education disruption*. New York: UNICEF.
22. Ministry of Education, Government of India (2020). *PRAGYATA guidelines on digital education*. New Delhi: MoE.