



DIGITAL DIVIDES AND DUAL BURDENS: PARENTAL CHALLENGES IN REMOTE LEARNING DURING COVID-19 PANDEMIC IN MIZORAM, INDIA

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ABSTRACT

The COVID-19 pandemic exacerbated preexisting inequities in education, disproportionately affecting marginalized communities. This mixed-methods study examines the dual burden—technological and socioemotional—borne by parents in Mizoram, India, during school closures. Survey data (*n* = 100) and parental interviews reveal that 66% faced inadequate digital access, while 45% lacked devices for multiple children, exacerbating intra-household disparities. Concurrently, 65% of parents reported severe stress from balancing educational supervision with employment, compounded by concerns over children's mental health (34% anxiety, 67% screen addiction) and academic regression (74% feared learning loss). Despite adaptive strategies (e.g., goal-setting by 69%), systemic gaps in institutional support left parents disproportionately responsible for mitigating crisis impacts. Findings highlight how intersecting burdens of digital exclusion and caregiving strain perpetuate inequality in low-resource settings. The study advocates for policies that concurrently address infrastructure deficits and psychosocial support to enhance resilience in future disruptions.

KEYWORDS: Parents, Educational Challenges, Remote Learning, COVID-19

INTRODUCTION

The COVID-19 pandemic caused massive disruption across global education systems. At the height of the crisis in April 2020, UNESCO reported that nearly 1.6 billion learners—around 94% of students worldwide—were impacted by school closures (UNESCO, 2020). Although the effects were widespread, they hit marginalized and under-resourced communities the hardest.

In Mizoram, a remote, mountainous state in northeastern India with limited digital infrastructure, the shift to online learning exposed long-standing educational inequalities. Many families, struggling with poor internet access and a lack of digital devices, were unable to fully engage in virtual classes.

Consequently, parents were thrust into dual roles as technical facilitators and educational mentors, often without prior experience or training. Research from Gulf countries revealed that “parents’ academic stress is a significant predictor of engagement with their children’s online learning,” highlighting how the burden of compensating for teachers emotionally and cognitively amplified parental stress (Abo Hamza & Elsantil, 2023).

The stress took both an emotional and mental toll. A study from the U.S. revealed that disruptions to children’s daily routines during the pandemic led to a noticeable rise in caregiver stress and anxiety, especially among mothers (Xu et al., 2023). Similar trends were seen worldwide, with many families reporting increased parental burnout, growing anxiety in children, and a drop in overall motivation (Brown et al., 2020). On top of emotional stress, parents also faced tough practical challenges. Those working from home had to juggle their jobs, manage household responsibilities, and oversee their children’s learning—often without any real support. This situation echoed research from Japan, where school closures were linked to a decline in mental health, especially among less educated mothers caring for young school-age children (Yamamura & Tsutsui, 2021).

Beyond the difficulties, a small number of families reported beneficial outcomes, such as stronger parent-child-teacher relationships and personalized learning approaches. However, these were the exception rather than the norm. This paper explores the multifaceted challenges—technological, educational, emotional, and logistical—faced by parents in Mizoram during pandemic-induced remote learning. By examining these struggles and the coping strategies employed, this study aims to inform more effective support mechanisms and policies to enhance educational resilience in future crises.

OBJECTIVE OF THE STUDY

To find out the educational challenges faced by parents during the COVID-19 Pandemic in Mizoram.



METHOD OF THE STUDY

This study used mixed-methods design, integrating a quantitative survey with qualitative parental testimonies.

Population

The population of the study includes all the parents of secondary school students in Mizoram.

Sampling

Participants were recruited using a stratified random sampling technique for quantitative data and a purposive sampling technique for qualitative data across rural and urban districts of Mizoram to ensure representation from a wide range of socioeconomic backgrounds. The study included 100 parents from the state. Data collection involved distributing questionnaires to secondary school students; all returned questionnaires were included in the analysis.

Data Gathering Instrument

The survey questionnaire was designed by the investigator. It featured multiple-choice questions allowing respondents to select more than one answer, along with open-ended items for detailed responses. Items were drafted based on literature and expert consultation. To ensure content validity, the draft questionnaire was evaluated by a panel of 15 subject-matter experts, who reviewed each item's relevance, clarity, and alignment with the study's objectives. Additionally, semi-structured interviews were conducted after analysis of quantitative data

DATA ANALYSIS METHOD

To analyze the quantitative data, the investigator used descriptive statistical techniques such as frequency distribution and percentage as and when necessary. The descriptive qualitative analysis is used to analyze the qualitative data collected using focus group discussions. The qualitative data is used to enrich and support the quantitative findings.

FINDINGS AND DISCUSSION

Table 1: Challenges Faced by Parents in Mizoram During the COVID-19 Pandemic (n=100)

Category	Specific Challenge	Responses	(%)
Technological Challenges	Limited access to a device/reliable internet	66	66
	Insufficient technical knowledge for virtual platforms	12	12
Device Provision	Able to provide multiple devices for children	55	55
	Unable to provide multiple devices	45	45
Mental Health Challenges	Stress/anxiety related to virtual learning & pandemic	65	65
	Difficulty supporting child's mental well-being	36	36
Negative Effects on children	Laziness	56	56
	Anxiety/stress	34	34
	Online addiction	67	67
Academic Challenges	Limited access to grades/teacher feedback	30	30



Category	Specific Challenge	Responses	(%)
Time Management Issues	Struggles in supporting virtual learning	17	17
	Concerns about learning loss/falling behind	74	74
	Problems creating a learning schedule/routine	33	33
	Problems prioritizing tasks by urgency/importance	78	78
School Communication Issues	Limited communication from school/teachers	18	18
	Difficulty navigating virtual platforms	20	20
Workload Changes	Increased workload during pandemic	44	44
	Same workload	56	56
Environmental Challenges	Background noise at home	57	57
	Limited physical space	30	30
	Increased household chores	44	44

Technological Challenge

The findings reveal profound technological limitations that severely constrain remote learning capabilities. A significant majority of respondents (66%) reported inadequate access to digital devices or reliable internet connectivity during the pandemic. As one parent poignantly stated, *"We cannot afford to buy a laptop or tablet for our children. Even the data packs or the internet are too expensive for us to use every day,"* highlighting the intersection of economic constraints and digital exclusion.

Device provision

The device provision data presents a concerning picture of intra-household resource allocation, with 45% of families unable to provide multiple devices for their children. Parental narratives such as *"We had to buy a second phone because both our children had online classes at the same time"* versus *"Others could not afford even one device"* starkly illustrate the socioeconomic gradients in digital access. States like Assam, Manipur, and Meghalaya had 40–50% of students without digital access (NAS, 2021). Philippines and Indonesia reported device shortages and parental inability to support learning (Putra et al., 2020; Barrot et al., 2021).

Mental Health Challenges

The psychological toll of pandemic-era education emerges as a dominant theme in our analysis. An alarming 65% of parents reported significant stress and anxiety related to virtual learning responsibilities. One participant's account - *"The pressure to ensure my child does not fall behind... It is mentally exhausting"* - captures the emotional labor. Children's physical health declined due to sedentary routines (Wang et al., 2020).



Negative effect on children

Children's mental health outcomes present equally concerning patterns. The prevalence of online addiction (67%). Parents also report that their children use devices for gaming more than learning. Behavioral changes, including increased laziness (56%) and anxiety (34%) can also be evident during the pandemic.

Academic Challenges

The educational consequences of these compounded stressors manifest clearly in the data. A striking 74% of parents expressed concerns about learning loss. The statement *"I'm afraid they will fall behind"* shows widespread anxieties about academic regression. 30% of parents reported limited access to grades/teacher feedback, and 17% Struggles in supporting virtual learning.

Time Management issue

33% of parents reported difficulties in establishing consistent daily routines for home learning. The majority—78%—struggled with determining which tasks or subjects to focus on first, highlighting widespread difficulties in managing academic priorities. One parent put it, *"It was difficult to know what assignments were essential versus what could wait, so everything felt urgent at once"*. Parents faced stress balancing home tutoring and responsibilities (India Today, 2020).

School Communication Issue

18% of parents indicated they received too little guidance or updates from educational staff. One parent reflected, *"I rarely heard from the school – it was just silence, and we didn't know what was expected of our child,"*. 20% struggled with using online learning systems, underscoring barriers in adapting to digital tools for communication with schools. Many educators lacked training, especially in developing countries (Izhar et al., 2021; The British Council, 2020).

Changes in Parental Workload

44% reported their own workload increased during the pandemic, reflecting the added stress of remote work or reduced outside help (e.g., from grandparents or daycare). One parent described the balancing act as: *"It was stressful. I could not fully give my attention to my work and my child simultaneously."* 56% maintained their usual workload, but still had to manage it alongside supervising their children's education.

Environmental Challenges

Environmental barriers further exacerbated these challenges. Fifty-seven percent of respondents cited background noise as disruptive, while 30% reported inadequate study spaces. Parental descriptions like *"Our house is small with no quiet space"* illustrate the physical constraints that hindered effective remote education.

DISCUSSION

The pandemic laid bare deep inequalities in digital access, mental health, and academic stability for families trying to cope with remote learning. Parents were stretched thin—dealing with limited devices, unreliable internet, heavier workloads, and growing emotional strain—while schools often lacked the resources to truly support them. Across income levels, but especially in rural and low-income communities, families encountered major digital roadblocks. Research highlighted widespread issues like poor internet access (National Achievement Survey, 2021; Mishra et al., 2020) and not enough devices to go around (India Today, 2021), which made regular class participation difficult. In India, the digital gap was especially stark: rural families faced costly data plans and spotty connections (Mishra et al., 2020). Globally, nearly half of lower-income households reported at least one major tech-related challenge during this time (Vogels, 2021).

The transition to home-based learning created complex role conflicts for parents. Working parents, especially mothers, faced extreme stress balancing professional duties with educational supervision (Alghamdi, 2021; Cui et al., 2021). Many lacked formal teaching skills, making concept explanation difficult (Putra et al., 2020), while schools provided inadequate guidance on supporting home learning (Rawal, 2021). Financial pressures only made things harder. Some families couldn't afford the necessary technology (Barrot et al., 2021), and in India, the suspension of mid-day meal programs raised serious concerns about children's nutrition (Jena, 2020). Parents worried not just about their children falling behind academically (Singh & Quraishi, 2021), but also about the amount of time they were spending on screens (Wang et al., 2020). The home learning environment proved difficult to manage, with children often distracted by entertainment media (Apriyanti, 2020) and parents struggling to enforce productive routines (India Today, 2020; Lau et al., 2021). Many experienced guilt over perceived inadequate support (Donnelly et al., 2021), compounded by limited access to teacher consultations in disadvantaged regions (Dawadi et al., 2020).



Comprehensive Survey Results on Pandemic Challenges and Strategies in Mizoram (n=100)

Category	Specific Item	Responses	(%)
Motivation Strategies	Set goals and incentives for task completion	69	69
	Used interactive/multimedia tools	31	31
	Collaborated with other parents for online activities	12	12
Emotional Support Methods	Encouraged open communication	31	31
	Maintained child's social connections	22	22
	Practiced self-care as coping model	70	70
Work-Childcare Management	Adjusted work hours	39	39
	Worked from home while supervising a child	61	61
	Enlisted caregiver/family help	8	8
Home Environment optimization Strategies	Designated quiet area	20	20
	Encouraged routine following	32	32
	Family cooperation to minimize distractions	56	56

Motivational Strategies

The data demonstrates significant parental investment in maintaining educational engagement, with 69% implementing goal-setting strategies. A parent's account that *"We allowed our children to touch the phone for 30 minutes after they completed their online class and helped with household chores"* illustrates the behavioral reinforcement mechanisms families developed.

Notably, only 31% of parents utilized interactive/multimedia tools, suggesting either limited awareness or access barriers to digital learning resources. The minimal collaboration between parents (12%) for organizing online activities reflects the social distancing constraints, though it also indicates potential missed opportunities for collective learning solutions.

Emotional Support Mechanisms

The predominance of self-care modeling (70%) as a coping strategy shows the importance of parental emotional regulation during crises. Statements like *"We told our kid to go for walks, draw, or listen to music when they start becoming lazy"* exemplify the adaptive techniques families employed.

However, the relatively lower rates of maintaining social connections (22%) may reflect health anxieties, as captured in one parent's admission: *"I usually kept my children indoors to avoid being infected by the virus."*



Work-Childcare Management

The 61% of parents who worked from home while supervising children demonstrates significant role adaptation during school closures. The limited utilization of external caregiving support (8%) may reflect both cultural norms and restricted access to formal childcare services.

Home Environment Optimization Strategies

Family cooperation emerged as the predominant environmental strategy (56%). The relatively low implementation of designated quiet spaces (20%) likely reflects material constraints, as described in parental accounts of small living quarters. The moderate adoption of routine-following (32%) suggests potential gaps in time management support.

DISCUSSION

The findings reveal both resilience and gaps in parental strategies during pandemic-era remote learning. While 69% of parents implemented goal-setting techniques—aligning with self-determination theory (Ryan & Deci, 2000), which emphasizes autonomy-supportive practices—the low use of interactive tools (31%) reflects persistent digital divides (Livingstone & Blum-Ross, 2020) or lack of institutional guidance (Rawal, 2021). The minimal parental collaboration (12%) mirrors global reports of isolation exacerbated by health anxieties (Brooks et al., 2020), though peer-support networks could have mitigated stress (Iyengar, 2021). Parents prioritized self-care modeling (70%), consistent with studies highlighting parental stress management as critical for child well-being (Wang et al., 2020). However, limited social connections (22%) align with findings on pandemic-induced isolation (Herzallah et al., 2021) and missed opportunities for communal coping (Donnelly et al., 2021). The 61% of parents juggling work and childcare underscores role strain theories (Greenhaus & Beutell, 1985), exacerbated by inadequate external support (8%), a gap noted in low-income contexts (Barrot et al., 2021). Family cooperation (56%) was a key adaptive strategy, yet limited quiet spaces (20%) reflect socioeconomic barriers (Cui et al., 2021). Routine-following (32%) was moderate, suggesting needs for structured time-management aids (Lau et al., 2021).

CONCLUSION

The COVID-19 pandemic exposed profound vulnerabilities in Mizoram's education system, where families struggled to maintain learning continuity amidst severe technological constraints and psychological stressors. Parents demonstrated remarkable adaptability, creating structured home learning environments and emotional support systems, yet these efforts were fundamentally limited by systemic barriers, including device scarcity, cramped living conditions, and inadequate institutional support.

This research highlights how crises, like the pandemic, tend to deepen existing gaps in education, hitting marginalized communities the hardest. The findings point to an urgent need for well-rounded policy responses that not only help students catch up in the short term but also build stronger, more resilient education systems for the future. Instead of placing the burden on families to adapt on their own, long-lasting solutions should focus on improving digital access, fostering stronger partnerships between teachers and parents, and weaving mental health support into the fabric of education. Mizoram's experience offers valuable insights for developing equitable crisis-response frameworks worldwide. Moving forward, educational planning must prioritize bridging the digital divide while fostering community-based support networks that protect vulnerable learners during disruptions. The pandemic has made clear that true educational resilience requires systemic transformation, not just temporary adaptations.

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