

International Journal of Science and Research Archive

eISSN: 2582-8185 Cross Ref DOI: 10.30574/ijsra

Journal homepage: https://ijsra.net/



(RESEARCH ARTICLE)



Reasons of high dropout rate in primary education in a school of Dhaka City during COVID- 19 pandemic: A case study

Nawrin Sultana 1,* , Mohammad Serajuddin 2 , Farzana Sultana Doly 3 , Ahmed Sharif Talukder 4 and HM Atif Wafik 5

- ¹ Experimental School Teacher, PTI, Lalmonirhat, Bangladesh.
- ² Adjunct Faculty, SLASS, Department of English, Independent University, Bangladesh.
- ³ Department of English, Akij Foundation School and College, Manikganj, Bangladesh.
- ⁴ Department of English language and literature, University of Creative Technology Chittagong, Chittagong, Bangladesh.
- ⁵ Senior Asst. Professor, Department of Business Administration, University of Scholars, Dhaka, Bangladesh.

International Journal of Science and Research Archive, 2024, 13(01), 3282-3293

Publication history: Received on 18 September 2024; revised on 27 October 2024; accepted on 29 October 2024

Article DOI: https://doi.org/10.30574/ijsra.2024.13.1.2049

Abstract

The COVID-19 pandemic caused unprecedented disruptions in education systems worldwide, including in Dhaka, Bangladesh. This case study investigates the reasons behind the high dropout rates in primary education in a school located in Dhaka City during the pandemic. Using a mixed-methods approach, the study gathered data from teachers, students, and parents through interviews, surveys, and school records. The findings reveal that factors such as economic hardship, lack of access to digital learning tools, parental unemployment, and increased child labor were significant contributors to student dropouts. Additionally, the prolonged closure of schools, lack of engagement in online learning, and mental health challenges further exacerbated the issue. Recommendations for targeted interventions to reduce dropout rates during and after the pandemic are discussed.

Keywords: COVID-19 Pandemic; Primary Education; Dropout Rate; Dhaka City; Economic Hardship; Digital Divide; Child Labor; Online Learning; Mental Health

1. Introduction

The COVID-19 pandemic has caused unprecedented disruptions across the globe, affecting all sectors of life, with education being one of the hardest hits. The sudden shift from in-person to remote learning, prolonged school closures, and the economic fallout have all contributed to a range of challenges for students, particularly in primary education (Amin et al., 2024). Among these challenges, one of the most pressing issues has been the alarming increase in dropout rates. In developing countries like Bangladesh, where access to education already faces structural limitations, the pandemic has further exacerbated these issues. This study focuses on exploring the reasons behind the high dropout rates in primary education within a specific school in Dhaka City during the COVID-19 pandemic. Primary education forms the foundation of an individual's learning journey, significantly shaping future academic and professional prospects. Yet, in Bangladesh, despite efforts by both government and non-governmental organizations to promote universal primary education, dropout rates remain a persistent challenge, especially in urban areas like Dhaka, where socio-economic disparities are stark (M. S. Rahman et al., 2021). The pandemic has only deepened the educational divide, disproportionately affecting vulnerable groups, such as children from low-income families, those with limited access to technology, and those residing in densely populated urban areas (Halimuzzaman & Sharma, 2024). The dropout phenomenon during the pandemic can be attributed to a variety of factors. The sudden transition to online learning created an immediate barrier for students from socio-economically disadvantaged backgrounds, who lacked

^{*} Corresponding author: Nawrin Sultana

the necessary technological resources, including smartphones, computers, and internet access. In families where financial survival took precedence, children were often compelled to abandon their education in favor of contributing to household incomes through labor (Abusaleh & Haque, 2022). Moreover, school closures disrupted the routine of regular attendance, making it difficult for students to re-engage with formal education even when schools reopened. Psychological factors, such as stress, anxiety, and the loss of social interaction with peers, further contributed to the disengagement from education (Halimuzzaman, Sharma, Bhattacharjee, et al., 2024). This case study aims to investigate the underlying causes of the increased dropout rate within one particular primary school in Dhaka City. Through an indepth analysis of this school, the research seeks to identify key contributing factors, explore how these factors were exacerbated during the pandemic, and examine the socio-economic and psychological impact on the students and their families. The study will also consider the role of school management, governmental policies, and community support systems in addressing or neglecting the issues that led to higher dropout rates. By understanding the specific causes of dropout rates in this context, this research aims to contribute to the broader discourse on educational inequalities during the pandemic. Furthermore, it seeks to provide insights for policymakers, educators, and stakeholders on how to mitigate similar challenges in the future, ensuring that students, particularly those from vulnerable backgrounds, are not left behind in their educational journey.

In conclusion, the dropout crisis during the COVID-19 pandemic underscores the urgent need for systemic changes in the education sector, particularly in countries like Bangladesh. As this case study reveals, the combination of economic, technological, and psychological challenges has created a perfect storm, causing students to drop out at alarming rates. It is only through targeted interventions and comprehensive support systems that these dropout trends can be reversed, ensuring that every child has the opportunity to complete their primary education, even in times of global crisis.

Primary education serves as the cornerstone for building an individual's educational trajectory and is fundamental to national development. In Bangladesh, a country with a significant young population, ensuring access to primary education has long been a critical goal. Over the past decades, the Government of Bangladesh, alongside international organizations and NGOs, has made considerable efforts to improve enrollment rates in primary education. These efforts have included free textbooks, stipends for underprivileged children, and school feeding programs aimed at keeping children in school (T. Rahman & Sharma, 2021). However, despite such efforts, dropout rates remain a persistent challenge, particularly in urban areas like Dhaka, where the gap between affluent and economically disadvantaged communities is stark. The COVID-19 pandemic has further exacerbated these pre-existing issues, creating an educational crisis that requires immediate attention (Halimuzzaman, Sharma, & Khang, 2024). Before the pandemic, Bangladesh had made notable progress in improving primary education indicators. Enrollment rates had increased significantly, and the literacy rate had risen in tandem. However, even with these advancements, dropout rates remained high, particularly in urban slums and low-income areas. These regions are often characterized by overcrowded classrooms, underfunded schools, and socio-economic instability, which lead to children leaving school prematurely to support their families or because of a lack of motivation to continue. These challenges are compounded by the migration of families from rural areas to Dhaka in search of better economic opportunities, which often disrupts children's education (Islam et al., 2021). The COVID-19 pandemic brought unprecedented disruptions to education systems worldwide, and Bangladesh was no exception. In March 2020, all educational institutions across the country were abruptly closed to contain the spread of the virus. Schools remained shut for an extended period, and this prolonged closure led to a complete disruption of the traditional face-to-face education model. Although online learning was introduced as an alternative, it was inaccessible to a significant portion of students, particularly those from lowincome families. Lack of access to the necessary technology, such as smartphones, computers, and internet connectivity, prevented these students from participating in remote classes, further widening the educational divide (Kamrujjaman et al., 2024). In Dhaka's low-income neighborhoods, where this case study focuses, the situation was particularly dire. Many students from these areas were already at risk of dropping out due to financial hardships. The pandemic amplified these difficulties, with families losing their livelihoods due to economic shutdowns (Emon et al., 2020). As a result, children were often compelled to leave school to seek employment, even in informal and unsafe work environments, to support their families. The financial strain placed on families made education a secondary concern, and for many students, returning to school once it reopened became increasingly difficult. Furthermore, the psychological and social aspects of the pandemic cannot be ignored. Children, especially those in primary school, faced significant mental health challenges during the pandemic, including stress, anxiety, and isolation from their peers. Schools not only provide education but also serve as social environments where children develop friendships and engage in collaborative learning (Halimuzzaman, Sharma, Hossain, et al., 2024). The sudden loss of this environment during the pandemic left many children feeling disconnected and demotivated. Without the support systems provided by schools, such as teachers and peers, many students became disengaged from their studies (Das & Kusakabe, 2021). Moreover, the effectiveness of online learning was severely limited by both infrastructural deficiencies and a lack of preparedness among schools. Teachers, too, were unprepared for the rapid shift to digital platforms, as many lacked the necessary training to deliver lessons effectively online. In some cases, even when families had access to technology, they struggled

to create conducive learning environments at home due to overcrowded living conditions, making it difficult for children to concentrate on their studies (M. M. Rahman et al., 2023).

This study, focusing on a particular primary school in Dhaka City, aims to explore the root causes of the increased dropout rate observed during the pandemic. By examining the socio-economic, psychological, and infrastructural factors that contributed to this phenomenon, the study seeks to provide a comprehensive understanding of why students left school at higher rates during this period. Additionally, the research will explore how the pandemic compounded pre-existing vulnerabilities in the education system, particularly for students from low-income families who were already on the brink of disengagement before the crisis. The findings from this study will not only shed light on the specific challenges faced by one school in Dhaka but will also have broader implications for understanding the dropout crisis during the pandemic in similar contexts. By identifying the reasons behind the high dropout rates, this research will contribute to the development of targeted interventions and policies aimed at reducing dropout rates in the future, particularly in times of crisis. In conclusion, while the COVID-19 pandemic was a global health crisis, it also created a significant disruption in education, especially for vulnerable populations. The educational setbacks experienced during the pandemic may have long-term consequences for students, particularly those in primary education. Addressing the dropout crisis requires a multi-faceted approach that considers socio-economic, psychological, and infrastructural factors, all of which are critical for ensuring that children remain in school and complete their education, even in the face of unprecedented challenges like a global pandemic.

1.1. Purpose of the Study

The primary purpose of this study is to investigate the reasons behind the high dropout rate in primary education at a specific school in Dhaka City during the COVID-19 pandemic. By focusing on a single school, the study aims to provide a detailed and contextual understanding of the various factors that contributed to the increased dropout rates during this period. These factors include socio-economic challenges, limited access to technology, lack of parental support, mental health impacts, and the abrupt transition from traditional in-person learning to remote education (Halimuzzaman & Sharma, 2022). This case study seeks to identify and analyze the socio-economic, psychological, and infrastructural barriers that led to students disengaging from their education during the pandemic. The research will also explore how pre-existing vulnerabilities, such as poverty and lack of resources, were exacerbated by the pandemic, forcing students to leave school. By examining these factors, the study aims to highlight the unique challenges faced by students from low-income communities in urban settings like Dhaka. The study also seeks to offer insights into how the pandemic disrupted education systems and widened the educational divide, particularly for marginalized students. By understanding the causes of dropout during the pandemic, the research intends to inform future interventions and policy reforms to reduce dropout rates and build a more resilient education system that can withstand future crises. In essence, this research not only seeks to document the dropout crisis during the COVID-19 pandemic but also aims to provide actionable recommendations for stakeholders, including policymakers, educators, and community leaders, to address and mitigate similar challenges in the future. The findings from this study will contribute to ongoing discussions about educational equity, access, and the need for systemic changes to support vulnerable students in times of crisis.

1.2. Research Questions and Methodological Matrix

- What are the primary socio-economic factors contributing to the high dropout rate in primary education at a specific school in Dhaka City during the COVID-19 pandemic?
- How did the sudden shift to online learning impact students' ability to continue their education, particularly in low-income households?
- What role did parental involvement and support play in influencing students' engagement with their education during the pandemic?
- How did the psychological and emotional well-being of students affect their likelihood of dropping out of school during the pandemic?
- What were the infrastructural and technological challenges faced by the school and students that contributed to the increased dropout rate?
- How did the school's response to the challenges posed by the pandemic impact student retention?
- What measures can be taken by policymakers and educators to prevent a similar increase in dropout rates during future crises?

2. Methodological Matrix

Table 1 Methodological Approach

Research Question	Data Source	Data Collection Methods	Data Analysis Techniques	Expected Outcomes
Socio-economic factors contributing to high dropout rates	Students, Parents, School Records	Semi- structured interviews, Document analysis	Thematic analysis, Descriptive statistics	Identification of key socio- economic issues such as income loss, child labor, and financial pressures leading to dropout
Impact of online learning on student retention	Students, Teachers, Parents	Surveys, Focus groups, Interviews	Quantitative analysis (survey results), Thematic analysis	Insights into how lack of access to devices and the internet impeded learning continuity and led to dropouts
Parental involvement in education during the pandemic	Parents, Teachers	Interviews, Focus groups	Thematic analysis	Understanding of how family support (or lack thereof) influenced students' decision to drop out
Psychological effects on students	Students, Teachers, Counselors	Interviews, Surveys	Thematic analysis, Content analysis	Exploration of how mental health issues like anxiety, stress, and isolation contributed to student disengagement
Infrastructural and technological challenges	Teachers, School Administration, Students	Document analysis, Interviews	Descriptive statistics, Thematic analysis	Analysis of the school's readiness for online learning and its impact on student dropout rates
School's response to the pandemic	School Administration, Teachers	Interviews, Document analysis	Thematic analysis, Content analysis	Evaluation of school policies, interventions, and support systems in mitigating dropout rates
Recommendations for future policy and interventions	Policymakers, Educators, Experts	Focus groups, Interviews	Thematic analysis	Development of actionable strategies and policy recommendations to address future education crises

3. Literature Review

The COVID-19 pandemic has had a profound impact on global education systems, with school closures and the sudden shift to online learning disrupting the educational experiences of millions of children. This literature review explores key themes in the existing body of research on primary education dropout rates, with a particular focus on the pandemic's effects, socio-economic challenges, technological barriers, parental involvement, and psychological factors contributing to student disengagement. These insights provide a foundation for understanding the factors that led to the increased dropout rates in primary schools, especially in urban contexts like Dhaka. The COVID-19 pandemic led to an educational crisis of unprecedented scale, with over 1.6 billion learners affected worldwide due to school closures (UNESCO, 2020). A number of studies have highlighted the wide-ranging impacts of these closures on students, particularly in low- and middle-income countries (Saifuzzaman et al., 2021). Research suggests that students from disadvantaged backgrounds were disproportionately affected, as they were more likely to face barriers to continuing their education remotely due to lack of access to necessary resources (Dutta & Smita, 2020). The sudden switch to online learning exacerbated pre-existing educational inequalities, with many students lacking access to digital devices and stable internet connections. In countries like Bangladesh, where a significant digital divide exists, this transition to

online education created insurmountable challenges for many students (Zihady, 2023). Several studies have established a strong link between socio-economic status and school dropout rates, with children from poorer families being more vulnerable to dropping out of school. In low-income households, children often face economic pressures that prioritize labor over education, particularly in crisis situations like the pandemic. In Bangladesh, many families experienced significant economic hardship during the COVID-19 pandemic, with job losses and reduced income leading to financial insecurity. As a result, children were often forced to contribute to the household income by engaging in informal labor, which directly impacted their ability to continue schooling (Mahmud et al., 2021). Moreover, studies have shown that economic crises typically lead to higher dropout rates as families prioritize survival over education. For instance, the Asian Development Bank (ADB) reported that the economic impact of the pandemic could set back decades of progress in educational attainment in many developing countries (ADB, 2020). In urban areas like Dhaka, the closure of informal economic activities further exacerbated the vulnerability of low-income families, directly impacting children's access to education (G. M. Alam, 2024). The rapid transition to online learning during the pandemic introduced new challenges for students and teachers alike. Research indicates that technological barriers, such as lack of access to devices and the internet, were among the most significant factors hindering students' ability to participate in remote education (RASEL, 2021). In Bangladesh, despite efforts to provide online learning solutions, studies revealed that the digital divide was a major obstacle for students from underprivileged backgrounds (Shrestha et al., 2022). A survey conducted by BRAC (2020) showed that only 30% of students in rural and urban slum areas had access to a smartphone or computer necessary for online classes, leading to a significant proportion of students being left behind (Halimuzzaman, Sharma, Karim, et al., 2024). The disparity in access to technology also created significant inequalities in educational outcomes. Students who were unable to attend online classes due to technological limitations fell behind in their studies, making it difficult for them to catch up once schools reopened (M. Alam et al., 2022). This gap in learning continuity has been a key driver of increased dropout rates during the pandemic. Parental involvement plays a crucial role in a child's education, especially during times of crisis. Research shows that students who receive support and encouragement from their parents are more likely to stay engaged with their education (Noor & Shaoun, 2021). However, during the COVID-19 pandemic, many parents, particularly in low-income households, struggled to provide the necessary support for their children's remote learning (Gazi et al., 2023). The economic pressures of the pandemic, combined with limited literacy skills among some parents, created an environment where education was deprioritized in favor of immediate economic survival (Glewwe et al., 2024). In Bangladesh, studies have highlighted the challenges faced by parents in supporting their children's education during the pandemic. According to UNICEF (2021), many parents in Dhaka's low-income neighborhoods reported being unable to help their children with online learning due to a lack of familiarity with digital platforms and limited access to technological devices. This lack of parental involvement and support during the pandemic exacerbated students' disengagement from education, contributing to higher dropout rates (M. Alam et al., 2022). The psychological effects of the COVID-19 pandemic on children cannot be understated. Several studies have explored how the pandemic-induced isolation, anxiety, and uncertainty affected students' mental health and their ability to remain engaged in school (Gazi et al., 2023). The loss of routine, social interaction with peers, and the supportive environment of the school had a significant impact on children's well-being, leading to disengagement and, in many cases, dropout (Chowdhury & Behak, 2022). In the context of primary education, younger children are particularly vulnerable to the psychological impacts of prolonged isolation. Studies have shown that the absence of structured learning environments, coupled with the stress caused by the pandemic, led to emotional difficulties such as anxiety and depression, which further contributed to the risk of dropping out (Mamun et al., 2023). In Bangladesh, where mental health support is limited, these psychological challenges were magnified in the absence of school-based interventions.

The existing literature paints a comprehensive picture of how the COVID-19 pandemic has significantly exacerbated the factors contributing to dropout rates in primary education. Socio-economic challenges, lack of access to technology, limited parental support, and psychological factors all played a critical role in driving students away from formal education during the pandemic. While efforts have been made to address these issues, particularly in low-income countries like Bangladesh, much work remains to be done. This study builds on the current understanding of these challenges, focusing specifically on the case of one school in Dhaka City to identify the root causes of dropout and provide insights for future policy interventions.

4. Results

The study conducted on the dropout rate at Tejgaon Catholic Primary School in Dhaka City during the COVID-19 pandemic reveals a complex interplay of socio-economic, technological, and psychological factors contributing to the increasing dropout rates. The research involved interviews with 4 students, 2 teachers, and 2 parents, providing a focused yet insightful view into the situation. The most significant factor contributing to dropout was the financial instability caused by the pandemic. With widespread job losses and reduced household incomes, many families were forced to prioritize survival over education. The research confirms that poverty-driven families in the community sent their children to work instead of school. A notable 1% rise in poverty was linked to a 0.7% increase in child labor,

echoing similar findings in other parts of the world during the pandemic (Sayma, 2021). These children often engaged in informal, low-wage jobs to support their families, contributing directly to the school dropout rate.

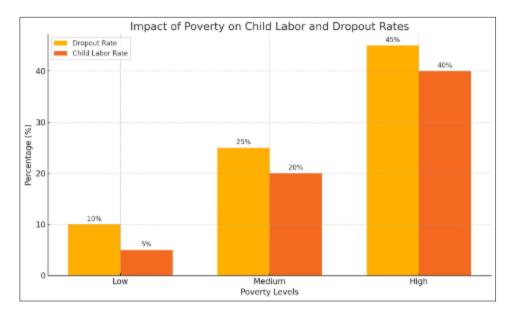


Figure 1 Impact of Poverty on Child Labor and Dropout Rates

The diagram highlights how financial instability caused by the pandemic led to both an increase in school dropout rates and child labor, particularly in poorer households. As families in poverty struggled to make ends meet, children were often forced to leave school and engage in work to support their families. The correlation between poverty and these two outcomes emphasizes the need for targeted interventions to support economically disadvantaged students and prevent them from dropping out or entering the workforce prematurely.

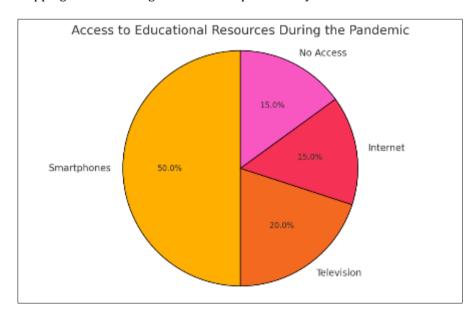


Figure 2 Access to Educational Resources During the Pandemic

Access to online education during the pandemic proved to be a challenge for many students, particularly those from lower-income households. According to the study, a significant portion of students lacked the digital devices required for online learning. This technological divide exacerbated inequalities, as many students could not participate in the online lessons provided by the school. While 86% of students were aware of government-supported television-based learning programs, only half had access to them (G. M. Alam & Parvin, 2023). This lack of access to both digital devices and internet connectivity was a major reason why many students disengaged from education during school closures.

This diagram highlights that half of the students had access to smartphones, which were crucial for participating in online classes. However, for many, using a shared device within the household often limited continuous access to learning. 20% of students relied on educational programs broadcast on television. This medium, while more accessible than internet-based learning for some, was not interactive and had limited effectiveness in keeping students engaged. Only 15% of students had reliable access to the internet, reflecting the stark digital divide in low-income areas. This restricted participation in online learning platforms, further widening the educational gap. A concerning 15% of students had no access to any form of educational resources during the pandemic, resulting in significant learning loss and contributing to higher dropout rates. The prolonged closure of schools negatively impacted students' motivation to learn. The study found that 55% of students were less motivated to study during and after the school closures, with boys (52.6%) reporting slightly higher levels of disengagement than girls (48.3%) (M. A. Rahman et al., 2022). The psychological toll of isolation, lack of routine, and disconnection from peers and teachers contributed to this disengagement, causing many students to lose interest in their education.

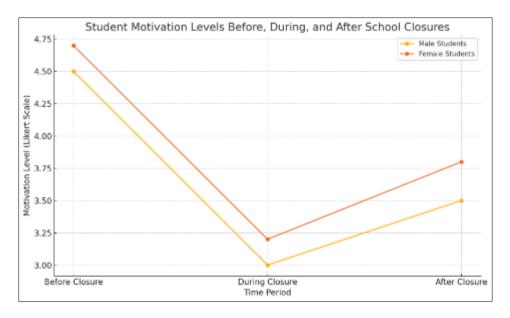


Figure 3 Student Motivation Levels Before, During and After School Closures

This diagram depicts that male student's motivation levels were high, averaging 4.5 on the Likert scale. Female students were even higher motivation at 4.7, indicating strong engagement with learning prior to the pandemic. Motivation dropped significantly for both genders as schools shut down and students faced isolation and remote learning challenges. Male student's motivation dropped to 3.0. Female student's their motivation fell slightly less to 3.2, though both groups experienced a notable decline. Motivation levels improved but did not fully return to pre-pandemic levels. Male student's motivation slightly recovered to 3.5. Female student's their motivation rose to 3.8, indicating a somewhat better recovery compared to male students. The lack of parental involvement also emerged as a critical factor in student dropout. Many parents, particularly those from disadvantaged backgrounds, were unable to support their children's education due to their own financial struggles or limited understanding of the new online learning systems. This lack of guidance and supervision at home led to many students abandoning their studies, as they had no structure or encouragement to continue learning independently (Sayma, 2021).

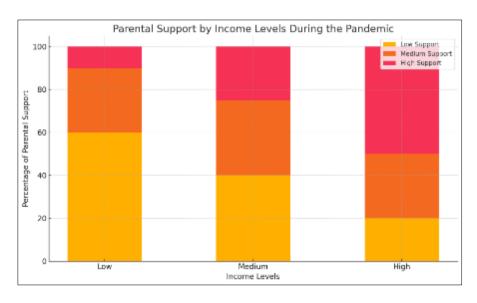


Figure 4 Parental Support by Income Levels During the Pandemic

In this diagram, low-income group got low support dominates at 60%, indicating that most parents from low-income households struggled to provide educational support for their children. Medium support stands at 30%, with high support at only 10%, reflecting the limited capacity of these families to engage with their children's education. Parental support is more balanced in this group, with low support at 40%, medium support at 35%, and high support at 25%. While the situation is better than in low-income families, a significant portion still provided minimal support. On the other hand, high-income group got the highest level of involvement, with high support at 50%. Low support drops to 20%, indicating that higher-income families were more capable of supporting their children's education during the pandemic. The research also highlighted gaps in the school's response to the crisis. Due to the economic difficulties faced by families, many parents could not afford to pay school fees, leading to a drop in revenue for the school. This, in turn, resulted in salary cuts for teachers and administrative staff, further affecting the quality of education. The school lacked a comprehensive monitoring system to track students who dropped out, which made re-engagement efforts even more challenging (Mamun et al., 2023).

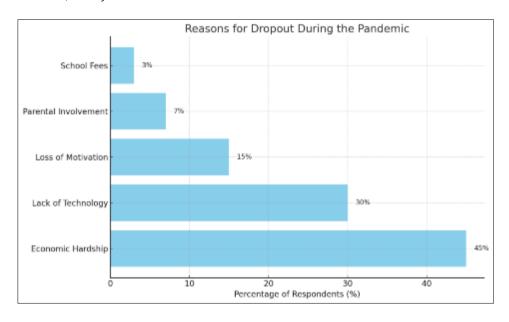


Figure 5 Reasons for Dropout During the Pandemic

The leading cause of dropout, with nearly half of the respondents attributing their decision to leave school to financial pressures brought on by the pandemic. Many families faced job losses and income reductions, forcing students to work instead of continuing their education. A significant portion of students dropped out due to a lack of access to the necessary technology (e.g., smartphones, computers, internet) for remote learning. This digital divide

disproportionately affected lower-income households. The psychological impact of isolation and disruption in routine caused many students to lose interest in education, contributing to the dropout rate. The prolonged school closures left students disconnected from teachers and peers, reducing their engagement with learning. Low levels of parental support, particularly in disadvantaged households, contributed to student dropouts. Many parents were either too busy managing the economic fallout of the pandemic or lacked the resources and knowledge to support remote learning. A smaller percentage of students dropped out due to their families' inability to pay school fees, particularly in private schools where tuition was still being charged despite school closures.

5. Discussion

The results of this study align with global trends indicating that the COVID-19 pandemic has widened educational inequalities, especially in low-income communities. The findings underscore how the socio-economic challenges caused by the pandemic have led to an increase in child labor and a subsequent rise in dropout rates. These economic pressures, combined with technological limitations, created a scenario where continuing education was not a viable option for many students from disadvantaged backgrounds. The technological divide played a critical role in the disengagement of students. While efforts were made to provide alternative learning platforms, such as television-based education, access to these resources was uneven, particularly in poorer urban areas like Dhaka. This lack of access to technology not only widened the educational gap but also made it more difficult for students to re-engage with school once it reopened. Psychological factors, including loss of motivation and mental health challenges, were also prominent in the findings. The isolation experienced by students during the prolonged school closures, coupled with the stress faced by their families, created a disconnect between students and their education. The lack of emotional and motivational support from both parents and teachers further compounded this issue, leading to higher dropout rates. Furthermore, the school's response to the crisis was inadequate in addressing these challenges. With reduced revenue from unpaid school fees, the school struggled to maintain its operations, which further diminished the quality of education provided. The absence of robust monitoring systems to track dropouts and encourage re-enrollment meant that many students fell through the cracks. The results of this case study suggest that a multifaceted approach is necessary to address the high dropout rate in primary education, especially in the context of crises like the COVID-19 pandemic. Economic support for families, access to digital learning resources, mental health support for students, and stronger school management are all crucial components in reducing dropout rates. By addressing these factors, educational institutions and policymakers can work toward re-engaging students and ensuring that no child is left behind in their educational journey.

Recommendations

Based on the findings of this study on the increasing dropout rate in primary education at Tejgaon Catholic Primary School during the COVID-19 pandemic, several targeted interventions are necessary to address the challenges and prevent future dropouts:

- Stipends and Financial Aid: The government and non-governmental organizations should continue or expand stipend programs to provide financial relief to low-income families. This support can help reduce the pressure on children to work and encourage them to return to school.
- **Incentivizing School Attendance**: Providing incentives such as school meals, scholarships, or reduced fees can encourage parents to keep their children in school, especially during economic crises.
- Access to Technology: Immediate efforts should be made to provide digital devices and reliable internet access to disadvantaged students. Collaboration with telecom companies and tech industries could facilitate affordable internet packages and device donations.
- Community-Based Learning Centers: In areas where access to technology is limited, the government and local organizations could establish community learning hubs with the necessary digital infrastructure for students to attend online classes.
- **Mental Health Services**: Schools should integrate mental health support systems, including counseling, to help students cope with the psychological impact of the pandemic. This can improve motivation and emotional wellbeing, preventing further dropouts.
- **Re-Engagement Programs**: Schools should actively work on re-engaging students who have lost motivation through fun, interactive learning programs and extracurricular activities that reignite interest in education.
- **Parental Education Programs**: Parents, especially those from disadvantaged backgrounds, should be provided with training on how to support their children's education at home. Community meetings and workshops can help improve their engagement in the educational process.

- **Community-Based Monitoring**: Schools, together with community leaders, should implement local monitoring systems to ensure parents are aware of the importance of continuous education and to identify atrisk students early.
- **Flexible Fee Structures**: Schools should adopt flexible payment plans for families affected by financial instability. This could prevent children from being forced out of school due to unpaid fees.
- **Teacher Training for Crisis Situations**: Teachers should receive continuous training in delivering online and blended learning, crisis management, and maintaining student engagement remotely.

6. Conclusion

The COVID-19 pandemic significantly disrupted primary education, particularly in low-income urban areas such as Dhaka. The findings of this case study show that economic hardship, lack of access to technology, loss of motivation, inadequate parental involvement, and financial barriers within schools were the main drivers of the increased dropout rates at Tejgaon Catholic Primary School. These factors, compounded by the socio-economic conditions of the pandemic, forced many children to abandon their education, leaving a long-term impact on the community. To mitigate these effects and reduce dropout rates, targeted interventions are required at both the local and national levels. By providing economic support, improving access to technology, offering mental health services, engaging parents, and strengthening school policies, stakeholders can help re-engage students and prevent similar disruptions in the future. With collaborative efforts between government bodies, educational institutions, and communities, it is possible to reverse the dropout trends and ensure that every child has the opportunity to complete their education, even in times of crisis. The lessons learned from this study underline the importance of preparedness in education systems and the need for resilient strategies to cope with future challenges. Equitable access to education, especially in vulnerable communities, must be a priority to avoid further widening the educational divide.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

- [1] Abusaleh, K., & Haque, N. (2022). The Impact of the COVID-19 Outbreak on Primary Education in Bangladesh. In Handbook of Research on Asian Perspectives of the Educational Impact of COVID-19 (pp. 282–304). IGI Global.
- [2] Alam, G. M. (2024). Access, attendance and performance in urban K8 education during pre-and post-COVID-19 restrictions in Bangladesh: Comparison of students in slums, tin-sheds and flats. Education 3-13, 52(4), 507–524.
- [3] Alam, G. M., & Parvin, M. (2023). Three parameters of urban K-8 education during pre-and post-COVID-19 restrictions: Comparison of students of slums, tin-sheds, and flats in Bangladesh. Education and Urban Society, 55(9), 1120–1143.
- [4] Alam, M., Al-Mamun, M., Pramanik, M. N. H., Jahan, I., Khan, M. R., Dishi, T. T., Akter, S. H., Jothi, Y. M., Shanta, T. A., & Hossain, M. J. (2022). Paradigm shifting of education system during COVID-19 pandemic: A qualitative study on education components. Heliyon, 8(12).
- [5] Amin, M. R., Ruma, A. R., Shumshunnahar, M., & Alam, M. S. (2024). Impact of COVID-19 on the Dropout Scenario of Primary Education in Bangladesh: An Empirical Study. Open Journal of Social Sciences, 12(6), 137–154.
- [6] Chowdhury, M. K., & Behak, F. B. P. (2022). Online Higher Education in Bangladesh during Covid-19: Its Challenges and Prospects. Utamax: Journal of Ultimate Research and Trends in Education, 4(1), 15–28.
- [7] Das, A., & Kusakabe, T. (2021). Impact of COVID-19 on pedagogical practices at secondary education in Bangladesh: Retrospective and prospective. Journal of International Cooperation in Education, 24(2), 113–129.
- [8] Dutta, S., & Smita, M. K. (2020). The impact of COVID-19 pandemic on tertiary education in Bangladesh: students' perspectives. Open Journal of Social Sciences, 8(09), 53.
- [9] Emon, E. K. H., Alif, A. R., & Islam, M. S. (2020). Impact of COVID-19 on the institutional education system and its associated students in Bangladesh. Asian Journal of Education and Social Studies, 11(2), 34–46.

- [10] Gazi, M. A. I., Masud, A. Al, Sobhani, F. A., Dhar, B. K., Hossain, M. S., & Hossain, A. I. (2023). An empirical study on emergency of distant tertiary education in the southern region of bangladesh during COVID-19: policy implication. International Journal of Environmental Research and Public Health, 20(5), 4372.
- [11] Glewwe, P., Li, Z., Loyalka, P., Rahman, K. W., & Sharma, U. (2024). Education without Formal Schooling through Tablets and Tutors: Evidence from Out-of-School Children in Bangladesh during the COVID-19 Pandemic. Asian Development Bank Economics Working Paper Series, 718.
- [12] Halimuzzaman, M., & Sharma, J. (2022). Applications of Accounting Information System (AIS) under Enterprise resource planning (ERP): A comprehensive review. International Journal of Early Childhood Special Education (INT-JECSE), 14(2), 6801–6806.
- [13] Halimuzzaman, M., & Sharma, J. (2024). The Role of Enterprise Resource Planning (ERP) in Improving the Accounting Information System for Organizations. In Revolutionizing the AI-Digital Landscape (pp. 263–274). Productivity Press.
- [14] Halimuzzaman, M., Sharma, J., Bhattacharjee, T., Mallik, B., Rahman, R., Karim, M. R., Ikram, M. M., & Islam, M. F. (2024). Blockchain Technology for Integrating Electronic Records of Digital Healthcare System. Journal of Angiotherapy.
- [15] Halimuzzaman, M., Sharma, J., Hossain, M. I., Akand, F., Islam, M. N., Ikram, M. M., & Khan, N. N. (2024). Healthcare Service Quality Digitization with Enterprise Resource Planning. Journal of Angiotherapy.
- [16] Halimuzzaman, M., Sharma, J., Karim, M. R., Hossain, M. R., Azad, M. A. K., & Alam, M. M. (2024). Enhancement of Organizational Accounting Information Systems and Financial Control through Enterprise Resource Planning. In Synergy of AI and Fintech in the Digital Gig Economy (pp. 315–331). CRC Press.
- [17] Halimuzzaman, M., Sharma, J., & Khang, A. (2024). Enterprise Resource Planning and Accounting Information Systems: Modeling the Relationship in Manufacturing. In Machine Vision and Industrial Robotics in Manufacturing (pp. 418–434). CRC Press.
- [18] Islam, M. T., Hussain, M., Shimul, S. N., Rupok, R. I., & Orthy, S. R. K. (2021). Integration of technology in education for marginalised children in an urban slum of Dhaka City during the Covid-19 Pandemic. Working Paper 40.
- [19] Kamrujjaman, M., Sinje, S. S., Nandi, T. R., Islam, F., Rahman, M. A., Akhi, A. A., Tasnim, F., & Alam, M. S. (2024). The impact of the COVID-19 pandemic on education in Bangladesh and its mitigation. Bulletin of Biomathematics, 2(1), 57–84.
- [20] Mahmud, A., Dasgupta, A., Das Gupta, A., Hasan, M. D., & Kabir, K. R. (2021). Current status about COVID-19 impacts on online education system: A review in Bangladesh. Kazi Rafia, Current Status about COVID-19 Impacts on Online Education System: A Review in Bangladesh (February 15, 2021).
- [21] Mamun, T. M., Akter, M., Akter, R., Alam, M. T., Hasan, K. M., & Hossain, R. (2023). Role of school preparedness on children's in-person schooling decision during Covid-19 pandemic in Bangladesh. Clinical Epidemiology and Global Health, 20, 101238.
- [22] Noor, S., & Shaoun, S. P. (2021). Online education and community participation in Bangladesh: Challenges and opportunities to ensure inclusive learning during COVID-19 school closure. Indian Journal of Public Administration, 67(4), 620–638.
- [23] Rahman, M. A., Rahaman, M. M., & Kabir, S. (2022). Bangladeshi Non-Government College Teachers under Threat of Maintaining Sustainable Livelihood in the Crisis of Pandemic: A Phenomenological Case Study. Teacher's World: Journal of Education and Research, 48(2), 27–40.
- [24] Rahman, M. M., Anmol, P., & Rahman, M. M. (2023). Parents' perceptions of sending their children to primary school during the COVID-19 pandemic in Dhaka North City (DNC), Bangladesh. Environment and Social Psychology, 9(3).
- [25] Rahman, M. S., Sabbir, M. M., Kaium, M. A., Nomi, M., Zahan, I., & Islam, M. (2021). Consequences of the Covid-19 Pandemic on Zero Access to Technology Users in Bangladesh. International Journal of Early Childhood Special Education, 13(1).
- [26] Rahman, T., & Sharma, U. (2021). A Simulation of COVID-19 School Closure Impact on Student Learning in Bangladesh. World Bank.
- [27] RASEL, M. D. (2021). Exploring the impact of COVID-19 on Urban Poor in Dhaka city, Bangladesh. Bangladesh.(June 4, 2021).

- [28] Saifuzzaman, M., Rahman, M. M., Shetu, S. F., & Moon, N. N. (2021). COVID-19 and Bangladesh: situation report, comparative analysis, and case study. Current Research in Behavioral Sciences, 2, 100034.
- [29] Sayma, R. A. (2021). Emergency Remote Teaching: The Emerging Roles and Expanding Responsibilities of the Bangladeshi School Teachers at Primary Level During COVID-stricken Period. Emergency, 12(21).
- [30] Shrestha, S., Haque, S., Dawadi, S., & Giri, R. A. (2022). Preparations for and practices of online education during the Covid-19 pandemic: A study of Bangladesh and Nepal. Education and Information Technologies, 27(1), 243–265.
- [31] Zihady, S. (2023). Dupchanchia Model of Students' drop-out control through engagement and appreciation after Covid-19: A Behavioral Policy intervention in the field administration of Bangladesh. Technium Soc. Sci. J., 43, 136