

Beyond the classroom: structural and qualitative challenges in Bangladesh's primary education

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Abstract: The study provides an overview of the problems in the primary education system of Bangladesh by highlighting issues such as teacher-student ratio variations, unqualified teachers, different educational systems, and coordination issues in primary schools. The adverse impact of poverty on children's schooling, worsened by health and nutrition problems, is identified as a major barrier to academic achievement. This study employed a sociological perspective to systematically investigate and identify the structural inequities inherent within the primary education system. The study analyzed news articles from Bangladesh's most popular newspaper in 2023 to identify pressing issues in the primary education system, focusing on teacher qualifications, teacher-student ratios, and the impact of COVID-19. The findings were triangulated with sociological theories and existing empirical investigations. While it is ethical to use public data, there are also limitations, such as potential media bias and the year of data collection, which could potentially affect generalizability. This study aims to enhance equity and academic achievement within the country's primary education landscape by investigating and proposing solutions to the challenges of Bangladesh's primary education.

Keywords: Primary education, Structural problem, Bangladesh, Socioeconomic disparity, News media analysis, Sociological interpretation.

1. Introduction

1.1 Background

Education is at the heart of the development for countries with a transitional economy, impacting everything from poverty reduction to economic growth and gender equality (Kogan & Unt, 2005). Bangladesh, a South Asian country with a population of over 160 million, has made significant strides in increasing access to education in recent decades (Salahuddin, 2021). It is of great importance for curbing population growth, reducing maternal mortality, boosting

agricultural output, increasing participation in the workforce, and, most notably, promoting the advancement of democratization (Shuib & Yunus, 2021). The primary education system in Bangladesh, designed to provide basic education to children aged 6 to 10 years, plays a crucial role in the country's efforts to achieve universal education and socio-economic development (Adhikary et al., 2022). It is the first stage of education that is compulsory for all children. It marks the beginning of a child's learning journey, where basics such as reading, writing and math are taught (Salahuddin, 2021). This initial phase is crucial as it lays the foundation for future learning. However, the current situation of primary education in Bangladesh faces

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significant challenges, such as variations in the teacher-student ratio, lack of qualified and trained teachers, variety in primary education systems, and disparity and lack of coordination among primary educational institutions (Jahan & Islam, 2017). In Bangladesh, poverty significantly impacts children's schooling regarding enrollment, participation, attendance and success (Shohel, 2014). The lack of health conditions for children and malnutrition is closely linked to poverty and are important indicators of academic success (Tunali, 2019). Primary education in Bangladesh faces many challenges and poor performance is one of them. In Bangladesh, the poor performance of primary-level students in mathematics, science and English has been a concern (Roy et al., 2020; Talukder et al., 2021). The country also faces the challenge of ensuring universal primary education, as a significant number of impoverished people reside in slums and experience the social isolation (Masoom, 2016). Therefore, for the poor performance observed in primary-level students, it is likely that this issue persists in secondary and higher secondary-level education (Khatun, 2022).

The results of the National Student Assessment 2017 revealed that students in grade 3 and 5 have low proficiency in reading and mathematics. As in most developing countries, student performance is evidently poor, with over 80 percent of grade 5 students struggling with basic math skills and a significant number failing to maintain the reading skills they acquired in grade 3 (Yuningsih, 2019). Untrained and unqualified teachers are prevalent, as most primary teachers lack the qualifications or specialized training in education (Nur & Short, 2020). Shockingly, over 177,000 primary school teachers in Bangladesh do not even have an honors degree (Chandan, 2023). This lack of qualified teachers is particularly concerning given the challenges posed by the sudden shift to online learning during the COVID-19 pandemic. When the COVID-19 pandemic spread to Bangladesh, it led to a widespread lockdown that affected various aspects of daily life, including the education system. This decision was triggered by the highly infectious nature of the disease. During the COVID-19 period, students switched to an online teaching system. This transition brought forth many problems and highlighted the difficulties of introducing online teaching. The way children accessing online learning during COVID-19 varied greatly. BBS reported that remote learning was only accessible to 18.7 percent of primary school children during school closures. This highlights a significant problem: not all children have the same opportunities to get a good education, as there are differences in how much money their families have available for their education. This shows that many primary school children in Bangladesh could not study remotely during the pandemic. In addition, the sharp decline in learning outcomes across different age groups, particularly in essential skills such as reading and math, highlights the detrimental impact of prolonged school closures on students (Ela et al., 2021).

The negative impact of COVID-19 was exacerbated by pre-existing inequalities, which in turn had the potential to hinder future development (UNICEF Bangladesh & Bangladesh Bureau of Statistics [BBS], 2023). In response to these challenges, the Bangladesh Ministry of Education has introduced a revamped curriculum for primary schools. This new approach emphasizes active learning, project-based work and incorporating digital tools into the classroom. There will no exam in primary-level grade one to three. Instead, teachers will regularly assess students through quizzes, projects and observations (Ahmed, 2023). However, the new curriculum can also be a big problem for primary education in Bangladesh, as teachers will judge the students by regularly assessing them through quizzes, projects and observations. Primary school teachers were inadequately trained and far from qualified to cope with the changing conditions (Ruhe, 2022). Numerous studies have shed light on the persistent issues regarding the qualifications and training of primary school teachers in Bangladesh. For instance, despite initiatives such as the Primary Education Development Program (PEDP), which aims to train 70,000 untrained teachers, only a fraction of these have actually enrolled for training within a three-year period, suggesting substantial deficiencies in the systematic development of teacher competencies (Singh et al., 2021). Another study revealed that untrained school staff significantly hinder the quality classroom management, which further highlights the urgent need for qualified primary school teachers in the region (Hosan & Che, 2022). In addition, broader analyses suggest a trend of inadequately prepared teachers who are often assigned to teach subjects for which they are not trained, compounding the challenges faced in educational delivery (Biswas, 2020). Placing children under the guidance of untrained teachers poses significant risks, as these educators may force students to seek private tutoring from them (Mustary, 2019). There exists a likelihood that these teachers could be influenced by local political figures or the guardians of students, which could lead to biased grading practices (Choudhury, 2019). Such a system for evaluating students could jeopardize the integrity of the educational process and undermine the objective assessment of their academic performance.

In light of the pressing challenges that plague Bangladesh's primary education system — ranging from disparities in teacher-student ratios and the prevalence of unqualified teachers to the profound impacts of socio-economic factors such as poverty on access to education and educational attainment — this present study embarks on a critical investigation with a dual purpose. Firstly, it aims to comprehensively analyze the structural inequities and barriers within the primary education system that impede academic achievement and equity, leveraging a sociological lens to offer a deeper understanding of these issues. Secondly, the study seeks to propose viable solutions to these entrenched challenges and thereby contributes to the advancement of educational equity and

quality in Bangladesh. The significance of this endeavor is underscored by the vital role that primary education plays in fostering the development of foundational skills and knowledge, as well as its potential to drive socio-economic progress. As evidenced by recent studies, innovative pedagogical approaches and enhanced engagement of teachers, students and the community are crucial to address these challenges and improve the educational landscape (Biswas & bin Ahsan, 2023). In addition, studies have identified a need for infrastructural improvements and pedagogical reforms to tackle challenges related to curricula, teacher training and resource allocation, further underscoring the critical nature of these interventions for educational progress (Ahmed et al., 2021; Mallick et al., 2022). The recommendations of this study are intended to help policy makers, educators and stakeholders implement effective strategies that can address the identified challenges within the primary education system and drive Bangladesh towards a future marked by educational equity and excellence. Thus, through its focused analysis and recommendations, this study endeavors to inform policy, inspire pedagogical reform, and ultimately enhance the quality and accessibility of primary education in Bangladesh, paving the way for a more equitable and prosperous future.

1.2 Research gap

In the context of Bangladesh's educational landscape, the need for differentiated research on the ramifications of high teacher-student ratios across various subjects and educational levels has been significantly underestimated. Previous investigations largely encapsulated the general detriments of such ratios without addressing the intricacies inherent to specific disciplines. This oversight masks the potential for devising subject-oriented strategies that could significantly enhance instructional effectiveness. While the existing body of literature underscores the importance of teacher qualifications, it falls short of dissecting how disparate subject matters — namely economics, mathematics and the sciences — suffer uniquely due to uniform staffing policy. A deeper dive into subject-specific educational dynamics could pave the way to customized teacher training programs and thereby to improve pedagogical outcomes. In addition, the digital divide exacerbated by the COVID-19 pandemic, has prompted discussions on accessibility challenges faced by certain student demographics, particularly those that differ in rural and urban areas. However, a detailed examination on these barriers has yet to be undertaken, a gap that, if filled, could provide important information for targeted policy interventions to bridge these digital divides. Although the updated curricula advocate for enhanced technological integration, the readiness of both educators and learners to navigate this transition has not been sufficiently explored. Insights into the existing technological infrastructure within educational institutions, coupled with the effectiveness of

teacher training programs and student access to necessary devices, would provide a holistic understanding of the feasibility of such curricular reforms.

Empirical studies, such as the one by Paul et al. (2021), have revealed a negative correlation between student-teacher ratios and literacy rates in Bangladesh, suggesting that lower ratios could lead to better educational outcomes. Furthermore, the importance of effective teacher training in improving student achievements, particularly in the context of primary science education, had been emphasized by Obaydullah (2019), who advocated for specialized training to address the high student-teacher ratios and the lack of subject-based teaching. The central role of technology in enhancing educational effectiveness, as explored by Baten et al. (2022), further underscored the potential benefits of integrating ICT tools into teaching, particularly in urban schools where such resources are more readily available. To fill these gaps, the present study adopted a multidimensional approach, examining the impacts of teacher-student ratios through a subject-specific lens while concurrently assessing the technological readiness of both educators and students. Such studies would not only contribute to a more nuanced understanding of educational challenges in Bangladesh but also pave the way for making a more effective and evidence-based policy.

1.3 Objectives & rationales

Identify social influences: This study will investigate how social factors such as class backgrounds, gender norms, and rural-urban divides impact the student access and motivation, and teacher performance in Bangladeshi elementary schools. Understanding these sociological elements is crucial for addressing systemic inequities and promoting a more equitable and effective primary education system.

Analyze impact on educational quality: This objective focuses on how teacher-student ratios, teacher qualifications, and societal factors influence the educational quality. By examining these issues, the research aims to develop solutions that improve classroom management, student engagement, learning outcomes, and, ultimately, the overall quality of primary education in Bangladesh.

Explore relationships and propose solutions: This study will explore the complex relationships among factors such as poverty, lack of parental support, and early marriage among girls, and their impacts on student attendance, participation and academic performance. Conversely, the study will also investigate the extent to which school leadership and community involvement can mitigate these negative sociological influences. Based on these findings, we will propose feasible solutions, such as improved teacher training and support systems, targeted scholarship programs, or community-based learning initiatives, to address social inequalities that hinder educational access and achievement.

By employing a sociological lens, this study aims to

propose feasible solutions that address systemic challenges and enhance equity in Bangladesh's primary education. This holistic approach will help create meaningful and equitable changes for a more equitable and efficient education system.

2. Theoretical framework

Several sociological theories assume that conflicts of interest and power dynamics play a role in the disparities and lack of coordination observed in primary education. For instance, Bilecen (2020) argued that social stratification and inequality are not solely determined by class but by multiple dimensions such as gender, ethnicity/race and age. This multifaceted approach to understanding inequality suggests that educational disparities cannot be attributed to economic factors alone, but the overlapping effects of these various dimensions must also be considered. Bilecen emphasized the importance of looking beyond the nation-state frameworks to understand these inequalities and advocated for a transnational perspective that acknowledges the global nature of social stratification. Davis (2015) combined the stratification economics with identity economics to account for the complexity caused by intersectionality, where individuals belong to multiple social groups. Davis distinguished between categorical and relational social identities and argued that individuals' responses to stigmatization reflect power relationships in the social group (Davis, 2015). This framework suggests that educational inequalities are not only a result of economic disparities but are also shaped by social identities and the power dynamics that influence individuals' educational paths and outcomes. Similarly, Darity (2022) focused on the concepts of identity, social rank and relative group position when analyzing inequality between groups. By focusing on how social groups are stratified according to their status, Darity's work provides insights into the ways in which educational systems can perpetuate inequalities by reinforcing social rank and group positions. This perspective highlights the need for educational policies that address the root causes of stratification beyond mere access to resources.

Aydın (2018), on the other hand, revisited Max Weber's theory of social stratification and emphasized the role of power, economic status and social honor in creating societal hierarchies. Aydın's analysis suggests that educational disparities can be manifestations of broader social stratification processes in which power and status determine access to educational opportunities. This framework underlines the importance of addressing power imbalances within the education system to mitigate inequalities. Zhou and Wodtke (2019) employed a novel stratification index to measure the degree of class stratification in the income distribution, illustrating that stratification goes beyond simple measures of inequality. Their methodological approach could be applied in

educational research to explore how occupational class stratification affects educational access and success. By quantifying the degree of stratification, Zhou and Wodtke provided a tool for understanding the structural aspects of educational inequalities. Together, these authors contribute to a comprehensive understanding of social stratification and inequality and highlight the complexity of these phenomena and their implications for education and other social outcomes.

There is ample evidence in the literature of how conflicts of interest and power dynamics significantly impact disparities and coordination in primary education. A study found that the evolution from traditional classroom power structures, where teachers were predominantly in control, towards a more reciprocal power relationship between students and teachers leads to a negotiation of curriculum priorities that may prioritize classroom order over education, reflecting a conflict of interest between educational goals and classroom management (Cothran & Ennis, 1997). Further analysis of the persistence of social disparities in educational achievement suggests that understanding the primary and secondary effects of socialization is crucial to address inequalities in educational opportunity. This insight points to the necessity of exploring beyond the immediate educational environments to explore the broader societal influences that perpetuate these disparities (Nash, 2003). In the context of school reform, the discrepancy in the distribution of authority and the power structure within schools have been identified as core problems that lead to conflicts of interest. Such conflicts underline the importance of overcoming these challenges through strategies that emphasize common interests and cooperation among various stakeholders in education (Valente et al., 2020). In addition, research in professional organizations, including educational settings, demonstrates how conflicts of interest influenced by reputation and biases can lead to preferential treatment and undermine the equity and quality of education (Hayward & Boeker, 1998). Furthermore, the indirect role of education either in exacerbating or mitigating socioeconomic divisions and processes of political exclusion demonstrates the complex relationship between educational policies and the broader socio-political landscape, which further affects educational disparities and coordination efforts (Brown, 2011). These findings underscore the intricate interplay between power, conflict and education and necessitate a holistic approach to educational reform and policy-making that addresses these underlying dynamics so as to improve the equity and effectiveness of education.

Several recent studies also highlighted the critical role of qualified teachers in promoting student engagement and academic achievement. Recent studies linked effective teaching practices, characterized by maximizing learning time and high expectations, to improved student performance through increased engagement and positive behaviors (Tomaszewski et al., 2022). This reinforces the importance of teachers who can deliver knowledge

and create a dynamic learning environment. Some others emphasized the relationship between teachers and students as a critical factor for student engagement and argued that positive teacher behavior and a strong bond with students contribute significantly to a more engaging learning experience (Li & Xue, 2023). This highlights the need for teacher training programs that equip educators with the skills to build supportive and inclusive classrooms, particularly for students with special needs (Pérez-Salas et al., 2021). The impact of teacher qualification goes beyond current students. It is also argued that programs that prioritize student-centered and technology-integrated learning not only enhance the engagement of future teachers, but also prepare them to create similar environments for their students (Seo & Gibbons, 2019). These studies collectively indicated that teacher qualifications, encompassing pedagogical expertise and the ability to create a stimulating learning environment, are the cornerstone of educational success. To ensure high quality education that equips students for the future, educational institutions must prioritize addressing training deficiencies and fostering continuous learning opportunities for teachers.

3. Materials and methods

3.1 Data collection & analysis

The data collection for this sociological study on the primary education system in Bangladesh began with the selection of 'The Daily Star' newspaper due to its high circulation and authoritative reporting on local education issues. Articles from the year 2023 were selected to ensure relevance and timeliness, with a focus on content specifically discussing aspects of the primary education system. A digital archive search was conducted and the articles were filtered by keywords such as "primary education", "teacher-to-student ratios", "educator qualifications", and "COVID-19 impacts". Only those articles that matched the thematic criteria were selected for analysis. Academic articles and research papers on similar topics were sourced from academic databases (JSTOR, SSRN, Google Scholar & Semantic Scholar), focusing on recent publications with high relevance and credibility. These academic sources were intended to complement and triangulate the findings from the news articles. Reports and white papers from credible organizations such as UNICEF and the Bangladesh Bureau of Statistics provide authoritative data and assessments of educational initiatives and outcomes.

To ensure the research focused on the most pressing issues in Bangladeshi primary education, specific inclusion and exclusion criteria were implemented. Works that directly addressed the structure and effectiveness of education system, as well as the impact of socio-economic factors on the access and quality of education were included. Additionally, studies exploring innovations and policy changes driven by technology and pedagogy were

considered relevant. Conversely, articles and reports fell outside the scope of Bangladesh or the broader South Asian context were excluded from the study. Furthermore, works lacking empirical data, detailed analysis or including outdated information on educational policies and technologies were not included for this study. This rigorous selection process aimed to create a focused and informative exploration of primary education in Bangladesh.

The data collected was analyzed utilizing a content analysis methodology, which began with the conversion of all selected articles into a digital text format. This was followed by a rigorous cleaning process to remove errors and irrelevant content. Based on the research objectives, a preliminary coding scheme was developed, which was refined as the analysis progressed. Themes such as educational challenges, system responsiveness, and policy effectiveness were identified and meticulously coded. Data from news articles was then compared with that from scholarly literature to validate and deepen the findings through triangulation. This comparative analysis helped synthesize a broad perspective on the current challenges faced by the primary education system in Bangladesh. The process was carefully documented to ensure transparency and replicability and culminated in a detailed interpretation of how the identified themes relate to broader educational and socio-economic contexts. The findings were discussed in terms of their implications for educational policy and directions of future research, providing a comprehensive overview of the state of primary education in the country. Consider Table 1, which summarizes the key themes, authors, concepts, findings, and implications drawn from an extensive review of literature and studies relevant to this research on the challenges faced by primary education in Bangladesh.

3.2 Data synthesis & triangulation

Once the thematic analysis on the news articles was complete, the research process shifted towards a narrative synthesis. The motifs or recurring themes identified within the news reports were meticulously combined to create a cohesive story that aligned with the sociological perspective outlined in the objectives of this research. This narrative focused on deciphering the sociocultural factors that shape the educational experiences in Bangladesh's primary schools. By weaving together these themes, the research aimed to reveal the underlying social structures that posed the challenges to the education system. To strengthen the validity and trustworthiness of these findings, triangulation was employed. This involved meticulously comparing the data gleaned from news articles with that existing in scholarly works, studies and official records related to primary education in Bangladesh. This multi-source approach aimed to ensure the identified themes resonated within the broader context of research on education and reflected the true realities of the primary school system in Bangladesh.

3.3 Ethical considerations & limitations

Although the research adhered to ethical principles by utilizing publicly available data from news articles, it acknowledges certain limitations. Since the study relied on information that was already accessible to the public, confidentiality and anonymity were inherently maintained as no sensitive or personal information was involved. However, the research recognizes the inherent bias that can exist within media coverage. News outlets may prioritize specific angles or sensationalize certain issues, which potentially skews the overall representation of challenges within the education system. Furthermore, the decision to focus on news articles published exclusively in 2023 potentially limits the generalizability of the findings. The primary education system in Bangladesh is likely to face a complex web of challenges that evolve over time. By

restricting data collection to a single year, the research captures a snapshot of the system at a specific point in time. This may not fully take into account historical trends or ongoing initiatives that could shape the current situation. Additionally, focusing on such a recent timeframe limits the ability to assess the long-term impact of past policy decisions or educational reforms. Ideally, a more comprehensive understanding of the challenges faced by Bangladesh's primary education system could be achieved by including data from multiple years. This would allow for a more nuanced analysis of the evolution of these challenges and potentially identify areas where the situation has improved or worsened over time. Furthermore, examining news articles published over a longer period could provide insights into how the media landscape itself contributes to the public discussion on surrounding primary education.

Table 1. Comprehensive overview of challenges and implications in primary education system of Bangladesh

Theme	Source	Key Concepts	Key Findings	Implications
Teacher Qualifications	Hasan (2022), Jasim (2022), Kamol (2019)	Teacher training, Subject expertise	Inadequate training and expertise result in poor teaching quality and student outcomes.	Need for enhanced training programs and continuous professional development.
Resource Allocation	Sims (2008), Harker (2003), Prodhan (2016)	Teacher-student ratios, Resource distribution	High ratios and poor resource distribution hinder personalized learning and equity.	Advocacy for equitable resource distribution and smaller class sizes.
Digital Divide	Ahsan et al. (2023), Laden (2021)	ICT infrastructure, Access to technology	Limited access to technology during COVID-19 exacerbated educational inequalities.	Investments in ICT for schools, particularly in rural and underserved areas.
Curriculum Challenges	Rahman (2022), Ruhe (2022), M. Ahmed (2023)	Curriculum reform, Active learning	New curriculum faces challenges in implementation without adequate teacher training.	Implementation of teacher support and training for new curriculum strategies.
Socioeconomic Impacts	Chowdhury et al. (2017), M. M. Ahmed (2021)	Socioeconomic status, Educational outcomes	Socioeconomic disparities significantly influence educational access and success.	Policy focus on reducing socioeconomic barriers to education.
Pedagogical Innovations	Biswas & bin Ahsan (2023), Tomaszewski et al. (2022)	Innovative teaching, Student engagement	Engaging teaching practices linked to improved student outcomes and participation.	Encourage and support innovative teaching methods across schools.
Educational Equity	Bilecen (2020), Darity (2022), Davis (2015)	Inequality theories, Social stratification	Educational inequalities shaped by complex social identities and power dynamics.	Development of inclusive policies that address power dynamics and social stratification.
Impact of COVID-19	Ela et al. (2021), UNICEF Bangladesh & BBS (2023)	Pandemic impact, Learning disruptions	COVID-19 significantly disrupted learning and exacerbated existing inequalities.	Strengthening education systems to be resilient against future disruptions.
Teacher-Student Interactions	Pérez-Salas et al. (2021), Oliveira & Lathrop (2022)	Teacher-student relationships, Engagement	Positive teacher behavior enhances student engagement and learning experiences.	Training programs focusing on relationship-building and communication skills for teachers.

Educational Reforms	Valente et al. (2020), Hayward & Boeker (1998)	School conflicts, Policy effectiveness	Conflicts of interest and governance issues impede effective educational reforms.	Establishment of transparent governance structures and conflict resolution mechanisms.
Gender and Education	Nash (2003), Brown (2011)	Gender equality, Education management	Gender disparities affect educational access and management strategies.	Programs to promote gender equality in educational leadership and access.
Gender and Education	Nash (2003), Brown (2011)	Gender equality, Education management	Gender disparities affect educational access and management strategies.	Programs to promote gender equality in educational leadership and access.
Classroom Management	Hosan & Che (2022), Cothran & Ennis (1997)	Classroom dynamics, Teacher control	Teacher control and classroom management significantly influence educational outcomes.	Emphasis on classroom management training in teacher education programs.
Poverty and Education	Hossain & Zeitlyn (2010), Shohel (2014)	Poverty impact, Educational access	Poverty critically impacts children's schooling and educational attainment.	Policy interventions to support education access for economically disadvantaged groups.
Rural-Urban Educational Disparities	Mahmud & Akita (2018), Fubile & Sawe (2022)	Urban-rural divide, Resource inequality	Significant educational disparities exist between urban and rural settings.	Targeted rural education programs and resource allocation to reduce disparities.

4. Findings & discussions

4.1 Teacher-student ratio

One of the most glaring disparities in Bangladesh's primary education system is the uneven distribution of resources, which is particularly evident in the imbalance of teacher-student ratios. Rural areas and underprivileged communities are often the most affected by this problem, as overcrowded classrooms hinder individual attention and personalized learning. Studies by Sims (2008), Harker (2003), Jahan and Islam (2017) confirmed the detrimental effects of high ratios on learning outcomes. Students in these settings struggle to grasp concepts effectively and receive inadequate support, creating an imbalanced foundation that perpetuates educational inequities and disadvantages vulnerable populations. This unequal distribution of resources hinders individual learning and limits the effectiveness of methods and student engagement, ultimately leading to worse learning outcomes overall (Prodhan, 2016). High student-teacher ratios can lead to increased behavior problems in the classroom as teachers are unable to provide individual attention and support to struggling students (Cook et al., 2017). The lack of personalized instruction and guidance can cause frustration and disengagement among students, further hindering their learning (Oliveira & Lathrop, 2022). High ratios often have a disproportionately negative impact on disadvantaged populations, exacerbating existing educational inequalities and perpetuating a cycle of limited opportunities and achievement gaps (Fubile & Sawe, 2022).

Some recent studies also provide a comprehensive

understanding of the systemic inequalities in Bangladesh's education system, highlighting the intricate ways in which disparities in access and quality of education are interwoven with broader socioeconomic factors such as gender, geography and economic status. One study explored how unequal opportunities in education negatively affect the sustainable development goals and emphasized the importance of equitable access to quality education in reducing poverty and promoting social equity, noting that without it, cycles of intergenerational inequality persist, hampering the country's progress toward a just society (Ahmed, 2021). Another research illustrated the impact of socioeconomic factors on under-five mortality rates in rural Bangladesh and suggested that similar disparities are likely to influence educational outcomes, indicating that broader socioeconomic inequalities are reflected in the education system. Further analysis reveals significant regional differences in socioeconomic inequalities in child malnutrition, which parallels the educational disparities and underscores the critical role of socioeconomic status in mitigating educational inequalities (Chowdhury et al., 2017). Additionally, the urban and rural dimensions of educational inequality were also discussed, emphasizing the need for policies that fill the urban-rural education gap and reduce the mismatch between skills to alleviate overall educational inequalities (Mahmud & Akita, 2018). These studies collectively demonstrated how socioeconomic disparities, influenced by geography, gender and economic status manifest in Bangladesh's education system, leading to unequal educational opportunities and outcomes, necessitating a multifaceted approach that extends beyond the education system to include broader socioeconomic reforms.

4.2 Teacher qualifications and lack of coordination

The primary education system struggles with teacher qualifications. Hasan (2022) underscored the negative consequences of inadequate training and expertise on teaching, student engagement and learning outcomes. This issue is particularly pronounced in crucial subjects such as economics, mathematics and science, where Jasim (2022) emphasized the shortcomings of insufficient teacher training programs. Compounding this problem, Kamol (2019) revealed a systemic issue in utilizing existing training programs, which was that numerous teachers either lack the skills or fail to apply the knowledge they have received. Teachers, especially women working in rural areas, may feel overwhelmed and unsatisfied with their jobs due to a lack of adequate training, which ultimately leads to a higher turnover rate (Tasnim, 2006). Without proper expertise and ongoing professional development, teachers may encounter challenges in effectively conveying complex concepts, not only resulting in unmotivated students and poor learning outcomes, but also decreases the self-esteem of the teachers (Masoom, 2021). It is crucial for educational institutions to address these training deficiencies and prioritize continuous learning opportunities for teachers to ensure the delivery of high-quality education in essential subjects.

Apart from the unequal resource allocation, Bangladesh's primary education system suffers from a fundamental disconnect between institutions. Well-intentioned programs that aim to reduce inequality often fail due to poor targeting and inefficiencies rooted in complex societal challenges such as poverty, weak governance and inappropriate curricula (Hossain & Zeitlyn, 2010; Al-Samarrai, 2008). This lack of coordination leaves the intended beneficiaries underserved and perpetuates educational disparities. This disconnect extends beyond resource allocation and impacts teacher qualifications as well. Inadequate training and expertise hinder effective teaching methods, limit student engagement and ultimately affect learning outcomes (Hasan, 2022). The problem is acute in crucial subjects such as economics, mathematics and science, where short and insufficient training programs leave teachers ill-equipped (Jasim, 2022). Further compounding the issue, Kamol (2019) also revealed a systemic problem of teachers' reluctance to take up in-service training, which suggests deeper flaws within the training system. These findings illustrate how societal factors, including resource allocation, inadequate training programs, and potentially low incentives, contribute to a pool of underqualified teachers, further disadvantaging communities that rely on public education. The lack of qualified teachers in essential subjects such as economics, mathematics and science can significantly affect students' education. If these teachers do not receive adequate training, they may face difficulties in explaining complex concepts effectively, which leads to students having an insufficient understanding. The reluctance of teachers to utilize the training provided

suggests underlying problems within the training system, such as outdated methods or irrelevance to classroom practice. Ultimately, these systemic problems contribute to a vicious cycle of under-qualified teachers and perpetuate educational disparities within communities.

4.3 Potential challenges in the post-COVID-19 era

The COVID-19 pandemic exposed and amplified inequities in Bangladesh's primary education system, particularly through the stark digital divide. Limited access to ICT infrastructure for students, teachers and network providers (Ahsan et al., 2023) hampered the effectiveness of online learning during school closures. This lack of access and inadequate government initiatives resulted in a significant disruption in quality education delivery, highlighting the critical role of infrastructure and resources in ensuring equitable access in times of crisis. The report from UNICEF Bangladesh and BBS (2023) painted a bleak picture, revealing that only 18.7 percent of children participated in remote learning, with younger children being the most affected. This digital divide, echoed through a sociological lens, exposes how social disparities in technology access translate into educational inequalities. The lack of proper infrastructure, affordability issues and potentially cultural norms around the use of technology can all contribute to this vicious cycle, leaving disadvantaged communities further behind in their educational journeys. This digital divide is not limited to education alone, but also exacerbates existing social inequalities. Without access to digital tools and resources, children from disadvantaged backgrounds are unable to develop the digital literacy skills required for the modern world of work. This perpetuates the cycle of poverty and limits their future opportunities. To bridge this gap, investment in infrastructure and affordability are required to address the underlying societal factors that contribute to this divide. Only by doing so can we ensure equal educational opportunities for all children, regardless of socioeconomic background.

The recent introduction of a new curriculum for primary education presents both opportunities and challenges. The curriculum aims to make learning more engaging and interactive by eliminating exams until grade three and emphasizing active learning methods (Rahman, 2022). This shift towards fostering a more holistic learning environment is promising, but also requires significant changes in teaching methods. In line with the research conducted by Rahman (2022) and other scholars, it has been suggested that teachers might benefit from additional training and support to implement the new approaches effectively. Teachers who lack adequate training and support may struggle to understand how to implement active learning methods to effectively engage students without relying on traditional exams. The shift away from exams may raise concerns about how students' progress will be measured and evaluated. However, with the right investment in teacher

professional development, the new curriculum can create a dynamic and inclusive learning environment that promotes the critical thinking, creativity and problem-solving skills of young learners. Concerns regarding the curriculum's emphasis on technology integration could exacerbate the existing digital divide (Laden, 2021). The new curriculum may require teachers to adapt their teaching styles and acquire the skills to utilize technology effectively (Ahmed, 2023). The shift towards a holistic learning environment also calls for reevaluating assessment methods. Traditional exams and standardized tests may not accurately capture the breadth of knowledge and skills that students acquired in such an environment. Therefore, educators must explore alternative assessment strategies that align with the new teaching approaches, such as project-based assessments and portfolios. Ultimately, the successful implementation of a holistic learning environment requires a collaborative effort by policymakers, educators and the community to ensure that all students have equal access to resources and opportunities for growth.

5. Conclusion

Education is at the heart of societal progress, impacting everything from poverty alleviation to economic growth and gender equality. Bangladesh, a country striving for development, has made great strides in increasing access to education, particularly at the primary school level. However, beneath this progress, there lie deep-rooted challenges that impede equitable and quality education for all. Through a sociological lens, we can delve deeper into these issues and understand how social structures, inequalities and power dynamics shape the current landscape of primary education in Bangladesh.

This research employed a comprehensive sociological analysis to examine the multifaceted challenges facing by the primary education sector in Bangladesh. By synthesizing empirical studies, theoretical papers, policy reviews and case studies, the research aims to provide a nuanced understanding of the educational inequalities and the systemic challenges within the context of Bangladesh as a developing country. This study examined primary education issues in Bangladesh and revealed a complex array of challenges rooted in societal structures and dynamics. Disparities in learning outcomes persist due to an unequal distribution of resources, as manifested in high teacher-student ratios and unqualification of teachers. For instance, a news article from The Daily Star, written by Khatun (2022) highlighted the plight of a rural school, which was struggling with a single teacher for over 100 students, making it nearly impossible to provide personalized attention. The lack of coordination among educational institutions, rooted in historical inequalities and power struggles, hampers the effectiveness of programs to reduce educational disparities.

The digital divide, dramatically highlighted during the

COVID-19 pandemic, has intensified existing educational inequalities in Bangladesh, a developing country where many children already faced barriers to accessing quality education. This divide is particularly problematic as the country attempts to introduce a new curriculum that aimed at promoting active learning and eliminating early exams. However, the successful implementation of this curriculum could be hindered by the resistance from entrenched institutional structures and a reliance on technology, which was unable to make students access equally. These challenges are not merely logistical but are deeply rooted in broader societal norms, conflicting interests and institutional resistance, which are common in developing countries.

This detailed sociological examination provides essential insights for stakeholders in the field of education such as government policymakers, primary school teachers, and scholars who probe into the foundational issues plaguing Bangladesh's primary education system. Identifying knowledge gaps and theoretical and methodological shortcomings are crucial for developing targeted, context-specific strategies to overcome these barriers in education. For policymakers, recognizing education both as an individual right and a communal investment is vital for promoting societal progress. Practical, informed solutions are necessary to tackle structural inequalities and the complex social dynamics that affect education. For example, government-led initiatives could focus on enhancing teacher training in underprivileged areas to ensure all teachers are well-equipped to handle the new curricula and technology integration. Additionally, creating scholarship programs or supporting infrastructure development to mitigate the digital divide can ensure a more equitable access to quality education. By addressing these specific challenges with solutions grounded in sociological research, Bangladesh can make significant strides toward reforming its primary education system, setting a precedent for other developing countries that are facing similar issues.

By unrevealing these social issues, stakeholders can work collaboratively to implement reforms that can promote fairness, effectiveness and inclusivity in Bangladesh's primary education system. The challenging journey ahead necessitates a concerted effort to bridge the gap between superficial challenges and the deeper social issues that require attention for meaningful change.

Authors' contributions

Muhammad Rehan Masoom: organized and interpreted the data, and prepared the manuscript. Imtiaz Ahmed Siddik: conducted research design, data collection and analysis.

Conflict of interest

We declare no conflict of interest.

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