

# Understanding School Dropout and Its Impact on the Community in the Khulna Region of Bangladesh

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## Abstract

In the context of widespread school dropout rates and their far-reaching implications, there is a pressing need to comprehensively investigate the root causes and contributing factors. Extant literature suggests that school dropout is a complex issue influenced by a myriad of variables spanning individual, familial, and institutional domains. This study, conducted in the southern region of Bangladesh through random sampling and face-to-face interviews with 210 participants, delves into the intricate web of influences on school dropout. It scrutinizes the relationships between dropout and various factors, encompassing individual attributes such as willingness, perception, and academic performance, family related elements including the presence of educational role models and parental support, and school-specific features like truancy, school quality, geographical location, and instances of school conflict. The results divulge that socio-economic instability is a chief determinant of school dropout, delineating a distinct profile compared to regular students, further exacerbated by reduced engagement in extracurricular activities. Significantly, the absence of parental monitoring emerges as a pivotal predictive factor for dropout, transcending family structures defined by parental occupations. Considering these multifaceted findings, it is imperative to formulate school and family policies that underscore the role of parental monitoring in abating dropout rates, with a call for targeted interventions addressing these factors to curtail the prevalence of school dropout.

## Keywords

School Dropout, Factors, Khulna, Bangladesh, Education System,

## 1. Introduction

School dropout, a term signifying the unfortunate discontinuation of a student's educational journey without the attainment of a high school diploma, is a global challenge. However, it is particularly pronounced in Latin America, where it is a pervasive issue. The phenomenon is defined as departing the education system without securing the essential minimum credential, typically a high school diploma (De Witte et al., 2013). Dropout rates exhibit a significant increase in South and West Asia (43%) and Sub-Saharan Africa (36%) when compared to other geopolitical regions such as East Asia and Europe, which tend to have lower dropout rates (United Nations Educational, Scientific and Cultural Organization, 2012; European Commission Education Training, 2013).

The consequences of school dropout extend beyond the educational sphere. Youth who leave school prematurely are more likely to experience socioemotional challenges and engage in delinquent and criminal behaviors (Prevatt & Kelly, 2003; Lochner & Moretti, 2004; Bradshaw et al., 2008). School dropout can be seen as the culmination of a complex, cumulative process of disengagement from education, influenced by various factors across different domains (individual, family, school, and neighborhood) (Andrei et al., 2012; Bjerk, 2012; Fortin et al., 2013; Korhonen et al., 2014). Internalizing and externalizing disorders are both implicated as individual risk factors for school dropout, with disruptive behavior posing a significant obstacle to educational achievement, while depression and anxiety are common internalizing challenges (Esch et al., 2014).

Students who adhere to school regulations tend to perform better academically and are less likely to drop out (Bradshaw et al., 2008). Disruptive behavior not only affects school performance but also influences parental involvement and supervision, as well as teacher-student relationships, magnifying its impact on academic success (Dishion et al., 2004). Among individual risk factors, substance addiction is of particular concern, with a well-documented association between substance misuse and school dropout. Students who use drugs or alcohol are more prone to dropout, with early cannabis use linked to a fivefold increase in dropout risk (Esch et al., 2014). The reasons for this association range from neurobiological factors to learning difficulties and poor academic performance (Battin-Pearson et al., 2000).

Socioeconomic status, family structure, and the role of parents in academic performance have all been linked to school dropout (Townsend et al., 2007; DuPont et al., 2013; Goldberg-Looney et al., 2016; Park & Kim, 2016). Family socialization theory highlights the interconnectedness of home environment and school achievement, with stressful circumstances like parental divorce impacting a student's behavior both inside and outside the classroom (De Witte et al., 2013). Family structure also plays a role, with children from single-parent fami-

lies more likely to drop out, emphasizing the impact of family structure on socialization processes (Bridgeland et al., 2006; Román, 2013; Torres et al., 2015).

School dropout is a complex issue, influenced by multiple factors, including the absence of regulations, family dynamics, and substance abuse (Bridgeland et al., 2006; Park & Kim, 2016). Truancy, for instance, has been identified as a risk factor for dropout, indicating a disconnection from the educational system and potential involvement in delinquent behavior (Cutrín et al., 2015). The link between dropout and criminal behavior is crucial, as those who leave school for personal reasons are more likely to engage in offending conduct than those who leave for economic reasons (Weerman, 2010).

Research, such as this study, is driven by the need to address uncertainties and un-cover solutions to pressing issues. In the case of school dropout, the research aims to shed light on a significant problem, particularly in the Khulna region of Bangladesh, where limited research has been conducted. This study serves as the first exploration of school dropouts in this region, incorporating essential factors relevant to the local context. It seeks to contribute to social welfare by offering insights into the causes and consequences of school dropouts. Understanding this complex issue is essential for any society, and this study is a step toward that goal.

The objectives of this study encompass a multifaceted approach to comprehending the complexities of school dropout. Firstly, we aim to meticulously examine the socio-demographic profiles of the respondents, delving into the unique characteristics that may influence dropout rates. Subsequently, we endeavor to identify the pivotal factors that underlie the act of leaving school prematurely, shedding light on the root causes of this issue. Furthermore, we seek to draw insightful comparisons between the circumstances of students who successfully complete their education and those who unfortunately dropout, facilitating a deeper understanding of the contributing factors.

## **2. Methods**

### **2.1. Data Sources and Sampling Design**

For this study, we included individuals who were attending primary to higher secondary schools in the southern region of Bangladesh, specifically in Khulna. Primary data collection was employed, with data gathered through questionnaires pre-pared in English. The study population was divided into two distinct groups: regular students continuing their education and school dropouts. From the dropout category, a random selection of both male and female participants was interviewed, following a thorough explanation of the study's objectives and questionnaire. We obtained consent from 210 respondents for the evaluation of school dropouts, excluding those with improperly completed questionnaires.

### **2.2. Sampling Design**

Our study focused on the southern region of Bangladesh, utilizing purposive

sampling to select the sample based on the study objectives. Data collection took place between April 2022 and July 2022, employing a cross-sectional study design.

### 2.3. Study Design

This study encompasses both school dropouts and students who are still pursuing their education. The data collection instrument, a questionnaire, was structured into four segments:

1) The first segment collected demographic information, including name, gender, age, number of family members, annual family income, fathers' and mothers' ages, and the history of school dropouts.

2) The second segment delved into respondents' level of education, their willingness to complete SSC (Secondary School Certificate), their perception of education, home location, reasons for dropping out and academic performance during school.

3) The third segment included details about the occupations of the respondents' parents, parental academic support, household head's education level (at least SSC), the number of siblings who dropped out, parents' marital status, access to local power structures, and family food security.

4) The fourth segment focused on school-related factors such as school location, distance from home, the quality of relationships with teachers, school type, teacher quality, and activities during school hours.

### 2.4. Dependent Variables

The primary focus of this study is the school dropout status, serving as the dependent variable. Respondents' school dropout status was determined through their response to the question "Did you dropout from school?" with "yes" indicating drop-out status and "no" signifying regular student status. The dependent variable is categorized into these two groups for analysis:

$$\text{School dropped out : } \begin{cases} 0; \text{ No; if respondent is a regular student} \\ 1; \text{ Yes; if respondent is dropped out student} \end{cases}$$

### 2.5. Independent Variables

Various independent variables were considered and categorized into different factor groups. These independent variables include gender, age, family size, family income, fathers' and mothers' ages, the respondent's education level, willingness to complete SSC, perceptions regarding education, home location, food sufficiency within the family, mobility within local power structures, school location and distance, teacher quality, relationships with teachers and peers, school expenditure, and participation in extracurricular activities.

### 2.6. Statistical Analysis

The data underwent a comprehensive statistical analysis involving univariate,

chi-square testing, and logistic regression. Univariate analysis allowed us to examine the data's distribution by calculating various statistical measures such as mean, median, standard deviation, minimum, and maximum values. These values were used to create a range of graphical representations, including bar charts, histograms, and pie charts, and to summarize the variables. Bivariate analysis, on the other hand, focused on exploring the relationships between two categorical variables simultaneously. It examined the associations and the strength of correlations between these two variables. The chi-square test, a widely used statistical method, was employed to assess the connections between variables. In particular, the chi-square goodness of fit test, a nonparametric test for a single sample, was utilized to explore these relationships and associations. The formula of chi-square test is:

$$\chi^2 = \sum_{i=1}^n \frac{(O_i - E_i)^2}{E_i} \quad (1)$$

Logistic regression is a statistical technique that utilizes a logistic function, specifically the cumulative logistic distribution, to evaluate the relationship between a categorical dependent variable and one or more independent variables. This method is particularly applicable when the dependent variable is binary, making it suitable for binary logistic regression. Much like other regression analyses, logistic regression is used for predictive purposes. All the analyses in this study were conducted using IBM SPSS-22.

### 3. Results

**Table 1** provides a comprehensive overview of the study's demographics. Among the respondents, 64.29% were male, and 35.27% were female. The age distribution included 7.1% below 15 years, 72.3% aged 15 to 24, and 20.48% between 25 to 64 years. In terms of annual family income, 29.05% belonged to the lower-income bracket, 61.43% to the lower-middle income, and 9.52% to the upper-middle income category. Notably, 68.57% of respondents were school dropouts, while 31.43% were regular students. In terms of education levels, 55.71% had a primary education, 29.05% had a secondary education, and 15.24% had achieved higher education. A positive perception of education was expressed by 51.43% of respondents, while only 8.57% held a negative view. The majority lived in rural areas (72.86%), with the rest in urban settings (27.14%). Parental occupations included 35.24% in business and 16.70% in jobs for fathers, while 88.57% of mothers were housewives and 1.43% engaged in business. Most received positive academic support from their parents (44.29%), and 15.24% experienced negative support. The majority had parents who were not divorced (96.67%). Concerning mobility in local power structures, 54.29% had some level of mobility, while 58.57% reported no food deficit. Regarding living arrangements, 85.24% lived with their parents, and 14.76% did not. School characteristics indicated that 67.145% attended rural schools, with 55.24% having schools far from their homes. Respondents mostly had positive relationships with their

**Table 1.** Distribution of selected variables by frequency for students experiencing school dropout and those attending regularly in the southern region of Bangladesh.

Variable	Category	Frequency	Percentage (%)
Gender	Male	135	64.29
	Female	75	35.71
Age	Children (0 - 14)	15	7.14
	Youth (15 - 24)	152	72.38
	Adult (25 - 64)	43	20.48
Yearly Family Income	Lower Income	61	29.05
	Lower Middle Income	129	61.43
	Upper Middle Income	20	9.52
Drop Out	No	66	31.43
	Yes	144	68.57
Respondent's level of education	Primary	117	55.71
	Secondary	61	29.05
	Higher Education	32	15.24
Perception on education	Bad	18	8.57
	Average	84	40.00
	Good	108	51.43
Residence	Rural	153	72.86
	Urban	57	27.14
Fathers Occupation	Business	74	35.24
	Job	35	51.90
	Farmer	51	76.19
	Others	50	100.00
Mother's Occupation	Business	3	1.43
	Job	12	5.71
	Housewife	186	88.57
	Others	9	4.29
Parent's Academic Support	No Support	32	15.24
	Neutral	85	40.48
	Supportive	93	44.29
Parents are divorced	Yes	7	3.33
	No	203	96.67
Mobility to local power structure	Yes	114	54.29
	No	96	45.71
Food deficit in family	Yes	87	41.43
	No	123	58.57

**Continued**

Children live with their parents	Yes	179	85.24
	No	31	14.76
School Location	Rural	141	67.14
	Urban	69	32.86
Distance of school from home	Far	116	55.24
	Near	94	44.76
Relationship with Teachers	Bad	14	6.67
	Neutral	63	30.00
	Good	133	63.33
School Type	Public	135	64.29
	Private	75	35.71
School Expenditure	Not much	77	36.67
	Average	104	49.52
	Very much	29	13.81
Teachers Quality	Not Good	15	7.14
	Neutral	56	26.67
	Good	139	66.19
Participation in extracurricular activities	Yes	47	22.38
	No	163	77.62

teachers (63.33%), while 6.67% reported negative ones. Of the respondents, 64.29% attended public schools, and 35.71% attended private ones. School expenditure was considered average by 49.52% and very high by 13.81%. Most perceived their teachers' quality as good (66.19%), with a minority suggesting otherwise (7.14%). Extracurricular activities were not participated in by 77.62%, whereas 22.38% were engaged in them.

**Table 2** displays the results of chi-square tests assessing the associations between school dropout and its related covariates, along with their corresponding p-values. The table highlights the significant influence of various covariates on school drop-out. Notably, respondent's yearly family income (BDT), level of education, willingness to study up to SSC, place of residence, father's occupation, mobility within local power structures, food sufficiency within the family, children's living arrangements, school location, school type, and participation in extracurricular activities all exhibit statistically significant associations with school dropout. Lower income (91.8%), lower-middle income (63.6%), and upper-middle income (30%) have varying degrees of positive impact on school dropout, with an overall impact factor of 30.583. Educational levels also play a role, with primary (79.5%), secondary (72.1%), and higher education (21.9%) displaying significant impacts. Respondents' willingness to study up to SSC has

**Table 2.** Evaluating the relationship between school dropout status and chosen variables through a Chi-Square test.

Variables	Categories	Dropout Status		$\chi^2$ (p-value)
		Yes n (%)	No n (%)	
Yearly Family Income (BDT)	Lower Income	56 (91.8)	5 (8.2)	30.583 (<0.001)
	Lower Middle Income	82 (63.6)	47 (36.4)	
	Upper Middle Income	6 (30)	14 (70)	
Respondent's level of Education	Primary	93 (79.5)	24 (20.5)	39.205 (<0.001)
	Secondary	44 (72.1)	17 (27.9)	
	Higher Education	7 (21.9)	25 (78.1)	
Willingness to study up to SSC	Less	41 (89.1)	5 (10.9)	11.776 (0.003)
	Neutral	18 (66.7)	9 (33.3)	
	Very Much	85 (62)	52 (38)	
Residence	Rural	117 (76.5)	36 (23.5)	16.320 (<0.001)
	Urban	27 (47.4)	30 (52.6)	
Father's Occupation	Business	50 (67.6)	24 (32.4)	36.373 (<0.001)
	Job	10 (28.6)	25 (71.4)	
	Farmer	41 (80.4)	10 (19.6)	
	Others	43 (86)	7 (14)	
Mobility to Local Power Structure	Yes	65 (57)	49 (43)	15.447 (<0.001)
	No	79 (82.3)	17 (17.7)	
Food Deficit in Family	Yes	71 (81.6)	16 (18.4)	11.716 (0.001)
	No	73 (59.3)	50 (40.7)	
Children living with family	Yes	118 (65.9)	61 (34.1)	3.950 (0.047)
	No	26 (83.9)	5 (16.1)	
School Location	Rural	109 (77.3)	32 (22.7)	15.188 (<0.001)
	Urban	35 (50.7)	34 (49.3)	
School Type	Public	100 (74.1)	35 (25.9)	5.311 (0.021)
	Private	44 (58.7)	31 (41.7)	
Participation in Extracurricular Activities	Yes	26 (55.3)	21 (44.7)	4.934 (0.026)
	No	118 (72.4)	45 (27.6)	

distinct effects on dropout, with less (89.1%), neutral (66.7%), and very much (62%) yielding varying results. Geographically, respondents in rural areas (76.5%) and urban areas (47.4%) have differing influences on dropout rates. Father's occupation, be it business (67.6%), job (28.6%), farmer (80.4%), or others



(86%), also has diverse impacts. The presence or absence of mobility to local power structures impacts dropout, with mobility (57%) and non-mobility (82.3%) yielding different results. Food sufficiency, with deficits (81.6%) and without (59.3%), affects dropout. Children's living arrangements, with family (65.9%) and without (83.9%), vary in impact. School location, rural (77.3%) and urban (50.7%), influences dropout rates, as does school type, public (74.1%) and private (58.7%). Finally, participation in extracurricular activities (55.3%) and non-participation (72.4%) significantly affect school dropout rates.

In **Table 3**, the odds ratio analysis provides valuable insights into the factors influencing school dropout. For respondent gender, the odds ratio of 0.319 (for female) with a 95% confidence interval of [0.123, 0.83] reveals that females were approximately 1.143 times less likely to drop out compared to their male counterparts. The confidence interval signifies that these findings are reliable within a range of 0.123 to 0.83 with 95% certainty. Examining yearly family income, the odds ratio was 0.115 (for lower middle income) with a 95% confidence interval of [0.034, 0.387]. This suggests that respondents from lower middle-income families were roughly 0.115 times less likely to experience dropout when compared to those with lower family incomes. Similarly, an odds ratio of 0.023 (for upper middle income) with a 95% confidence interval of [0.004, 0.136] indicates

**Table 3.** Binary logistic regression analysis provides estimates for all chosen covariates, presenting odds ratios and corresponding p-values.

Covariates	Categories	Estimates	Odds Ratio	p-Value	95% CI for OR	
					Lower value	Upper value
Gender	Male (ref.)	-	-	-	-	-
	Female	-1.143	0.319	0.019	0.123	0.83
Yearly Family Income (BDT)	Lower Income (ref.)	-	-	-	-	-
	Lower Middle Income	-2.163	0.115	<0.001	0.034	0.387
	Upper Middle Income	-3.772	0.023	<0.001	0.004	0.136
Respondents Level of Education	Primary (ref.)	-	-	-	-	-
	Secondary	-0.379	0.684	0.483	0.237	1.976
	Higher Education	-3.244	0.039	<0.001	0.01	0.161
Willingness to study up to SSC	Less (ref.)	-	-	-	-	-
	Neutral	-1.871	0.154	0.03	0.029	0.837
	Very Much	-0.921	0.398	0.204	0.096	1.65
Father's Occupation	Business (ref.)	-	-	-	-	-
	Job	-2.154	0.116	0.001	0.034	0.39
	Farmer	-0.849	0.953	0.935	0.297	3.055
	Others	0.751	2.12	0.261	0.572	7.859
Mobility to Local Power Structure	Yes (ref.)	-	-	-	-	-
	No	0.932	2.539	0.053	0.988	6.513
Participation in Extracurricular Activities	Yes (ref.)	-	-	-	-	-
	No	1.360	3.897	0.01	1.384	10.974

Note: CI = confidence interval.

that respondents from upper middle-income households were almost 0.023 times less likely to drop out in comparison to those from lower-income families.

Shifting the focus to the respondent's level of education, an odds ratio of 0.684 (for secondary) with a 95% confidence interval of [0.237, 1.976] suggests that those with secondary education were approximately 0.684 times less likely to drop out than respondents with primary education. Likewise, the odds ratio for higher education was 0.039, with a 95% confidence interval of [0.01, 0.161], signifying that individuals with higher education were almost 0.039 times less likely to experience dropout compared to those with primary education.

When evaluating the willingness to study up to SSC, an odds ratio of 0.154 (for neutral) with a 95% confidence interval of [0.029, 0.837] indicates that respondents with a neutral willingness level were almost 0.154 times less likely to drop out than those with lower willingness. Furthermore, the odds ratio of 0.398 (for very much) with a 95% confidence interval of [0.096, 1.65] implies that respondents with a very high willingness to study were almost 0.398 times less likely to experience dropout than those with lower willingness.

Considering the father's occupation, the odds ratios vary, indicating different impacts. For example, an odds ratio of 0.116 (job) with a 95% confidence interval of [0.034, 0.39] suggests that respondents with fathers in jobs were almost 0.116 times less likely to drop out than those with fathers in business. In contrast, an odds ratio of 0.953 (farmer) with a 95% confidence interval of [0.297, 3.055] implies that respondents with fathers engaged in farming were almost 0.953 times less likely to experience dropout than those with fathers in business. Lastly, an odds ratio of 2.12 (others) with a 95% confidence interval of [0.572, 7.859] reveals that respondents with fathers in other occupations were almost 2.12 times more likely to drop out compared to those with fathers in other categories. Analyzing mobility to local power structures, an odds ratio of 2.539 (for "No" responses) with a 95% confidence interval of [0.988, 6.513] indicates that respondents with no mobility were almost 2.539 times more likely to drop out than those with mobility in local power structures. Additionally, for participation in extracurricular activities, an odds ratio of 3.897 (for "No" responses) with a 95% confidence interval of [1.384, 10.974] shows that respondents who did not participate were almost 3.897 times more likely to experience dropout than those who engaged in extracurricular activities. These odds ratio findings provide valuable insights into the factors that influence school drop-out.

#### 4. Discussion

The issue of school dropouts has long been recognized as a significant concern in both the educational and social spheres. Individuals who leave school prematurely often face considerable intellectual challenges resulting from their incomplete education, which subsequently hampers their social and economic prospects in adulthood. Notably, school dropout is a pressing concern in Bangladesh. To address this issue, this study was conducted with the aim of ex-

ploring the underlying causes of school dropout at the primary, secondary, and higher education levels, focusing on the southern region of Bangladesh, specifically the Khulna region. The study collected data from respondents using a simple random sampling method and employed chi-square tests to identify the most significant variables among various factors. Subsequently, binary logistic regression was applied to these variables, and the outcomes were compared to findings from prior studies. The results highlighted several significant variables, particularly emphasizing the influence of economic factors, such as respondents' yearly family income and their level of education, mirroring observations from previous research conducted throughout Bangladesh (Sarker, Wu, & Hossain, 2019). This study underscores the multifaceted nature of school dropout and its association with various socio-economic and educational determinants.

The geographical proximity between a student's home and their school, as well as the characteristics of their place of residence, play pivotal roles in determining school dropout rates. Studies, such as the one by Juneja (2001), have pointed out that when schools are perceived as being situated too far from a student's home, it can lead to higher dropout rates, particularly among young girls who are more vulnerable to incidents of sexual harassment, and among boys who may be susceptible to bullying. Such concerns often lead parents to worry about the safety and well-being of their children when considering the location of their residence in relation to the school (Shahidul & Karim, 2015). The influence of this factor on school dropout is further substantiated by the findings of this study, affirming that the place of residence in-deed exerts a significant impact on the likelihood of students dropping out of school. This underscores the critical interplay between geographical factors, safety concerns, and student attrition, highlighting the need for policies and interventions that address these issues comprehensively.

Parental occupation emerges as a crucial factor significantly influencing the likelihood of a child's school dropout. The profession of parents plays a pivotal role in shaping a child's commitment to education. This phenomenon is exemplified in a study where the relationship between parental occupation and the socio-economic status of a child's education was examined. The study found that, on average, parents with higher levels of education contributed to a lower dropout rate, with a parental education rate of 10.74 among dropout students, compared to 12.78 among regular students. Additionally, the study noted that children with parents who had learning disabilities faced a dropout rate of 13.65%, contrasting with just 5.89% among students whose parents did not have learning disabilities, highlighting the substantial impact of parental occupation on a child's educational trajectory (Ingrum, 2006).

Moreover, school dropout is intricately connected to the mobility of educational institutions and the local power structure. The geographical distribution of schools, as well as their accessibility, directly impacts students' educational

opportunities. A higher degree of mobility within the local power structure is linked to increased learning opportunities for students. Consequently, this factor becomes an integral component in addressing the issue of school dropout and underscores the importance of ensuring adequate access to quality education by addressing the dynamics of local power structures.

This study highlights the significance of mobility within the local power structure as a key factor impacting school dropout ( $p < 0.001$ ). This observation aligns with previous research, indicating that mobility's influence is evident in the percentage of students who drop out. The study found that areas with higher mobility scores exhibited lower dropout rates, as low as 8.1%, while regions with limited mobility witnessed dropout rates of approximately 100% (Gasper, DeLuca, & Estacion, 2012).

Furthermore, the study underscores the role of food security in children's educational continuity. Research predicted that food deficits within families significantly contributed to children's absence from school, with a substantial 33.0% of children from food-deficient households being absent compared to their counterparts with adequate food (17.8%,  $p < 0.001$ ) (Belachew, Hadley, Lindstrom, & Gebremariam, 2011). This factor also emerged as significant in the present study, with a significance level of  $p = 0.001$ .

The type of school or educational institution also emerged as a determinant of school dropout, influenced by the financial aspects of a student's education. The cost considerations associated with different school types significantly influenced the likelihood of school dropout ( $p = 0.029$ ), aligning with findings from another study where school location and expenditure impacted children's dropout rates ( $p < 0.001$ ) (Sarker, Wu, & Hossain, 2019).

Additionally, the study reveals that participation in extracurricular activities plays a pivotal role in determining school dropout rates among children. Previous research reported that individuals engaged in extracurricular activities were 2.30 times more likely to remain enrolled in school compared to their peers who did not participate in such activities (Davalos, Chavez, & Guardiola, 2016). Similarly, this study found that participation in extracurricular activities had a substantial impact on school dropout ( $p = 0.033$ ).

### Limitations

Study limitations are worth acknowledging. While we employed a standardized process, sample design, and questionnaire, it's essential to recognize certain constraints. The study's cross-sectional design restricts our ability to establish correlations between variables. Additionally, the use of interviewers to administer the questionnaire introduces a potential source of interviewer bias. Even though we utilized simple random sampling to select respondents, there is a possibility of selection bias if interviewers did not strictly adhere to the sampling technique. While more precise analyses could provide more accurate estimates, resource and time constraints limited us to using binary logistic regression and chi-square

tests. Unfortunately, these limitations prevented us from exploring casual relationships between the dependent variable and other parameters.

## 5. Conclusion

In conclusion, this study elucidates the multifaceted factors impacting school drop-out, irrespective of students' gender, with certain determinants amplifying dropout rates and diminishing overall educational achievements. Financial hardships disproportionately affect parents with lower socioeconomic statuses, hindering their ability to afford their children's education. Furthermore, gender-driven decision-making within families sometimes favors male children for future opportunities. School-level variables, including infrastructure and access to local power structures, exhibit varying effects on dropout rates, closely linked to geo-graphical disparities between urban and rural schools. Notably, rural areas experience significantly higher dropout rates. Parental perceptions, influenced by education, socio-economic status, and family dynamics, significantly shape a child's educational journey, especially in regions like Khulna, in southern Bangladesh, where parental decision-making and knowledge gaps substantially influence children's educational trajectories.

## Compliance with Ethical Standards

The ethical guidelines of the national research committee, the 1964 Helsinki Declaration, and any subsequent changes, or equivalent ethical standards, were followed in all aspects of this study's procedures involving human subjects. Informed consent was obtained from all individual participants included in the study. All participants have their own right to withdraw from the study at any time. In compliance with local law and institutional regulations, an ethical evaluation has been made by the authors during the data collection procedure of this study.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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