# School Closure during Covid-19 and Likely Impact on Dropout Behavior in Bangladesh: A Theoretical Analysis

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Abstract: Among the countries, with the highest number of days of full school closures, Bangladesh is in third position in worldwide and first in the Asian countries caused by Covid-19. And Bangladesh is in the 28th position where children are at moderate or high risk of drop out from education. Therefore, the foremost purpose of this study is to explore the theories of school dropout to find out the underlying factors of drop out for the children during prolonged school closer due to outbreak of Covid-19 in Bangladesh. Based on the study of BRAC, this study exhibits the current scenario of education during Covid-19, Students' spending time during lockdown, rate and causes not for participating in distance learning in Bangladesh. This study also explores the dropout theories which are Finn's developmental theory of high school dropout, structural strains theory, Tinto's theory of institutional departure, academic mediation theory. This study observed that some of the factors which are particularly relevant to school dropout in online/distance education system.

Key Words: Dropout, school closure, distance learning, learning inequality, theories.

# I. INTRODUCTION

## 1.1 Back Ground of Study

n Bangladesh, the whole country went into general lockdown from March 26 of 2020 due to of Covid-19 pandemic. National school closures in Bangladesh started from March 17, 2020 and since then all the educational institutions remain closed. Aside from the economy, the sector which is harmed worst by the outbreak of Covid-19 is the education sector especially in Bangladesh. Because, among the countries, with the highest number of days of full school closures, Bangladesh is in third position in worldwide and first in the Asian countries (UNESCO Global monitoring of school closures caused by COVID-19). There are 34.6 million students in Bangladesh. Among them, 3.6 million students are in preprimary, 18 million in primary and 13 million in secondary school level More than two-thirds of them are from the lower middle class and lower-class families(BANBEIS, 2018).

School dropout has become a global concern nowadays. A recent report of Save the Children published in 2021 warned that almost 10 million children might never return to school after the pandemic across the world. The report listed

Bangladesh in the 28th position where children are at moderate or high risk of dropout. A report of the Bangladesh Bureau of Educational Information and Statistics (BANBEIS) published in 2019 indicated a 36 per cent dropout rate at the secondary level. The percentage will be increased to 45 per cent or more if the pandemic continues till the end of this year. It has also been reported that the girls are at increased exposure to gender-based violence and the threat of child marriage in Bangladesh. The report raised a significant concern as 54 per cent of secondary level students and 51 per cent of primary level students are girls in Bangladesh. The recent study of the Gender Justice and Diversity Department of BRAC (Bangladesh Rural Advancement Committee) found that in the year 2020, child marriage increased by 13 per cent in Bangladesh during Covid-19 pandemic, which is the highest in the last 25 years.

Though in Bangladesh, some initiatives such as television lessons, online classes have been introduced by the government and some educational institutions to support the mass students during pandemic of Covid-19, the facilities have not reached to the marginal students due to the economic vulnerability and lack of technological devices and knowledge to handle the devices. According to the Multiple Indicator Cluster Survey (MICS), 2019, conducted by the Bangladesh Bureau of Statistics (BBS) and UNICEF Bangladesh, around 50 per cent of the total households do not own television while 5 per cent do not have a mobile phone. The percentage would be much greater if the survey considered android devices a must need to join such platforms. The report says that 94.4 per cent of total households do not own a computer, while 63 per cent do not have internet access. The percentage of accessibility of the internet is lower in the countryside than in the urban region. Therefore, prolonged school closures threaten to erase education development gains achieved in recent decades, especially for girls and those from disadvantaged backgrounds.

# 1.2 Objective of the Study

The foremost purpose of this study is to explore the theories of school dropout to find out the underlying factors of drop out for the children during prolonged school closer due to outbreak of Covid-19 in Bangladesh.

# II. THE CURRENT SCENARIO OF EDUCATION IN BANGLADESH DURING COVID-19

This study exhibits the current scenario of education in Bangladesh during Covid-19 based on the study of BRAC (Bangladesh Rural Advancement Committee) entitled Impact of COVID-19 on Education in Bangladesh. The study was carried out throughout the country in which two districts from each administrative divisions and one Upazila was picked from each selected district through the random sampling procedure. The study covered a total of 1,938 students via their parents, elder siblings, or legal guardians. Of the children covered in the survey, 51% were female, and 49% were male. 50% of the students were selected from primary schools and rest from secondary schools. 4% (82 students) students were with disabilities and 8% (146 students) from ethnic minorities. Among the selected students, 87% of students were from Bangla medium schools and the rest 13% (259 students) from madrasas (religious schools). 73% of students are from rural areas and the rest 27% from urban areas. On average, it covered 242 students from each administrative division. Hence based on the data of the study the current scenario of education in Bangladesh during Covid-19 is as follows:

### 2.1 Students Spending Time during Lockdown

Data on student activities during lockdown (Figure-1) exhibits that 65.3% of the female students are more involved with household activities compared to their male counterparts (44%). Male students spend more time in gossiping (29.5%), phone, internet and online gaming (23.2%) and sports (13.6%) in which these activities are little low case for female students which are 25.4%, 15.7% and 6.9% respectively. In the case for hobbies, female students take more time compared to male students. However, watching television takes similar time from both sexes (9%)

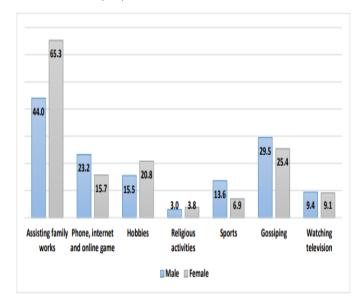


Figure 1: Students' spending time during lockdown by sex (Percentage), (Brac.net, 2020).

### 2.2 Study Scenario at Home by the Students

Data in Figure-2 exhibits that 1% of the respondents who are not studying at all. Most of the students (58%) are studying just moderately. Only 25% of students are studying well and continuing studying at home.

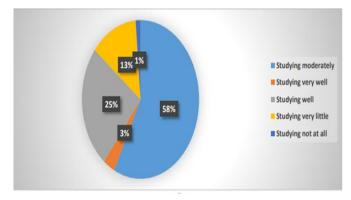


Figure 2: Statements of education taken at home (Brac.net, 2020).

The survey data suggest some causes behind "studying not at all' at home among respondents. In this respect data in figure-3 reveal that 54.8% of the madrasa students who reported not continuing education at home due to food shortage in their family. 52.4% of the students have reported not getting necessary directions from schools. It is fact that the economic downturn affected urban dwellers more; it is not surprising that the students living in urban areas (30%) suffered more from the food crisis compared to rural areas (20.3%). Students living in rural areas (44.9%) reported not getting any direction from their schools about how to continue education at home. Data also show that the students living in urban areas (42%) do not study at home due to their poor mental health condition, including anxiety, depression, isolation etc.

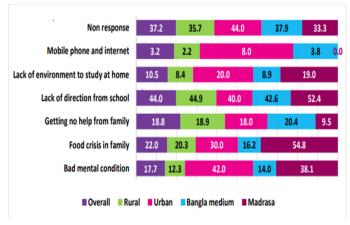


Figure 3: Causes of not continuing education at home by location and type of schools (Percentage), (Brac.net, 2020).

#### 2.3 Rate of Participations in Distance Learning

Data in (figure-4) exhibits that overall 56.9% of students not participating in distant learning processes in Bangladesh. This inequality is quite high in the education system of Madrasa in

which around 67.6% of the students of Madrasa do not participate in online education process. Learning gape is also quite high in the children with disabilities as well as ethnic minorities while 61% and 74.7% of the students respectively do not participate in online education of Bangladesh. Like this, learning gape is also found quite high in rural- urban settings in Bangladesh in which 44.2% of the urban students do not participate distance learning while this proportion is massively high in rural region (60.2%) compared to urban region of Bangladesh.

Data suggests (figure-5) some particular reasons not for participating in distant learning processes of the students. The foremost reasons is the limitation of necessary arrangements to access in distance education system such as lacking of television, internet connection, electricity, cable-network connection, etc in which 71.2% of students face these challenge. Moreover, 20.5% of students are not well informed about these alternative arrangements.

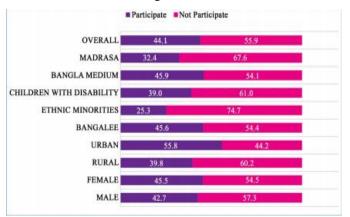


Figure 4: Participation in distant learning by different categories (percentage), (Brac.net, 2020).

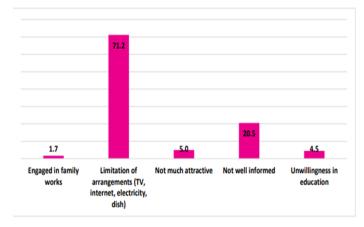


Figure 5: Cause of not participating in distant learning (percentage), (Brac.net, 2020).

# 2.4 Manifestation of Panic Apparent among the Students during Lockdown

Surveyed data in (figure-6) indicated that 16% of students expressed anxiety over this pandemic. It is alarming

considering the total number of students in Bangladesh. Children with disabilities are more vulnerable than others. 29% of students with disabilities expressed their fear. This experience is also higher among female students (17%) compared to male students (15%). Moreover, the students of secondary schools (17%), those living in rural areas (17%), and those studying in madrasas (17%) are more anxious compared to others. Interestingly, only 4% of students from ethnic minorities expressed their anxiety over Coronavirus.

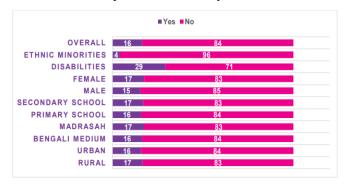


Figure 6: Experience of panic during lockdown by different categories of students (percentage), (Brac.net, 2020).

#### III. THEORIES OF SCHOOL DROPOUT

Scholars on dropout behavior of the students have clarified a number of models to explain the route of dropping out of school. Some of the models have focused exclusively on dropping out factors while others attempt to explain student outcomes in general with dropping out representing simply. In some cases, the models are developed from a review of the literature, but not examined empirically; in other cases, the models are derived from a specific experimental study.

# 3.1 Finn's Developmental Theory of High School Dropout

To clarify dropout behavior Jeremy D Finn (1989) developed two types of models. Finn's model highlights two long-term pathways that can lead to dropout when children enter the school system. In the first one, called "frustration-self-esteem" "participation-identification" model and model. "frustration-self-esteem" model posits that the initial precursor to school removal is early school failure which in turn leads to low level of self-esteem and then consequently producesproblem behaviorsin students (e.g. skipping class, truancy, disruptive behavior, and juvenile delinquency). In the long run, problem behaviors reduce school performance which leads to further declines in self-esteem and increases in problem behaviors again. Consequently, students either voluntarily quit from school and or are removed fromschool because of their problematic behavior in general.

The second model of Finn indicates as the "participationidentification" model. In this model, the initial precursor of dropping is the lack of participation in school activities such as classroom participation, homework, and participation in the social, extracurricular activities and governance aspects of the school which revolve leads to poor school performance and then to less identification (e.g. sense of "belonging" and "valuing") with school. For the time being, the lack of identification with school leads to less participation, poorer school performance, less identification with school, and eventually dropping out of school.

#### 3.2 Academic Mediation Theory

The Academic Mediation Theory focused on clarifying the relationship between academic achievement and dropout behavior of students. It implies that the foremost predictor for school dropout is poor academic achievement which usually in form of standardized tests or grade point average, Battin-. Pearson et al. (2000) . Authoralso uses other studies relevant to school bonding of the students when formulating the theory. This school bonding is massively associated to students' presentation in school. It shows that students who have great bonding in school are doing better academically and less likely to quit school. This means, those who have a low academic achievement, most likely has a low bonding to school and are more likely to drop out from school. In fact, school bonding measured by the close tie of friendship networks in school of the students. Ample of studies examined that students who are more socially integrated in school are less likely to dropout, Farmer et al., (2003). South et al. (2007) also found that students who are less likely to drop out have strong friendship networks.

# 3.3 Tinto's Theory of Institutional Departure

Vincent Tinos' theory (1993) states, that drop out from educational institution can be seen as a process, which takes place over a long period of time. During this time, many multifarious interactions between the individual, the academic and social systems takes place in this process. Tinto argues that every student enrolls at school with specific personal attributes; sex, race, ability, family background, social status and values. All these factors have a great impact on the students' performance, goals and commitments to school. In addition to that the intentions and motivation of the students can be affected by the characteristics of the respective school such as quality of education, size of school might bring up the decision for dropout.

# 3.4 Structural Strains theory

This theory focuses on demographic factors such as gender, race and ethnicity, and family socio-economic status, Rumberger& Lim (2008). According to this theory compare to boys, girls are more likely to be dropped out from education whoseare possibly come from families with low socio-economic status. Boys are more tend to dropout who has lower motivation to study. This theory argues that minorities tend to drop out of school more often. However these factors to dropout can be reduced when socio-economic factors are controlled.

# IV. FACTORS RELEVANT TO DROPOUT IN ONLINE/DISTANCE EDUCATION

Sociologist Rovai (2003) clarified four types of factor relevant with online education program which are learner characteristics, skills, external factors; and internal factors. Author clarified these factors to determine the dropout behavior for the students those who are enrolled in distance learning program despite having opening the educational institutions as well. However, this study considersonly the factors relevant with dropping out during when the educational institutes are closed for a long time period.

#### 4.1 Learner Characteristics and Skills

Factors of learner characteristics in relation to dropout are; age, ethnicity, gender and socio-economic background of learners. Packham et al. (2004) mentioned that successful elearners are typically female. Jun, J. (2005) found that there are many individual background variables such as the number of online courses, gender, learning hours for the course per week and hours worked per week were significant to predict learner dropout behavior. Rovai (2003) identified some factor of student skills related to dropout such as computer literacy, information literacy, time management, reading & writing and computer-based skills required for successful distance learning (Cole, 2000; Rowntree, 1995).

#### 4.2 External and Internal Factors

There are many external factors have been recognized by the many researchers. Rovai (2003) adopted external factors such as finances, family responsibilities and outside encouragement to learners influence as external factors for the students. Not only external factors, there are many internal factors also affecting learners' decision to dropout or persistence. Bean and Metzner (1985) also addressed many internal factors such as study habits, advising, absenteeism, course availability, satisfaction, and so forth. In addition, Rovai (2003) expanded the realm of internal factors by including some factors such as self-esteem, interpersonal relationships and identification with school. Packham et al. (2004) determined that the amount of coursework and assignments were a critical factor of dropout. Brown (1996) claimed that lack of support from tutors and difficulties in contacting them played an important role in the decisions of dropout. Willging and Johnson (2004) found that lack of technical support, and learning environment were the reasons why student dropped out.

## 4.3 School Closure and Learning Inequality

School closure in fact usually implies a reduction in instructional time and consequently also a decline in learning time which results learning gap. The former studies have found a clear effect of each day of school cancellation on students' achievement, especially among students who are attending in less-resourced schools with low socioeconomic background (Goodman et, al. 2014; Kuhfeld et al. 2020). The current lockdown due to covit pandemic, this time schools

have managed to maintain some contact with students, mostly through online instruction. However, despite the efforts to support remote learning, many students have not had access to it. Existing literatureon education during the lockdown indicate that teachers have been unable to contact a noteworthy number of students, due to lack of an internet connection or adequate devices to engage in distance learning (Kuhfeld et al. 2020) .Even when students have been able to connect, remote learning during school closures seems to have widened the existing attainment gap between students with different socioeconomic backgrounds (Coe et al. 2020). This is because the pre-condition for effective remote learning such as good internet connection, clear explanations and feedback from teachers are not easy to accomplish to improve students' learning opportunities (Kay et al. 2020). In this circumstance, it has a significant risk for those vulnerable and disadvanced students who have less access to quality teachingwhich making widening the attainment gap due to the school lockdown (Coe et al. 2020). Consequently, it may result dropout from education especially for this kind of students.

#### V. DISCUSSION

Ample of research clarified that school dropout factors are broadly inflated into four types dominant factors which are; student individual related factors, family related factors, school related factors and community related factors. The lockdown has posed adverse impacts on the students based on these dimensions throughout the education system of Bangladesh due to school closure during covid pandemic. In this circumstance, most of the students are continuing their education at home by their self or with the help of family members. However, in this case students how much will be benefitted with the help their family members it depends on the education level of the family members and students who have not this opportunity cannot continue their study. Beside this, data exhibits that some of the students are not studying at all and a large portion of the students (58%) are studying just moderately which might produce low academic performance among the students. Hence, as per the theories mentioned above, this types of student are might venerable for dropping out from education due to their low academic performance.

Although some students are participating in distant learning programs howevermostof the students especially in rural areas are facing challenges due to limitation of arrangements such as TV, internet andlacking of other accessories to participate in the e-learning/distance learning program at their home. Furthermore, data shows that participation rate in distance learning for female students are lower compared to the male students as well as students with Madrasa background, children with disability and ethnic minorities. Therefore, some of the students are still fare from current education system which may turn them dropout from education in the long run, This is because, as per the theories of dropping out, non-participation in education system for the students might produce low level of self-esteem and then low level of

academic performance which in turn drop out behavior among the students.

Some students are experiencing bad mental condition as for locking in home due to panic of corona various and this bad mental condition may impact to improve their academic performance which may turn them to be dropped out as well. Moreover, a large number of families are going through a food crisis due to economic shutdown and mobility restrictions. Some of the earnersare losing their jobs and encouraging their childrenin doing labor in and outside of home for the financial assistance in the family instead of study. In this respect, data exhibit that female students are doing more family works compared to do the male students. It is theoretically well established that child labor has a negative effect in educational performance of the students and a positive impact on dropout rate as well. It implies that if working hour of the students increase then academic performance of the students decrease and consequently likely of dropout rate in school increase.

Moreover school closure also affects negatively to make a close tie network among students which affects student's academic outcome. Giordano (2003) identified reasons why students' academic outcome may be affected by their most intimate friendship ties in schools. First, more frequent communication and interaction with friends offers more opportunities in academic performance. Alongside, students also get opportunities to make a close relationship with their teacher pattern in school which positively affect in their academic performance as well. In this respect, Suh et al. (2007) found that students who are less likely to drop out have strong friendship networks in schools.

Students are getting engaged in unproductive activities due to lockdown. A significant portion of their time is spent in gossiping, internet browsing, playing online games, and watching television which demotivating to the students for their education. The students with disabilities are disproportionately affected by the lockdown. They have suffered the most from abuse and harassment. Their anxiety towards coronavirus infection and fear of education has increased. Language and remoteness are the main challenges for students from the ethnic minority. On the other hand, the madrasa students are suffering from a shortage of food, which has led them to discontinuation of education at home. The students living in rural areas and those studying in madrasas did not receive clear directions from schools. Lack of monitoring by relevant stakeholders is another challenge to continue studying at home properly and therefore these students are more venerable to be dropped out from education of Bangladesh.

#### VI. CONCLUSION

During school closure the distant learning has emerged as useful alternative in the world including Bangladesh due to COVID pandemic. However, most of the students cannot access in this facility. The students of ethnic minorities, with disabilities, Madrasa (religious schools) and those living in rural areas are least benefitted. This is because logistical constraints seem to be the critical obstacle behind the lower participation in these platforms. Therefore learning inequality or learning gap will be emerged among the students. Consequently, likelihood of dropping out for students in Bangladesh is more for female students compared to the male students and students with disability and ethnic minorities, madrasa background and those living in rural areas as well as with low level of socioeconomic status.

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