

Transition and Dropout in Lower Income Countries: Case studies of secondary education in Bangladesh and Uganda

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Foreward

The emerging post-colonial nations of Sub Saharan Africa and across the globe have long pursued broad access to basic quality education as the key to meeting their people's rising hopes and expectations. Leaders recognized the promise of education in driving their nations' prosperity in a changing world. Despite the innumerable setbacks developing regions have faced –economic turbulence, conflict, persistent poverty, to name a few – absolute enrollment rates in lower and upper secondary schools between 2000 and 2010 have increased faster in developing countries than in any period since the 1960s.

With the Sustainable Development Goals of 2015 and the Incheon Declaration, more low and middle income countries are working to establish universal access to secondary education as framed in Goal Four of the SDGs. International education initiatives and conventions over nearly six decades represent a continuity of focus, producing new tools of information that allow researchers to dig more deeply into diverse issues such as dropout, and to provide new explanations and better solutions.

In this WISE report, the Brac team compares dropout issues in Bangladesh and Uganda, two countries similar only in income levels. The studies highlight contrasts in the histories, development paths and demographic trajectories of these countries. Between 2015 and 2030, as an example, Uganda's secondary school age population is projected to increase by 50 percent; in Bangladesh, it is expected to decline by nine percent. The two portraits reflect very different realities around dropout and the diversity of challenges faced in developing societies.

These country studies open a wider space for reflection and action to address dropout and failure to transit to secondary school. The three main factors causing education differences, the research indicates, appear to be family income, location (rural or urban) of the family, and gender – in this order of importance. There is much discussion of the role of gender in education disparities, and intriguingly, despite the enduring barriers girls face in accessing education, they may not be doing less well, overall, than boys. The value of the report emerges from the portraits of families sketched by these diverse influencing factors.

What is behind the 'lack of interest' that a young person often gives as reason for not continuing studies? The report suggests compelling reasons for more appropriate vocational training to engage students in skills building that can help them find work. The Brac WISE report makes a useful contribution to the deepening scrutiny of education disparities that researchers and policymakers need to arrive at meaningful conclusions and appropriate recommendations and solutions that respond to variety.

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Executive Summary

This research explores the failure of students to transition from primary to secondary education, and dropout at the secondary level in two countries that differ in their geography and other socio-political and economic realities. The countries are Uganda, a low-income country in Sub-Saharan Africa, and Bangladesh, a lower-middle income country in South Asia. The objective of this research is to provide insight into secondary education through case studies of low and middle-income countries.

An international movement for educational development has been underway for nearly six decades. A major intervention started with the Jomtien Conference in 1990, and was an important goal of the Millennium Development initiative in 2015. During this period, educational development in low-income and lower-middle income countries was mostly concentrated on the expansion of primary and secondary education with gender parity as an overarching goal. Impressive progress has been observed in many parts of the world; however, in some countries progress has been less than satisfactory. Progress was better in South Asian countries than those in the Sub-Saharan region. Taking Uganda and Bangladesh as examples, this study explores issues related to transition failure from the primary to secondary level, and dropout at the secondary level. Such an investigation is important because the fourth Sustainable Development Goal (SDGs) is the completion of primary and secondary education for all children by 2030. This target is linked with the concept of lifelong learning and sustainability in all other aspects of development.

Uganda and Bangladesh, the two countries under investigation, fall in the Sub-Saharan African and South Asian regions respectively. On the Human Development Index, Bangladesh is ranked 139th, while Uganda is ranked 163rd. According to the World Bank, Uganda is a low-income country, and Bangladesh is a lower-middle income country. The Uganda case study investigated transition failure from primary to secondary education. The Bangladesh case study looked at the dropout phenomenon at the secondary level. Both countries have compulsory primary education. In Uganda, primary education is seven years; in Bangladesh it is five years. At the end of primary education a public examination is required in both countries. In Uganda, primary education is followed by six years of secondary education, while in Bangladesh, primary education is followed by five years of secondary and two years of higher secondary education. It should be noted that the Bangladesh case study did not consider higher secondary education while addressing the dropout rate.

The following two definitions were used to frame the terms “failure to transition,” and “secondary dropout”.

- **For Uganda:** Failure to transition to secondary education refers to those students who persisted to the highest grade of primary education, but did not participate in the first grade of secondary education.

- **For Bangladesh:** Secondary dropout refers to those admitted to secondary education after passing the primary completion examination, but dropped out of school before completing secondary education.

A mixed methodology approach was adopted in preparing the cases. A household survey was conducted in both countries to examine the prevalence and intensity of the issues under investigation, and to understand their socio-economic implications. The survey included 1,907 students in Uganda, and 4,199 students in Bangladesh. Sampling was conducted to reflect gender specific estimates in each country, and also to consider the balance of urban and rural regions in Uganda and Bangladesh. Focus Group Discussions (FGDs), in-depth interviews with various stakeholders, and individual case studies of students were carried out to explore the causes of transition failure and dropout, and also to examine the linkages between these factors. Various statistical techniques were used in analyzing the survey data, and thematic content analysis was employed for qualitative information.

In Uganda, over a fifth of the seventh graders (21.4 percent) of two successive years (2014 and 2015) failed to make a transition to secondary education with a higher rate for the latter year than the former. No gender difference was observed, but regional differences existed with much higher rates in the northern region, and the lowest rate was in Kampala. Repetition at the primary level was high (51.8 percent). The rate of repetition has a strong relationship to parental education; students who had parents with a lower level of education were more likely to repeat at primary level. A good portion of students repeated more than once. A statistically significant negative relationship between transition failure/repetition and parental education underscores the complexity of the issue. A student's late start in primary education, and the potential of repetition, means the student is older than normal on completion. A significant increase in the rate of transition failure with an increase in age was observed.

Transition from primary to secondary education was very high in Bangladesh (94.5 percent), with females ahead of males. Most of the students were admitted into secondary education the following year, but a few took a one-year break. The secondary dropout rate was 26.1 percent among those who were projected to complete secondary education before the fieldwork phase of this study, and 11.6 percent for those who still had time to complete – on average, 14.6 percent. The multivariate regression analysis shows that the age of enrollment in secondary education, the year of enrollment, gender, and mothers' education level were the most significant socio-economic predictors of secondary dropout. Students who started secondary education at a later age (because they started primary education late) were more likely to drop out early. Females had a higher rate of dropout. The higher the mother's education level, the lower the chance of dropout.

There were similarities in some of the findings between the two case studies. In the Uganda study, poverty was the key factor predicting transition failure. Family inability to pay tuition fees was found to cause a very high proportion

of failure to transition to secondary education. Although not as prevalent in Uganda, the Bangladesh study found that a fifth of secondary education dropout was due to family inability to afford the cost. This is, of course, found in most low-income and developing countries, particularly in remote rural communities and urban slums. In Uganda other contributors of transition failure were the examination failure rate, the scarcity of secondary educational institutions, and the low quality of education –a concern in many countries. Similarly, in Bangladesh, over 22 percent of the dropout cases were linked to the poor quality of education and a loss in interest among the students. Educational institutions should take responsibility for providing an education that builds student interest in continuing their education. Their education should progress gradually to reach to an optimal outcome. Ensuring quality of both primary and secondary education for all, as advanced in the fourth goal of the SDGs, is a major concern.

Bangladesh is celebrated for achieving gender parity in primary and secondary education; however, this is not the case in every grade, especially in secondary education. National data, as well as this study, showed that females dropout of grade eight in greater numbers than males. Security concerns, the persistence of traditional gender roles and other socio-cultural norms often prompt parents to remove their daughters from school to enter them into arranged marriages. Marriage as a major cause of secondary dropout among females was most likely among both economically well-off families, and Muslim families. Early marriage and transition failure in Uganda, and dropout in Bangladesh, were found to be closely linked. Security concerns for young unmarried women (harassment, rape, abduction, etc.) also pushes families to marry their young girls earlier than the legal marriage age. Additionally, the lack of sanitary facilities for girls in school, and the distances between home and school, often contribute to secondary dropout and transition failure.

Provisions to support mass education may be insufficient or ineffective. For instance, initiatives such as not charging tuition fees for primary and secondary education, free textbooks, the Primary Education Stipend Project (PESP), and the Female Secondary Stipend Program (FSSP) in Bangladesh, have yet to remove out-of-pocket costs for families, thus placing education costs beyond the support available. Provisions should be needs-based so that students, especially those from vulnerable families are supported fully.

It was noted that a lack of interest in education and subsequent dropout do not happen suddenly. The research provided various explanations for the lack of student interest in education, including a lack of job prospects or any tangible, immediate return from education, the expense of time and money for study, a lack of educated role models in the community, and a lack of support from family, among others. Further affirmative action is needed to create a safe and friendly atmosphere to encourage girls to have career aspirations and help support job creation for educated females. Educated women could then serve as role models for others. Technical and vocational education after a certain level of basic education should be encouraged in order to help solve youth unemployment. A commitment to making education more relevant to social and economic needs is needed. The improvement of life and the creation of livelihoods for all citizens should be prime considerations.

Employment is especially high in low-income countries, and in some cases is also high in lower-middle income countries with a bias toward the informal sector. Agriculture remains the major sector in some countries; however, a tendency to move toward a non-farm sector is also seen. Women are engaged in agriculture and home-based income generating activities, but often lack basic literacy and numeracy skills. In order to help countries move faster toward non-farm and more of formal sectors would require a strengthening of human capital. This includes providing at least eight years of basic education for all, and technical and vocational education to a good portion of youth. Contents of secondary education should therefore be aimed at qualifying students for employment, possibly after receiving some vocational education and preparation for tertiary education. A comprehensive human resource development and employment policy may be helpful in this regard. Many old and newly industrialized countries (e.g., Singapore) may have faced similar problems and have found good solutions. Lessons can be learned from their strategies.

Population growth among secondary school age children has driven enrollment. The demography factor plays a far more important role in Uganda than in Bangladesh. According to UN estimates, between 2000 and 2015, the secondary school aged population increased by 68 percent in Uganda, compared to four percent in Bangladesh with a slight decline between 2010 and 2015. As a consequence, the challenges in providing for universal secondary education by 2030 will be vastly different for the two countries. Between 2015 and 2030, secondary school age population is projected to increase by 50 percent in Uganda, but to decline by nine percent in Bangladesh. Uganda and similar countries in Sub-Saharan Africa and elsewhere will have to struggle and invest more.

Finally, an emphasis on quantity has widely over shadowed the issue of quality in both primary and secondary education. But quality of education, as reflected in the fourth SDG, is a major concern. The study also finds that the lack of quality in school education contributes to transition failure and dropout. In addition, linking education with the world of work, and with tertiary education remains an issue. More attention needs to be given to the issue of lifelong learning, with the purpose of achieving success in work, and also in being aware of current global and local knowledge.

Acronyms

- ANER:** Adjusted Net Enrollment Rate
- BANBEIS:** Bangladesh Bureau of Educational Information and Statistics
- BBS:** Bangladesh Bureau of Statistics
- CREATE:** Consortium for Research on Educational Access, Transition, and Equity
- EFA:** Education for All
- FGD:** Focus Group Discussion
- FSSP:** Female Secondary Stipend Project
- GoB:** Government of Bangladesh
- GPI:** Gender Parity Index
- HDI:** Human Development Index
- HSC:** Higher Secondary Certificate:
- JSC:** Junior Secondary Certificate
- MDGs:** Millennium Development Goals
- MoEST:** Ministry of Education, Sports, and Technology (Uganda)
- NGO:** Non-government Organization
- PECE:** Primary Education Completion Examination
- PESP:** Primary Education Stipend Project
- PLE:** Primary Leaving Examination
- RA:** Research Assistant
- SDG:** Sustainable Development Goal
- SEQAEP:** Secondary Education Quality and Access Enhancement Project
- SMC:** School Managing Committee
- SPSS:** Statistical Package for Social Sciences
- SSA:** Sub-Saharan Africa
- SSC:** Secondary School Certificate
- STAR:** Skills Training for Advancing Resources
- UBOS:** Uganda Bureau of Statistics
- UACE:** Uganda Advanced Comprehensive Examination
- UCE:** Uganda Comprehensive Examination
- UNESCO:** United Nations Educational, Scientific and Cultural Organization
- UNFPA:** United Nations Population Fund
- UPE:** Universal Primary Education

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Introduction

The global movement for universal primary education started in 1960 with four regional conferences convened by UNESCO. The Asia conference was held in Karachi in 1960 and the Sub-Saharan Africa conference took place in Addis Ababa in 1961. Over recent decades several global initiatives and international agreements on the expansion of education have been launched. The Jomtien Conference of 1990 called for ensuring basic education (the 3Rs and life skills). The Dakar Education Forum of 2000 called for Education for All (EFA) by 2015; and the recent Incheon Declaration of 2015 targeted universal quality primary and secondary education by 2030. The United Nations Millennium Development Goals (MDG) of 2000 aimed to be achieved by 2015; they were followed by the Sustainable Development Goals (SDG) of 2015, with the goal of achievement by 2030. The latter two initiatives (MDGs and SDGs) put EFA at the forefront of the development agenda. Development goals, particularly in the SDGs, have been closely linked with education goals (UNESCO, 2016). Due to this international pressure, most countries have improved access to both primary and secondary education, including low and lower-middle income countries.

Youth make up the majority of the world's population; the largest share resides in the developing world (USAID, 2012). Continued growth and increased prosperity for developing countries depend on young people's ability to find work and build a productive life. The education priority of the past decade has been achieving universal primary education, which several nations have accomplished. Lost in the discussion was the importance of secondary education and its role in preparing students for the workplace or tertiary education. The complexities of today's world require individuals to have skills beyond basic literacy and arithmetic. As the world becomes increasingly complex, transferable skills become more important as vital skills to enable people to adapt and solve problems.

Primary education is the foundation for building a nation's education; secondary education should facilitate higher-order cognitive and other skills that individuals can use in a variety of situations. Such transferable skills improve the prospects for adolescents and youth to enter careers that rely less on technical skills and more on soft skills that can be applied in a variety of contexts. These transferable skills are focused around soft-skills, character skills, personality traits, twenty-first century skills, and life skills. The fourth goal of the SDGs covers a wide range of concerns from pre-primary to tertiary education. Technical and vocation education, skills development for youths and adults, literacy and numeracy of population, inclusiveness and equity in education, quality of teachers and provisions, and knowledge, skills, attitude and behavior all contribute to sustainable development, and are given prominence in SDGs (United Nations, 2015).

Although there were significant educational achievements in the MDG era, the Global Education Monitoring Report 2016 projected that "the world will be 50 years late in achieving its global education commitments" (UNESCO, 2016). It was also estimated in the same report that by 2030, the primary

school attainment rate will be 95 percent in Southern Asia and 77 percent in Sub-Saharan Africa. For lower secondary, these rates will be 89 and 62 percent, respectively; for upper secondary education, they will be 73.5 and 42.4 percent, respectively. By the same time, the primary, lower secondary and upper secondary attainment rate in low income countries will be 69.6, 50 and 29 percent, respectively. In lower middle-income countries, these will be 93.2, 86.8 and 71.8 percent, respectively. There are marked differences between the two regions and the countries of the two income groups; they also lag significantly behind the rest of the world. Considering both global and regional scenarios, the report commented that, “achieving universal secondary completion requires an unprecedented and immediate break with past trends” (UNESCO, 2016).

Conditions need to be created to increase primary school completion, enable the transition from primary to secondary, and improve secondary completion. Obstacles must be identified. Approaches to creating enabling conditions and opportunities may vary among countries and from one region to another. The experiences of one country may be useful for others in strategizing and planning a shift from the past trends and ensure faster growth.

This report comprises two case studies to describe and highlight issues of primary to secondary transition failure, and secondary education dropout. In Uganda, a Sub-Saharan low-income country, transition failure from primary to secondary education was explored. Dropout from secondary education was explored in Bangladesh, a lower-middle-income country in South Asia. To some degree, these countries reflect and represent issues faced in other countries of comparative income levels.

Uganda started its journey as an independent nation in 1962, about nine years before Bangladesh (1971). Uganda (241,550 sq. km.) has a population of 40 million; Bangladesh has about four times the Ugandan population, but with 39 percent less surface area. Bangladesh is about six times more densely populated than Uganda (1,251 inhabitants per square kilometer, versus 202 in Uganda). Since independence, both countries have made progress. On the Human Development Index (HDI), Uganda progressed from approximately 0.3 in 1980, to 0.5 in 2015, and Bangladesh progressed from 0.3 in 1980, to 0.6 in 2015. The rate of progress was faster for Bangladesh than Uganda. In 2015, of the four components of HDI, Bangladesh was substantially ahead of Uganda in two areas: life expectancy at birth, and GNI per capita (Table 1). In terms of expected years of schooling, Bangladesh was slightly ahead of Uganda, but in terms of mean years of schooling, a reverse situation was observed. Overall, with HDI value of 0.6, Bangladesh was 139th in the global ranking, and Uganda was 163rd with an HDI value of 0.5.

Components of human development	Uganda	Sub-Saharan Africa region	Bangladesh	Southern Asia region
Life expectancy at birth	59.2	58.9	72.0	68.7
Expected years of schooling	10.0	9.7	10.2	11.3
Mean years of schooling	5.7	5.4	5.2	6.2
GNI per capita (2011 PPP\$)	1,670	3,383	3,341	5,799
HDI value	0.493	0.523	0.579	0.621
HDI rank (global)	163	-	139	-

Table 1. Comparison of Bangladesh and Uganda in terms of Human Development Index (HDI),
2015 Source: UNDP (2016). Human Development Report 2016

Regionally, Bangladesh was ahead in Southern Asia only in life expectancy at birth, but behind in the remaining three HDI components. Uganda was much behind the Sub-Saharan average in GNI per capita, but ahead in the three other components.

Officially, primary education starts at age six in both the countries and lasts for five years in Bangladesh, and seven in Uganda. It is compulsory in both countries (grades one to five in Bangladesh, and grades one to seven in Uganda). In Bangladesh, primary education is followed by another five years of secondary education (the first three years in junior secondary) and two years of higher secondary education. In Uganda, primary education is followed by four years of lower secondary and two years of upper secondary education. This totals 12 years of schooling in Bangladesh, and 13 in Uganda. Four public examinations are given in Bangladesh: Primary Education Completion Examination (PECE) at grade five, Junior Secondary Certificate (JSC) at grade eight, Secondary School Certificate (SSC) at grade ten, and Higher Secondary Certificate (HSC) at grade 12. There are three examinations in Uganda: Primary Leaving Examination (PLE) at grade seven, Uganda Certificate of Education (UCE) at grade 11, and Uganda Advanced Certificate Education (UACE) at grade 13. Afterwards, students may move to tertiary education, which is five years in Bangladesh, and three to five years in Uganda.



Chapter 1

Literature Review

1.1. Primary to secondary school transition

The global primary education adjusted net enrollment rate (ANER) reached 91 percent in 2012, up from 84 percent in 1999. The gender parity index (GPI) has risen from 0.93 to 0.98 during the same period (UNESCO, 2015). Sub-Saharan Africa has shown the most improvement; the ANER reached 79 percent in the region. The gender gap in enrollment was significantly lower in most of the countries. The improvement in access to primary education intensified demand for secondary education. Although proportionately more pupils are now accessing secondary education, low transition from primary to secondary education is still a problem for a number of countries globally where a larger proportion of pupils failed to join the first grade of secondary education (Werunga et al., 2011). This is particularly a problem in Sub-Saharan Africa, and specifically in Uganda.

The problem and issues related to transition failure from primary to secondary is not new. In order to measure and track transition to secondary education, UNESCO developed a new indicator called “effective transition rate”, which estimates the likelihood of students moving to an upper level of education from primary. While some of the world’s lowest transition rates were found in Sub-Saharan Africa, the situation varies dramatically among countries: 98 percent in the Seychelles, but only 44 percent in Nigeria, and just 36 percent in Tanzania. Figure 1 charts progress in the effective transition rate in different regions and types of countries from 2000 to 2013. The situation in the low-income countries was the worst. Sub-Saharan Africa was slightly lower. The transition rate in Uganda was very low– 43.8 percent in 2000, and 62.3 percent in 2013 (UNESCO, UIS database).

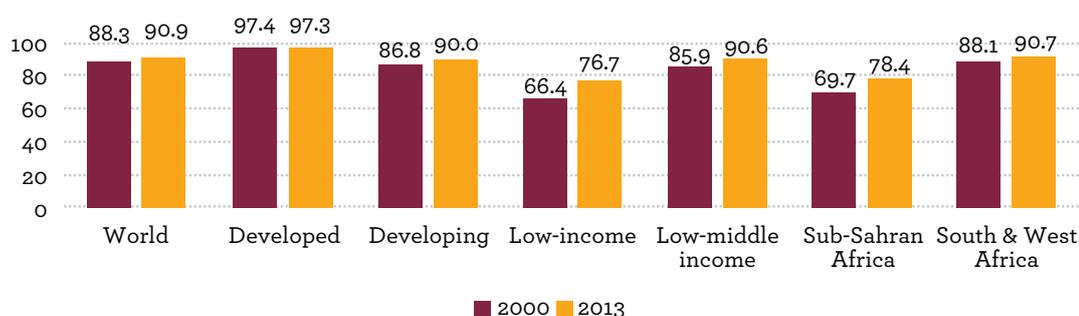


Figure 1. Effective transition rate from primary to secondary education by region

Source: UIS data (data.uis.unesco.org, accessed on 22 March 2017)

The low transition rates have been a concern in many countries as secondary education is emphasized for its important role in social and economic empowerment of individuals (Werunga et al., 2011). The post-primary level of education plays a fundamental, but complex role in preparing young people for the labor market, which is closely linked to economic growth. Evidence shows that post-primary enrollment has a negative relationship with fertility,

and a positive relationship with real per capita GDP (Brist and Caplan, 2000 cited in Liang 2002). According to World Bank's former Managing Director Ngozi Okonjo-Iweale,

Evidence suggests that having a critical mass of people with secondary education is the key to shifting the basis of economic growth from a labor-intensive to a more knowledge-centric activity. Global evidence shows that an additional year of secondary schooling increases future wages by about 10-15 percent. Further, raising completion rates in secondary schools by three percent boosts yearly per-capita growth by one percentage point. Beyond economic benefits— it is required for young women. Educated women are better equipped to make decisions regarding marriage, bearing children, child health and education. An extra year of women's education helps reduce fertility and maternal mortality by two per 1000 births. (Dewan, 2011).

The issue of transition to secondary school continues to be a concern despite efforts to offer free or subsidized secondary education (Werunga et al., 2011). Long ago Avakov (1980) observed that even with the great expansion of the number of school places in secondary level, only a small percentage of primary school leavers are admitted to secondary school. While there is a large body of research that investigates factors influencing school participation in general, research on transition as a core focus is relatively rare (Hunt 2008, Siddhu 2011, Kamanda and Sankoh, 2015). The Consortium for Research on Educational Access, Transition, and Equity (CREATE) provides a broader conceptualization of access by identifying zones of exclusion which highlight various patterns of school behavior among children of school age where the fourth Zone highlighted “primary leavers not entering secondary” (Lewin, 2011; Kamanda and Sankoh, 2015). A few studies look at the transition from primary to secondary school in developing countries or in rural areas (Ames and Rajas, 2010).

While dropout has supply and demand causes, it is often a process rather than the result of one single event. It has more than one proximate cause (Hunt, 2008; Sabates et al., 2010). A number of reasons were attributed to transition and dropout during that process. For instance, Kariuki (1976) argues that in Kenya, school-based factors such as school rules, attitudes, curriculum, teachers, physical facilities, and management practices do affect student transition rates. In addition, socio-economic and cultural factors such as parental education and occupation, family size, birth order, gender, occupational aspirations, parental involvement or student attitudes toward education also have an effect on transition rates.

McGee et al. (2004) identified issues relating to the impacts of transition on students achievement and adjustment to secondary school. A study of factors affecting transition was prompted by the fact that despite there being facilities in secondary schools, the number of pupils who enrolled in secondary education did not match the available places. Parents preferred their children to work in farms, gemstone mines and sisal plantations instead of transitioning to secondary schools because they wanted the additional family income (Werunga et al., 2011). There are often precursors to dropping out, where children could be seen to be at risk or vulnerable to early withdrawal (Hunt, 2008; Lewin, 2008). These include grade repetition, low achievement, over-aged enrollees and children who were regularly absent or who were previously temporary withdrawals from school (Sabates et al., 2010). Being a child who is over-aged, due to late enrollment or grade repetition, can limit the number of years the child will have in school because older children have greater pressures to earn income for households (EPDC, 2009).

1.2. Secondary school dropout

Dropout from school before completing a certain level of education is common worldwide (UNESCO, 2016). It is a serious problem at the secondary level. Half of young people in 64 of 125 countries drop out from secondary education. The dropout rate tends to rise with education level, irrespective of a country's economic status. Dropout rates also vary according to the economic status of countries at each level of education. UNESCO (2016) reported that from 2008 to 2014, the combined (for both boys and girls) dropout rate at the lower secondary level was 73 percent in low income countries, 32 percent in lower middle income countries, and 21 percent in the upper middle income countries. At upper secondary level the figures were 86, 62 and 57 percent, respectively. Girls' dropout rates are higher in most parts of the world.

Studies have tried to identify the reasons for dropout. Rumberger and Lim (2008) found that dropout factors are divided into individual and institutional factors. Individual factors include educational performance, behaviors, attitudes and background. Institutional factors include high absenteeism, behavior problems, and course failure, including both the failure to complete assignments and the failure to pass courses. In a number of studies, absenteeism of students from classrooms was identified as a strong predictor of course failure, which ultimately influenced dropout (Allensworth and Easton, 2007; Chang and Romero, 2008; Schargel and Smink, 2001). Schools that fail to provide a learning environment put their students at risk of dropping out, while those that cultivate more personal relationships among teachers and students have low dropout rates (Allensworth and Easton, 2007). The same study also showed that students' course performance is related to their relationships with teachers, the relevance of classroom instruction, and the teachers' way of working with students.

Push and pull pressures on student dropout are explained by Jordan et al. (1994). A student is pushed out of school when unfavorable situations arise in the school environment. Such situations could result from aspects of the school environment including tests, attendance, discipline policies, and behavior. Conversely, students are pulled out of school when personal factors distract them from completing school. Thus, financial uncertainties, out-of-school employment, family needs, change in the family such as marriage or childbirth, and illnesses may pull students out of school. In these cases, students put more value on another aspect of life, and eventually stop going to school. Failing out of school also happens when a student does not show significant academic progress in schoolwork and becomes uncertain about school completion. Roessingh (1994) noted this as a side-effect of insufficient personal and educational support for the student. These factors indicate the range of factors that can lead to dropout (Doll et al., 2013).

A critical review of literature on school dropout by Witte et al. (2013) identified potential predictors of early school leaving. Although interlinked, the authors divided predictors into four categories: student, family, school, and community factors.

Student-related factors: Low academic achievement was observed as an important student-related factor of early school leaving. This may be at elementary or primary level or the previous year's performance. Passing the typical age for a grade significantly increases the risk of leaving school early (Rumberger, 2004a cited in Witte et al., 2013). Student engagement with school, typically measured by attendance rates, was also found to be responsible for school dropout. Engagement also includes negative attitudes, feelings, perceptions and traits, which potentially result in problematic comportment and discipline problems. Bullying and abuse by peers, and use of drugs are some behavioral issues. Finally, marriage, teenage pregnancy and parenthood have been shown to result in a higher probability of leaving school before graduation (Rumberger, 1983; Kalmijn and Kraaykamp, 2003 cited in Witte et al., 2013).

Family-related factors: Socio-economic status like parents' education levels, their education aspirations for children, nature of employment, and income level strongly influence school attainment of students. Children from low-income families are specifically vulnerable and marginalized; therefore, they are more likely to drop out than those of better-off families. For Hunt, (2008) poverty was a versatile concept that encompassed social, economic and political elements affecting a family. Poverty can lower individual self-esteem, increase vulnerability, and influence decisions to continue or drop out of school. Costs of school activities and materials increase pressure on the students to seek a job to pay for these, or to leave school altogether. Students from families with five or more siblings have lower graduation prospects. Irrespective of income and ethnicity, parental support or involvement is also a predictor of school dropout (Cooper et al., 2005 cited in Witte et al., 2013). The parent-child relationship is also considered an important predictor (Witte et al., 2013).

School-related factors: Smaller class size and lower teacher-pupil ratios have a positive effect on school achievement, which is an important predictor of school dropout. Another crucial factor is the schools' social and academic climate. Smooth student-faculty interaction, a high level of participation in school activities and functional cohesion creates a healthy school climate. Rumberger and Lim (2008) observed that students are less likely to drop out if they attend schools with a stronger academic climate. The teachers' levels of experience, expectations, support, and instruction quality are the factors related to school that influence dropout rates. Student perception of teachers and teaching quality are other crucial factors in this context (Witte et al., 2013).

Community-related factors: Neighborhood characteristics, location of families' residence, housing problems, lack of playgrounds and green areas may have direct or indirect negative effects on student performance (Rumberger, 1983 and 2004a cited in Witte et al., 2013). Students living in poor and distressed environments may be more susceptible to early school leaving. A network of high achieving and high aspiring peers in the environment could influence students to stay in school. On the other hand, employment or apprenticeship opportunities could press students to drop out. Other community factors and societal mechanisms, like social discrimination and prejudice could play a crucial role (Witte et al., 2013).

Sabates et al. (2010) observed that students who are often absent, who are over-age for the grade, or who have repeated a grade are more likely to drop out. Students who spent less time doing household work or who engaged in income generating activities, and whose families helped with school work, and had good rapport with their children's teachers were less likely to drop out. A family's higher expenditure on education was also associated with reduced chances of dropping out. Strong parental interest and engagement in children's schooling also positively influence their children to remain in school.

BANBEIS (2014) explored the role of tradition and culture in creating barriers to female secondary education in Bangladesh. The findings revealed that lack of security, sexual harassment (known regionally by the euphemism 'eve teasing'), early marriage in rural communities, general disinterest in female education, etc., contribute to barriers to girls' education. These barriers existed due to the economic insecurity of families, unconscious and illiterate parents, religious misconceptions, deeply rooted sexism, etc. Field and Ambrus (2008) argued that the common practice of adolescent marriage in developing countries has a depressive effect on female education. They showed that if a girl's marriage is postponed for one year between the ages of 11 and 16, her time in school is increased by an estimated 0.22 years and her literacy rate as an adult rises by 5.6 percent.

Field and Ambrus (2008) argued that parents want to marry daughters off at young ages mostly due to economic reasons, and to ease the financial burden of their households. In a setting like Bangladesh where traditional customs are strong, adolescent marriages raise the opportunity cost of educating girls.

Typically younger brides cost a lower dowry (Field and Ambrus, 2008). For this reason, families that are unable to provide for their daughters or are unaware of their welfare choose this path. Conversely, the social norms require more education for husbands than wives. As a result more highly educated girls may pay more for a spouse. This discourages parents from investing more in daughters' schooling before marriage. Again, when individual girls delay marriage because of delayed menarche or delayed puberty, their school attainment significantly increases and they are more likely to be literate. However, delaying marriage might not increase a girl's education alone. Lack of schooling opportunities might send her into the labor force to provide for her family and to cover the increased cost of marriage (Field and Ambrus, 2008). UNICEF (2015) has shown that if all girls in Sub-Saharan Africa and South and West Asia had secondary education, child marriage would fall by 64 percent.

School dropout not only affects the lives and opportunities of students; it is also a concern for society because of its huge economic and social implications. For instance, Wilson et al. (2011) referred to an estimate calculated by Sum et al. (2009) suggesting that compared to high school graduates, the average US student who drops out of high school costs taxpayers over \$292,000 (USD) due to lower tax revenues, higher cash and in-kind transfer costs, and costs associated with incarceration (Sum, Khatiwada and McLaughlin, 2009). In developing countries, children stop going to school to look after the younger siblings, or to go to work to contribute to the household income. But it is commonly known that young people who drop out of regular school today are less able to find proper employment possibilities, and therefore face serious economic challenges (Chugh, 2011). In 2012, BRAC initiated Skills Training for Advancing Resources (STAR) to produce a well-trained and empowered youth group by providing job training and classroom based training on various trades and skill courses in Bangladesh. Rahman et al. (2017) found that after the intervention the effect on income increased six times the baseline mean and for that employment increased 46 percentage points.



Chapter 2

The Case Studies

2.1. Secondary School Transition Failure in Uganda

2.1.1. Background

Africa is the most youthful continent. Close to half (48.7 percent) of the population in Uganda is under 15 years old (UNFPA, 2014). In fact, nearly half of Africans are under the age of 15 years. These youth are the future leaders and a driving force in the world, yet many often face challenges in pursuing secondary education. Education is often promoted as key to a successful future. A lack of education poses East Africans with growing challenges and often prevents them from escaping poverty. While significant progress has been made toward education for all in primary education, East Africa remains stagnant, with a huge decrease in secondary school enrollment. Transition from primary to secondary school should be a natural progression. Uganda is among a minority of countries with a large difference between primary and secondary enrollment rates. Even for the lucky ones who do enroll, secondary school graduation is far from certain.

Education in Uganda has improved over the past decade. Universal Primary Education (UPE) was implemented in 1997, with government primary schools removing school fees. While abolishing primary school fees enabled an increase in enrollment in primary school from 50 percent to 90 percent by 2013, net enrollment rates for secondary school was 23.6 percent in 2010, and remained stagnant, at around 25 percent (UNESCO, 2013; UIS, 2017). Low secondary enrollment rates were partially explained by the sharp difference between primary and secondary enrollment rates; a substantial portion of students failed to make a transition to secondary education. The transition failure between the primary and secondary is dramatic. Between 2000 and 2005, the attrition rate from primary to secondary fluctuated between 30 and 50 percent. The level of transition from primary to secondary school in Uganda is lower than the African average (World Bank, 2002). Transition rate was 68 percent in 2007, and 66 percent in 2011 (UBOS, 2012). Out of 564,000 students registered for the national PLE in 2012, only 346,000 enrolled in secondary the following year, despite a pass rate of over 85 percent. Again, in 2013, 582,181 students registered for PLE, of which 494,839 passed and 348,701 enrolled in the first grade of secondary education in 2014, indicating a 70 percent transition rate (UBOS 2015). In other words, three out of every ten students failed to transition to secondary education despite successfully passing PLE. This suggests that the transition failure to secondary school is just as serious a problem as dropout. This study is interested in exploring the factors that influence student failure to transition from primary to secondary education.

The existing research on education in Uganda widely overlooks secondary transition failure and fails to recognize the complex interconnected related factors. There are inherent differences between dropout in secondary school and failure to make a transition to secondary school from primary. There

are a variety of factors, especially socio-economic status, as this research hypothesized, to explain students' transition to secondary school. The main purpose of the case study is to consider the factors that influence primary graduates' failure to make a transition to secondary school in Uganda.

Transition is the process, or a period, of changing from one state or condition to another. It also means to undergo a process or period of movement or change from one state or situation to another. Several definitions of transition rate have been found in different government papers. For example, the Uganda Bureau of Statistics' Compendium of Statistical Concepts defined transition rate as "the proportion of pupils who progress from the final grade of one level to the first grade of the next level, expressed as a percentage of those enrolled in the final grade of the preceding school year" (UBOS 2001). Again, "The number of pupils/students admitted to the first grade of a higher level of education in a given year, expressed as a proportion of the number of candidates who successfully sat and passed the final grade of the lower level of education in the previous year" (MoES 2015). UNESCO defines the Effective Transition Rate "as the number of new entrants to the first grade of the higher level of education in the following year expressed as a percentage of the students enrolled in the last grade of the given level of education in the given year who do not repeat that grade the following year." For the purposes of this research, we followed the definition of UNESCO, and define transition as "the number of pupils admitted to the first grade of a higher level of education in a given year, expressed as a percentage of the number of pupils enrolled in the last grade of the lower level of education in the previous year."

This case study focuses on a particular period i.e., transition between primary to secondary, seeking explanations for failure. It mainly scrutinized the factors that are involved and influence primary graduates' failure to transition from primary to secondary education, over a period of two years after completing primary education. The report is intended to be a starting point for a wider range of discussions on the barriers to access in secondary education in Uganda. The report identifies and highlights salient aspects of culture, society, household, and the pupil, as these relate to primary graduates transition failure to secondary education.

2.1.2. Methods

Objectives

The key research issue this case study addresses is the failure of primary graduates to make a transition to secondary education. Following are the specific objectives.

1. To estimate the rate of secondary education transition failure and its differentials in terms of gender, region and year.
2. To discover the socio-economic factors that predict transition failure and examine whether these vary for different groups of students.
3. To explore the community views on secondary education transition failure.

A mixed method approach was initiated using data gathered through a comprehensive national survey on primary to secondary education transition. In addition, various life situations and challenges students faced in transition from primary to secondary education, including the interrelated socio-economic aspects were investigated through qualitative research tools and techniques.

Sampling procedure for survey

Students who completed primary education (grade seven or P7) in the past two years (2014 and 2015) were the target population for this case study. It was estimated that with a 50 percent transition failure rate, a 95 percent confidence level, and a five percent margin of error, a sample of size of 385 students was required for a valid estimate. The size was doubled to ensure disaggregated estimates by gender. Since school management (private and government) is a commonly associated factor in the case of intended issue, it was doubled again. Therefore, the total estimated sample size for the case study stood at $(385 \times 2 \times 2) = 1,540$ students.

The study used a multi-stage cluster sampling strategy. At the first stage, four districts were sampled randomly from each of the four administrative regions: Eastern, Central, Western, and Northern. Because of its importance as the capital and the biggest city in Uganda, the Kampala district was included as a region. At the second stage, a list of registered schools provided by the MoEST was used to select a minimum of 136 schools. On average, roughly ten schools were randomly selected in each district, equally divided between government and private schools. At the third stage, randomly selected schools were asked to provide the primary graduation lists for 2014 and 2015. Out of each graduation list, six students and their primary caregivers were sampled for interview. Therefore the survey was ready to cover $(136 \times 12 \Rightarrow) 1,632$ students.

Central	Eastern	Northern	Western	Kampala
Buikwe	Ingana	Arua	Kibaale	
Kayunga	Kaliro	Kitgum	Mbarara	
Luwero	Mbale	Lira	Masindi	
Masaka	Soroti	Moroto	Rubirizi	

Figure 2. Selected districts by region, Uganda

On average, 12 students were identified per school. If an equal number of male and female students was not found in some schools the target was met by interviewing more of the opposite gender to meet the six required students per year. If a school failed to have six students in a given year that year was replaced by another randomly selected school. In some cases, an additional number of students were sampled in order to keep the overall sample size up. As a result, the size of the sample was larger which in a sense increased the precision level of the estimates. The final sample consists of 1,907 students – 933 from the completers of 2014, and 974 from those of 2015 (Table 2). Overall, 49.6 percent of the sampled graduates were female.

Region	2014			2015			All		
	Male	Female	Both	Male	Female	Both	Male	Female	Both
Central	122	115	237	126	122	248	248	237	485
Eastern	99	114	213	114	111	225	213	225	438
Northern	113	100	213	112	116	228	225	216	441
Western	114	105	219	108	110	218	222	215	437
Kampala	26	25	51	27	28	55	53	53	106
Total	474	459	933	487	487	974	961	946	1,907

Table 2. Sample at a glance, Uganda

Instruments and participants

Both the primary completers and their female caregivers were interviewed. Interviews with the primary female caregivers used a questionnaire that captured household socioeconomic status, household dynamics and decision-making and schooling information for children aged six to eighteen residing in the household. The survey with the primary graduates gathered information regarding educational background, perceptions and attitudes toward learning, a basic literacy and numeracy examination, and attitudes toward the future.

Field operation and data analysis

A team of research assistants were recruited and trained to administer the questionnaires to the respective respondents. The interviews were held at the households where the sampled students were members. The fieldwork was done from mid-October to the end of November 2016.

Survey data were collected using Android phones and uploaded to an online database manager. It was then subsequently downloaded and imported into SPSS, a statistical analysis software. Analysis was primarily carried out using a variety of relevant statistical tests based on the variable type. Multiple logistic regressions were performed to provide insight into correlation between key indicators.

Qualitative investigation

Qualitative research was specifically done to achieve the third objective. One focus group discussion (FGD) in Kampala, and two each in other four regions, totaling nine, were conducted. The FGD participants included a mix of educators at both primary and secondary levels, the district education officer, religious leaders and NGO workers in the education sector. Eight to ten persons participated in each FGD. A team of trained research assistants conducted the FGDs. FGDs were recorded using an audio recorder and transcribed by research assistants. Analysis was primarily carried out using thematic content analysis. In regards to coding and organizing of the FGDs, repetitive words and phrases highlighted important thematic areas to focus on. During analysis, words throughout the seven discussions were repeated, not only within each discussion but across discussions as well.

2.1.3 Findings

Background of students

Students for the Uganda case study were sampled from those who reached the final grade of primary education in 2014 and 2015. Of the total sample, 48.9 percent belonged to the 2014 cohort, and the rest to 2015. The proportion of females was 49.2 percent in the 2014 cohort, and 50 percent in 2015 cohort; totaling 49.6 percent. In terms of region, 25.4 percent came from the Central area, 23 percent from the Eastern area, 23.1 percent from the Northern area, 22.9 percent from the Western area and 5.6 percent from Kampala (Annex 1). A similar distribution was observed for males and females and for 2014 and 2015 cohorts.

The age of the students varied from 12 to 22 years when they reached grade seven, the final year of primary. The majority of the students were 16 years old (26.3 percent) followed by 17 and 15 years, respectively. Nearly 62 percent of the students were age 15-17 years, and 86.4 percent were age 14-18 years. Of the students, 35.6 percent was 12-15 years old, 45.2 percent was 16-17 years old, and 19.3 percent were between 18 and 22 years (Annex 2). On average, the students were 16.1 years old; male 16.3 years and female 16 years.

Twenty-two percent of the mothers and 8.8 percent of the fathers had never been to school (Annexes 3 and 4). Consolidating this data, it was observed that both parents of 5.7 percent of students had no education. They were

first generation learners. Of the mothers, 25.3 percent completed one to five years of schooling, 28.3 percent completed six to seven years, and 24.4 percent completed eight or more years (Annex 3). Of the fathers, 18.7 percent completed one to five years of schooling, 31.5 percent completed six to seven years, and 41 percent completed eight or more years (Annex 4). On average, mothers had 5.4 years of schooling and fathers had 7.4 years.

Mothers of 7.2 percent of the students, and fathers of 17 of the same, were not alive at the time of fieldwork for this study (Annex 5). Consolidating the two, both the parents of 79.6 percent of the students were alive, one parent had passed away for 16.9 percent of the students, and no parent was alive in the case of 3.5 percent of the students. In terms of deceased parents, the Northern region had the highest rate, followed by Central and Western regions. The situation was much better in the Eastern region followed by Kampala.

More than half of the students repeated at least one year while pursuing primary education. On average, 48.2 percent of the students did not repeat a single year, a third repeated one year, 13.7 percent repeated two years, and five percent repeated three or more years (Annex 6). Student PLE results were also collected. 12.7 percent got first division, 49.4 percent got second division, 26.1 percent third division, 8.6 percent fourth division, and 3.2 percent failed in the examination (Annex 7).

Transition failure to secondary education

On average, 21.4 percent of the survivors of the final year of primary education failed to make a transition to secondary education (Figure 3 and Annex 8). Statistically no gender difference was observed – 22.6 percent of males, and 20.3 percent of females failed to make a transition to secondary education. Those who reached the final year of primary education in 2015, were more likely to not make a transition to secondary education than those who completed in 2014. The rates were 26.3 and 16.4 percent, respectively ($p < 0.001$). The 2015 figure was more than one-and-a-half times larger than the 2014 figure. Among the 2014 students, 19 percent of males and 13.7 percent of females belonged to this category ($p < 0.05$). This represents 26.1 percent of males and 26.5 percent of females among those who belonged to the 2015 cohort. Year-wise statistically, a significant difference was observed among males as well as females.

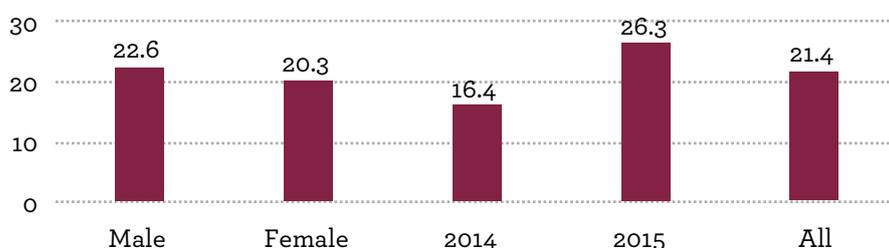


Figure 3. Percentage of students who failed to make a transition to secondary education by gender and year, Uganda

Statistically significant regional variation was observed in failure to make a transition to secondary education ($p < 0.001$). The highest rate was observed in the Northern region (29.3 percent), followed by Central (21.9 percent), Eastern (21.7 percent), and Western (17.6 percent) regions, respectively (Figure 4). Less than two percent of the students of Kampala failed to make a transition. More males than females failed to make a transition in Eastern region (Annex 9). An opposite result was found in Central and Western region, and no difference in Kampala. However, a statistically significant gender difference was observed only in the Northern region. Over a third of the males and a quarter of the females in the Northern region failed to make a transition to secondary education ($p < 0.001$).

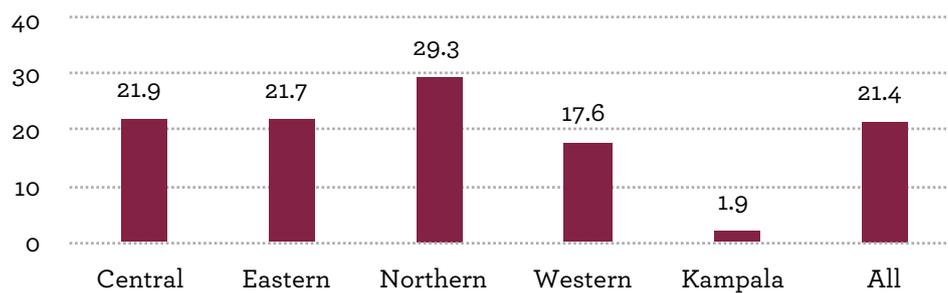


Figure 4. Percentage of students who failed to make a transition to secondary education by region, Uganda

Yearly analysis shows, a higher figure against 2015 in all four regions except Kampala (Annex 9). However, a statistically significant difference was observed in two regions, Eastern and Western. The failure to transition rate was 13.6 percent among 2014 students and 29.3 percent among 2015 students in Eastern region ($p < 0.001$). These figures were 11 and 24.3 percent, respectively in Western region ($p < 0.001$).

Socioeconomic differentials of transition failure

The age of the students at the time of fieldwork had a positive relationship with failure to transition (Figure 5). For instance, 11.9 percent of the students of age 12-15 years failed to make a transition. This was 21.3 percent among those aged 16-17 years, and 40 percent among those aged 18 years or more ($p < 0.001$). A similar level of statistically significant trends was observed when data were analyzed by gender and year. The figures were higher for males than females but these were much higher among those who were in grade seven in 2015 than those were in the same grade in 2014 (Annex 10).

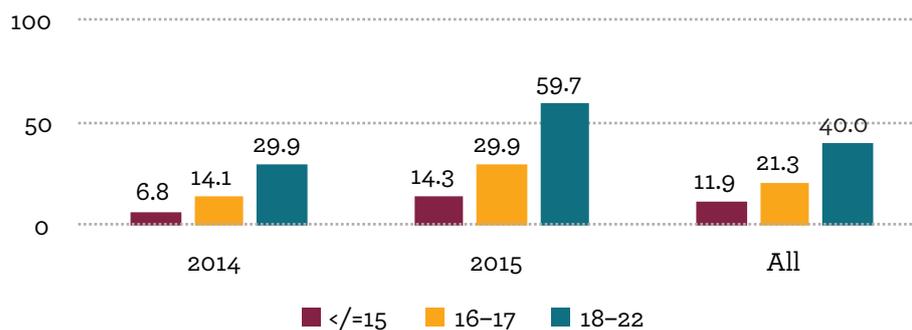


Figure 5. Percentage of students who failed to make a transition to secondary education by age group and year, Uganda

A student’s failure to transition to secondary education significantly decreased with an increase of the parents’ education (Figure 6). For instance, the transition failure rate was 31.6 percent if the mothers had no education, but it was 24.6 percent for those who had mothers with one to five years of schooling, 19.6 percent for those whose mothers had six to seven years of education and 6.9 percent for those whose mothers had eight or more years of education ($p < 0.001$). The failure to transition was 36.4, 31.9, 23.3 and 9.9 percent against similar level of fathers education ($p < 0.001$). More analysis on this is provided in Annexes 11 and 12.

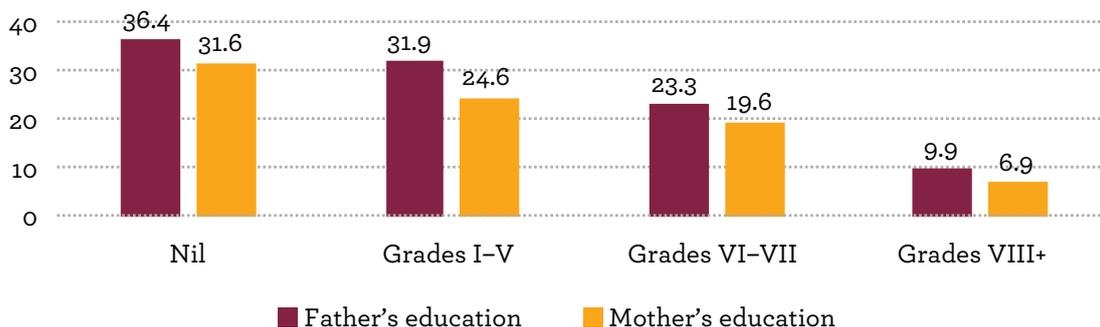


Figure 6. Percentage of students who failed to make a transition to secondary education by parental education, Uganda

Multivariate analysis

A multivariate regression analysis was carried out in order to find the predictive factors of failure to transition to secondary education. This analysis allows various background characteristics in explaining their contribution in students’ failure to transition. The dependent variable was the failure to transition to secondary school, measured dichotomously, transitioned versus non-transitioned. The variables included gender, region, the year of reaching grade seven, the age of students, the fathers’ education, mothers’ education, and the years repeated at primary level. All of these variables are categorical in nature. Measurements are provided in Annex 16. A stepwise approach was followed – the variables appeared in the model through forward selection and backward elimination. Therefore, only those variables which have statistically significant contribution (at $p < 0.05$ level) in explaining transition failure were included in the final model.

Out of seven variables, six appeared in the final model (Table 3). Chronologically, these are the years repeated in primary, the father's education, the year of reaching grade seven, the age of students, the mother's education, and region. Gender was not found to have any significant contribution in explaining transition failure in Uganda. These variables collectively explained 16 percent of the variation in dependent variables. Following is the summary of findings. Possibility of failure to transition to secondary education increased with the increase in the number of years repeated at primary level.

- No difference was found in the chance of transition failure of the students if their parents did not go beyond primary education. However, when parents received secondary education their children had significantly less chance of transition failure.
- Possibility of failure to transition significantly increased with increase of student age. Students reaching grade seven in 2015 were more likely to transition fail than those reached in 2014.
- Regional variation was observed. Students of Kampala, and the Eastern and Western region had no variation in transition failure. Students of Central and Northern regions had a higher possibility of transition failure than the above three.

Explanatory variable	Regression coefficient	Odds ratio	95 percent CI of odds ratio	Level of significance
Region				
<i>Kampala</i>	0	1.000		
<i>Central</i>	1.478	4.383	1.007 – 19.068	p<0.05
<i>Eastern</i>	1.157	3.181	0.728 – 13.900	ns
<i>Northern</i>	1.558	4.751	1.093 – 20.653	p<0.05
<i>Western</i>	0.925	2.523	0.574 – 11.080	ns
Year at P7				
<i>2014</i>	0	1.000		
<i>2015</i>	0.815	2.258	1.698 – 3.003	p<0.001
Age of students				
<i>12-15y</i>	0	1.000		
<i>16-17y</i>	0.413	1.512	1.057 – 2.163	p<0.05
<i>18-22y</i>	1.084	2.958	1.908 – 4.584	p<0.001
Mothers education				
<i>Nil</i>	0	1.000		
<i>Grades I-V</i>	-0.264	0.768	0.539 – 1.094	ns
<i>Grades VI-VII</i>	-0.210	0.810	0.562 – 1.168	ns
<i>Grades VIII+</i>	-1.022	0.360	0.217 – 0.597	p<0.001
Fathers education				
<i>Nil</i>	0	1.000		

<i>Grades I-V</i>	0.281	1.325	0.897 – 1.958	ns
<i>Grades VI-VII</i>	-0.039	0.961	0.667 – 1.385	ns
<i>Grades VIII+</i>	-0.833	0.435	0.289 – 0.654	p<0.001
Explanatory variable	Regression coefficient	Odds ratio	95 percent CI of odds ratio	Level of significance
Repetition at primary				
<i>Nil</i>	0	1.000		
<i>1y</i>	0.735	2.086	1.508 – 2.885	p<0.001
<i>2y</i>	0.725	2.065	1.370 – 3.113	p<0.001
<i>3y+</i>	1.503	4.496	2.631 – 7.682	p<0.001
Constant	-3.552			
-2 log likelihood	1374.438			
Cox & Snell R ²	0.157			
Nagelkerke R ²	0.244			

Table 3. Results of logistic regression analysis predicting failure to transition to secondary education, Uganda

Reasons for transition failure: parents' views

The caregivers (parents) reported 16 reasons for student failure to make a transition to secondary education. Two were found to be the most important in frequency of citation. Nearly a half of the students failed to transition to secondary education because of scarcity of money for school fees, and another one-third failed to do so because of failure in examination (Table 4). These two reasons collectively accounted for 82 percent of the transition failure cases. Gender difference was noticed in these categories. Whereas the lack of money was cited for more males than females, exam failure was cited for more females than males. Among other students, 3.2 percent failed to transition because of marriage, 2.6 percent due to becoming pregnant, 2.3 percent due to illness or disability, and 1.5 percent were not interested in continued study. For the rest, 8.4 percent of caregivers mentioned ten various reasons. More females than males failed to transition to secondary education due to marriage and obviously, being pregnant was specific to females. Over a tenth of the females failed to transition because of these two reasons combined. On the other hand, more males than females were observed in the 'others' category.

Main Reason	Gender		Total
	Male	Female	
No money for fees	55.8	42.0	49.6
Failed in examination	25.8	40.6	32.5
Got married	2.1	4.5	3.2
Became pregnant	0.0	5.8	2.6
Illness or disability	2.1	2.6	2.3
Not interested in study	2.6	0.0	1.5
Others	11.6	4.5	8.4
Total	100.0	100.0	100.0

Table 4. Percentage distribution of students who failed to make a transition to secondary education organized by gender and reason for failure, Uganda

Poverty and child labor

The two principal reasons for transition failure that emerged from caregiver interviews were mostly related to household income. Households with more disposable income and assets were better able to afford secondary school expenses. Economic insecurity, drought, war, and other disasters forced many poor households to cut on schools. Referring to low family income and poverty, a community member from Iganga asserted, “One lacks of school fees and scholastic material due to poverty. The school fees in these days are high. I know some parents who failed to pay school fees. They had to withdraw their children from schools.”

Families using agriculture as their main source of income are subjected to shocks such as drought, and rely on market stability to ensure income. Harvests depend on the season, making it difficult for households to estimate and budget predictably for expenditures. Again, parents with multiple school-aged children have to make a decision on schooling. They often emphasize children’s completing primary school so that they can gain some form of literacy. The cost of secondary schooling is viewed as a financial liability.

Informants in FGDs also indicated that vocational education was quite expensive for low income parents. Poor parents struggle to send their children beyond primary education. A female respondent stated, “...it’s a lot of money and I don’t have that much, let my kid be at home.... I think poverty is the biggest barrier that stops kids from enrolling in secondary schools. If you are poor, if you don’t have money to pay for school fees, you can’t take your child to secondary school.”

Some marginalized students showed their determination by saying that they would work and earn money to offset their school fees. Undertaking casual work and/or income generating activities can earn enough to eventually return students to school. How poverty affects transition failure and leads students involve in child labor was illustrated by the following comment by an informant:

What is most likely to happen after primary graduation is ‘dropout’ and the reason was low family income and poverty. It led poor students to the streets, for being a driver of bodaboda (motor bike) or hawking small goods because that’s what’s commonly available.

Generally between the time of the PLE completion and the results published, poor children who are often involved in various domestic chores like fetching water, collecting firewood, cleaning the house and yards, and washing. In towns or urban areas they have to help parents with their businesses, and in agriculture in rural areas. Some are also involved in some form of job in the informal market (paid or unpaid) for maintaining the family. Failure to save enough money for general secondary education means some seek institutions like vocational schools. Otherwise, they resume the activities that they were involved with previously, such as agriculture. In towns they find casual labor

in construction, brick laying, working in salons, as security guards or in small businesses. Failure of girls to access secondary education usually means early marriage. Adolescent girls are also expected to take care of younger siblings or generate income through tailoring, working in hotels or in homes as a maid. “When a child is already involved in work due to poverty and knows how to earn money, he often gets less invested in joining secondary education, because going to school seems to be a waste of time for him”, a community leader elaborated.

Availability and quality of secondary school

Secondary schools are often centered in major towns. Under the Universal Secondary Education (USE) program, government is trying to ensure a secondary school in each sub-county. According to most of our informants, absence of secondary school in each sub-country limits a primary graduate’s transition to secondary education. They also raised the question of quality of existing secondary schools, and showed their dissatisfaction about their standards. Since good quality secondary schools are rare and expensive, accessing one depends on a family’s level of income.

According to informants, the government schools are also expensive, their requirements are many, and are increasing steadily. Additionally, school teachers do not fully concentrate on teaching in classrooms. According to informants, in some cases, students are found crowded in front of the teachers. Some alleged that some teachers cannot even deliver the right messages, and a section of teachers have no idea how to handle students with care. A community member in Soroti asserted that the “quality of education revolves around the teachers’ progress and students depend on the teachers. Quality teacher is the key. So the most influential person is the teacher.” Many informants noted teacher absenteeism, and pointed to a link among teaching quality, school quality and dropout. One person in Soroti said, “Teachers determine the quality of education in the school. They influence students, their quality and discipline. We have seen that once the quality of education in school is poor it affects [other outcomes] like early marriage, early pregnancy, and dropout.” Students living far from a secondary school require more resources to attend than a student living in a more urban center with several secondary schools options.

Cultural norms, beliefs and practices

While often overlooked and not fully addressed within different contexts, some cultural practices that prevent and actively discourage transition to secondary school continue to be important. Girls in Uganda, especially in remote rural areas, face difficulty in pursuing and completing secondary education because of culturally generated fear that it compromises a girl’s ability to find an educated husband or to be a good wife. Cultural norms, attitudes and practices like bride price, polygamy, and early pregnancy, most common in rural areas, disadvantage females, and inhibit their access to education, and ultimately limit their transition to secondary school.

Culturally expected roles and responsibilities were reported to dominate young people's lives and shape their performance in education. A male child is expected to graze animals and harvest coffee; a girl child should cook, fetch water, collect firewood, etc. In some parts of Uganda education endeavors are under-supported. Households fail to assist students through this process. In some parts of the northern region, social ideals of education are archaic and often reflect an inability to see the long-term value of pursuing education related activities. Youth who are in schools living in those environments can often be influenced by the overarching attitudes and beliefs, and can make decisions that lead them away from school.

Early marriage for the girls is embedded in tradition and cultural practice, and is a dominant factor in girls' transition failure. There are many cultures (especially Muslim culture) in Uganda that regard girls as grown up and eligible for marriage at puberty or sooner. They are married off, and lose access to further education. "In certain cultures, like in Karamoja, people believe that when a girl reaches puberty, she is beyond marriageable age. At this age, a daughter should have brought for me cows (as bride price)", a community member in Moroto noted.

Blocking girls from progressing to post-primary education is one of the worst forms of cultural practice. Though not widespread, it persists in many rural areas. In some communities, girls are subjected to genital cutting when the girls finish primary school, effectively blocking their access to secondary education. For example, "...if someone is circumcised then culturally it means that that one is ready for marriage," an informant explained. In some communities, there is a strong belief that their girls should not be exposed to a higher level of education. As a community member in Aura noted, "if a girl is exposed to higher education, this girl goes to learn more bad things." According to an informant, people in Karamoja believe that "if a girl goes to higher school, she becomes a prostitute."

Living and death of parents

Parental life and death status has consequences for the capacity of students to make the transition from primary to secondary. The life and death status of parents was found to link to students' transition to secondary education (Annexes 13 and 14). The rate of failure to transition was 20.7 percent among those students whose mothers were living, and it was 29.4 percent among those whose mothers have passed away. This figure was 20.6 percent if the father was alive, and 25.8 percent if the father has passed away. Further analysis of data shows that 20.2 percent of the students failed to transition to secondary education if both the parents were living, 25 percent if either passed away, and 31.8 percent if both passed away. Parental loss is often debilitating for the household. The loss of one of the parents (mainly the father) causes the loss of an important source of revenue for the family.

Social environment, aspiration and engagement

The social environment is crucial, as it is a child's primary learning space. Within it, they learn to see, interact, and reflect on the world, as they know it. The social environment shapes students' outlook about life, and it can be difficult to rise above negative things and people. The social environment not only shapes worldviews, but also influences educational aspiration. When children are exposed to a congenial environment both at home and in school, their development is shaped positively. When students are exposed to negative social influences and environments that do not support educational ideals, they often failed to have educational aspirations. Accordingly, students see their social environment as a strong determinant on future decisions and goals. A negative social environment influences a child's aspiration. If a child bases their views of the world around a negative perception of reality, it can propel the child to rise above, or it can lead to the development of a defeatist attitude.

Positive family relationships are imperative for a student's success in school and in the ability to transition to higher levels. Consistent family stressors increase the likelihood that a child will drop out. Students who have a strong supportive system at home, and parents who are committed to their academic endeavors, have a greater chance at transitioning. Households with parents or guardians who value education will often find the necessary resources to provide students with schooling opportunities.

Parental involvement also appeared as an important factor in student success at transition from primary to secondary. Educated parents are more likely to be supportive of children's education. They can also provide the necessary resources for their children to attend school. If there is little parental involvement, there is greater likelihood that the student will face barriers to transitioning. Lack of parental support prevents children from receiving encouragement toward attending school. Parents that are encouraging provide increased access and availability to financial resources necessary for school, if available within the household. Adults that find value and importance in education are more likely to encourage the child toward studying by directing household resources to the necessary costs of providing an education for that child.

Parents committed to their children's learning might still face obstacles in regards to financial resources for school fees and access to quality secondary schools, contributing to children failing to transition to secondary school. Despite the support and commitment of the parents and the family, the children fail to transition to secondary school.

Students' aspiration, engagement and performance are closely interconnected. Primary seven graduates scoring in lower divisions tend to believe that their poor-performance prevents them from enrolling in secondary school. Those who are poor academic performers can develop stressors and attitudes that eventually lead them to dropout, or to devalue secondary education.

The inability to access consistent education often makes students unable to translate their ambitions into a productive and fulfilling future. The aspiration and ambition of becoming a doctor or lawyer are just that, when a student is forced to skip a term, or not enroll in the subsequent level due to failure to pay school fees. The disappointment, for some, might encourage those individuals to reinforce their frustrations and desperation. Some might engage in drunkenness. Not all will, but some accept their limited future and find some form of income generation to help the household.

Low-literacy is still a problem within Uganda, and a lack of mastery in primary skills can lead to frustrations later on. The lack of knowledge or inability to master the social skills that are required for secondary school success also play a role in students not transitioning. A student's inability to perform in the classroom at an early stage can cause frustrations over years and may potentially reach a point where the student no longer wants to partake in additional schooling, resulting in dropping out. Student disengagement does not occur suddenly, but rather is a slow process often occurring in two phases, psychological and behavioral. The psychological awareness of poor academic performance leads to the behavior of absenteeism, misbehaviors in class and ultimately dropout.

Aspiration is the single largest positive factor in facilitating transition from primary to secondary for Ugandan adolescents. Without aspiration, students are more likely to be caught up in the now, and often have trouble identifying with the bigger picture – that is, their future. Career guidance plays a crucial role for the students who are first generation learners. The kids don't know what to do. "Why should I go to (secondary) school?", a community member asked. In the same context, another community member from Mbarara said, "They lack guidance, so they end up by not getting what they expect from secondary schools." Hence, failure to provide career guidance and making the right choice has been identified as a major factor behind the transition failure. Some children from poor and illiterate families wonder why they should go to school, and some children become lazy. Higher levels of aspiration and ambition are scarce among the students from remote areas.

Performance in PLE

PLE offers a standardized test aimed at assessing the overall level of student performance at the end of primary level. Presently PLE has four examinable subjects: English language, mathematics, science and social studies. The PLE grading is classified as *Distinctions* (D1 and D2), *Credits* (C3 to C6), *Passes* (P7 and P8) and *Failure* (F9) with each figure symbolizing a point: D1 being one point and F9 being 9 points. The best possible PLE grade a student can achieve is a total of four (4), which means one point – a distinction – in each of the four subjects, while the worst is a total of 36, that is nine points for each subject, meaning a "fail". Students who score between four and 12 points pass the PLE with a first grade, or division one. Those with scores between 13 and 23 points receive a second grade (division two); those with 24 to 29 points get a third grade, while those with 30 to 34 pass with a fourth grade, and those with above 34 points fail.

The final PLE grade determines whether or not the students are able to make a transition to secondary school. Students are only eligible to officially enter secondary school upon receiving a pass slip, in which the resulting grade must be between the first and third division. Scoring beyond the third division results in a failure to receive a pass slip, and therefore the child is not eligible to enroll in a secondary school. Commonly, students who do not achieve a third division or higher often re-enroll and repeat primary seven hoping they can increase the score and eventually make the transition to secondary. Standardized tests such as the PLE provide insight into the overall educational progress the country is achieving, but do not account for quality of education and access to resources. The gradual increase of the rate of students' failure to transition to secondary education in terms of decrease of their performance in PLE is provided in Table 5.

Division in PLE	Gender		Year		All
	Male	Female	2014	2015	
1 st division	2.0	0.0	0.7	2.0	1.2
2 nd division	10.2	4.4	7.5	7.2	7.3
3 rd division	28.0	17.6	17.4	26.7	22.3
Level of significance	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001

Table 5. Percentage of students who failed to make a transition to secondary education organized by performance in PLE, gender, and final primary year reached, Uganda

Poor performance on national examinations limits the eligibility of students into secondary schools. Schools that offer quality academic learning often place performance thresholds on students entering. A child who scored division three regardless of district may not be eligible to enter into a secondary school with an enrollment cut off of division two. Parents of a child who scores in the bottom division of national PLE exams, often believe that the child will not succeed in secondary school. This results in the parent deciding not to spend the household resources on secondary school.

Referring to the significance of the performance in PLE, a participant in Mbarara observed, "It (PLE performance) acts as a yardstick to allow students leave primary to secondary...it depends on the marks one gets. If one gets good marks, they go to a good secondary school." For poor performance of the students, respondents tend to put much of the blame on the environment and the teachers. "They performed poorly maybe because of the environment around" one said. Some of the respondents also thought that though parents have a role to play, teachers actually play the greatest role. "...a teacher comes as a second parent," a community member asserted. Without their contribution, one cannot expect good performance. A respondent criticized the way PLE assesses students. According to her, "it is good, but to me, I feel like let us change our assessment system so that it is continuous. We don't want to get fixed."

Remote districts like Karamoja have very few students score in the first division. PLE makes no concession regarding the quality of education received, the ability to access good schools, students' educational performance in other term examinations, and living conditions, in regard to final performance. In remote regions, students face serious challenges in accessing education. Scholastic materials are harder to procure, and students often learn on empty stomachs with food insecurity predominant. All of this is compounded by poor teaching methods and limited teaching resources. Therefore, the PLE is associated with the failure of students to transition from primary to secondary in more remote regions of Uganda. Top secondary schools often place limitations on registration with students required to have scored in division one. Opportunities for secondary school scholarships, bursaries and financial assistance are for the most part academically based where students are expected to highlight academic talent in the national governmental exams.

Repetition and over-age

On average, 52 percent of the primary graduates reported that they had repeated one term or more at any level of schooling. Repeating is associated with inefficiency and inequity in the provision of education. When the students sit for end of year examinations and fail to get the required scores needed to pass the grade, the parents usually advise students to repeat the class. The idea behind repeating is to offer the student the opportunity to master the contents better, hopefully bettering them for the following year's examinations. On average, 11.3 percent of interviewed students repeated the seventh grade of primary to obtain a better grade in PLE.

Figure 7 shows that increased years of repetition in the primary level reduced the chance of the primary graduates' failure to make the transition to secondary education. Over 11 percent of those who had no repetition failed to transition to secondary education which was 56.2 percent among those who repeated for three or more years. The rate of failure to transition was higher among males than females for each of the 0-2 years of repetition; however, an opposite scenario was observed among those who repeated for three or more years (Annex 15). The rates were higher for the 2015 cohort than those of 2014 cohorts.

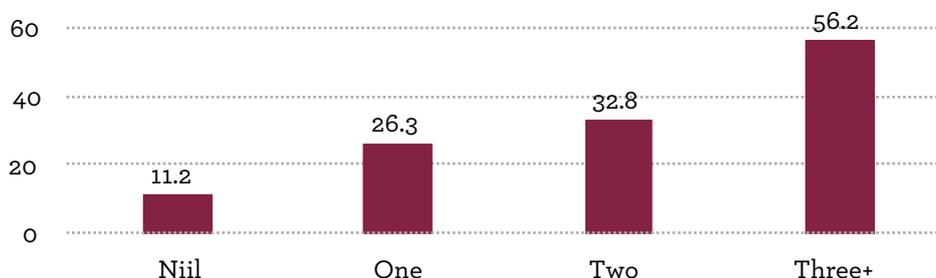


Figure 7. Percentage of students who failed to make a transition to secondary education by number of years repeated, Uganda

It should be noted that with the increase in the years of repetition, the students' age also increased. As a result, students tend to feel stigmatized and become reluctant to continue education compared to the younger age group. Children with ages above the normal age for the grade were, according to the informants, more likely to feel reluctant to continue education. According to a community member in Iganga, "they shy away, they shy away going to school. They think it better to begin a business, or just to get married." The over-age issue was further explicated in the following quote from an informant in Soroti:

If she always feels that she's an adult or she's older than the other kids in the school, and if the other kids always look up to him [sic] as someone who is elder, who shouldn't be in the same class with them, that often accounts for her dropping out.

Early marriage and pregnancy

Girls' education has been viewed as a predictor for a number of development indicators including national fertility rates, infant mortality, family income, and productivity. Girls' education is not only important as a social indicator, but also leads to a greater level of health, economic, security, liberty, and participation in social and political activity. It was observed earlier that 4.5 percent of the females who failed to transition to secondary education failed due to marriage. This figure, in terms of region, was 7.4 percent in the Northern, 6.4 percent in Eastern, 5.9 percent in Western, and 3.8 percent in Central (Figure 8).

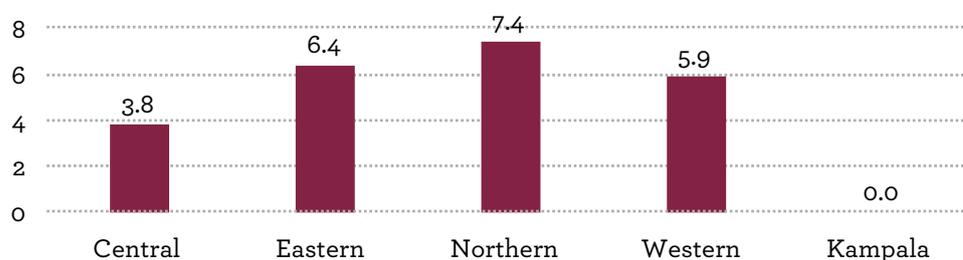


Figure 8. Percentage of females who failed to make a transition to secondary education due to marriage by region, Uganda

The early marriage of girls is sometimes connected with early pregnancies, and girls are forced to marry immediately after the seventh grade of primary. Some boys who are involved in relations that result in early pregnancy may have the chance of continuing with education unless the boy is subjected to some punishment by the community. Sometimes they leave their village home and take shelter in towns and look for jobs. Due to a lack of education, they commonly get low paying jobs as security guards or as servants. A community member in Kampala noted that, "After getting pregnant, a girl becomes stigmatized. She feels like an outcast in society which results in her failure

to be admitted to secondary school.” Another informant added that, “Instead of motivating the girl to continued education, family and teachers often obstruct continue education. They think getting pregnant is the last step.” It was also known that some girls get pregnant on vacation after PLE. “Just due to pregnancies, you find that when one gets pregnant they drop out of school because the school is not willing to have them. Specifically for pregnant girls, most schools don’t admit a pregnant girl”, a community member said.

2.1.4. Discussion

In 2007, Uganda became the first country in Sub-Saharan Africa to introduce universal secondary education. In the Ugandan context, a section of primary graduates started secondary school one or two years after completing primary education, while others might enroll immediately after primary, but a majority complete only one or two terms. Failure to make a transition to secondary education immediately, or within two years of graduation, prevents youth from becoming educated members of society. With an international focus shifting from primary to secondary and tertiary education, and toward life-long learning, the demand for educated citizens is a reality. Findings of this case study reveal that about half of the sampled students had a history of repetition at primary level. This suggests that there is a lack of consistent education starting from the primary. Students, on average, enter the first grade of primary education at the age of 6.8 years, with often at least a one-grade year repeated between starting and finishing primary education.

Government reports focus on student enrollment rates and the difference in the enrollment rates between primary completion and secondary enrollment. What were not considered in these rates are the time-frames that elapse between when children completed primary and entering secondary. This case study suggests that failure to make a transition from primary to secondary was not as large as known. Within this sample, 12.5 percent failed to enroll in secondary schools within two years of completing primary education. The findings suggest that students faced increased difficulties in enrollment in secondary in certain regions, but that households often made financial decisions in order to enroll their children. While it does stress that parents are predominantly responsible for children’s continuation into secondary, ultimately the decision is based more on the socio-economic status of the households. Most of the households bear the expenses of secondary education including increased school fees. This shows that most of the parents/guardians in Uganda recognize the benefits and value of education and therefore spend scarce resources to support their children’s secondary education.

Overall, this case study highlighted that poverty remains the key factor influencing secondary school transition failure. Lack of quality in primary school, availability of secondary school, poor performance of teachers, over-age of students, repetition, hostile family environment, lack of career-

guidance, parental education, parents living and death status, and students' performance in PLE, all weigh against the transition of both male and females to secondary school. Though there are no significant differences in secondary school transition failure between male and females, the failure of females to transition is based on a combination of two factors. The first is the limited financial resources of households, and the second is the community's socio-cultural norms and practices and preference toward males. This study found that females, predominantly face special pressures due to early marriage and pregnancy or circumcisions, and failed to make a transition to secondary education. Finally, along with socio-economic factors, the perceived low value of education in some regions had a leading influence against the transition.

2.2 Secondary School Dropout in Bangladesh

2.2.1 Introduction

Education in Bangladesh has improved significantly over the past decades. Primary and secondary education has steadily improving enrollment and completion rates. Improvement started after the Jomtien Conference in the early 1990s, as the Bangladesh government responded to various calls and affirmative actions directed toward universal primary education. The international calls like Education for All (EFA) and the Millennium Development Goals (MDGs) emphasized the government's role and responsibility to provide universal education. Over time, the educational system started to experience improvements in the rate of enrollment, suggesting increased access to education, for primary and secondary levels, and that gender-parity in enrollment has been achieved.

Despite overall quality, and the improvement in access, to school education during the past two-and-a-half decades, Bangladesh is still struggling to combat dropout at secondary level and quality of education at both primary and secondary levels. Around 95 percent of primary school aged children enroll in school, of which a fifth dropout before completing the full cycle. Although, most of the primary completers admit at secondary level but two-fifths leave school before completing secondary education. This suggests that secondary school dropout is much more intense than that at primary level- the former is almost double of the latter. Therefore, this case study is interested in exploring the dropout issue at secondary level.

Like any other social issue, dropout at secondary level might not be homogeneous across the board. It may be differentiated by socioeconomic characteristics of the students and their families. It is therefore important to know the reasons behind secondary dropout and how they vary for students of different socio-economic status. It can be assumed that there is no single reason for dropout, and reasons may vary across the different statuses of students. In other words, causes of dropout are likely to vary in terms of the socioeconomic characteristics of students. Exploration of these characteristics might be useful for policy suggestions.

Starting at age six, the duration of primary and secondary education is five-years each. Though the former is compulsory by law, government initiatives are in place to foster both. Grades one to five are considered primary, and grades six to ten are considered secondary. The first three years of secondary education i.e., grades six to eight are also known as junior secondary under the broad area of secondary education. Primary education provides basic education, and secondary education serves two purposes. On the one hand, it prepares students for the workplace, concurrently it prepares them for tertiary education. Until grade eight, all students study a common curriculum. Afterwards they are divided into Humanities, Science, Business Studies or Technical/Vocational streams. Both general (secular) and madrasa (Islamic) education is provided in separate institutions. The proportion of madrasa students consists of 6.4 percent of primary, and 17 percent of secondary students (BANBEIS, 2016). Note that after completing secondary, by doing higher secondary education for two more years, students move to tertiary education in Bangladesh.

The primary net enrollment rate was 60 percent in 1990, which increased to about 95 percent in 2013 (BBS and UNESCO, 2000; Nath et al., 2015). Secondary level net and gross enrollment ratios were recorded as 50 and 56 percent respectively in 2014 (BANBEIS, 2015). Gender parity in access to education in both the levels occurred more than one-and-a-half decades ago (BANBEIS, 2015; DPE, 2015; Nath et al., 2015). In recent years, girls outnumbered boys throughout the school education. The primary education in Bangladesh is comprised of about 19.6 million students, with over half girls. The cohort dropout rate at primary level decreased over time— from 50.5 percent in 2007 to 20.4 percent in 2015 (DPE, 2015; BANBEIS, 2016). This means that the primary education completion rate has increased during this period. The dropout rate was much higher for males than females— 23.9 percent versus 17 percent in 2015 (BANBEIS, 2016). Figure 9 provides primary level dropout rates in the past few years.

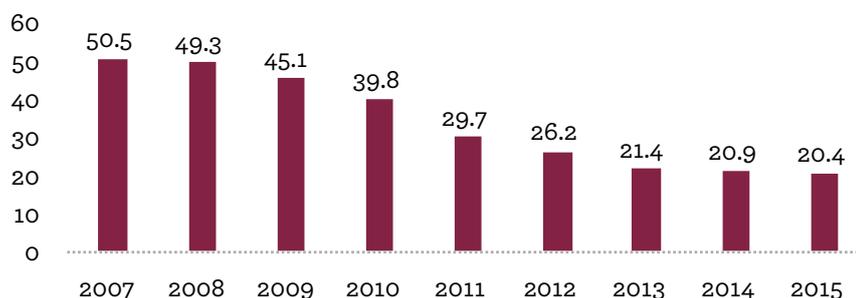


Figure 9. Cohort dropout rate at primary level by year, Bangladesh: 2007 to 2015.

Source: DPE (2015), BANBEIS (2016)

A decrease of the dropout rate at primary level can also be seen from the increasing number of students attending and passing the Primary Education Completion Examination (PECE). The number of students that attended in PECE was 2.1 million in 2009, 2.5 million in 2011, 2.8 million in 2013, and three million in 2014. Similarly, the number of students that passed PECE in these years was 1.9, 2.4, 2.7 and 2.9 million, respectively. How many of these students actually were admitted in secondary education is not directly observed, but the number of students in grade six (the first year of secondary education) in the following years was higher than the above figures (Table 6). Some of these students may be repeaters, but the majority are the primary completers of the previous years. This indicates that a large portion of the primary completers was admitted to secondary education. So, dropout during transition from primary to secondary education is at best minimal in Bangladesh.

Year	Attended in PECE (in million)	Passed in PECE (in million)	Enrolled in secondary education next year	Enrolled students as % of passed students
2009	2.1	1.9	2.4	126.3
2011	2.5	2.4	2.6	108.3
2013	2.8	2.7	2.9	107.4
2014	3.0	2.9	3.0	103.4

Table 6. Transition from primary to secondary education, Bangladesh: 2009 to 2014

Note: Both general and madrasa streams together. Source: DPE website, BANBEIS (2011, 2013, 2015)

The dropout rate at this level also decreased over time, but the rate was much higher than that of primary level. The cohort dropout rate at secondary level was 61.4 percent in 2008, which decreased to 40.3 percent in 2015 (Figure 10). The secondary dropout rate is almost double the primary dropout rate. The rate was much higher for females than males in each of the years. In 2015, the secondary dropout rate was 33.7 percent for males, and 45.9 percent for females.

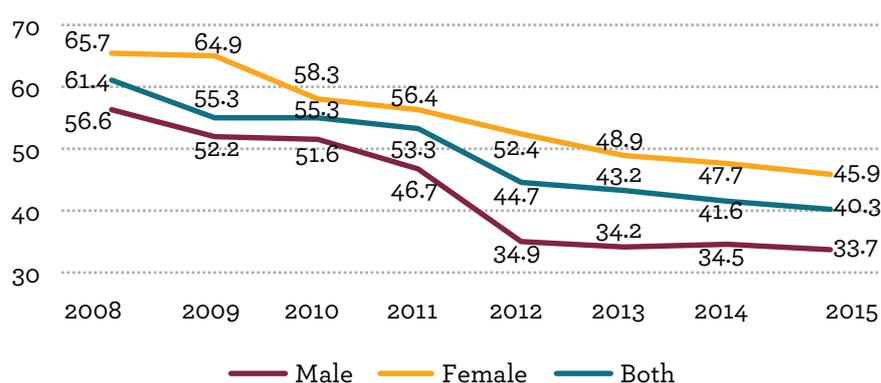


Figure 10. Cohort dropout rate at secondary level by year and gender, Bangladesh: 2008 to 2015

Source: BANBEIS (2009, 2011, 2013, 2015, 2016)

Overall, the number of secondary students increased from 8.5 million in 2008, to 11.8 million in 2015 (Annex 17). Interestingly, such an increasing trend was observed up to grade eight, and then slowed down. A decreasing trend in the number of students of a particular grade in a particular year, and that of the next grade in the following year, also gives an indication of dropout during the period of secondary education. This is not as visible in the first three grades; but obviously from grade eight to nine, and again from grade nine to ten. Major dropout occurred in these two steps.

The government of Bangladesh has a policy to extend primary education from grade five to grade eight by 2018 (GoB, 2010). Bangladesh also has an intention to be a middle-income country by 2021, and a developed country by 2041. The country is committed to the Sustainable Development Goals (SDG) of the United Nations. The fourth of the 17 SDGs demands full completion of primary and secondary education with quality and provision for lifelong learning for all. It would not be possible to fulfil the above targets without properly addressing the issue of dropout. In order to do so, the multidimensional face of dropout needs to be explored and addressed. It is expected that the findings of this study will be helpful in policy formulation and strategy identification for achieving a part of the fourth SDG.

2.2.2 Methods

Objectives

The central research goal of this case study is to identify the factors associated with student dropout from secondary education in Bangladesh, the reasons behind dropout and the factors associated with these reasons. The focus includes prevalence of dropout in secondary education and the interrelationships, and socioeconomic correlates of dropout.

The specific objectives were:

1. To estimate the prevalence rate of dropout at various grades of secondary education and its differentials in terms of gender and residence (urban/rural).
2. To identify socio-economic factors that predict school dropout at secondary level and see whether there is any difference in the predicting factors in terms of grade, gender and residence.
3. To explore the reasons for student dropout from secondary education, and ways of tackling it from various perspectives like students, family/household, school and society, and how these differ by grade, gender and residence.
4. To suggest appropriate policy measures so that all students can complete the full course of secondary education in line with the fourth SDG.

Investigating the above required a mixed methods approach. The quantitative portion intended to find out the proportion of dropout rate using statistical precision. Using quantitative methods, the focus was on residence specific estimates, between urban-rural, and between male-female variations. The qualitative portion offered the opportunity to supplement the quantitative data to support more abstract correlations related to perceptions and perspectives of individuals and community members. The qualitative and quantitative data collectively present a holistic scenario of dropout at the secondary level.

Sampling procedure

The quantitative part of the study aimed to posit residence-wise estimates so that urban-rural variations were captured. The country was divided into two strata: rural and urban. The basis of the information was household survey. A three-stage sampling strategy was adopted separately in each stratum. At the first stage, 30 upazilas (thanas for urban area) were selected. At the second stage, one neighborhood (village/mahallah) was selected from each selected upazila/thana. At the third stage, from each neighborhood, 115 households were selected. A simple random sampling strategy was applied for the first two stages, and systematic sampling for the third stage. The sampling frame was borrowed from the Bangladesh Bureau of Statistics.

With a 50 percent dropout rate, five percent error of margin, 99 percent confidence limit and a design effect of 1.5, it was calculated that 968 students are required in the sample to have a valid estimate of dropout rate. As the study was intended to have separate estimates by gender the figure was doubled. Again for the sake of separate estimates for urban and rural areas the figure was doubled again. Therefore, the estimated size of sample for the study became $(968 \times 2 \times 2) = 3,872$. The targeted population for this study was household members aged ten to 20 years who were enrolled in the first grade of secondary education (grade six) on completion of primary education.

Available data show that secondary experienced students were available in about 6,800 households- 3,400 households in each stratum. A 30 cluster sampling method was applied in this study. Therefore, it was decided to survey 115 households in each cluster. The number of households surveyed in each stratum was 3,450. Therefore the total number of households surveyed for the study was 6,900. Table 7 shows a sample for the quantitative part of the study at a glance. This table shows more female than males in the sample. This is consistent with national statistics, as more females than males enroll in grade six (BANBEIS 2016).

Residence	Cluster	Household	Population	Sample		
				Male	Female	Total
Rural	30	3,450	15,064	925	1,217	2,142
Urban	30	3,450	15,128	881	1,176	2,057
Both	60	6,900	30,192	1,806	2,393	4,199

Table 7. Sample for household survey, Bangladesh

Two rural *upazilas* and two urban *thanas* were chosen for qualitative investigation. These were purposively taken from four different areas located far from the capital city. The secondary dropout rate was around the national average in these areas.

Using three qualitative methods, in-depth interviews, FGDs, and case studies, a variety of relevant stakeholders were interviewed. In-depth interviews were carried out with the *upazila/thana* level education officials. Focus group discussions were conducted with the dropout students, their parents, community leaders and the secondary school teachers. Case studies were prepared with the dropout students. Therefore, 16 focus group discussions, 12 case studies and four in-depth interviews were carried out to get qualitative insights. Six to eight individuals participated in each focus group discussion. Table 8 shows the sample of qualitative investigation at a glance.

Techniques	Respondents	Number
In-depth interview	<i>Upazila</i> Secondary Education Officer	1 × 4 = 4
Focus group discussion	Secondary level teachers	1 × 4 = 4
	Dropout students	1 × 4 = 4
	Dropout students' parents	1 × 4 = 4
	Community leaders/local influential people	1 × 4 = 4
Case study	Dropout student	2 × 4 = 8 (4 males, 4 females)
	Students at risk of dropout	1 × 4 = 4

Table 8. Sample for qualitative investigation, Bangladesh

Instruments

A structured questionnaire was developed for the household survey that was finalized through several pre-tests in various locations. Separate checklists were used depending on the purpose and respondents in qualitative investigation. All checklists were pre-tested by the research team prior to finalization. Within the paradigm of the research design, a triangulation of data was done to ensure consistency. Researcher's triangulation was done during data analysis to minimize bias and inconsistencies.

Field operation

Interviews for the household survey were carried out at the premises of the households. The heads of the households were the principal respondents. In their absence, their spouses were considered. The respondent was sometimes supported by the respective student and/or any adult person of the household.

Interviews with education officials were held at their offices. FGDs with the teachers were held at the school premises (preferably in the teachers' common room or in a classroom). FGDs with the dropout students, their parents and the community people were held at suitable locations in the communities. The dropout students' case studies were prepared through interviewing them as well as a variety of people surrounding them at their locations. Fieldwork was carried out from 15 November to 15 December 2016.

Data analysis

The survey data were computerized and analyzed using software called Statistical Package for Social Sciences or SPSS. Bi-and-trivariate analysis was primarily carried out with appropriate statistical tests. Some multiple regression analyses were also performed. Analysis for qualitative data focused on using thematic content analysis. Using the objectives of the study, similar thematic concepts were identified.

2.2.3 Findings

Background of Students

Among the household members of age ten to 20 years completing primary education, 94.5 percent were admitted in secondary education (Table 9). This indicates a high transition rate from primary to secondary education. Females were ahead of males in transiting from primary to secondary education (95.8 percent versus 92.7 percent; $p < 0.001$). No urban-rural variation was observed. However, in both the areas, females were ahead of males in overcoming the transition. Most students (99.5 percent) enrolled in secondary education the year following completing primary education. The rest few took a year gap.

Residence	Gender		Both	Significance
	Male	Female		
Rural	92.6	95.8	94.4	$p < 0.001$
Urban	93.0	95.8	94.6	$p < 0.01$
All	92.7	95.8	94.5	$p < 0.001$
Significance	ns	ns	ns	

ns = not significant at $p = 0.05$

Table 9. Percentage of primary graduates aged ten to twenty years who transitioned to secondary education, by residence and gender, Bangladesh

The above students were admitted in secondary education from 2005 to 2016. Those who enrolled in 2010 or before were supposed to complete secondary education by the time of fieldwork for this study if they did not take a year break or dropout from the system. On the other hand, those who were admitted in secondary education in 2011 or after were supposed to stay in school if they did not dropout. About 21 percent of the students in the sample were admitted in secondary education on or before 2010, and the rest from 2011 to 2016.

The majority of the students were admitted in non-government secondary schools (69.7 percent), 15.8 percent in the madrasas, 5.8 percent in the non-government school and colleges, 4.2 percent in the government secondary schools, 2.6 percent in junior secondary schools, 1.2 percent in vocational schools, and 0.5 percent in other types of school. The percentages of rural students admitted in non-government schools and the madrasas were higher than those of the urban students (70.9 percent versus 65.5 percent and 17.6 percent versus 9.8 percent). On the other hand, proportionately more urban students were admitted in government schools than in the rural schools (14.8 percent versus 1.2 percent).

The age of admission in secondary education also varied. Although primary schooling officially starts at age six years and continues up to ten years in Bangladesh, 5.4 percent of the students were admitted in secondary education at the age of nine or ten years (Annex 2). These students probably started their primary education early. The Majority of the students admitted in grade six at age 12 years (36 percent), followed by those aged 11 years (24.1 percent) and 13 years (20.4 percent). The rest of the students (14.2 percent) were 14 to 17 years when they started secondary education. Except those admitted at age 11 years or below, others were probably admitted in primary education one or more years later than the official age of six years. Some of those might have stayed in one grade for more than a year at primary level. A similar distribution was observed in rural and urban areas (Annex 18).

Over 34 percent of the fathers, and 31 percent of the mothers of these students had never been to school (Annex 19). Among the fathers, 16.8 percent enrolled in school but left school leaving primary education incomplete, another 34 percent completed primary education, but did not complete secondary education, and 14.8 percent completed secondary or received more education. Among the mothers, these figures were 18.5, 41.8 and 8.7 percent, respectively. The proportion of mothers completing one to nine years of schooling was higher than that of the fathers, but the proportion of those who had never been schooled, and those who completed ten or more years of schooling, was higher among fathers than mothers. The educational qualification of urban parents was higher than their counterparts in rural areas.

Further analysis of data shows that both the parents of a fifth of the students had never been to school. First generation learners were 21.5 percent among rural students, and 14 percent among urban students. Both parents of another

17.1 percent of the students either enrolled in school or not, but did not complete primary education. Therefore, one or both parents of 63 percent of the students completed at least primary education (60.6 percent rural and 72 percent urban). Both parents of 5.8 percent of the students completed secondary education— 3.3 percent in rural areas, and 14.2 percent in urban areas.

In terms of religion, although Muslims, Hindus, Buddhists and Christians were in the sample, the majority of the students belonged to the Muslim community. They were 85.4 percent of the total students. The non-Muslims comprised of 14.6 percent of the sample, the majority were Hindus. The proportion of non-Muslims was 15.3 percent in rural areas, and 12.1 percent in urban areas.

As a proxy to the economic strength of the household, yearly food security data was collected. It was a self-rated measurement. The heads of the households were asked to rate their households on a four-point scale considering total income and expenditure of the past year. The points on the scale were: “always in deficit,” “sometimes in deficit,” “break-even,” and “surplus.” Of the students in the sample, 4.4 percent belonged to “always in deficit” households, 19.2 percent “sometimes in deficit,” 39.5 percent “break-even,” and 37 percent “surplus” (Annex 20). Proportionately more “surplus” households were observed in urban areas, and the other three categories in rural areas.

Dropout from secondary

Of the total students, 62.7 percent were currently enrolled in any of the secondary classes, 14.6 percent dropped out of school, and 22.7 percent completed secondary education (Annex 21). The percentage of completed, as well as currently enrolled students, was higher among males than females. On the other hand, the proportion of currently enrolled and dropped out students was higher in rural areas than in urban areas, but it was the other way around in the case of completion of secondary education (Annex 21 and Figure 11).

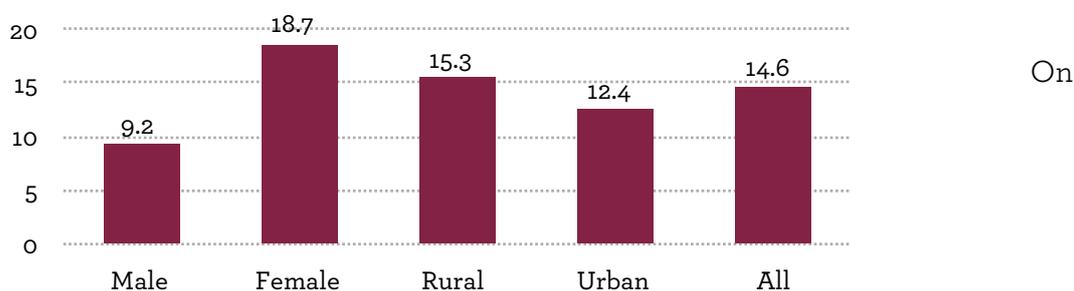


Figure 11. Percentage of students who dropped out before completing secondary education, Bangladesh

average, the percentage of students who dropped out of secondary education was 14.6 percent (Table 10). This was 9.2 percent among males, and 18.7 percent among females, ($p < 0.001$) and 15.3 percent among rural, and 12.4 percent among urban students ($p < 0.01$). Statistically significant gender difference was observed in both the areas. The rate was highest among rural females, and lowest among urban males– 19.3 percent and 6.5 percent, respectively. Although, residence variation among females was statistically insignificant, rural males were significantly ahead of their urban counterparts in dropping out from secondary education.

Residence	Gender		Both	Significance
	Male	Female		
Rural	10.1	19.3	15.3	$p < 0.001$
Urban	6.5	16.8	12.4	$p < 0.001$
Both	9.2	18.7	14.6	$p < 0.001$
Significance	$p < 0.01$	ns	$p < 0.01$	

ns = not significant at $p = 0.05$

Table 10. Percentage of dropout students by residence and gender, Bangladesh

A logical variation in current enrollment, dropout and completion rates in terms of year of admission in secondary education was observed (Annex 22). The percentage of currently enrolled students increased over time meaning that those who enrolled in secondary education in recent years were more likely to be currently enrolled. It was interesting to note that about three-quarters of those who were admitted in 2008 or before, 71.7 percent of those admitted in 2009-10, and over two-thirds of those admitted in 2011, have already completed their secondary education (Annex 22). Over a quarter of the students who were admitted in secondary education in 2010 or before, dropped out from such education making it incomplete. This was 22.8 percent among those admitted in 2011, which gradually decreased to 2.1 percent among those admitted in 2016 (Annex 22 and Table 11). The latter group of students had a chance to complete secondary education as well as to dropout in coming years. Table 11 provides gender and residence dropout rates by year of admission in secondary education. Annexes 23 and 24 present more analysis on this.

Year of admission	Gender		Residence		All
	Male	Female	Urban	Rural	
<2008	15.6	31.2	26.5	24.2	26.1
2009	13.5	36.7	32.0	17.7	27.6
2010	11.2	36.6	26.4	19.8	25.1
2011	14.4	29.3	22.0	25.1	22.8
2012	10.9	23.8	19.5	13.1	18.1
2013	14.5	18.6	17.8	13.0	16.9
2014	7.7	12.7	11.6	6.7	10.5
2015	2.5	4.5	3.7	3.3	3.7
2016	2.8	1.5	2.5	0.4	2.1

Table 11. Percentage of dropout students, by year of admission in grade six, residence and gender, Bangladesh

Socioeconomic differentials of dropout

Student age of enrollment in secondary education had an interesting relationship to dropout rate (Figure 12). The dropout rate was 12.7 percent if the student entered in secondary education at age ten years or less, which came to 7.5 percent for those who started secondary education at age 11 years, the right age to do so. The dropout rate then gradually increased with the increase of the age of starting secondary education. For instance, it was 10.2 percent for those aged 12 years, 17.2 percent for those aged 13 years, 31.2 percent for those aged 14 years, and 40.1 percent for those aged 15 years or more ($p < 0.001$). The same relationship was observed when data were segregated by gender, residence and year of admission (Annex 25).

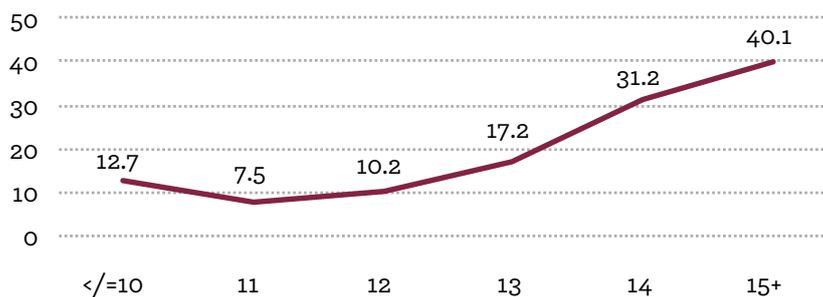


Figure 12. Dropout rate by age of admission at grade six, Bangladesh

The dropout rate of secondary students significantly decreased with an increase of parental education (Figure 13). The rate was 17.6 percent if the fathers had no education, 16.7 percent if the fathers had one to four years of schooling, 13.7 percent if the fathers had five to nine years of schooling, and 6.5 percent if the fathers had ten years or more education ($p < 0.001$). These rates were 21.9, 17.4, 10.1 and 4.1 percent, respectively for the similar level of mothers' education ($p < 0.001$). Statistically significant gender differences disfavoring females was observed in the first three educational groups of fathers, and all four educational groups of mothers (Annexes 26 and 27). On the other hand, no urban-rural difference was observed in any of the educational groups of mothers (Annex 27). However, the rate was significantly higher for urban students than their rural counterparts if the fathers had no education (Annex 26). An opposite scenario was observed in the third and fourth educational groups of fathers. Those who were admitted in secondary education in 2010 or earlier had significantly higher dropout rate than those enrolled in 2011 or later in each of the four educational groups of fathers and mothers (Annexes 28 and 29).

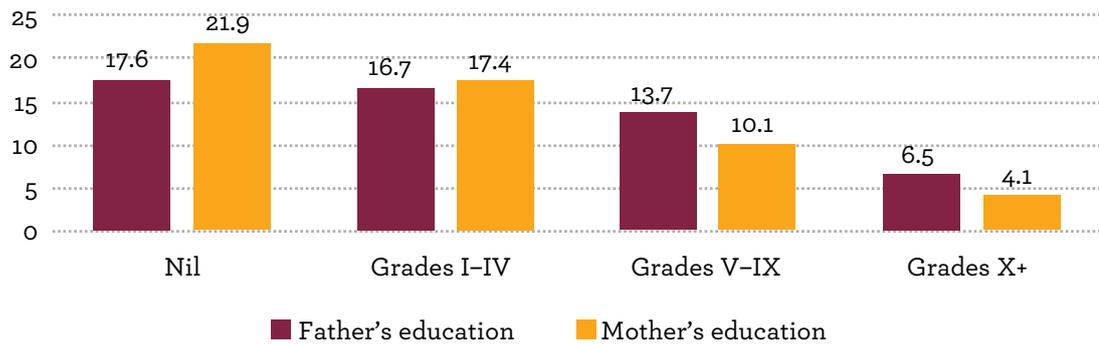


Figure 13. Dropout rate by parental education, Bangladesh

Overall, no statistically significant variation was observed in dropout rate in terms of the food security status of the households (Annex 30). But when the data were segregated by gender and residence a significantly decreasing trend was observed among males and those who lived in urban areas. The same was observed among those admitted in secondary education on or before 2010, but not among those in 2011 or later (Annex 31). No significant difference in dropout rate by religion of students was observed. The rate was 14.9 percent among the Muslims, and 13 percent among non-Muslims (Annex 32).

Multivariate Analysis of Dropout

A multivariate regression analysis was carried out in order to find out the predictive factors of secondary dropout. Such an analysis would help understand the predictive power of various background characteristics of the students in explaining why they dropped out from secondary education. The dependent variable was the dropout status measured dichotomously, viz., dropout and not-dropout (currently enrolled and completers together). Therefore, a binary logistic approach was considered, and eight explanatory variables were considered. The measurements are provided in Annex 33. The variables include gender, residence, age of enrollment at grade six, father's education, mother's education, religion, food security status of household, and year of secondary enrollment. All these variables are categorical. A total of three models were built - one for all students under sample (model 1) and the rest for two groups of students in terms of the year of admission in secondary education (models 2 and 3).

A stepwise approach was followed in building the models- the variables appeared in the model through forward selection and backward elimination. Therefore, only those variables that had a statistically significant contribution in explaining the variability in the dropout status of students (at $p < 0.05$ level) were included in the final models.

It seems that four of the above eight variables appeared in the first model (Table 12). These, in terms of chronology of appearance in the model, are age of enrollment at grade six, year of enrollment, gender, and mother's education. Chronology of appearance indicates the importance of variables in 'explaining' secondary dropout. An early appearance means a higher degree of association of the factor with dropout than of others.

- The students were more likely to drop out early from secondary education if they start secondary education late. Those who started secondary education at age 12-13 years were 1.96 times more likely to drop out than those who started such education at age 11 years or early ($p < 0.001$). Compared to the same group of students, the change of dropout was 9.28 times higher for those who were admitted at age 14 years or later ($p < 0.001$).
- Females were 2.47 times more likely to drop out than males ($p < 0.001$). Those admitted in 2010 or before were 4.58 times more likely to drop out than those admitted in 2011 or later ($p < 0.001$).
- In general, an increase in the mother's education lessened the chance of dropping out. No difference was observed in dropout between the first two educational groups of mothers (nil, and grades one to four). However, with the latter two groups of mothers, the students were significantly less likely to drop out ($p < 0.001$).

It should be noted that these four characteristics collectively explained 12 percent of the variation in dropout (as found using Cox & Snell R^2). It would be appropriate to note that explanation in this statistical exercise is more an association between the factors and the secondary dropout status of students rather than a causative relationship.

The same three explanatory variables came out in the second and the third models; however, their chronology of appearance in the models was different. These also appeared in the first model. Detailed results are provided in Annexes 34 and 35. The model for those admitted in secondary education in 2010 or before considered gender as the most important factor for explaining their dropout followed by mother's education and age of admission at grade six, respectively. On the other hand, the model for those who were admitted in secondary education in 2011 or later, considered age of admission at grade six as the most important predictor followed by mother's education and gender, respectively. The three characteristics collectively 'explained' about 13 percent of the variation in dropout in the second model and 10 percent in the third model.

Explanatory variable	Regression coefficient	Odds ratio	95 percent CI of odds ratio	Level of significance
Gender				
<i>Male</i>	0	1.000		
<i>Female</i>	0.905	2.471	2.016 – 3.030	p<0.001
Age at grade six				
<i><11 years</i>	0	1.000		
<i>12-13 years</i>	0.675	1.964	1.523 – 2.531	p<0.001
<i>14 years+</i>	2.228	9.281	6.839 – 12.594	p<0.001
Mother's education				
<i>Nil</i>	0	1.000		
<i>Grades I-IV</i>	-0.117	0.889	0.695 – 1.138	ns
<i>Grades V-IX</i>	-0.774	0.461	0.370 – 0.575	p<0.001
<i>Grades X+</i>	-1.565	0.209	0.120 – 0.363	p<0.001
Secondary enrollment Year				
<i>2011 or after</i>	0	1.000		
<i>2010 or before</i>	1.523	4.584	3.686 – 5.701	p<0.001
Constant	-3.217	0.040		p<0.001
<i>-2 log likelihood</i>	2882.965			
<i>Cox & Snell R²</i>	0.122			
<i>Nagelkerke R²</i>	0.217			

ns = not significant at p = 0.05

Table 12. Result of logistic regression analysis predicting dropout of secondary students, Bangladesh (model 1)

Reasons of Dropout

Dropout from secondary education is a single event in an individual's life, but there may be many reasons behind it that are linked in a complex way. In order to tackle the situation, 'the most important reason' was recorded for each. However, interlinked multiple reasons emerged in the qualitative investigation as well. Thirteen specific reasons were found in the household survey, of which three are major (Table 13). The major reasons include marriage, students not interested in continuing study, and the inability to bear the cost of education by the households. Marriage was the most frequently mentioned reason for secondary dropout; 35.8 percent of the dropout cases occurred due to this reason. Students were not interested in continuing their study in 22.4 percent of the cases, and the households were unable to bear the educational cost for a fifth of the dropout students. These three reasons collectively covered 78.3 percent of the dropout cases. The other reasons included parents who were not interested in sending their children to school, failure on the school examination, children being required to join in income earning activities or having to work at home, illness or disability, social insecurity, school being far from home, transportation problems, going abroad, and barriers because of religion.

Reason	Gender		Residence		Year of admission		All
	Male	Female	Rural	Urban	2010 or before	2011 or after	
Inability to bear cost of education	19.8	20.2	19.5	23.3	20.1	20.2	20.1
School is far from home	0.0	1.1	0.9	0.0	1.3	0.5	0.8
Student is not interested in study	55.7	9.9	22.9	20.9	18.8	24.3	22.4
Failure on examination	6.0	2.5	3.7	2.4	3.6	3.3	3.4
Transportation problem	0.0	0.4	0.3	0.4	0.9	0.0	0.3
Illness/disability	1.2	3.4	2.8	2.0	2.7	2.8	2.8
Parents not interested to send	2.4	6.7	5.9	3.6	6.7	4.9	5.6
Marriage	0.0	49.2	35.3	38.2	32.7	37.3	35.8
Have to work at home	0.0	2.2	1.5	2.4	3.6	0.8	1.6
Join in income earning activities	11.4	0.0	3.1	3.2	4.0	2.6	3.1
For going abroad	1.2	0.0	0.3	0.4	0.9	0.0	0.3
Social insecurity	0.0	1.6	0.9	2.0	0.9	1.3	1.1
Religious barrier	1.2	0.7	0.9	0.0	0.9	0.8	0.8
Others	1.2	2.0	1.9	1.2	2.7	1.3	1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 13. Percentage distribution of dropout students, by reasons of dropping out, residence, gender and year of admission, Bangladesh

Gender-wise, variations in the reasons of dropout persisted. Marriage was an issue for females. About a half of the female dropout cases occurred due to marriage, and not a single such case was found among the males. 55.7 percent of the male dropout cases was because of a lack of interest in study, it was about ten percent among females. Over 11 percent of males dropped out because they were required to join in income earning activities, which was not an issue for any of the females. On the other hand, a mostly equal proportion of male and female dropout occurred due to a households' inability to bear the educational costs. Among other reasons, dropout due to failures in examination occurred more among males than females, and parents were not interested to send more females to school than males.

Not much variation was observed between rural and urban students in the reasons for secondary dropout. However, a small variation was observed between those admitted in 2010 or before, and those in 2011 or after. The two reasons such as 'marriage' and 'students were not interested to continue study', occurred more among the former group of students than the latter group.

Marriage emerged as the principal reason for female dropout from secondary education. This reason was mentioned for about a half of the female dropouts. It was observed that another 28.2 percent of the female dropouts got married after leaving school, although they mentioned various other reasons of dropout while interviewed (Figure 14). Totaling these two, 77.4 percent of female dropouts were married at the time of the fieldwork portion of this study. This was 76.7 percent in rural areas, 80.3 percent in urban areas, and 78.8 percent among those admitted in grade six in 2010 or before, and 76.4 percent among those admitted in grade six in 2011 or after (Annex 36).

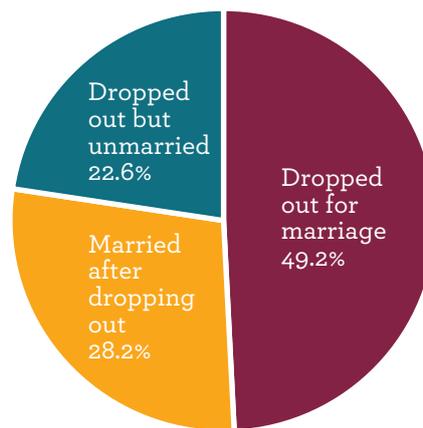


Figure 14. Percentage distribution of dropout students by marital status, Bangladesh

Of the total number of married cases, about 95 percent occurred before the age of 18 years, the legal age of marriage for females in Bangladesh (Table 14). It was 96 percent in rural areas, and 90.6 percent in urban areas. The highest proportion of marriage occurred at age 15 years, followed by 14, and 16 years, respectively. About 68 percent of marriages occurred at age 14 to 16 years, with about 14 percent before and 18 percent after. Both the mean and median age at marriage was 15 years.

Age at marriage	Residence		Admission year		Total
	Rural	Urban	2010 or before	2011 or after	
12	2.8	1.9	1.4	3.4	2.6
13	10.1	15.7	12.1	10.6	11.3
14	22.3	22.6	22.0	22.7	22.4
15	25.7	29.6	28.4	25.6	26.5
16	22.3	8.2	18.4	19.8	19.3
17	12.8	12.6	10.6	14.5	12.8
18+	4.0	9.4	7.1	3.4	5.1
All	100.0	100.0	100.0	100.0	100.0

Table 14. Percentage distribution of dropped out females, by age at marriage and residence, Bangladesh

Mean age at marriage was 14.8 years among those who dropped out from secondary education for the cause of marriage. This was 15.6 years among those who got married after dropping out. The median age at marriage was 15 and 16 years, respectively for the above two groups.

An attempt was made to identify the socio-economic factors predicting marriage as reason for dropping out and marriage of dropout students (models four and five respectively). The dependent variable was measured dichotomously in both, and therefore logistic regression analysis was carried out. The explanatory variables were the same as before (Annex 33). This analysis was done with the dropout females only.

In both cases, only three variables emerged in the final models (Annexes 37 and 38). These are age of enrollment at grade six, religion, and the food security status of household. The chronology of variables in the models was different. In model four, the food security status of the household came out as the most important predictor, followed by the age of admission at grade six, and religion, respectively. In model five, religion came out as the most important predictor, followed by household food security status, and age of admission at grade six, respectively.

- The chance of dropout for the cause of marriage, and/or early marriage increased with the increase of the food security status of households, and students age of entry in secondary education.
- Muslims, enrolled in grade six at age 12 years or later and belonging to the households with break-even or surplus food security status, were the most likely to drop out from secondary schools due to marriage. The same group of students was also at risk of early marriage even after dropping out.

The issue of female students getting married early instead of continuing education was raised during interviews with education officials and FGDs with teachers, parents and the community. In most cases, they emphasized that female students reach puberty and start to grow physically and mentally when they are in grades eight to ten. They highlighted a strong social norm about marrying girls off at a ‘tender age’. The respondents, irrespective of identity, contended that such a practice is associated with social belief and security. They strongly emphasized supply and demand. Young girls are in high demand in the wedding market, and as they get older the amount of dowry increases to marry them off. Some of the respondents mentioned that the students of this age have a tendency to talk and engage with the opposite gender. Some of them, however, mentioned it as ‘natural’ but the majority said, it’s not acceptable and is condemned by society. A strong culture of shaming girls and their families persists, which is not the case with boys. Therefore, parents want their daughters to get married early to escape this kind of scandal. Social insecurity is another influential catalyst of female dropout. Parents and teachers said that the parents of adolescent girls live in constant anxiety and dread that their daughter may face a bad situation on her way from home to school. Moreover, the culture of impunity is igniting parents fear day by day. One education officer whose daughter experienced harassment shared his experience with the study team. One local boy followed the education officer’s daughter for several days on her way to school. His intention was to talk to her, which the daughter did not want. She became afraid, and stopped going to school and attended private tutoring classes for some days. At one point her mother started to accompany her everywhere. How the education officer thinks about the consequences of this incident describes the societal stance very well. His words were, “Just imagine if I, an officer of the government of Bangladesh is facing this, what is the situation of common people. It would be really shameful for me if my colleagues in administration know about this.”

An FGD a community leader said, “social honor is far greater than daughters’ physical and mental well-being.”

Teachers in the FGDs emphasized increased parental awareness to stop the unfortunate phenomenon of early marriage. Some of them claimed that sometimes they created initiatives to stop such incidences, and were successful for a time. However, after a few months they discovered that the parents secretly arranged the wedding of their daughters in another village. In some cases, they then tried to convince the in-laws to continue the bride’s education, but this was not effective, they admitted. Once a marriage register (qazi) was sentenced to jail for 26 days as a result of such an event, but this type of example is rare.

A commonly held perception of females who completed higher secondary education, or received a Bachelor degree, was that they would not find a partner compatible in terms of their educational qualifications. They saw a difficult situation coming in their lives regarding marriage. Referring to their unemployment some FGD participants opined that investment in their education was meaningless. It was also said that based on their experience, many parents didn’t want their daughters to end up like them. Some of them believed that stopping girls education was right. Some believed that since a daughter is ultimately a wife, and then a mother, an ability to read and calculate is good enough for these roles. They don’t need anything else.

Following are some examples.

- Shikha (24) admitted in grade six when she was 12. Her parents arranged her marriage when she was a seventh grader. She considered it as ‘right’ because, as she said, the society is ‘spoiled’. Her in-laws were not interested in continuing her education, so she had no way to restart schooling.
- Babli (19) is the only child of her parents. She got married of her own choice when she was a student in class nine so she could not tell in-laws about her intention to continue her education. Her husband, however, told her to continue to study, but household chores and responsibilities did not allow her to do so.
- Shukonnya (17) stopped going to school because young local boys harassed her on her way to school. She stopped studying after passing grade six. She stayed at home for one year and then got married.

Logistic regression analyses predicting the other two major reasons of secondary dropout were done with the same explanatory variables mentioned in Annex 33. The gender of students, and the age of admission at grade six were predictors of dropout due to ‘students’ lack of interest in study’ (Annex 39). These two variables collectively explained 21 percent of the variation

in the particular reason for dropout. The analysis revealed that males were 12.3 times more likely than the females to dropout from secondary education due to a lack of interest in study. This was less likely among those who were admitted in secondary education at age 12 to 13 years. Comparatively, a higher chance of dropout due to lack of interest was found among those who were admitted in grade six at age 11 years or less, and those at 14 years or later.

Three characteristics of students appeared as significant predictors of their dropout from secondary education due to the inability of households to bear educational costs. The most important of these is household food security status, followed by the fathers' education and religion (Annex 40). These three characteristics collectively explained 11 percent of the variability in the dependent variable. Following are the findings in short:

- Students of *deficit* and *break-even* households were equally likely to drop out due to the households' inability to bear the educational costs, but they were more likely to be dropped out than those from surplus households.
- Students with fathers who were never schooled were more likely to drop out due to the inability to bear educational costs than those who had fathers with at least one year of schooling. Students with fathers having one to four, five to nine, and ten or more years of schooling were equally likely to drop out due to such reasons.
- Non-Muslims were 2.6 times more likely to be dropped out than Muslims due to the households' inability to bear educational costs.

Students gradually lose interest in education due to a number of factors: the need to engage in income generating activities for the family, an inability to take on the study load, poor teaching-learning provisions in the classrooms, no visible immediate outcome of education, and a lack of role models in the society, etc. are some of these factors. Once children reach a certain age, the parents expect them to start earning to support the family. This holds true specifically for males who are under social pressure to help households, and this pressure may not allow them to continue with secondary school. Earning is more valued and important than secondary education. The focus remains on the short term benefits that are derived by the secondary school dropout engaging in earning an income, such as the initial increase in household income, and the ability to spend, against the longer term benefits of remaining in school. Students are forced to drop out of school partly due to not being able to physically attend classes. Girls are especially susceptible to this, as they are often required to work within the home completing chores. Households that rely on agriculture for household income are more likely to require the older children to remain at home to help.

Some teachers noted that students do not find any role models in the society who can inspire them. Some of them added, “Unfortunately we, the teachers are also bad examples of leading an uncertain life after getting higher education.” The teaching ability of secondary teachers was also questioned in a number of FGDs with community leaders and teachers, and interviews with education officials. Most of them opined that secondary teachers are not competent enough, and they only work for the salary. Therefore, quality education is a low priority to them, and they contend that the quality of teaching is deteriorating day by day. Some of them said that good teachers do not teach well in the classrooms, but they do teach privately. Teachers also admitted that they do not fulfill their roles properly, and that classroom practices are not effective in teaching students well. Moreover, students do not recognize the value of education because general education cannot ensure good jobs. A student who stopped going to school after completing grade seven asked, “What’s the point of studying? Do we have enough jobs?” Many other students were also wondering the same. Additionally, teachers said that moral decay among young students is increasing at an alarming rate.

In the interviews and FGDs, the participants highlighted that students and their families generally struggle to pay the annual admission fees, examination fees, the occasional contribution for school events, and most importantly they struggle to buy guidebooks and to pay for private tutoring/coaching. According to parents, students and community people who participated in FGDs strongly emphasized that private tutoring and the use of guidebooks were essential parts of the education system. In most cases, the teachers do not teach well in the classrooms, and they encourage students to take part in private tutoring. Free textbooks are also not used by the students or the teachers. They prefer guidebooks believing these are easy. Sometimes the teachers require students to buy guidebooks of a particular publisher of their choice. They seem to be aligned with the ground level situation. One of them said, “Government stipend is not enough to carry out-of-pocket expenditure of education. It does not cover the costs of private tutoring and guidebooks.” The teachers however, did not always commit their engagement with private tutoring or guidebooks, but said that students are mostly afraid of mathematics and English for which they seek support of private tutors and guidebooks.

A service holder (29) observed that private tutoring and guidebooks became norms of the education system. Those who are unable to buy these stop going to school with an understanding that without those s/he would not do well in examination. This was supported by students also. In a FGD, a student said, “I spent Tk. 200 every month for private tutoring before dropping out, my private tutor was very helpful, I could understand my lessons easily then. Once my parents said, they would not be able to continue such expenditure. I gradually stopped going to school.” Parents also pointed out that paying for education, especially for private tutoring and guidebooks, are challenging for them, which they believe is an essential tool for learning. One education officer also mentioned this tendency, and said that the students’ inability to buy guidebooks and private tutoring lead them to drop out.

The following case shows how the students and parents struggle to pay for their education.

Prarthona, a ninth grader, saw most of her classmates taking private tutoring and they all had guidebooks. Her parents were unable to provide her any of these. When she faced difficulty in continuing education without these she planned for some earning. She tutored 12 primary level students for three months. With this income she bought guidebooks and participated in mathematics private tutoring for a month. In her words, ‘I still don’t have all the guidebooks, sometimes I borrow those from other students and give those back after study.’ She was planning to do private tutoring for some more months to fulfil her needs.

Attempted measures against dropout

Students who dropped out reported that school teachers, members of the school managing committees (SMC) and the relatives/neighbors met the dropout students and/or their parents to convince them to go back to school. Such attempts were made independently by the teachers and the relatives and neighbors. However, school managing committee members made such attempts when requested by the teachers. The teachers made an attempt for 45.7 percent of the dropout students, 11.1 percent of the attempts were also supported by school managing committee members (Figure 15). Relatives and neighbors made such attempts for 58.2 percent of the dropout students. The teachers made attempts equally to bring the male and female dropout students back. The SMC members made their attempts for more females than males. On the other hand, the relatives/neighbors made such attempts for more males than females. No urban-rural variation was observed.

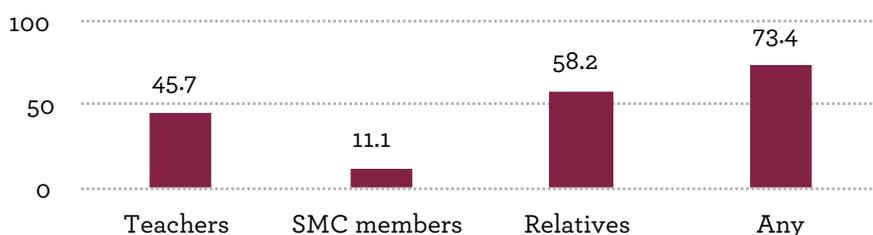


Figure 15. Percentage of dropout students who were advised to return to school by type of advice provider, Bangladesh

Overall, 73.4 percent of the dropout students were requested by any of the above three groups of people. The male dropouts were more likely to be requested than the female dropouts (80.7 percent versus 70.6 percent; $p < 0.01$). No urban-rural variation was found in this case (Annex 41).

Teacher home visits to take back dropout students also came up in FGDs with the parents. Sometimes the head teachers called the parents to school and tried to convince them. Subject teachers went to students' homes to make them understand the importance of education. Sometimes teachers met parents and students in market places and conveyed their message. For female students they mostly advocated against early marriage. However, monetary help, and giving scholarships for needy students was not found in qualitative investigations. All the efforts taken by teachers were mostly verbal and focused on raising awareness. Relatives and neighbors often encouraged students to return to school. In some cases, they provided monetary help to keep students in school for some time.

2.2.4 Discussion

Although secondary education (grades six to ten), is not compulsory in Bangladesh, the government has taken various measures to promote secondary education. Primary education was greatly expanded after the introduction of compulsory primary education in 1990. Demand for secondary education was created by higher primary completion. In response, the government has moved to expand secondary education. Although secondary admission and completion rates have risen, there are high dropout rates still existing at this level.

The government calculates dropout rates through cohort analysis (BANBEIS, 2016) requiring school-based information of two successive years. This method was not used in this study, and the dropout rates observed were quite different from government estimates. The present study used household-based information, an approach that frames dropout scenarios within the context of the socioeconomic characteristics of the students. This is not possible in the school-based approach, as schools do not have such information on students.

This study reveals that transition rates from primary to secondary education were high, and that females were significantly ahead of males. These findings are consistent with statistics generated using the number of students who passed the PECE, and the number of students admitted in secondary education the following year (BANBEIS, 2016). Some statistics on this are provided in the introductory section of this report. There might have been regional differences, however unfortunately this study or the government statistics did not account for this. Because the majority of the students have to receive their primary and secondary education from two institutions, there is a chance of a higher transition rate in various societies, but this is not the case in Bangladesh. The presence of secondary educational institutions near home may make transition easier.

Studies on primary education repeatedly found that students do not always enroll in school at the official age of enrollment (Chowdhury et al., 1999; Nath and Chowdhury, 2009; Nath et al., 2015). The majority enter the first grade of primary education one or two years after the official age of six years (at age seven or eight years). Therefore, instead of at age ten, the majority of students complete primary education at age 11 or 12 years of age. The majority of the sampled students were admitted in the first grade of secondary education at age 12 years or older. Multivariate regression analysis reveals that the age of admission in secondary education was the most important predictor of secondary dropout. The chance of dropout from secondary education significantly increased with the increase of age of admission. Those who enrolled in primary education late, completed late, and therefore subsequently were admitted into secondary education late, and were more likely to drop out early. It is therefore suggested that children should be enrolled in primary education at the age of six years, the officially specified age for primary enrollment established in the compulsory primary education act. It would help protect secondary dropout to some extent.

This study strongly suggests that females were more likely to drop out of secondary education than males. Major female dropout occurred at grade eight and afterwards. It seems that the special stipend program and tuition fee waiver for females did not deter them from dropping out earlier than males.

Female dropout has a specific dimension which is very much linked to social norms and values. Half of the female dropout cases occurred due to marriage, and more than a quarter of the females who dropped out got married afterward. This is a big challenge to the expansion of female education. In addition to those admitted in school at a later age, Muslims and females of relatively well-off families were more likely to drop out due to marriage. Qualitative investigation with parents, teachers, education officials and community leaders suggests a strong social demand for the marriage of girls at an early age.

Parents are often pressed to allow, or to facilitate, a daughter's early marriage, which inevitably means discontinuing her education. The pressure comes from the demand of adult males for young (under-aged by law) brides, the potential necessity of paying a dowry (which could rise with the age of the bride), and other possible outcomes such as increased harassment and insecurity. When social norm dictates that a husband has to get a higher education than his wife, investment in female education is less likely (Field and Ambrus, 2008). The application of marriage act seems to be very weak as this study observed that 95 percent of the marital cases occurred before the age of 18 years- the legal age of marriage for females. The marriage act could be a vital instrument to protect early marriage, as well as keeping females in schools until they complete secondary education. However, this cannot happen without strong commitment, including punishment of those who violate the law.

The mothers' education played important role in protecting dropout from secondary education. This study did not find any difference in secondary level dropout among those students who had a mother without schooling, and those who had mothers with incomplete primary education. However, if the mothers completed primary education, but kept their secondary education incomplete their children were significantly less likely to be dropped from secondary education compared to the above two groups. The chance of children dropping out from secondary education significantly lessened if the mothers completed secondary education. These findings have important policy implications. First of all, female education up to grade IV (incomplete primary education) has no implication in protecting secondary dropout of the next generation, and to get the maximum benefit, they should at least complete secondary education. Secondly, if the trend continues, children of females who left school before completing secondary education are at risk of dropping out early. Social as well as legal measures should be seriously considered in order to protect early marriage of females, and to ensure completion of secondary education.

Late enrollment in school also had an implication in secondary level dropout due to lack of interest in study, specifically for the male students. These students might not feel comfortable at their adolescent age to stay in the same classrooms with those younger than them. Again, at such an age, families might want their labor for income earning. However, in qualitative investigation, the uncertainty of getting a job after study, no immediate return from education, expenses of time and money during study, the lack of educated role models in the community, and a lack of support from family etc., came out as reasons of losing interest in education. The school's lack of care about the demands of students was observed in many studies and may be linked to their loss of interest (Ahmed and Nath, 2005; Nath, 2016). Moreover, it did not happen suddenly. Lack of care and demand of labor may interchangeably act on each other and may be the start of students being absent from school, which eventually leads to dropout over time. This study further observed that a majority of the dropout males engaged in the informal job market. Some of them might have gained some skills through learning by doing, but the majority might not have such an opportunity. The labor force surveys also shows that a majority of the unskilled youths engaged in informal jobs (BBS, 2015). An opportunity of vocational education may be created for those who want an immediate benefit of education.

The International Labor Organization observed that about 41 percent of Bangladeshi youth were not involved in employment, education or training (ILO, 2013). World Bank (2015) identified that the absence of quality of education and a skilled labor force are the main causes of youth unemployment in Bangladesh. BBS (2015) also observed that people who hold no education or primary education were involved more in informal employment. However, a significant number of formal job holders had secondary education. A recent BRAC study found that after getting skills based training, the income of youth increased six times which increased employment by 46 percentage points (Rahman 2017).

The inability to afford out-of-pocket expenses for secondary education came out as one of the major causes of dropout. The government has taken initiatives to provide tuition waiver and stipend for all girls of rural educational institutions, and free textbooks to all students throughout the country (Nath, 2016). Under the Secondary Education Quality and Access Enhancement Project (SEQAEP) both boys and girls from poor households are given stipends as well (World Bank, 2012). However, these initiatives seem to be inadequate to meet the educational expenses of a fifth of dropout students. During FGDs and interviews, many participants expressed that the guidebooks that are an essential part of education, needed to be bought from an open market, and that education couldn't be continued without private tutoring. Both are costly and difficult to afford for many. Such a situation is again linked to the quality of textbooks and the teaching-learning provisions in the classrooms. It is therefore important to improve the quality of classroom teaching so that students become interested in education, and they do not need to go for private tutoring or buy guidebooks.

Chapter 3

Conclusion & Recommendations

3.1 Conclusion

Completing secondary education helps people gain valuable knowledge and the skills needed to compete in modern job markets, and improve earning potential. It helps access to tertiary education and the opportunities of lifelong learning. In most cases there are multiple and complex reasons behind the decision to quit school. Leaving school may occur during primary education, at the time of transition from primary to secondary education, or during secondary education.

This study takes lessons from the two case studies representing countries very different in geography, and in their social and political-economic settings. In Uganda, the study considered primary to secondary transition failure; in Bangladesh it explored dropout at the secondary level.

The duration of primary education is seven years in Uganda, and five years in Bangladesh. In Uganda, over a fifth of seventh graders failed to make a transition from primary to secondary education with no gender variation. Nearly 95 percent of the primary completers were admitted into secondary education in Bangladesh. Dropout from secondary education occurs mostly at grade eight or nine in Bangladesh. In terms of primary education, Adjusted Net Enrollment Ratio (ANER), Bangladesh is ahead of Uganda (96 and 91 percent, respectively; UNESCO, 2016). This study showed that the children of Bangladesh stayed in school longer than those in Uganda. Generally, it can be concluded that the overall situation is somewhat better in Bangladesh. Repetition at primary level is common in Uganda (more than half of primary students repeat at least one year; over a third repeat more than once). Repetition is less common in Bangladesh. Urban-rural variation in Bangladesh, and regional variation in Uganda were also noticed. Other factors influencing transition failure or dropout were the age of students in their final year of primary education, age at the time of admission to secondary, and the level of the mothers' education.

Dropout or transition failure did not happen suddenly; and the reasons were linked. In both countries poverty was a prominent contributing factor in dropout or transition failure. This scenario can be observed in most Sub-Saharan and South Asian countries. A significant portion of young people stopped attending school when their families failed to pay for education expenses. Failure in examinations, scarcity of secondary educational institutions, and low quality of education were reasons specific to Uganda. In Bangladesh, loss of interest in school among boys was the second most important explanation for their dropout. Prevailing insecurity for girls, including the risk of sexual harassment, social practice and norms, stigmatization and traditional gender roles prompting early marriage and pregnancy prevented them from continuing education. The financial costs of education, such as for supplies, uniforms, festival fees etc. also factored into decisions to quit education and led the way to child labor.

The quality of education provided at primary and secondary levels was a major concern in both countries. Basic primary education alone does not provide access to the benefits of a technology-based, globalized job-market. Secondary education should help students prepare not only for accessing higher education, but also for modern workplaces through higher order skills and knowledge. Strong advocacy to raise awareness about the importance of secondary education and creating provision of employment for secondary graduates can largely incentivize secondary education. Many low income countries remain dependent on an agriculture based economy where a large portion of youth join an informal job market. Implementing government subsidized and cost effective technical and vocational education with a provision of job assurance can produce skilled workers with better pay, and role models for those who are at risk of dropout. Improvement of law and order in countries to ensure women's safe movement can also greatly support women's education.

Ensuring that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes by 2030, is one of the targets of the SDGs. To achieve this, Bangladesh and Uganda may have to take different paths. Though the hurdles in accessing and continuing secondary education are found to be similar, because of varying demographic structures each country will pursue the challenge quite differently. According to UN estimates and projections, the secondary school age population will increase by 50 percent in Uganda between 2015 and 2030. In Bangladesh, in the same period, the secondary school age population is expected to decline by nine percent. Countries like Uganda and Bangladesh have to invest resources in secondary education commensurate with their specific demographic realities. To curb the problem of transition failure and dropout, the countries need to focus on creating affordable secondary education provision for all sections of society, and across all parts of the country. Finally, there is no alternative to ensuring quality, both in primary and secondary education levels. Given the state of socio-economic development, and in order to respond to human resource needs of the country, creating provision and popularizing technical and vocational education is a viable option.

3.2 Recommendations

The following are the recommendations based on the findings of this study.

1. Since affordability determines the student transition to, and dropout from secondary education, incentive schemes should be devised to address the needs of potential transition failure and dropout. Provision of secondary education should be affordable not only for a privileged section of society, but also for all.

2. Regional and urban-rural disparities were found to be key influences in secondary transition failure and dropout. This could be addressed by creating more attractive provision of secondary education in rural, underserved, remote and/or hard to reach areas. Efforts to make an equitable distribution of secondary schooling based on the existing and potential numbers of students could be an effective option. If schools are established privately, provisions of subsidies/stipends for poor families in the area should be kept so that they can access secondary education at affordable costs.
3. The distance between home and school is a key issue for girls' secondary school access and continuation. Larger distances incurs extra transport costs, and creates security concerns, and potentially more harassment of young girls on the way to school. Communities with the help of local administrative bodies should be mobilized to facilitate girls' education and counter harassment.
4. Initiatives are needed to admit children in primary education at the officially determined age to improve classroom teaching and learning. By preventing repetition at primary level this would ensure students smooth transition from primary to secondary education, and prevent secondary dropout. Parents, schools and local education authorities should be aware of, and encourage (and possibly incentivize) age-appropriate admissions.
5. Child labor is prohibited by laws in both countries, but still practiced widely and contributes to dropout and transition failure. In a sense, it is beyond the scope of the education sector to address it properly, but education authorities can create attractive education provisions for these children so return to school. Anti-child labor awareness needs to raised, and laws need to be enforced against those who employ children in their farms and industries. Provisions for a mid-day meal, and stipends for disadvantaged students (instead of all) can play a vital role in increasing enrollment and retention in secondary schools and improve the overall quality of education.
6. The age of marriage is mentioned in the law, but is often not strictly followed or enforced. Marriage registrars and law enforcing agencies need further coordination to reduce early marriage. Female stipend programs like FSSP in Bangladesh can help reduce early marriage and drop out by imposing conditions. Awareness building programs can be initiated in the communities to help people fully understand the issues and drawbacks of early marriage and to obey the law. Teachers can introduce school based initiatives like discussion programs, motivational sessions, etc. Counseling for female students at risk of dropout due to marriage and their parents is also important. Teachers can play a strong role in motivating students to continue education. NGOs and government should work together to educate adults and youth about the negative consequences of early marriage.

7. Schools should be encouraged to open technical and vocational sections. Secondary level technical and vocational education is not popular and may be very limited. Initiatives should be implemented for its expansion, and to make it popular among students, parents and teachers. Creating job opportunities after technical and vocational education can incentivize students to take such courses. Inclusion of modern technologies, and reducing the cost or providing a stipend for such education can attract students to this sector. In this way, youth involvement in the informal economy can be reduced, and individuals equipped with modern technical knowledge and skills can be trained and encouraged. The country's socio-economic and demographic composition needs to be considered in preparing the education policy and human resource development plan.
8. A strategy of strong community-based advocacy can be implemented in line with the fourth SDG. The value of education in lives and its linkage with other aspects of socio-economic development need to spread. Common people should be aware of their rights to education and realize both short and long term benefits of receiving secondary education. Raising awareness of the often negative impact of social norms and gender roles is needed.
9. Teacher qualifications, quality and professional commitment are preconditions for quality education. It is important to ensure higher standards of qualification for teachers and high quality training. Preferably a bachelor's degree or a minimum of a post-secondary degree followed by a one or two year teaching degree should be mandatory. Teacher motivation and commitment also needs to be improved by providing teachers a career path and adequate remuneration. Proper monitoring is crucial to ensure teacher attendance and quality practice in classrooms. Highly motivated teachers can improve the school environment and play a vital role in student retention.
10. In countries where students are dependent on rote learning, guidebooks and private tutoring, the quality of classroom teaching and learning needs to be improved. Initiatives should be taken to use modern technology in classroom teaching. Schools can offer special classes to those who need such support. Strong monitoring from local education authorities is also important.

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BRAC is an international NGO promoting the reduction of poverty through cyclic intervention addressing the multidimensional factors that influence an individual remaining in poverty. Brac is a global leader in microfinance and a comprehensive integrative approach using health, education, and livelihoods to mitigate and reduce poverty in the global south.

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world innovation summit for education

مؤتمر القمة العالمي للابتكار في التعليم

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The World Innovation Summit for Education was established by Qatar Foundation in 2009 under the leadership of its Chairperson, Her Highness Sheikha Moza bint Nasser. WISE is an international, multi-sectoral platform for creative, evidence-based thinking, debate, and purposeful action toward building the future of education. Through the biennial summit, collaborative research and a range of on-going programs, WISE is a global reference in new approaches to education.

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Disclaimer

The views and opinions in this publication are solely those of the authors. Errors and omissions remain the responsibility of the authors.

Annexes

Region	Gender		Year		All
	Male	Female	2014	2015	
Central	25.8	25.1	25.4	25.5	25.4
Eastern	22.2	23.8	22.8	23.1	23.0
Northern	23.4	22.8	22.8	23.4	23.1
Western	23.1	22.7	23.5	22.4	22.9
Kampala	5.5	5.6	5.5	5.6	5.6
Total	100.0	100.0	100.0	100.0	100.0

Annex 1. Percentage distribution of students by region, gender and year of reaching at grade seven, Uganda

Age group	Gender		Year		All
	Male	Female	2014	2015	
12-15	33.3	37.8	23.7	47.0	35.6
16-17	44.6	45.8	50.4	40.2	45.1
18-22	22.1	16.4	25.9	12.8	19.3
Total	100.0	100.0	100.0	100.0	100.0
Mean (years)	16.3	16.0	16.6	15.6	16.1

Annex 2. Percentage distribution of students by age group, gender and year of reaching at grade seven, Uganda

Mothers' education	Gender		Year		All
	Male	Female	2014	2015	
Nil	22.9	21.1	20.7	23.2	22.0
Grades I-V	25.6	25.0	28.2	22.5	25.3
Grades VI-VII	26.9	29.7	26.6	30.0	28.3
Grades VIII+	24.6	24.2	24.5	24.3	24.4
Total	100.0	100.0	100.0	100.0	100.0
Mean (years)	5.3	5.5	5.4	5.4	5.4

Annex 3. Percentage distribution of students by mothers' education, gender and year of reaching at grade seven, Uganda

Fathers' education	Gender		Year		All
	Male	Female	2014	2015	
Nil	9.3	8.3	8.2	9.4	8.8
Grades I-V	18.8	18.6	19.2	18.2	18.7
Grades VI-VII	29.3	33.8	31.5	31.5	31.5
Grades VIII+	42.6	39.3	41.1	40.9	41.0
Total	100.0	100.0	100.0	100.0	100.0
Mean (years)	7.5	7.4	7.5	7.4	7.4

Annex 4. Percentage distribution of students by fathers' education, gender and year of reaching at grade seven, Uganda

Region	Mothers passed away	Fathers passed away	Both passed away	At least one alive	Both alive
Gender					
Male	8.2	18.1	3.9	18.3	77.8
Female	6.2	15.8	3.1	15.5	81.4
Year					
2014	7.9	17.2	3.6	17.7	78.7
2015	6.5	16.7	3.4	16.2	80.4
Region					
Central	7.1	20.2	4.5	18.1	77.4
Eastern	4.1	10.0	1.6	10.5	87.9
Northern	10.2	20.6	4.8	21.1	74.1
Western	8.0	16.8	3.5	17.9	78.6
Kampala	3.8	16.0	1.9	16.0	82.1
All	7.2	17.0	3.5	16.9	79.6

Annex 5. Percentage of students whose parents passed away by region, Uganda

Years repetition in Primary	Gender		Year		All
	Male	Female	2014	2015	
Nil	49.1	47.1	49.3	47.0	48.2
One	31.2	35.0	32.5	33.7	33.1
Two	14.3	13.2	13.9	13.6	13.7
Three +	5.4	4.7	4.3	5.7	5.0
Total	100.0	100.0	100.0	100.0	100.0

Annex 6. Percentage distribution of students by years repeated at primary level, gender and year of reaching at grade seven, Uganda

Result in PLE	Gender		Year		All
	Male	Female	2014	2015	
1 st division	15.8	9.5	15.1	10.4	12.7
2 nd division	50.3	48.6	51.8	47.2	49.4
3 rd division	23.4	28.9	25.3	26.9	26.1
4 th division	7.4	9.7	5.8	11.2	8.6
Fail	3.1	3.3	2.0	4.3	3.2
Total	100.0	100.0	100.0	100.0	100.0

Annex 7. Percentage distribution of students by PLE result, gender and year of reaching at grade seven, Uganda

Year of completion	Gender			Level of significance
	Male	Female	Both	
2014	19.0	13.7	16.4	p<0.05
2015	26.1	26.5	26.3	ns
All	22.6	20.3	21.4	ns
Level of significance	p<0.01	p<0.001	p<0.001	

Annex 8. Percentage of students who failed to make a transition to secondary education by year of reaching at the final year of primary and gender, Uganda

Region	Gender			Year			All
	Male	Female	Level of significance	2014	2015	Level of significance	
Central	21.0	22.8	ns	19.0	24.6	ns	21.9
Eastern	24.4	19.1	ns	13.6	29.3	p<0.001	21.7
Northern	33.8	24.5	p<0.05	25.4	32.9	ns	29.3
Western	16.2	19.1	ns	11.0	24.3	p<0.001	17.6
Kampala	1.9	1.9	ns	2.0	1.8	ns	1.9
Level of significance	p<0.001	p<0.01		p<0.001	p<0.001		p<0.001

Annex 9. Percentage of students who failed to make a transition to secondary education by region, gender and year of reaching at the final year of primary, Uganda

Age group (in year)	Gender		Year		All
	Male	Female	2014	2015	
12-15	11.3	12.4	6.8	14.3	11.9
16-17	21.9	20.6	14.1	29.9	21.3
18-22	41.7	37.7	29.9	59.7	40.0
Level of significance	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001

Annex 10. Percentage of students who failed to make a transition to secondary education by age group, gender and year of reaching at the final year of primary, Uganda

Mothers' education	Male		Year		All
	Male	Female	2014	2015	
Nil	32.2	31.0	24.5	37.7	31.6
Grades I-V	25.9	23.3	16.7	34.1	24.6
Grades VI-VII	20.9	18.3	17.7	21.1	19.6
Grades VIII+	6.1	7.7	3.6	10.0	6.9
Level of significance	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001

Annex 11. Percentage of students who failed to make a transition to secondary education by mothers' education, gender and year of reaching at the final year of primary, Uganda

Fathers education	Gender		Year		All
	Male	Female	2014	2015	
Nil	44.6	26.8	27.3	43.9	36.4
Grades I-V	33.6	30.2	28.7	35.2	31.9
Grades VI-VII	19.1	27.1	17.0	29.4	23.3
Grades VIII+	10.1	9.7	6.5	13.2	9.9
Level of significance	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001

Annex 12. Percentage of students who failed to make a transition to secondary education by fathers' education, gender and year of reaching at the final year of primary, Uganda

Parental alive status	Gender		Year		All
	Male	Female	2014	2015	
Mothers					
<i>Alive</i>	21.5	19.9	15.5	25.7	20.7
<i>Not alive</i>	32.1	25.9	26.0	33.3	29.4
<i>Level of significance</i>	p<0.05	ns	p<0.05	ns	p<0.05
Fathers					
<i>Alive</i>	20.6	20.6	15.6	25.4	20.6
<i>Not alive</i>	32.2	18.4	20.9	30.6	25.8
<i>Level of significance</i>	p<0.01	ns	ns	ns	p<0.05

Annex 13. Percentage of students who failed to make a transition to secondary education by parental alive status, gender and year of reaching at the final year of primary, Uganda

Parents' alive status	Gender		Year		All
	Male	Female	2014	2015	
Both alive	19.8	20.6	14.9	25.1	20.2
At least one alive	32.4	16.1	19.9	30.3	25.0
Both death	32.4	31.0	30.3	33.3	31.8
Level of significance	p<0.01	ns	p<0.05	ns	p<0.05

Annex 14. Percentage of students who failed to make a transition to secondary education by fathers' education, gender and year of reaching at the final year of primary, Uganda

Years repeated at primary	Gender		Year		All
	Male	Female	2014	2015	
Nil	12.3	10.1	10.4	12.0	11.2
One	28.7	24.2	17.5	34.5	26.3
Two	37.2	28.0	24.6	40.9	32.8
Three +	42.3	72.7	50.0	60.7	56.2
Level of significance	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001

Annex 15. Percentage of students who failed to make a transition to secondary education by number of year repeated at primary, gender and year of reaching at the final year of primary, Uganda

Variables	Measurement
Dependent	
Transition failure	1 = failed to transit, 0 = continued to secondary
Explanatory	
Region	1 = Kampala, 2 = Central, 3 = Eastern, 4 = Northern, 5 = Western
Gender	1 = male, 2 = female
Age of student	1 = 12-15 years, 2 = 16-17 years, 3 = 18-22 years
Fathers' education	0 = nil, 1 = grades I-V, 2 = grades VI-VII, 3 = grades VIII+
Mothers' education	0 = nil, 1 = grades I-V, 2 = grades VI-VII, 3 = grades VIII+
Repletion in primary	Nil to 3+, years repeated at primary level
Year in grade VII	1 = 2014, 2 = 2015

Annex 16. Measurement variables used in multivariate regression analysis, Uganda

Year	Grades					Total
	Six	Seven	Eight	Nine	Ten	
2008	2.1 (25.2)	1.9 (22.4)	1.8 (20.8)	1.5 (17.2)	1.2 (14.5)	8.5 (100.0)
2010	2.4 (25.4)	2.2 (23.1)	1.8 (19.4)	1.6 (17.2)	1.4 (15.0)	9.4 (100.0)
2012	2.6 (26.5)	2.2 (22.7)	2.1 (21.5)	1.6 (15.8)	1.3 (13.5)	9.8 (100.0)
2014	2.9 (26.0)	2.7 (23.8)	2.4 (21.1)	1.8 (15.8)	1.5 (13.3)	11.2 (100.0)
2015	3.0 (25.4)	2.7 (23.2)	2.5 (21.6)	1.9 (16.2)	1.6 (13.7)	11.8 (100.0)

Annex 17. Distribution of secondary school students by year and grades, Bangladesh: 2008 to 2015

General and madrasa streams together. Numbers are in million; figures in parentheses indicate percentage distribution.

Source: BANBEIS (2009, 2011, 2013, 2015, 2016)

Age of admission	Residence		All
	Rural	Urban	
9-10	5.4	5.4	5.4
11	24.2	23.8	24.1
12	35.5	37.5	36.0
13	20.5	20.1	20.4
14	8.5	8.4	8.5
15-17	6.0	4.8	5.7
Total	100.0	100.0	100.0

Annex 18. Percentage distribution of students, by age of admission and residence, Bangladesh

Level of Education	Fathers' education			Mothers' education		
	Rural	Urban	All	Rural	Urban	All
Nil	37.1	24.8	34.3	32.8	24.8	31.0
Grades I-IV	16.8	16.8	16.8	19.5	15.3	18.5
Grades V-IX	34.7	31.8	34.1	41.6	42.7	41.8
Grades X+	11.4	26.6	14.8	6.1	17.3	8.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Annex 19. Percentage distribution of students, by level of parental education and residence, Bangladesh

Food security status	Residence		
	Rural	Urban	All
Always in deficit	4.5	4.0	4.4
Sometimes in deficit	20.7	13.9	19.2
Breakeven	40.1	37.3	39.5
Surplus	34.7	44.7	37.0
Total	100.0	100.0	100.0

Annex 20. Percentage distribution of students, by yearly food security status of household and residence, Bangladesh

		Current enrollment status			Total
		Enrolled	Dropped out	Completed	
Gender	Male	65.6	9.2	25.2	100.0
	Female	60.6	18.7	20.7	100.0
Residence	Rural	63.1	15.3	21.6	100.0
	Urban	61.2	12.4	26.4	100.0
	Both	62.7	14.6	22.7	100.0

Annex 21. Percentage distribution of people aged ten to twenty years, by current enrollment status, gender and residence, Bangladesh

Year of admission	Current enrollment status			Total
	Enrolled	Dropped out	Completed	
2008	0.0	25.8	74.2	100.0
2009	0.7	27.6	71.7	100.0
2010	3.2	25.1	71.7	100.0
2011	9.5	22.8	67.7	100.0
2012	78.6	18.1	3.3	100.0
2013	82.6	16.9	0.5	100.0
2014	89.5	10.5	0.0	100.0
2015	96.3	3.7	0.0	100.0
2016	97.9	2.1	0.0	100.0
All	62.7	14.6	22.7	100.0

Annex 22. Percentage distribution of people aged ten to 20 years by current enrollment status, year of admission in grade six, Bangladesh

Year of admission	Gender	Current enrollment status			Total
		Enrolled	Dropped out	Completed	
2010 or before	Male	2.5	12.8	84.6	100.0
	Female	0.9	35.0	64.0	100.0
	Both	1.6	26.1	72.3	100.0
2011 or after	Male	80.8	8.4	10.8	100.0
	Female	77.2	14.2	8.6	100.0
	Both	78.8	11.6	9.6	100.0

Annex 23. Percentage distribution of people aged ten to 20 years by current enrollment status, year of admission in grade six and gender, Bangladesh

Year of admission	Residence	Current enrollment status			Total
		Enrolled	Dropped out	Completed	
2010 or before	Rural	1.9	28.1	70.1	100.0
	Urban	0.6	20.2	79.2	100.0
	Both	1.6	26.1	72.3	100.0
2011 or after	Rural	78.5	12.1	9.4	100.0
	Urban	79.8	10.0	10.2	100.0
	Both	78.8	11.6	9.6	100.0
Overall		62.7	14.6	22.7	100.0

Annex 24. Percentage distribution of people aged ten to 20 years by current enrollment status, year of admission in grade six and residence, Bangladesh

Age (in years)	Year of admission		Gender		Residence		All
	2010 or before	2011 or after	Male	Female	Rural	Urban	
<10	20.2	7.5	14.1	11.9	13.9	8.2	12.7
11	18.1	3.6	4.5	9.8	7.5	7.6	7.5
12	28.9	4.7	5.8	13.2	10.9	8.1	10.2
13	33.1	14.5	11.7	22.3	17.4	17.2	17.2
14	50.0	29.1	14.7	43.8	33.5	23.7	31.2
15+	-	40.1	24.6	54.8	41.4	34.7	40.1
Significance	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001

Annex 25. Dropout rate by age of admission at grade six, year of admission, gender and residence, Bangladesh

Father's Education	Gender			Residence			All
	Male	Female	Significance	Rural	Urban	Significance	
Nil	10.2	23.4	p<0.001	16.9	20.9	p<0.10	17.6
Grades I-IV	11.9	20.2	p<0.01	16.7	16.9	ns	16.7
Grades V-IX	8.7	17.5	p<0.001	14.4	11.1	p<0.10	13.7
Grades X+	5.2	7.5	ns	8.8	3.0	p<0.001	6.5
Significance	p<0.05	p<0.001		p<0.01	p<0.001		p<0.001

ns = not significant at p = 0.05

Annex 26. Dropout rate, by fathers' education, gender and residence, Bangladesh

Mother's Education	Gender			Residence			All
	Male	Female	Significance	Rural	Urban	Significance	
Nil	11.9	29.3	p<0.001	21.8	22.2	ns	21.9
Grades I-IV	14.5	19.8	p<0.05	18.0	15.2	ns	17.4
Grades V-IX	6.7	12.6	p<0.001	10.2	9.6	ns	10.1
Grades X+	1.3	6.3	p<0.05	5.4	2.6	ns	4.1
Significance	p<0.001	p<0.001		p<0.001	p<0.001		p<0.001

ns = not significant at p = 0.05

Annex 27. Dropout rate, by mothers' education, gender and residence, Bangladesh

Fathers education	Year of admission in grade six		All	Significance
	2010 or earlier	2011 or later		
Nil	36.7	13.6	17.6	p<0.001
Grades I-IV	38.1	13.5	16.7	p<0.001
Grades V-IX	22.6	11.3	13.7	p<0.001
Grades X+	12.8	4.3	6.5	p<0.001
Significance	p<0.001	p<0.001	p<0.001	

Annex 28. Dropout rate by fathers' education and year of admission in grade six, Bangladesh

Mothers education	Year of admission in grade six		All	Significance
	2010 or earlier	2011 or later		
Nil	35.6	18.4	21.9	p<0.001
Grades I-IV	36.8	12.7	17.4	p<0.001
Grades V-IX	18.4	7.9	10.1	p<0.001
Grades X+	10.8	2.1	4.1	p<0.001
Significance	p<0.001	p<0.001	p<0.001	

Annex 29. Dropout rate by mothers' education and year of admission in grade six, Bangladesh

Food security status	Gender		Residence		All
	Male	Female	Rural	Urban	
Always in deficit	17.1	18.2	15.6	24.4	17.7
Sometimes in deficit	10.6	18.3	15.1	14.3	15.0
Breakeven	9.6	20.4	15.9	14.2	15.6
Surplus	7.3	17.4	14.7	9.2	13.1
Significance	p<0.05	ns	ns	p<0.001	ns

ns = not significant at p = 0.05

Annex 30. Dropout rate, by yearly food security status, gender, and residence, Bangladesh

Food security status	Year of admission in grade six		All	Significance
	2010 or earlier	2011 or later		
Always in deficit	20.5	16.3	17.7	ns
Sometimes in deficit	21.7	13.6	15.0	p<0.01
Breakeven	32.8	11.3	15.6	p<0.001
Surplus	22.4	10.4	13.1	p<0.001
Significance	p<0.01	ns	ns	

Annex 31. Dropout rate by yearly food security status and year of admission in grade six, Bangladesh

Religion	Year of admission in grade six		All	Significance
	2010 or earlier	2011 or later		
Muslim	26.9	11.8	14.9	p<0.001
Non-Muslim	20.9	10.9	13.0	p<0.001
Both	26.1	11.6	14.6	p<0.001
Significance	ns	ns	ns	

Annex 32. Dropout rate by religion and year of admission in grade six, Bangladesh

Variables	Measurement
Residence	1 = rural, 2 = urban
Gender	1 = male, 2 = female
Age at grade VI	1 = <11 years, 2 = 12-13 years, 3 = 14 years+
Fathers' education	0 = Nil, 1 = grades I-IV, 2 = grades V-IX, 3 = grades X+
Mothers' education	0 = Nil, 1 = grades I-IV, 2 = grades V-IX, 3 = grades X+
Religion	1 = Muslim, 2 = non-Muslim
Household food security status	1 = deficit, 2 = breakeven, 3 = surplus
Year of secondary enrollment	1 = 2011 or after, 2 = 2010 or before

Annex 33. Measurement of explanatory variables used in regression analysis, Bangladesh

Explanatory variable	Regression coefficient	Odds ratio	95% CI of odds ratio	Level of significance
Gender				
Male	0	1.000		
Female	1.334	3.797	2.603 – 5.538	p<0.001
Age at grade six				
<11 years	0	1.000		
12-13 years	0.725	2.065	1.448 – 2.943	p<0.001
14 years+	1.351	3.861	1.777 – 8.388	p<0.001
Mothers' education				
Nil	0	1.000		
Grades I-IV	0.067	1.069	0.685 – 1.668	ns
Grades V-IX	-0.822	0.439	0.298 – 0.649	p<0.001
Grades X+	-1.420	0.242	0.110 – 0.531	p<0.001
Constant	-2.016	0.133		p<0.001
-2 log likelihood	850.600			
Cox & Snell R ²	0.127			
Nagelkerke R ²	0.187			

Annex 34. Result of logistic regression analysis predicting dropout of secondary students who enrolled in school in 2010 or before (model 2), Bangladesh

Explanatory variable	Regression coefficient	Odds ratio	95% CI of odds ratio	Level of significance
Gender				
Male	0	1.000		
Female	0.714	2.042	1.602 – 2.603	p<0.001
Age at grade six				
<11 years	0	1.000		
12-13 years	0.680	1.975	1.354 – 2.880	p<0.001
14 years+	2.298	9.958	6.749 – 14.695	p<0.001
Mothers' education				
Nil	0	1.000		
Grades I-IV	-0.223	0.800	0.592 – 1.082	ns
Grades V-IX	-0.742	0.476	0.364 – 0.622	p<0.001
Grades X+	-1.728	0.178	0.079 – 0.399	p<0.001
Constant	-3.102	0.045		p<0.001
-2 log likelihood	2015.792			
Cox & Snell R ²	0.098			
Nagelkerke R ²	0.192			

Annex 35. Result of logistic regression analysis predicting dropout of secondary students who enrolled in school in 2011 or after (model 3), Bangladesh

Marital situation of dropout females	Residence		Year of admission		All
	Rural	Urban	2010 or before	2011 or after	
Dropped out for marriage	49.1	49.2	40.8	54.7	49.2
Married after dropping out	27.6	31.1	38.0	21.7	28.2
Dropped out but unmarried	23.3	19.7	21.2	23.6	22.6
Total	100.0	100.0	100.0	100.0	100.0

Annex 36. Percentage distribution of dropped out females, by marital status, residence, and year of admission, Bangladesh

Explanatory variable	Regression coefficient	Odds ratio	95 percent CI of odds ratio	Level of significance
Age at grade six				
<11 years	0	1.000		
12-13 years	1.636	5.133	2.532 – 10.403	p<0.001
14 years+	1.740	5.699	2.736 – 11.871	p<0.001
Religion				
Non-Muslim	0	1.000		
Muslim	1.039	2.828	1.377 – 5.808	p<0.001
Food security status				
Deficit	0	1.000		
Breakeven	-0.161	0.851	0.508 – 1.427	ns
Surplus	1.119	3.062	1.766 – 5.311	p<0.001
Constant	-2.765	0.063		p<0.001
-2 log likelihood	522.144			
Cox & Snell R ²	0.149			
Nagelkerke R ²	0.199			

ns = not significant at p = 0.05

Annex 37. Result of logistic regression analysis predicting wedding as reason of dropout from secondary education, Bangladesh (model 4)

Explanatory variable	Regression coefficient	Odds ratio	95 percent CI of odds ratio	Level of significance
Age at grade six				
<11 years	0	1.000		
12-13 years	1.083	2.953	1.576 – 5.533	p<0.001
14 years+	1.527	4.604	2.266 – 9.353	p<0.001
Religion				
Non-Muslim	0	1.000		
Muslim	1.467	4.335	2.224 – 8.451	p<0.001
Food security status				
Deficit	0	1.000		
Breakeven	0.589	1.803	1.038 – 3.130	p<0.05
Surplus	1.719	5.581	2.783 – 11.192	p<0.001
Constant	-1.801	0.165		p<0.001
-2 log likelihood	400.185			
Cox & Snell R ²	0.143			
Nagelkerke R ²	0.215			

ns = not significant at p = 0.05

Annex 38. Result of logistic regression analysis predicting wedding of female dropout from secondary education, Bangladesh (model 5)

Explanatory variable	Regression coefficient	Odds ratio	95 percent CI of odds ratio	Level of significance
Gender				
Male	0	1.000		
Female	2.507	12.268	7.814 – 19.261	p<0.001
Age at grade six				
<11 years	0	1.000		
12-13 years	-0.727	0.483	0.259 – 0.901	p<0.05
14 years+	-0.260	0.771	0.405 – 1.470	ns
Constant	-1.784			p<0.001
-2 log likelihood	492.141			
Cox & Snell R ²	0.212			
Nagelkerke R ²	0.322			

ns = not significant at p = 0.05

Annex 39. Results of logistic regression analysis predicting 'students' lack of interest in study' as reason of dropout, Bangladesh (model 6)

Explanatory variable	Regression coefficient	Odds ratio	95 percent CI of odds ratio	Level of significance
Religion				
Muslim	0	1.000		
Non-Muslim	0.957	2.605	1.510 – 4.494	p<0.001
Food security status				
Deficit	0	1.000		
Breakeven	-0.304	0.738	0.461 – 1.181	ns
Surplus	-1.553	0.212	0.111 – 0.405	p<0.001
Fathers' education				
Nil	0	1.000		
Grades I-IV	-0.924	0.397	0.218 – 0.723	p<0.01
Grades V-IX	-0.771	0.463	0.280 – 0.765	p<0.01
Grades X+	-2.764	0.063	0.008 – 0.509	p<0.01
Constant	-0.521			p<0.001
-2 log likelihood	529.245			
Cox & Snell R ²	0.113			
Nagelkerke R ²	0.178			

ns = not significant at p = 0.05

Annex 40. Results of logistic regression analysis predicting 'inability to bear educational cost' as reason of dropout, Bangladesh (model 7)

Advice provider	Gender			Residence			All
	Male	Female	Significance	Rural	Urban	Significance	
Teachers	42.2	47.0	ns	45.5	46.2	ns	45.7
SMC members	6.6	12.8	p<0.05	11.1	10.4	ns	11.1
Relatives	71.1	53.4	p<0.001	58.8	55.4	ns	58.2
Any	80.7	70.6	p<0.01	74.3	69.5	ns	73.4

ns = not significant at p = 0.05

Annex 41. Percentage of dropout students who were advised to go back to their schools by type of advice provider, residence, and gender, Bangladesh

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