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# **NEW FORMS OF ADOLESCENT VOICE AND AGENCY IN BANGLADESH THROUGH THE USE OF MOBILE PHONES AND ICT**

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**REPORT FOR GAGE RREF**

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## List of Acronyms

A2i	Access to Information programme, Prime Minister’s Office
ADB	Asian Development Bank
AQA	Assessment and Qualifications Alliance
BANBEIS	Bangladesh Bureau of Educational Information and Statistics
BIGD	Brac Institute of Governance and Development
BBS	Bangladesh Bureau of Statistics
BDHS	Bangladesh Demographic and Health Survey
BTRC	Bangladesh Telecommunication Regulatory Commission
CAIE	Cambridge Assessment International Education
CEO	Chief Executive Officer
COVID-19	Coronavirus disease of 2019
DSHE	Directorate of Secondary and Higher Education
FGD	Focus Group Discussion
GoB	Government of Bangladesh
GPE	Global Partnership for Education
HH	Household
HD	High-definition
IB	International Baccalaureate
ICEF	International Children's Emergency Fund
ICT	Information and communications technology
IDI	In-depth interviews

JSC	Junior School Certificate
LMIC	Low- and Middle-income Countries
MDGs	Millennium Development Goals
MoE	Ministry of Education
MoPME	Ministry of Primary and Mass Education
MPO	Monthly Pay Order
NCTB	National Curriculum Textbook Board
NGO	Non-governmental organisation
NGSS	Non-government Secondary School
PBUH	Peace be upon him - always used after taking the name of Prophet Muhammad
PIU	Problematic Internet Use
PMO	Prime Minister's Office
PSC	Primary School Certificate
PTM	Parents-Teachers Meeting
SDGs	Sustainable Development Goals
SIM	Subscriber Identification Module
SRH	Sexual and reproductive health
SSC	Secondary School Certificate
TV	Television
UN	United Nations
UNB	United News of Bangladesh
UNDP	United Nations Development Program

UNICEF	United Nations International Children's Emergency Fund
WB	World Bank
Wi-Fi	Wireless Fidelity

## Glossary

<i>Ayyame- Jahiliyat</i>	Dark Age in Islam
<i>hujur</i>	Islam religion teacher
<i>Nirapod Shorok Andolon</i>	Safe Roads Movement
<i>ochena balok</i>	unknown boy
<i>por-purush</i>	unknown/ non-kin men
<i>purdah</i>	veiling
<i>waz</i>	religious preaching on Islam mainly by men

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## Executive Summary

The rapid proliferation of digital technology that has taken over the world has also reached Bangladesh. This is evidenced by the increasing number of internet users from 31.1 million in February 2012 (BTRC 2012) to 110.8 million in October 2020 (BTRC 2020). However, access to information and communications technology (ICT) remains unequal, with 38% fewer internet users in rural areas than in urban areas and 62% more male internet users than female across the country (UNB News, June 19, 2020). Evidence from GAGE research (Livingstone et al., 2017) shows that disparities in affordability, digital skills, online risks, and socioeconomic factors play an important role in the inequality in the provision of internet access and the availability of services and devices. Adolescents growing up in this rapidly digitizing world are in a unique position of having their life experiences and opinions shaped by technology; this unprecedented increase in connectivity with the outside world is changing adolescents' lived realities by overcoming normative boundaries. However, if the digital divides mentioned above are not bridged, they might deepen existing socio-economic divisions.

With these issues in mind, the objective of this research is to seek answers to the broad question, “what are the implications, both positive and negative, of mobile phone and internet use for adolescent voice and agency?” Here, we explore the difference in these implications between adolescent boys and girls, between adolescents of well-off and poorer families, and between adolescents living in Dhaka city and those in Cumilla, a more rural district. Moreover, we address voice and agency in terms of indicators that are relevant for Bangladeshi adolescents: developing relationships, accessing information that raises their voice and decision-making capacity, learning new skills, developing online risk recognition and mitigation skills and creating a sense of belonging to a larger virtual community. We also explore whether and how it is used to express opinions, organise, and build youth leadership. The study also seeks to address and understand the concerns of parents and teachers regarding risks such as cyberbullying, harassment, and the perceived social and moral degradation of the youth.

Our sample consists of 64 male and female school-going adolescents of Class Eight, who are mostly 14-year-olds. We conducted focus group discussions (FGDs) with adolescents from four types of schools: a mainstream English medium school in Dhaka, generally attended by children of high socioeconomic status; a mainstream Bengali medium school in Dhaka attended generally by children from middle-class families; a slum-based secondary school in Dhaka attended by children of lower-income groups; and a government secondary school in a rural area in Cumilla. In-depth interviews (IDIs) were also conducted with three adolescent boys and three adolescent girls selected from each FGD. Our respondents also included teachers and parents of students of Class Eight. Moreover, we observed cyber cafes and mobile data shops in two locations.

When considering ownership and access, we found that access to mobile phones is more equitable across class, location, and gender, but the quality of access varies. Notably, there are gender differences when it comes to the use of the mobile phone; girls from middle and poorer socio-economic groups and from rural areas are heavily restricted by parents in their use of phones. Access to internet varies by class. For example, adolescents from higher socio-economic groups have unlimited access to the internet because they have Wi-Fi at home and most places they visit.

We found that access to mobile phones and the internet, and consequently, information, has a strong impact on adolescent voice and agency, giving them a voice they did not have before, for instance in household decision making because of their access to information. Our research did not find disparities in access to information by class, gender, and location, although there is diversity in their use of this information. In terms of education, the internet gives adolescents access to ideas and reference materials that were not available before. Adolescents also learn new skills and engage with friends. Some participate in online movements that involve them in matters larger than themselves, which also provide them an arena to exercise their moral development, although there are some class differences here. However, regardless of class, the internet can ignite their aspirations for the future, for example, to set up their businesses.

Online risks were found to be common across all divides and while girls are vulnerable to threats of violence, boys are vulnerable too, for instance to sexual harassment or cyberbullying. We also found that certain adolescents develop personal agency to regulate their online behaviour and manage their online risks, and can themselves identify the negative impact of mobile and ICT use on their lives. Young adolescents' access to pornography seems to be easier than in the past across different socio-economic groups in both urban and rural contexts.

Overall, we found that adolescent voice and agency and a safe environment for mobile and internet use are influenced by the role of parents, schools, and government policies. Parental digital literacy needs to be ensured before they can play a more constructive role in guaranteeing that their children can safely avail the opportunity of the internet. They need to be educated about the positive links between education and internet use and understand that internet access is necessary for both their daughters and sons. Schools play an important role in enabling ICT use of students - introducing websites where adolescents can find help, encouraging internet use in conducting research, educating students about managing online risks, and finally supporting students who experience these online risks. Government policies have a role to play in ensuring that schools have both physical and human resources. The government's ICT policy and their introduction of computer labs and multi-media classrooms is a step in the right direction, but this has to be accompanied by comprehensive teacher training on ICT and its use in education. The government also has to institute stronger

measures that make it difficult for under-aged children to access age-inappropriate material and to protect them from online risks.

## 1. Introduction

*“The internet may be a different world in itself but it is merging with the real world more and more.”*

—Boy (14), Class Eight, rural school<sup>1</sup>

### ***The focus of the Study***

This paper sets out to understand the extent of change that has taken place among school-going boy and girl adolescents in Bangladesh in terms of their voice and agency through mobile phone and internet use. The fact that there has been a change is part of a global trend and certainly true of Bangladesh too. While there is some recent literature on adolescent mobile and internet use in Bangladesh, most have been around health and negative effects (Chowdhury et al., 2018; Ali & Hossain, 2019; Chandrima et al., 2020; Hassan et al., 2020), and there have not been any studies exploring changes in their voice and agency.

This is an important issue for Bangladesh for various reasons. For one thing, the Vision 2021 of the Bangladesh ruling party Awami League election manifesto highlighted the focus on building a ‘Digital Bangladesh’ as a development strategy that deliberately attempts to leverage information and communications technology (ICT) for poverty reduction and “transformation of the fate of all women and men of Bangladesh” (A2i Programme, PMO, 2011). This requires a population with digital literacy which prompted the government to introduce ICT as a mandatory subject and establish compulsory computer labs in secondary schools (discussed at length later). For another, the majority of the population is struggling to learn to use the internet in their adult life. Additionally, not everyone has equal access to the internet. The current generation of adolescents is one of the first generations to have grown up with this revolutionary technology. Therefore, not much is known about how it has changed the lives of adolescents or the digital divide amongst adolescents by sex, class, or location.

This report is based on the study of the ‘New Forms of Adolescent Voice and Agency in Bangladesh through the Use of Mobile Phones and ICT’. Gender & Adolescence: Global Evidence (GAGE) has worked extensively on the issue of adolescent capabilities. The GAGE framework deals with both the individual and the collective

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<sup>1</sup> The Bangladeshi schooling context is discussed in the Background chapter.

capabilities that underlie adolescent wellbeing and identifies the challenges that need to be overcome across six key capability sets or domains—education and learning, bodily integrity (including freedom from sexual and gender-based violence and child marriage), physical and reproductive health and nutrition, psychosocial wellbeing, voice and agency, and economic empowerment. This research is informed by GAGE’s framework of the domain of adolescent voice and agency that focuses on “the ability of adolescent girls to meaningfully participate in household, school and community life—which are key to them developing the skills required for political participation in adulthood” (GAGE consortium, 2017). Taking upon the different dimensions of the definition, in this research we want to explore whether and how mobile and internet use is enabling adolescents to overcome barriers to participation and increase their voice and agency. The arenas within which we want to explore their voice and agency gained through mobile phone and internet use are: developing relationships, accessing information that raises their voice and decision-making capacity, learning new skills, and creating a sense of belonging to a larger virtual community. We also want to explore whether and how it is used to express opinions, organize, and build youth leadership. At the same time, the research proposes to address the concerns of parents and teachers concerning the risks such as cyberbullying, harassment, or stalking and the perceived social and moral degradation of the youth. The study also sought to understand and explore adolescents’ risk recognition and mitigation skills. Thus, the broad central question of this research is, “what are the implications, both positive and negative, of mobile phone and internet use for adolescent voice and agency in Bangladesh?”

To address the digital divides that may exist between male and female adolescents, between adolescents of well-off and poor families, and between adolescents in urban and rural spaces, this research has been carried out amongst school-going male and female adolescents of different types of schools as a proxy for class in Dhaka city and a rural region (Cumilla).

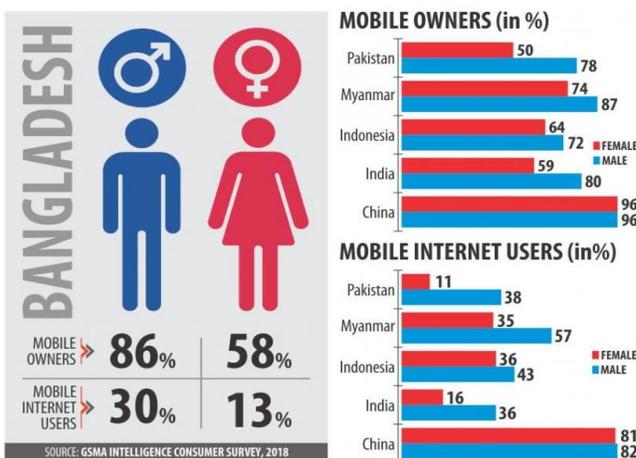
## **1.1 Study Context: Mobile Phone and Internet Access in Bangladesh**

Bangladesh has one of the world’s highest rates of mobile phone coverage. According to the Bangladesh Telecommunication Regulatory Commission (BTRC), at the end of April 2020, there were 162.920 million mobile subscribers in Bangladesh (UNB News June 19, 2020) in a population of 164 million people. The same source found that around 74% of the 15 to 65-year-old population in Bangladesh have mobile phones. Research on different South Asian countries (LIRNEasia, 2018; GSMA, 2019) shows that there is a gender gap in mobile phone ownership in Bangladesh, with 33-34% more men owning phones compared to women (The Daily Star, October 3, 2018; The Daily Star, March 8, 2019), second only to Pakistan, where the difference is 37%. But

the data also shows that the urban-rural gap in mobile phone ownership in Bangladesh is very low at seven percent.

With respect to internet coverage, findings from a 2018 study by LIRNEasia, an Asia Pacific-based think tank, showed that 60% of the population in Bangladesh has internet-enabled handsets (The Daily Star, October 3, 2018). BTRC data shows that in April 2020, the number of total internet users reached 101.18 million (UNB News, June 19, 2020) from 0.1 million internet subscribers in 2000. 62% of the population have access to the internet. In terms of only Facebook users, there were 33,713,000 users at the end of January 2020, at 20.5% penetration rate (Internet World Stats, 2020). This data pre-dates the COVID-19 pandemic which saw an exponential rise in social media usage. Thus, there is no doubt that Bangladesh has entered the digital age. However, like many other South Asian countries, there is a 38% urban-rural gap in internet use in Bangladesh, which is 48% in India. The gender gap in internet use was found to be markedly large in Bangladesh at 62% versus a mobile phone ownership gap of 33-34%. According to GSMA’s recently released Mobile Gender Gap Report 2019, 58% of adult women in Bangladesh own mobile phones of whom only 13% use the internet (The Daily Star, March 8, 2019; see Figure 1 below) in comparison to 86% men owning mobile phones and 30% using the internet. Although the two sources show different figures, the fact remains that there is a substantial gender gap in the use of the internet which is larger than the gap in mobile ownership. Commenting on this gender gap, the Telecom and ICT Minister stated, *“In many cases, parents are not unbiased to facilitate their boy and girl children. Sometimes, parents allow their 12-year-old son to use mobile phones, but girls will not be permitted to do so even when they are 18”* (The Daily Star, March 8, 2019).

Figure 1: Gender differences in mobile ownership and mobile internet use



Source: The Daily Star, March 08, 2019, <https://www.thedailystar.net/business/telecom/news/mobile-internet-use-women-far-behind-men-1711996>

One-fifth of the population in Bangladesh are adolescents (29.5 million in 2017), with 14.4 million girls and 15.1 million boys (Ainul et al., 2017). But the prevalence of adolescent use of mobile phones and internet services is very difficult to assess in Bangladesh since the mobile regulatory body BTRC regulations do not allow subscriber identification module (SIM) cards to be sold to users under the age of 18. Although young boys and girls may be using phones, they are registered in the names of others, and hence data and usage patterns are difficult to track. While research on adolescent use of mobile phone and the internet have used small research samples, it suggests that there is a high level of usage by adolescents and it is increasing day by day (Chowdhury et al., 2019; Mamun and Griffiths, 2019; Afrin et al., 2017). Various studies also found what it characterised as internet addiction among high school and university-going students (Afrin et al., 2017; Islam & Hossin, 2016; Karim & Nigar, 2014; Uddin et al., 2016).

In Bangladesh, the key focus of developing a ‘Digital Bangladesh’ has been the improvement of internet access to its citizens at minimal costs (Chandrima et al., 2020; Mamun et al., 2019; Uddin et al., 2016). One of the strategic priorities of Digital Bangladesh is to enable 21<sup>st</sup>-century education. Under this priority, the government set a goal to ensure digital literacy among all secondary school students by 2013, and all primary school students by 2021. Bangladesh Bureau of Educational Information and Statistics (BANBEIS) database (2017) reported that by 2017, 88.94% of secondary schools had computer facilities; 76.65% had an internet connection, 76.01% had multimedia facilities, 72.98% used a computer for official and academic purposes, and 36.43% secondary schools had their own websites (BANBEIS, 2017 in Hossain et al., 2019). That means that at least on paper, secondary school-going adolescent boys and girls, irrespective of their location and socio-economic status, have computer and internet facilities at school with some variation.

Access to the internet at the household level, however, may be different. A recent study conducted by the BRAC Institute of Governance and Development (BIGD) and the University of Malaya on 5,139 students (66% of whom were secondary school-going adolescents) in rural Bangladesh found that remedial measures in response to school closure due to COVID-19 included watching educational programmes on TV and the internet. Among them, 62% had access to TV, and 25% of those who had access watched the school programmes on TV. On the other hand, 30% had access to the internet, but only two percent watched educational programmes on the internet.

Ongoing GAGE Bangladesh COVID-19 research has shown that this is because of difficulties with connectivity, sharing of devices, and costs relating to mobile data (unpublished). Meanwhile, anecdotal evidence shows that Dhaka-based English medium school children did not lose a single day of school because of their ability to transition quickly into using ICT to hold classes (Asadullah, June 2020).

Another recent study by BIGD on digital access and digital literacy among 6,500 households in rural Bangladesh showed that 96% of households use mobile phones, but 41% have smartphone access (ownership plus access to other's handsets). About nine percent of households use either their own or someone else's computer (computer ownership is 2.4%); 50% have access to village computer shops. Moreover, 46% of the households are aware of what the internet is; 37% have internet connectivity (either broadband or mobile data or both); and 33% use the internet at least once a week (Shadat et. al, 2020). This survey further found that digital access has a significant positive impact on the digital skills level of the household. There is significant regional heterogeneity in digital access and digital literacy. There is also a strong and significant income effect on having better digital access and digital skills, and consequently, higher digital literacy. The age of the most digitally literate person in the household shows a negative impact on both digital skills and digital literacy, i.e. the younger the person is, the more digital skills s/he will have.

## **1.2 Research Rationale and Objective**

The GAGE evidence review of young adolescents and digital media (Livingstone et al., 2017) in low- and middle-income countries (LMIC) has found that the relationship between young adolescents and access to and use of digital media is varied in different contexts. The review found that the number of young adolescents going online has risen tremendously, particularly in high- and middle-income contexts. It is more likely that young adolescents in LMIC get access to digital media later in life than those in high-income countries and often the devices they use may not belong to them. They may only have very basic functional skills or they may not understand the online sphere. Gender inequalities exist in terms of internet access and the use of digital media. The gender gap is wider in LMICs, particularly for poorer girls or girls in rural areas. The review stated that while the potential of ICTs and digital media has recently been explicitly linked to the delivery of the new Sustainable Development Goals (SDGs), the spread of ICTs and digital media has also raised many concerns in terms of exacerbating forms of exclusion and amplifying pre-existing risks, or enabling

commercial exploitation. This is illustrated by the GAGE baseline research in Bangladesh which found that nearly a quarter of boys own mobile phones compared to only one in six girls, and boys are twice as likely to have used the internet as girls (Mohammed et al., 2019).

As the study context shows, there is extensive coverage of mobile phones and varied but significant penetration of the internet in rural and urban Bangladesh. This unprecedented increase in connectivity with the outside world is changing adolescents' lived realities by overcoming normative boundaries. In order to fully appreciate the significance of mobile phone and internet use by adolescents, one needs to be cognisant of the gendered social norms that guide females in Bangladesh at every stage of their life, shaping their voice and agency. Given the circumscribed nature of girls' lives in Bangladesh, the freedom offered by the internet is important, however, due to the control exercised by family members, their access is limited. Control over their lives passes on to their husbands and in-laws (Presley-Marshall and Stavrapoulou, 2017; Stavropolou et al., 2017; BBS, 2019; Ainul et al., 2017; Baird et al., 2019). This experience of adolescence may differ for girls by class or location, but the main principle of keeping them segregated from boys and under strict control is common across groups.

The introduction of mobile phones and internet use disrupts this control as connectivity to the outside world and members of the opposite sex no longer rely on actual physical mobility. The virtual space offers both boy and girl adolescents a space to meet, to make friends, to share information, to learn information that has the potential to strengthen their voice and enhance their skills from the confines of their physical space. It has the potential, on the one hand, to radically change long-held gender and social norms, and on the other to reinforce them.

With these issues in mind, the objective of this research is to seek answers to the broad question, "what are the implications, both positive and negative, of mobile phone and internet use for adolescent voice and agency?"

Based on the research, this paper address the question of how mobile phone and internet use and the effect on their voice and agency differs between adolescent boys and girls, between adolescents of well-off and poor families, and between adolescents living in Dhaka city and Cumilla.

Moreover, this paper addresses voice and agency in terms of indicators that are relevant and important for Bangladeshi adolescents, which may differ from global indicators of voice and agency. Thus, across class, sex, and location, this paper explores:

- **ownership and access to mobile phones and other devices and use of the internet:** Here we want to focus on any differences by gender, class, and location in ownership and access to different types of device and different types of internet (Wi-Fi and mobile data) in order to set the context within which the findings are explored.
- **extent to which the devices and internet enhance adolescents' opportunity to access information:** Access to devices may be very different for Bangladeshi adolescents compared to their access to the internet and thereby have an interesting effect on their opportunity to access information.
- **extent to which the devices and internet enhance adolescents' opportunity to learn new skills:** New skill-learning opportunity is limited for Bangladeshi adolescents and more so among females compared to males<sup>2</sup>. and we want to see how mobile phone and internet use has enabled them to learn new skills and the variation in the type of skills across the divides. This is assumed to increase the agency of the adolescents.
- **how and to what extent is the use of mobile phones and the internet enhancing their opportunity to build relationships with the opposite sex:** Friendships and relationships between the opposite sexes are discouraged in Bangladesh and we want to see how the use of mobile phone and internet use is enhancing the agency to overcome social barriers.
- **how and to what extent this information and skills enhance their opportunity to participate in a decision-making role in the household:** Indeed, as 14-year-old adolescents, they are not expected to have many decision-making roles in the Bangladeshi context, so any contribution to household decision-making, as a result of mobile and internet use can be seen as an enhancement in their voice and agency
- **how and to what extent this information and skills enhance their ability to recognise risks and mitigate them:** Managing online risks is seen here as an enhancement of the personal agency of adolescents and we want to see the variation of this agency across the divides.

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<sup>2</sup> Please see 'Skill Development in Bangladesh' ADB Brief No. 67, October 2016, for a detailed assessment.

- **how and to what extent the connectivity enhances their social contact and their feeling of belonging to a wider group (as opposed to being secluded) and builds foundations for participation in movements:** Adolescents', particularly girls', social circles are extremely limited. We want to capture whether mobile phone and internet use enhances their social engagement. Additionally, we want to see how wide their virtual community is, and finally whether being part of a virtual community engages them in movements that extend beyond their boundaries and strengthens their voice and agency.

## 2. Background

In this report, we will look into three aspects of the contexts within which we will attempt to situate our research study: the policy context, the normative context, and the schooling context.

### 2.1 ICT and Education Policy Context

The 2030 SDG Agenda by the United Nations (UN) has placed a great deal of importance on mitigating gender divides through the use of ICT. SDG4 aims at "ensuring inclusive and equitable quality of education and promoting lifelong learning opportunities for all" by 2030. The purpose is to create a skilled workforce and entrepreneurs for appropriate employment opportunities ([sdg4education2030.org/the-goal](http://sdg4education2030.org/the-goal)). In addition, SDG5 aims at "achieving gender equality and empowering all women and girls" and one of the major targets is to ensure the enhanced use of technology, specifically ICTs, to promote women's empowerment (Zaman & Uzzaman, 2015) This focus on the integration of ICT in education and particularly the education of girls by the Government of Bangladesh (GoB) is expected to contribute to Bangladesh achieving SDG4 and SDG5.

In 2008, the Awami League launched a Perspective Plan entitled Vision 2021 for Bangladesh in which "Digital Bangladesh" was a specific strategic goal. To accomplish this stated goal, ICT became an integral part of the government's plans. The overall objective was to develop Bangladesh's ICT sector to improve the country's socio-economic development and achieve higher living standards (Shamim and Raihan, 2015). Initially formulated in 2002, a revised National ICT Policy was passed in 2009 to increase the use of ICT across all levels of education, create multimedia institutes, and promote ICT training within the public sector. It also aims to develop uninterrupted telecommunication networks and ensure that the public has access to information (Prity, 2015). ICT integration in education was further emphasised in the National Education Policy 2010 (MoE, 2010; Mezbah-ul-Islam, 2015) with necessary reforms in the secondary school curriculum, pedagogy, and teacher capacity building (ADB report, 2018). However, there is still a long way to go to implement the strategy throughout the country, as most of the schools are not ready to integrate ICT into their classroom activities (Khan, Hossain, Hasan, & Clement, 2012).

As mentioned earlier in this report, the government set a goal to ensure ICT literacy among all secondary school students by 2013, and all primary school students by 2021. As part of the ICT integration in secondary education, the GoB aims to equip ICT facilities, e.g. ICT lab, multimedia classrooms (MMCs), digital content library in every secondary school across the country, in urban and rural areas. Consequently, the five year plans after this period reflect very concrete measures taken by the government to integrate ICT into education. Establishing full-fledged computer labs in every school was expensive, as a result, schools were initially equipped with one laptop and projector, as a pilot project to introduce multimedia classrooms included in the Sixth Five Year Plan (2011-2015) of the government. In the Seventh Five Year plan it was reported that during the Sixth Five Year Plan, the project established 20,000 MMCs (later re-named as “one computer for every school” by the Ministry of Education and Ministry of Primary and Mass Education and implemented by the Access to Information (A2i) project) in 13,700 schools, 5,200 madrasas, and 1,600 colleges (A2i and UNDP, 2013, p. 14). Government statistics from 2016 show that among 19,847 secondary schools of Bangladesh, 16,859 schools now have computers, and 15,085 have multimedia to use ICT in their classroom practices (BANBEIS, 2016). The report further provides details about textbook conversion to e-books, digital libraries, etc. Furthermore, the Ministry of Education (MoE) and the Ministry of Primary and Mass Education (MoPME) have introduced another project called “Teacher-led Digital Content Development.” The purpose is to create a multimedia content-sharing platform for teachers, through which content for teacher and student learning is accessible (GED, 2015, p. 560). The government also launched a platform containing e-learning resources for Grade 9 to 10 students and an e-manual for teachers to make learning and teach easier and interactive.

Through the new education policy of 2010, the government made ICT a compulsory subject for all students from grades six to twelve, particularly to encourage girls to gain interest in ICT (Imon, 2017). In addition, to strengthen ICT in schools and build a sustainable workforce at the secondary level, the GoB recruited 3,189 assistant teachers (ICT/Computer)—a total of 13,414 in 2017 (BANBEIS, 2017); and trained 6,400 teachers and 640 head-teachers respectively on ICT for pedagogy and management (ADB, 2018). The government also plans to train all female teachers in e-learning by 2023 (ADB, 2018) to develop a sustainable ICT-skilled workforce to achieve SDG4 and SDG5.

Bangladesh has made significant progress in inclusive and equitable education, in terms of student enrolment (discussed in sub-section 2.3) and the standard student-teacher ratio (STR 46:1) was also achieved in a larger number of schools—78% in 2017 compared to 62% in 2014 (BBS 2017).

This report states that 462 computer labs were established in 404 public secondary schools and out of the 5,769 classrooms in those schools, 1,114 were MMCs. On the other hand, it found that there were 6,106 computer labs in 15,754 private secondary schools with 24,683 classrooms, of which 3,001 were MMCs. The updated report also shows that more than 180,000 teachers were trained on ICT and that there are more than 300,000 teachers who are members of the portal for creating digital content (MoE, 2019, p. 32-36). According to the Global Partnership for Education’s summative evaluation report 2020, which covers the period till June 2017, 8,434 laptops and 21,688 multimedia equipment were distributed, and “one multi-media classroom with the required equipment was provided to all designated model schools, one in each upazila” (GPE, 2020 p. 69).

However, in reality, the practice of using ICT in all school activities is still limited (Hossain et al., 2019). As reported by Imon (2017) and Irani (2017), while most secondary schools have an ICT lab equipped with computers, in many cases, learning and teaching are yet to take place. Research carried out by Babu and Nath (2017), Imon (2017), and Irani (2017) found that the principal task for learners in multimedia classrooms is watching and listening, not actively participating in asking questions, or contributing to collaborative learning tasks. This contradicts the 6 C’s—collaboration, critical thinking, creativity, communication, citizenship, and character—as outlined by the New Pedagogies for Deep Learning (2019), an organisation that focuses on equipping youth with the necessary 21<sup>st</sup> century skills to be ready for the future workforce (cited in Hossain et al., 2019).

## **2.2 Schooling Context in Bangladesh**

The adolescents in our research study are from one government-approved English medium school in Dhaka and three government Bengali medium schools - one Bengali medium school in Dhaka, one Bengali medium school in the slum areas of Dhaka (identified here as the “slum school”), and one Bengali medium school in the rural area (identified here as the “rural school”). In this sub-section, we want to briefly lay out the landscape of the different types of educational institutions in Bangladesh and

particularly their differences for those who are not familiar with the Bangladeshi system.

In Bangladesh, secondary education (Grades 6 to 10) is managed and administered by the Directorate of Secondary and Higher Education (DSHE) under the Ministry of Education. The DSHE oversees 19,848 approved secondary schools that serve nearly 10.5 million students with 243,880 teachers (BANBEIS database, 2017). More than 96% of secondary schools are privately managed (Rahaman and Akter, 2017) known as Non-Government Secondary Schools (NGSSs). The GoB provides subsidies to approved NGSSs under the Monthly Pay Order (MPO) system that covers teacher salaries and some assistance in development expenditures (Hossain et al., 2019). Notably, there are only 368 publicly managed secondary schools with 318,513 students in Bangladesh (BANBEIS database, 2017).

Schooling in Bangladesh consists of Class One through Ten, the same as the grade system. The education system in Bangladesh consists of pre-primary, primary, secondary, and higher education. These are the levels of formal education of the country. Secondary education is divided into three sub-stages as junior secondary, secondary, and higher secondary respectively. Primary education (Grade One to Five) is compulsory for all the children of Bangladesh according to the compulsory primary education act of 1990, as Bangladesh pledged in EFA. Secondary education is still not mandatory for all the children of Bangladesh, but the government encourages it by providing free access and supplying books to female students. In general, all children enter Class One at the age of six/seven years. However, there are mainly two types of schools in terms of the language of education and the curriculum they follow.

The Bengali medium schools follow the national curriculum and all subjects are taught in Bengali with English as a compulsory second language. These schools are both government and non-government. Children studying in the Bengali medium schools, sit for three national or “board” exams throughout their school years—Primary School Certificate (PSC) exam in Class Five, Junior School Certificate (JSC) exam in Class Eight, and Secondary School Certificate (SSC) exam after completing Class Ten. Schooling is free till primary level education for all children in government and government-approved schools. Secondary school is free for girls in government and government-approved schools, but not in non-government schools. There are fees, but they are quite low, making it accessible to children from all socio-economic groups. However, there are other expenses associated with education such as buying

“notebooks or guides,” uniforms and “coaching fees.” The majority of children in Bangladesh attend Bengali medium schools. In recent years, private “English Version” schools have been introduced where children study the national curriculum translated into English. However, this type of school has not been included in this research.

The English medium schools mostly follow the British curriculum. “English medium” means children are taught all subjects in English with Bengali as a compulsory second language. Children follow the Cambridge Assessment International Education (CAIE), Pearson Edexcel, Oxford International AQA, or the International Baccalaureate (IB) curriculum at higher levels. English medium schools are all private schools and the fee structure is several times higher than in any type of government school. As a result, these schools are attended by children from higher economic groups.

Both Bengali medium and English medium schools have built within their structure, two years of kindergarten education. Additionally, most children who attend English medium schools also attend pre-school which consists of a year in Playgroup and a year in Nursery. Pre-schools are more widely prevalent in urban areas. But during the past decade, non-government organisations (NGOs) have built pre-schools in rural areas to support early childhood education. In general, children who study in English medium schools have more years of school education than children in Bengali medium schools.

There is one other major school system which is the *madrasah* where children are given Islamic education. This research did not include this type of school mainly because the curriculum is very different and access to these schools is difficult. Another type of school that was not included in this research are the schools set up by NGOs. Although there are attempts to standardise the curriculum by the government, there are differences in curriculum and approach. Each NGO has its own curriculum and may or may not pursue the traditional structure of classes.

### **2.3 Normative Context**

In this sub-section, we want to briefly lay out some of the social and gender norms pertaining to adolescents, particularly female adolescents, to understand the impact of mobile phone and ICT use on adolescent voice and agency.

Cummings et al. (2015) have identified a number of potential benefits arising out of the use of ICT as it pertains to adolescents in general. Some of the ones relevant to our

context include increasing communication, allowing adolescents to access information by themselves and be a participant in online communities; increasing self-confidence; providing exposure to adolescents about different societal attitudes and personal aspirations; a platform for self-expression; a greater sense of freedom; greater participation in decision-making; wider access to various skills; and increased social capital and sharing of ideas that facilitate the exercise of voice and engagement.

However, access to ICT and mobile phones is unequal. Evidence from GAGE research (Livingstone et al., 2017) shows that there are disparities in affordability, digital skills, and online risks, shaped by socioeconomic factors. Neither is it inevitable that the inclusion of ICT in formal education systems will automatically lead to a systemic transformation. As research by Gurumurthy and Chami (2014) revealed, the project “One laptop per Child” did not necessarily increase learning outcomes in classrooms, cultivate potential, or promote gender equality. In Bangladesh, gender norms may have a role in exacerbating these disparities. Therefore, it is important to note certain gender norms relating to education, marriage, mobility, and sexuality.

In terms of access to education, secondary school completion rate is still low, and lower for girls (20%) than it is for boys (23.4%). It is noteworthy that the main reason for non-completion for girls is marriage, while for boys it is poverty and work. If we look at the marriage norms, according to United Nations International Children's Emergency Fund (UNICEF) figures, 66% of Bangladeshi girls are married before the age of 18 and approximately a third of women aged 20 to 24 were married by the age of 15. There has been no further decline in early marriage since 2014 when the proportion of women age 20-24 who married before 18 years was 59% (NIPORT, 2019). Most of these marriages are arranged marriages, where social norm dictates that the bride's consent is not necessary. “Love marriages” are not socially approved of and if a girl has a “love marriage,” then it is considered socially justified to humiliate the family for her act. If adolescents are caught having a romantic relationship, both girls and boys may face wrath but the consequences for girls are worse and include leaving school, restriction of movement, being forced to marry, etc. After marriage, the voice and agency of adolescent girls become more constrained than those who are married later. Data from BDHS shows that a third of married adolescent girls have no say in household decision-making, compared with a sixth of older wives (NIPORT et al., 2016). In Amin's study of adolescents in Bangladesh (2015), boys (57%) were more likely than girls (36%) to say that men should have the final say in all matters. About 91% of adolescents agreed that a woman should always obey her husband. Boys

(95%) were more likely than girls (87%) to support that obedience was valued by women. It is well-established that before marriage, mobility is highly curtailed for adolescent girls in Bangladesh. A recent research (Save the Children, 2018) revealed that mobility of school-going children and adolescents is limited to schools and private tutors (coaching centres), which takes up much of their day. This research too found that as girls grow up, harassment of girls on their way to school becomes a common problem in both rural and urban areas. However, when the boys were asked about the problem that their peers are facing, they were indifferent.

Values and norms related to sexuality are an important aspect of this study. Traditionally, sex and sexuality are a grey area for Bangladeshi adolescents, partly because it is considered a taboo subject among adults as well. Teachers and parents and even senior officials within the Ministry of Education (MoE) were extremely resistant to the effort by the MoE in 2013 to include a chapter on ‘puberty and reproductive health’ for students of Class Six to Nine, with age-appropriate information (Naripokkho, 2016). Naripokkho’s research revealed that some parents termed sex education as an ‘embarrassing’ topic, some thought it would also encourage free mixing of boys and girls, causing them to become sexually active at an early age. Some parents also strongly believed that including sex education in the curriculum may increase sexual harassment. When there is no access to sexual and reproductive health, adolescents turn to inauthentic sources (magazines, movies, herbalists, etc.) for information. The material they access includes pornography. A recent survey of 500 school children of Dhaka city revealed that 77% of them have viewed pornography (Prothom Alo, 1 Oct 2016). And the pornography viewed is personal videos, rather than commercial. This pornographic content tends to reinforce certain stereotypical gender and sexual norms and expectations, such as male dominance and pleasure (Nahar et al., 2013).

### ***Adolescents and ICT***

Research in Bangladesh on adolescents and ICT has dealt with the negative impact of internet use on adolescents and youth and the impact on health (Chowdhury et al., 2018). Health problems reported included eye strain, headaches, depression, and impact on physical fitness (Ali & Hossain, 2019). Studies have also developed the concepts of Problematic Internet Use (PIU)<sup>3</sup> and internet addiction (Hassan et al.,

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<sup>3</sup> PIU has been defined as ‘an individual’s inability to control their internet use, which in turn leads to feelings of distress and functional impairment of daily activities’ (Shapira et al., 2000 cited in Islam and Hossain, 2016).

2020) and explored their associated socio-demographics, internet use behaviours, and the parental mediation role (Chandrima et al., 2020);. In contrast, Waldman et al. (2018) found that male and female college students were accessing and sharing sexual and reproductive health (SRH) information, which enabled female students to gain a better understanding of their bodies and a sense that they had more control over their fertility. They also use digital platforms to access previously discreet information, add value to that information, and bypass former gatekeepers. However, the research also found that access to health information is not entirely unconstrained, affecting male and female students differently, and powerful gatekeepers can still control sources of information.

Only one study was found on the use of social networking sites among adolescents in Dhaka city which reported some impact on voice and agency (Al Jubayer, 2013). According to the adolescents, in a city where there is little recreation for young people, they spend their time using Facebook. They also use Facebook as a platform to communicate with friends both near and far and to express a “darker side” for example, some teenagers create false identities, seek opportunities for long-distance romance, and view pornography).

### 3. Research Sample and Methodology

#### 3.1 Research Sample and Research Area

Our sample for this research is male and female school-going adolescents of Class Eight who are mostly 14-year-olds. The reason we selected 14-year-olds is first, because they are transitioning into becoming an older adolescent and are less busy (and therefore more accessible ) than adolescents in Class Nine and Class Ten, who are preparing for their high school final exams. Our assumption was also that students of Class Seven may not have yet had sufficient exposure to ICT to analyse some of the issues raised in the research.

Our respondents also included teachers and parents of students of Class Eight.

**Table 1: Number of research participants**

	<b>Proxy for the high-income group</b>	<b>Proxy for the middle-income group</b>	<b>Proxy for the lower-income group</b>	<b>Proxy for rural low/middle-income group</b>
	English medium School, Satarkul, Dhaka	Bangla medium School, Central Dhaka	Bangla medium School, Near Slum area in Merul Badda, Dhaka	Bangla medium School, Miabazar, Cumilla
FGD with male and female adolescents	12 male 8 female	8 male 8 female	8 male 8 female	8 male 8 female
IDI of male and female adolescents	3 male 3 female	3 male 3 female	3 male 3 female	3 male 3 female
FGD with parents	Nil	16 parents in 2 FGDs held separately with boys' parents (10) and girls' parents (6)	12 parents in 2 FGDs held separately with boys' parents (6) and girls' parents (6)	7 parents
FGD with teachers	6 teachers	5 teachers	5 teachers	7 teachers

To understand socio-economic and rural/urban differences in our analysis of adolescent voice and agency concerning mobile phone and internet use, we drew upon adolescents from four types of schools. We selected 1) a mainstream English medium school in the capital (Dhaka) generally attended by children of high socio-economic status and pay high school fees; 2) a mainstream Bengali medium school also in Dhaka generally attended by children from middle-class families who pay comparatively much lower fees; 3) a Dhaka slum-based secondary school attended by children of lower-income groups where fees are nominal for boys and free for girls; and 4) a government secondary school in a rural area in Cumilla, which is free for girls. Cumilla was included in order to learn specifically about rural children as opposed to those in urban areas. However, because it is relatively close to Dhaka and has a significant migrant population, Cumilla is more likely to have access to digital media compared to more isolated areas.

The socio-economic difference between the adolescents from these different schools was evident from their parents' occupation. Both fathers and mothers of the English medium school students were found to be working and both fathers and mothers were found to be professionals in senior positions (e.g. CEO, managing directors, doctors, etc.) or in businesses (e.g. garments industry). In the case of mothers of all other school students, all except one (accountant) were housewives. Fathers of the Bengali medium school students were found to be in government service or private clerical/administrative positions, mostly employed in the university campus where the school was located. Fathers of the rural school students included drivers (truck driver, car driver), international migrant workers mostly in OECD countries, and various low-paid and low-valued jobs. There were drivers (car drivers, auto-rickshaw drivers) among the fathers of the slum school students but also signboard painters, press workers, and fish sellers. The rural school students' families seem to be better off than the slum school students' because they also have family members who are migrant workers who send remittances.

Our sample respondents and sites were selected to allow us to gain insight into variations in our indicators of interest between gender (boy and girl adolescents), socio-economic class, and urban and rural context.

## 3.2 Research Tools and Methodology

### ***Planning and gaining access***

At the outset, we conducted three pilot focus group discussions (FGDs) with Class Eight students in three schools—a government Bengali medium school in Dhaka, a school based in a Dhaka slum, and a rural school in a village in Cumilla, as well as pilot interviews to refine our approach and the questions. The pilot helped us to refine questions, but more concretely adjust our approach so that they were more engaged and spoke freely with us.

For our study sample of schools, we reached out to different schools meeting our criteria by sending them a letter describing our research objective and requesting a meeting. The second step was to go to the schools which showed interest and present them with the research background, objectives, methodology, and research activities. We also presented what support we would need. We then obtained written permission from the schools that agreed. Once the permission was obtained, we had to schedule the research activities to their convenience.

### ***Data collection***

Activities and tools used for data collection are presented below:

- a) **FGD with adolescent boys and adolescent girls (separately) belonging to Class Eight using vignettes:** This activity was carried out in an empty classroom or computer lab in the school. There were in general 8-10 FGD participants. No teachers were present during the FGD. The FGD tool consisted of two vignettes. One vignette was about an adolescent girl and boy who use mobile phones and the internet under different ownership/access conditions, and who also connect via the internet. This was used to elicit data on access, use, control, privacy, app preferences, learning, risks, ICT education, role models, and relationships. The second vignette was focused on an actual online movement for safe roads that school children were involved with. This was used to elicit data on their engagement with online movements locally and globally and the extent of their engagement.
- b) **FGD with teachers of Class Eight of that school using guidelines:** These FGDs were held on school premises. The guideline was structured around questions regarding internet and computer access in the school, rules about mobile phone

and internet use in the school, what kind of internet activities are encouraged, which are discouraged, are there any safety measures to make children aware/protect students against risks, do they bridge any issues that parents may have regarding their child's use of mobile phones and internet, and their stance in relation to students' engagement in social movements, online and offline.

- c) **FGD with parents of girl adolescents and parents of boy adolescents (separately) using guidelines:** The research team had to think more creatively to hold FGDs with parents. For instance, in one case, parents were invited to a restaurant. The guideline was structured around issues of when their children started using mobile phones and their devices, issues of controls and limits, any discrimination between their son and daughter in terms of mobile phone and internet use, any changes in their children since using these devices (in terms of knowledge, information, attitude, helpfulness), perceptions around negative and positive aspects of using the internet, any safety precautions they take, and their knowledge and attitude towards children's involvement in social movements. The intention was to have separate FGDs with parents of boys and girls because we wanted to draw out the differences between parent's attitudes towards their daughters and sons. However, this was not possible in all cases due to logistic reasons.
- d) **In-depth interviews (IDIs) with three adolescent boys and three adolescent girls selected from each FGD:** These IDIs were held on the school premises but in privacy. The IDI guideline was structured around issues of devices, control and use, app preferences, networking, different uses of ICT, ICT in education, civic engagement, and perception of ICT use.
- e) **Conducting observation at cyber cafe and mobile data shop in two locations:** The methodology included observation of cyber cafes and mobile data shops in two of the areas where the adolescents live/attend school. It also included brief interviews with café managers or mobile salesmen about the clientele, age group and sex, type of resources accessed, type of mobile data (songs, movies, etc.) bought, etc.

### ***Validation and dissemination***

The following steps in the research involved sharing our findings with different stakeholders. The first amongst these steps was to conduct a findings-sharing

workshop at the school with all students and teachers of Class Eight. The data was anonymised to protect the identities of the students in terms of what they said. After the presentation was complete, the floor was opened for discussion. In every school, students were more vocal than the teachers. Their feedback was then incorporated into our research findings, for instance, by contrasting teachers' and adolescents' views. The next dissemination activity was to conduct a stakeholder workshop in each of the four communities involving, for instance, members of the governing board of the school, school management committee, local government official responsible for education and ICT, and others. And the final step in the research was to conduct a national policy-level seminar to disseminate our findings to decision-makers and policy-makers of government and non-government institutions, as well as the local and international development community. The webinar conducted on the 9<sup>th</sup> of December, 2020 was attended by more than 75 participants from a number of countries. Discussants included a representative from the government Access to Information project, as well as a former Cabinet secretary, a representative from GAGE, a representative from an NGO working on ICT, and a principal of one of the participating schools. The presentation led to a lively discussion on differential access to mobile phones and the internet and what schools can do. It was well covered in newspapers, two of which published op-eds on the issue.

### 3.3 Challenges

We have faced a number of challenges in implementing this research.

**Convincing schools to participate in the research:** The research team had to spend considerable time and effort to communicate, give presentations, follow-up, and convince schools to participate. Not all schools were interested in or invited us for presentations, and not all schools gave permission after the presentation. The schools also took a lot of time in responding. In order to obtain consent from four schools, we had to approach ten. The main constraint on the part of the schools who did not consent was scheduling the various research activities, as nearly all children attend school and then attend coaching classes and convincing parents to keep them back at school (and miss coaching) was difficult.

**Scheduling the activities:** All but the English medium schools, had upcoming Junior School Certificate (JSC) exams that all eighth-graders have to pass. Students are under

extraordinary pressure for exam preparation. Therefore, we had to postpone our activities for these three schools.

**FGD with parents:** It was very difficult to conduct FGDs with parents who could not or were not interested in giving time to this activity. Parents of adolescents in English medium schools did not agree to give any time at all. As the socio-economic backgrounds of the different groups of students revealed, most mothers did not work and so they attended the FGDs. But both the father and mother of English medium schools were found to be working and in high-powered jobs. They seem to have little time to spare and were perhaps therefore unable/uninterested in spending a few hours in an FGD. We had to conduct the FGD with parents of both boy and girl adolescents together, in the case of the rural school. We were able to conduct the FGD with the parents as planned, in the case of the slum-based school and the Bengali medium school. Although in the case of the latter, we approached the parents while they waited outside for their children who were taking their JSC exams, by taking them to a nearby restaurant which we had booked to hold the FGD there.

**Leaking the vignettes to participants:** The rural school authorities gave the vignettes (that we had submitted earlier for their approval) to the participants beforehand so that they could better “prepare” for the discussion. The participants did not understand and misinterpreted the vignettes and were extremely guarded in their responses. They reacted particularly towards the vignette about the young adolescent girl having a crush on an adolescent boy online. They kept on emphasising that they are “not that type of girl”. Halfway into the FGD, we realised the reason for their over-cautious behaviour. However, they were relaxed and frank in the in-depth interviews.

**Cybercafe and mobile data shop observations:** Our efforts to carry out observations in these sites as part of understanding adolescents’ access to and content of digital material failed as young adolescents rarely go to mobile data shops, and cyber cafes have become obsolete with increased access to Wi-Fi. They are mainly exposed to digital material via their older siblings. Talking about pornography, an adolescent boy from the slum school mentioned the irrelevance of these shops and cafes: *“Another way is to load it from different mobile shops. But it’s the digital age now. Those shops are not available now. The ones that are left have started to work with mobile software. At present, it’s available on the internet, and friends around me watch those videos.”*

**The onset of COVID-19:** The most recent and crippling challenge is the COVID-19 pandemic for which we have had to suspend the remaining stakeholder workshops.

Only one out of four has been conducted which was in the rural area of Cumilla. The national dissemination workshop is also on hold. We hope to be able to undertake this once the situation has become safe.

This paper is organised in the following way: Chapters 1 to 3 are introductory ones, providing the introduction, the background context, and the research sample and methodology. Chapter 4 discusses the findings in detail divided into six sub-sections. And finally, we end with Chapter 5, which discusses the conclusions concerning our research questions.

## 4. Research Findings

In this chapter, we will be discussing our findings in detail from the different research activities carried out with adolescents, parents of adolescents, and teachers of Class Eight students. We will first look at their ownership, access, and use of devices. Then we will explore to what extent they use these devices to learn skills. We will then learn what the adolescents have to say about developing relationships through mobile phones and the internet. After that, we will see whether their access/ ownership/ use influences their ability to participate in decision-making. We will then talk about the perception of online risks among adolescents and their capacity to mitigate these risks. Lastly, we will discuss whether the internet has expanded their sense of community and whether it has motivated their involvement in movements.

### 4.1 How Independent are Adolescents and What Agency Do They Show in Accessing and Using Devices?

In this section, we look at the adolescents' access to devices and the internet by class (shown in terms of schools), gender, and location. We then look at how they are using this access.

*“When our country is fully digitalized, instead of carrying books, we will just carry a tab with all the study materials. I will learn graphic design, using online sources, and earn money from home. I am already doing many things using the internet.”*

—Boy, Class Eight, slum school

#### 4.1.1 Access to the Internet and Control of Devices

In this sub-section, we look at how access to the internet and control of devices vary across socio-economic classes, location, and gender. We summarise the findings from each school in relation to this below. We further inspect the implications of owning vs. sharing devices. We also observe the facilities offered by the schools and teacher's attitudes, in terms of the adolescents' access to computers. Finally, we look at the kind of negotiations between parents and adolescents over mobile phone use.

#### ***English Medium School***

We spoke to 20 adolescents from the English medium school: 12 males and eight females. All adolescents have access to a mobile phone and the internet. Most of the

respondents have their own smartphones. These vary from iPhones or Samsung to Chinese brand phones which one can purchase for less than GBP 100 in Bangladesh. These are not necessarily new or bought for them. Often these are phones previously owned by their parents or older siblings. They also have access to other devices such as tablets which are their own, and some which the family uses together. Comparatively more boys than girls have access to devices other than their phones (e.g. tablets, iPads, etc.). Boys are more likely to have gaming devices like Xbox/Play Station and girls have devices like iPods to listen to music.

All of our respondents have access to Wi-Fi in their homes. Two boys and one girl informed us that they use mobile data when they leave home. But mostly they use the Wi-Fi network of the places they visit when it is available.

**Table 2: Gender Differences in Accessibility in English Medium School**

Gender Difference in Accessibility (English Medium)							
Device	Boys		Girls		Internet	Boys	Girls
	Own	Other	Own	Other			
Feature Phone (not internet enabled)	0	0	0	0	Wi-Fi	12	8
Smartphone	11	1	8	0	Mobile data	2	1
Laptop/Desktop	2	1	2	2	Broadband (wired)	0	0
Tablet	3	0	1	0			
Smart TV	0	0	0	1			
iPod	1	0	3	0			
Xbox/Play Station	5	0	2	0			
iPad	5	0	0	0			

### ***Slum School***

The number of total respondents in the slum school was 16 adolescents: eight boys and eight girls. While two boys reported that they have their own ‘feature phone’ (phones without internet capability), no adolescents had their own smartphone. Nonetheless, all boys and girls said that they have access to smartphones. Most of the female adolescents reported that they use their parents’ (especially mother’s) phone. Boys also use their parents’ and their elder sibling’s phone. It is noteworthy that there are

Bangladeshi brand smartphones available too, which cost around GBP 50 or more, and there are second-hand options that cost even less. One boy has his own laptop and one has access to his sister’s laptop; no girls, however, have access to laptop/desktop computers. Adolescents from the slum school do not have any access to tablets, iPods, iPads, smart TVs, or Xbox.

As these adolescents living in low-income settlements do not have Wi-Fi in their homes, only boys have access because they go to various public spaces like the bazar, where they can access free Wi-Fi. Girls’ mobility in public spaces is restricted and therefore they generally do not access Wi-Fi. Adolescents from these communities most commonly use mobile data. Mobile data packages in Bangladesh come in a very broad price range. Mobile packages are available for as little as 5MB, at a cost of less than BDT 3 (GBP 0.027); for 1GB at BDT 38 (GBP 0.34); and as high as 30GB at a cost of a few hundred takas. There are also various “social packs” available. A three-day social pack costs BDT 1.64 (GBP 0.015), a seven-day social pack costs BDT 6.56 (GBP 0.059), and a monthly social pack costs BDT 20 (GBP 0.18). A video pack of 50MB costs BDT 6.56 (GBP 0.059) for three days. Additionally, there are always various offers which reduce the cost further. According to the adolescents, their parents or siblings usually pay for the cost of the mobile data because the phone belongs to them, but sometimes they top-up data usage from pocket money or other sources.

**Table 3: Gender Difference in Accessibility in Slum School**

Gender Difference in Accessibility (Slum School)							
Device	Boys		Girls		Internet	Boys	Girls
	Own	Other	Own	Other			
Feature Phone	2	0	0	0	Wi-Fi	8	0
Smartphone	0	8	0	8	Mobile data	8	8
Laptop/Desktop	1	1	0	0	Broadband	0	0
Tablet	0	0	0	0			
Smart TV	0	0	0	0			
iPod	0	0	0	0			
Xbox/Play Station	0	0	0	0			
iPad	0	0	0	0			

### ***Bengali Medium School***

A total of 16 adolescents (eight males and eight females) participated in the FGD at the Bengali medium school. Among eight boys, two informed us that they have their own

phones, one uses a feature phone and the other uses a smartphone. Surprisingly, more girls (four) than boys have their own smartphones. This may be explained by the fact that parents give mobiles to their daughters to stay in touch with them, especially if they commute on their own to school and coaching centres. One female respondent said that she has her own tablet but no mobile phone, though she uses her sister’s phone and sometimes her friend’s laptop. Another female respondent informed us that she has had her own phone since Class Five. She was so attached to her phone that her father recently took it from her so she could prepare for her JSC examination. Two boys have their own computer and one has access to his cousin’s computer. Thus like the adolescents from the slum school, a lot of devices are shared. Also, none of the adolescents have any gaming devices.

Only one middle-income household had Wi-Fi, so most adolescents in this sample use mobile data. As in the case of adolescents from the slum school, the cost of mobile data is borne by parents. They top-up their phone balance and adolescents buy mobile data with money from the phone account. In many cases, when they use other devices, they use “hot spots” created from mobile phones to access the internet.

**Table 4: Gender Difference in Accessibility in Bengali Medium School**

Gender Difference in Accessibility (Bengali Medium)							
Device	Boys		Girls		Internet	Boys	Girls
	Own	Other	Own	Other			
Feature Phone	1	0	0	0	Wi-Fi	0	1
Smartphone	1	7	4	4	Mobile data	8	7
Laptop/Desktop	2	1	0	1	Broadband	0	0
Tablet	0	0	1	0			
Smart TV	0	1	0	0			
iPod	0	0	0	0			
Xbox/Play Station	0	0	0	0			
iPad	0	0	0	0			

### **Rural School**

There were eight male and eight female adolescent participants in the two FGDs held in the rural school. Here, we found that only two out of eight boys have their own smartphones. No girls own any kind of phone. All the adolescents have access to their parents’ phones. It is interesting to note that none of the households had feature

phones, which till very recently was the most common type of phone, especially in the rural areas. One boy has his own laptop and another has access to his father’s laptop. One of the girls informed us that she has access to her maternal aunt’s laptop who lives with them and teaches in a college. One girl has her own tablet, which she got from her brother who lives in the Middle East. They have no access to other devices. As only one house had Wi-Fi, mobile data is mostly used for browsing by both male and female adolescents. And like in other cases, mobile data is bought by parents or siblings who own the mobile phone. Sometimes adolescents use their own pocket money to buy extra mobile data.

**Table 5: Gender Difference in Accessibility in Rural School**

Gender Difference in Accessibility (Rural)							
Device	Boys		Girls		Internet	Boys	Girls
	Own	Other	Own	other			
Feature Phone	0	0	0	0	Wi-Fi	0	1
Smartphone	2	6	0	8	Mobile data	8	8
Laptop/Desktop	1	1	0	1	Broadband	0	0
Tablet	0	0	1	0			
Smart TV	0	0	0	0			
iPod	0	0	0	0			
Xbox/Play Station	0	0	0	0			
iPad	0	0	0	0			

So, what are the implications of owning vs. sharing devices? One implication is the time adolescents spend on devices. Adolescents who own devices can spend relatively longer and unsupervised time on their devices, except when they are at school. From the findings, it is evident that in most cases, parents try to limit the amount of time they spend on their devices—how much depends upon the negotiations they have with their children. Adolescents who share their devices are limited by the fact that other members of the family also use them. These adolescents “snatch” bits of time in between uses by the person whom they share with. A second implication is that adolescents who own devices have the freedom to visit any site they wish (unless any parental controls are activated). On the other hand, adolescents who share devices use their time to play games or visit specific sites that they need or want. They are also more likely to visit the type of websites that the owner visits, watch shows that the owner watches, since these pop up as recommended sites and shows for the owner.

The adolescents also tend to refrain from visiting websites or shows that the owner would not approve of if they found out. It is also important to note that adolescents who share devices may not have their own Facebook or other accounts—they use their parents' accounts. In this way, parents can closely monitor the online activities of their children.

Similarly, having Wi-Fi also frees adolescents from limits on the time they spend on it. Having to pay for mobile data limits the amount of time spent on it and curbs browsing. This can affect using the internet for educational purposes, as having Wi-Fi allows adolescents to do more research, use more apps, without having to think of the cost.

So far we have been looking at the access and use of mobile phones and the internet in the adolescents' home. What is their access to the internet or devices in the school?

First and foremost, students are not allowed to bring their mobile phones, laptops, or any other gadgets to school. This is the same for all schools. The English medium school students are allowed to bring their laptops if they are presenting a project or displaying something, for example, at the Science Fair. Most schools confiscate mobiles if they bring them to school.

As we have discussed earlier, ICT education is compulsory in schools from Class Six onwards, in general. We found that in the English medium school, ICT is a part of the curriculum from Class Three. Moreover, in the English medium school, students are taken on field trips related to ICT. For example, they go to the National Science and Technology Museum or are taken to factories that manufacture laptops. So the formal exposure to ICT is longer and wider for students in the English medium school, compared to students of all other schools. Secondly, as also discussed earlier, the government has made it mandatory for all schools to have computer labs. While this is true for most cases, except for the slum school where the computer lab was under construction, hands-on-access to computers varied across the schools.

In the English medium school, there are sufficient numbers of computers in the lab for students to each access one. They are internet-enabled and used not only during ICT class but also to show videos or other material for other classes, such as biology experiments, etc. In the Bengali medium school, there are 20-22 computers in the computer lab, but the classes are much larger (60-80 students) so the students have to share computers. Although the lab has Wi-Fi, students are not allowed to use the internet. According to one of the teachers,

*“I don’t allow access to the internet in the lab because some odd pictures or scenes might appear on the screen if they open the browser while connected to the internet. It will be embarrassing for them, as well as for us. When I need to show them something on the internet, I turn the projector off at first and open the browser to check if it contains anything embarrassing. Upon ensuring that there is no questionable content, I turn the projector on and show them the content on the internet, for instance, a tutorial on a specific topic on a specific site.”*

So, the strategy to “protect” the students means that they do not have the opportunity to browse or search or navigate their way around the internet on a computer.

The rural school children also have access to computers in their computer lab, but as there are 10 computers and 60 -70 students, they have to share computers in groups. The rural computer lab does not have Wi-Fi. They use a modem. They do not use the internet until they reach Class Nine when they are taught how to email. Rural school teachers are also under the impression that boys are more interested in computers, so they give them more opportunities to use the computers. This was mentioned at the workshops where we presented our findings back to the school. However, this was countered by the female students of the class in the same event. Girls are also interested in handling computers, but they are not given the chance. Teachers do teach them how to access websites as and when they need to. For example, they are taught how to access the National Curriculum Textbook Board (NCTB) website which has all the books necessary for the government curriculum, so if students lose a book, they can download it from this site.

In the slum school, the teachers use the laptops provided by the government to connect to a projector to teach the students ICT. So the students do not get the opportunity to use computers as there are none except for the teachers’ laptops.

From discussions with the parents and the teachers of the students from all the schools as well as from the students themselves, it is clear that a lot of negotiation goes on between students and their parents regarding the amount of time they are allowed to spend on the internet. All parents are conscious about how much time their children are spending on their devices and are discontent with their children spending time on their mobiles, considering it a waste of time. The attitude of the parents of adolescents in Bengali Medium and rural school was overall negative about the use of mobile phones and ICT by their children. They believe that the internet is making their children wayward. Adolescents who use shared devices are limited by their access to

them. A girl from the rural school stated that her mother keeps her phone locked so that she has to ask her to unlock it if she wants to play a game.

The slum school parents were not aware of their children's use of the internet or mobile phones. They know that their sons use their friends' mobiles or use the internet in public spaces, but believe their daughters do not know how to use it at all.

We do not have the perspective of the parents of the students of the English medium school, but a boy from that school who owns a phone talked about his restrictions. He said, *"During holidays, I get to use the phone daily. But when we have school, I only get to use the phone on Thursdays and Fridays. I have to return the phone to my mother on Saturday."* He said he is allowed to play on his Playstation console for an hour after he finishes homework. Parents of adolescents who own mobiles often have to take it away from them or take it away at night or restrict use for a few hours. Often parents bring these complaints to the teachers so they can exercise their authority on the adolescents by dissuading them from being on their devices all the time. Teachers also complain to the parents. For instance, a boy in the English medium school said, *"In PTM [parents-teachers meeting], my teachers complained that I waste too much time talking on the phone and doing other stuff. So, my mother told me that I don't need a password and that she was going to check my phone."*

In summary, we find that all adolescents of English medium schools own their own mobile phones. They also own various other types of devices and all have access to Wi-Fi at home. They all get the opportunity to work on computers at the computer lab in school and use the internet for school work or lessons. In contrast, none of the adolescents in the slum school have their own phones, nor do they have Wi-Fi at home. Their school computer lab is not yet functional and though they get ICT lessons shown on the projector, they do not have access to computers. Adolescents in Bengali and rural schools are similar in the sense of ownership and access to mobile phones and the internet, which was very low. The exception is girls in the urban Bengali medium school, who were found to own their mobiles so that they can be contacted by parents at all times, particularly when they commute on their own. However, girls in the rural school do not have their own mobile phones and parents do not approve of their daughters using the internet.

### 4.1.2 Application<sup>4</sup> Preferences

In this subsection, we are looking at application preferences among the different groups of children in order to see what they like using and why, and explore some factors which may influence their choice of apps. The different apps may have implications for variation in voice and agency which will be explored in the next section.

The most popular app among adolescents who participated in our research is YouTube. YouTube is used for a variety of purposes including entertainment, education, and skills development. Adolescents from Bengali medium and slum schools mentioned VidMate, which is a fast online HD video downloader app for Android, and those from English medium schools mentioned Netflix, which has a monthly subscription fee. TikTok is another popular app. Adolescents can easily upload short videos of themselves, mostly funny ones.

In terms of social media, Facebook is the most preferred application among our Bengali medium, slum, and rural school participants. Surprisingly, English medium adolescents do not like Facebook. Instagram is their favourite application for social networking. According to them, Facebook is for the older generation and it involves a lot of writing. Whereas it is much faster to connect via Instagram using a few words and photos. Messenger is one of the favourite applications of all adolescents as a means of communication. English medium school students also mentioned Twitter and Snapchat to maintain their networks with friends and followers. These were not mentioned by adolescents from other schools.

Google is their favourite search engine and all adolescents also use Google maps.

Adolescents mentioned several educational apps that they use. For instance, Khan Academy, which produces short lessons in the form of videos; Byjus, claiming fame as the world's largest learning app for school students, which offers comprehensive learning programmes in Math and Science for students of Class Four to 12; Photomath, an app for math learning, which can read and solve problems ranging from arithmetic to calculus instantly by using the camera on your mobile; Litchart which helps understand literature, make it easier and explains it, and shmoop.com, which is also an app for analysing literature. All these apps are free or adolescents use the free versions which

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<sup>4</sup> A mobile application, also referred to as a mobile app or simply an app, is a computer programme or software application designed to run on a mobile device such as a phone, tablet, or watch. For example, YouTube is an app. (Wikipedia)

may not allow them to use all functions. Rural, Bengali medium, and slum students also mention NCTB, an application provided by the government to facilitate distance learning, through which students download various books to help with studies.

Gaming apps are, of course, very popular. Adolescents from all socio-economic backgrounds share similar preferences when it comes to gaming. Our respondents talked about PUBG, Subway Surfer, Clash Of Clans, Temple Run, Asphalt 8, Free Fire, Color Bomb, Ludu Game, Card Game (Solitaire), Dream League, WCC 2, Angry Bird, Cooking Fever, Chess, Cake 3D, Salon Game, Dr. Driving, etc. An interesting point was that girls from slum and rural schools talked much more about the cooking game apps which the girls from the English and Bengali medium schools hardly mentioned.

English medium students use WhatsApp and Viber to communicate with friends and family. Sometimes they use Messenger as well. IMO is the most favourite communication app among our respondents from the slum, rural, and Bengali medium schools.

The most preferred apps for services are Uber (taxi service) and Pathao (all kinds of delivery services). The English medium school students also use Foodpanda to order food. For online shopping, adolescents mainly use Daraz and Amazon, etc. In most cases, their purchases are paid for by their parents and therefore they usually have to seek permission before they buy anything.

One of the key ways that adolescents access songs, videos, movies without Wi-Fi is no longer by purchasing them from shops or cyber cafes, but through SHAREit app, which is used to transfer files, including photos, videos, music, contacts, apps, and more. It acts like Bluetooth and is very popular among adolescents in rural and slum schools.

As evident from the discussion above, some preferences are the same for all adolescents across the board and some are different by type of school, gender, and location. Though the use of these apps is discussed in detail in the next section, some key differences may be mentioned here. While YouTube is popular among all adolescents, only adolescents from higher socio-economic groups can access apps such as Netflix, which requires online payment in USD. Therefore, cost and access to an international credit card is an issue. Second, adolescents from the English medium school seem to follow “global” or perhaps “western” trends in their preference for Instagram and Twitter and the culture of having followers. Facebook is used en masse by all in Bangladesh and a preference that all other adolescents seem to exhibit.

Moreover, since they share devices with someone older than them, they might be comfortable with or only be allowed to use something that their parents know about. Third, the kind of educational apps the adolescents use may be influenced by their curriculum, for example, where English medium students are studying the same curriculum as adolescents in England, they may also be directed to these apps by their schools. All teachers of the English medium school spoke of instructing students to do online research and seek online help with problems. The teachers in the Bengali medium, rural, and slum schools did not mention any specific apps that they ask the students to use for research or practice. One or two teachers talked about asking their students to look up, for example, a chemistry experiment on YouTube.

In terms of gaming, a difference was noticed among male and female adolescents. Male adolescents are more likely to play multi-player games that involve gamers from all over the world, while female adolescents mostly play single-player ones. Even when girls play multi-player games, girls from the rural school, for instance, play online with family members or cousins.

Finally, urban adolescents from English and Bengali medium schools use apps like Uber, Pathao, and Foodpanda, as these services are only available in the urban areas to buy food or other items.

Only adolescents from the English medium school were found to use Amazon for which you have to pay with a credit card (not common apart from high socio-economic groups) while others use Daraz which showcases local shops, for which you can pay with bKash,<sup>5</sup> a very popular Bangladeshi app used across classes. Some of our respondents, both male and female, mentioned researching products on YouTube before buying. It also helps them to purchase the right products at the right prices. An adolescent girl from the Bengali medium school said, *“At first, I look for the price of a product on the internet. Since we already know about the price of the product, we can properly bargain when buying from the market. You see, the sellers at the market can’t make you pay more for a product if you already know its price.”* According to a male student of the English medium school, YouTube informs him what new products there are to buy: *“I watch videos on new gadgets. Unbox Therapy shows unusual stuff about newly released gadgets. I tell them what household items should be changed or bought, what watch my*

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<sup>5</sup> It is used to transfer cash even when you do not have a bank account but only with a bKash account.

*grandfather should buy or what type of gadget he needs, what type of clothes and shoes he should buy, etc.”*

In conclusion, we find that there are some common apps that all adolescents use. But the use of apps may vary depending upon whether they are free or not, whether they require being online for a long time (particularly in the case of gaming apps), and also vary by the school curriculum and teaching method in the case of educational apps—where more active learning is encouraged, students are encouraged to their own research using these apps.

## **4.2 Adolescent Agency in Using the Internet to Develop Skills**

In this section, we look at the different apps that the adolescents use (explored in the previous section) and examine what they use them for and whether they have any potential for enhancing their voice or agency.

Our respondents reported using mobile applications for enhancing their skills, as well as for educational purposes. They mentioned that the skills they are developing are building their confidence. They reported that the appreciation they get in return from their parents and peers increases their urge to perform better.

YouTube is not only used for entertainment but also for learning new skills. These include baking, cooking, nail arts, arts and crafts, and tutorials of different sorts. They also gain knowledge about certain things they are unaware of, discussed below.

Some students mentioned learning crafts and how to apply make-up by watching YouTube videos. One of the female respondents from the Bengali medium school said, *“I have begun making science stuff. I learned to make photo frames. I have learned how to apply make-up nicely by watching videos on YouTube. I apply it properly before going out. I make TikTok videos and upload those. I want everyone to watch my TikTok videos and like them.”* Another respondent from the slum school mentioned that, she learned *“How to apply make-up on the eyelids, how to apply eyeliner, face powder and lipstick perfectly, step by step.”*

An adolescent girl from the rural school talked about improving her cooking skills: *“I cook noodles, chops, pakoras, etc. Also, I know how to make cakes with different designs, and how to write ‘birthday’ in different styles. I also know how to make the [butter]cream, which is used for writing.”*

Boys also learn how to cook and make crafts by watching YouTube videos. Cooking and even simple handicrafts are strongly linked to the skills of women in Bangladesh, not men (unless specialised like chefs or weavers). The interest of young boys in these skills was not common but it seems to be shifting. For example, a boy from the English medium school said, *“I learn football skills from watching football videos on YouTube. Once I had some dry clay, so I watched some videos about how to use this and made a pen holder. I learned some cooking too.”*

Another boy from the Bengali medium school said, *“If someone needs any recipes, I search Google. When I go to Gaibandha (home village), I cook with my cousins. Every day we cook a different dish.”* Cooking does seem to be catching on, as quite a few of the adolescent boys talked about it. For instance, another boy from the English medium school mentioned his mother and her reaction to his cooking, *“She doesn’t listen to my opinion on cooking, because I’m not that confident yet. One day I made her breakfast and she really started to open up to my cooking after that.”* In a culture where men are not expected to know how to cook and where men who cook for their families are laughed at, this is an important turning point.

Female adolescents, apart from those from the English medium school, talked about developing their performance (dancing and singing) skills by watching YouTube. The reason that this is significant is that rural communities are far more conservative than urban communities when it comes to girls performing, especially in front of an audience. But these girls seem to be changing what is acceptable in rural areas. One girl from the rural school said, *“I watch dance shows. I like dancing. When I have some time to spare, I watch dance clips on YouTube. When I get bored, I dance to some music. I dance at the wedding functions of my uncles and cousins. I learn the moves from YouTube.”* Another female rural student said, *“I download videos. When a function is supposed to be held, I download various songs by Sabina Yasmin and try to imitate her style when I practice singing.”*

When it comes to uploading their dance videos, there are differences. A young girl uploading a video of herself dancing will, in general, cause parents to be upset, if not angry. For instance, a girl from the slum school said, *“I don’t want to dance in front of unknown people and don’t want to upload my videos on YouTube and Facebook. If I upload my videos, people will say bad things about me and my family. People from the older generation do not understand these things, so they will say bad things to my father. Then my father’s honour will be gone. So I don’t like it. I dance at family events such as*

weddings. *At that time, no one forbids me to dance.*” However, one girl from the Bengali medium school who has access to Wi-Fi at home was not held back by such considerations and did upload videos. *“I upload TikTok and Likee videos,”* she said. *“I made a video of myself dancing and making expressions to the background music and uploaded it. I danced to a Hindi song.”*

Both male and female adolescents from the rural school specifically mentioned developing their debating skills by watching YouTube. A girl from the rural school shared, *“Before taking part in a debate contest (in school), I watch videos of debates and observe the gestures of the contestants, how they begin and end their arguments. I watch those and try to learn.”*

Male adolescents learn to create their science projects by watching YouTube. In the words of a Bengali medium school student, *“I also watch videos related to science projects. I watch videos on how to make drones and remote-controlled cars. I tried, but I wasn’t successful in my attempt to make a drone.”* Teachers also encourage adolescents to seek information on science projects from YouTube; however, this can be disappointing if they do not have the materials. One rural boy described how various science project videos appeared on the screen when he searched YouTube for the ‘Science Project’. He said, *“I clicked on the one I liked and watched it. I watched a video on how to connect an electric bulb to an electric fan. Then I tried to do it on my own. However, due to the lack of proper tools, instruments, and money, I couldn’t finally make it. The project was half done when I quit.”*

YouTube is used for educational purposes as well. A girl from the rural school talked about looking into more details about topics they are taught in school.

*“One can find an answer to such questions on the internet, on YouTube. If I don’t know something, I can search for it on the internet. For instance, science-related questions such as ‘how are cells created in the human body?’, ‘What does a human cell look like?’, etc. These questions come into our exams as well. So, we watch video answers to those questions on YouTube,”* she explained.

Adolescents use these apps particularly to improve on the subjects that they are weak at. Another girl from the same school stated, *“You see, maths, science, English, etc. are some of the most difficult subjects. So, I often seek help on YouTube about various topics related to these subjects.”*

But accessing YouTube for educational purposes means access to the internet and for some length of time. This is not available to all adolescents from all socio-economic backgrounds, which can be disappointing for them as, for example, a girl from the slum school explains, *“One can find information about what chemical to mix with another chemical to create a certain type of reaction. There are many examples of these reactions on the internet. There are even video clips of lectures by teachers on these topics. It feels bad that I can’t see any of these clips. I occasionally feel like it would have been better if I had access to the internet.”* However, this is not the same for all students of the slum school. A boy from the slum school said, *“When I couldn’t understand any maths in class, I searched it on YouTube later to find tutorials. There is an English to Bengali dictionary app which I’m using now.”* Girls from the slum school also reported using the internet for educational purposes. *“For instance, we need to do narrations, translations, etc.,” she said. “If I find it difficult to understand something sometimes, I can watch lectures of teachers on the internet.”*

Students of the English medium school reported using a number of different apps for educational purposes. According to a student of the English medium school, *“If my teacher teaches a topic in the class which I don’t understand, I watch it on YouTube. Sometimes these are referred by teachers, Khan Academy, Byju’s or Ten Minutes School—these are what I mostly use.”* For the solutions to maths problems, English medium students use PhotoMath. They use the app LitChart for help with literature.

Students of schools other than English medium schools spoke less about the educational apps. Even when they did, they mentioned different apps, in keeping with the curriculum that they follow. For example, a few students of the rural and slum school stated that they use ‘Warmalpha’ and ‘Goniter Shortcut Podhhoti’ (Shortcut methods for maths). A boy from the rural school who had lost his book said, *“My teacher suggested I use NCTB to download the electronic version of the ICT book from the internet. I downloaded it and found that everything was the same as in the book.”*

English medium students also use Duolingo to learn other languages. Several students mentioned using this app. For instance, a girl talked about trying to learn Japanese and Spanish using this app because, *“Well, my father said that if I learned those languages, it might give me an edge when applying to a university abroad and learning a language is commonly thought to be helpful for brain development too.”*

An important area of interest on YouTube for slum school adolescents (none of the other students mentioned this) was religious education, particularly in the form of *waz*

(religious preaching by men) and short Islamic videos. These videos are popular amongst both boys and girls. One male student described the content as follows:

*“They talk about Prophets, their life stories and how they are being tested. They talk about why we should believe in the afterlife, how human beings were created, and by whom. They talk about women’s veils, they say women should use veils, women shouldn’t come out in front of ‘Por Purush’ (unknown men) without veils. Yes, women should use veils. Before using the internet, I didn’t know much about my religion but now I learned a lot from watching waz.”<sup>6</sup>*

A possible reason why religious videos are only watched by the students in the slum school, we presume, is that they may reflect the interests of adults in that community, as most of these adolescents share their devices with their older siblings and parents.

From what these adolescents say, their notions around women and what women can and should do, especially in terms of purdah, are partially influenced by these videos on Islam. For example, one boy explained how during ‘Ayyame-Jahiliyat’ (The Dark Age in Islam—a period of chaos and violence before the advent of Prophet Muhammad (PBUH)), women were not treated well. *“When they were born, they used to be buried alive or stones were thrown at them, and sometimes they were burnt alive. In this way, they were tortured. Then Hazrat Mohammed (PBUH) came and started the practice of respecting women. I got to know this from listening to waz,”* he added. This quote, as well as others, demonstrates positive lessons in respecting women. However, there were also lessons of cruel punishment reported by a female adolescent who saw a video on Islam about eyelashes being torn off in hell for not abiding by the purdah.

Adolescents also talked about *waz* videos which they find funny. For instance, Taheri, a religious leader, has become famous for his *waz*—not for the content, but for the TikTok videos which mock the way he preaches.

To sum up, we find that adolescents are developing a multitude of skills using mobile phones and the internet. Boys and girls from different socio-economic backgrounds and different locations seem to be picking up similar sort of skills, perhaps using different apps to get there. To some extent, these skills seem to be challenging traditional gender roles—girls learning dancing and singing and even uploading their own performances online challenges the norm of girls not being allowed to dance in

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<sup>6</sup> *Waz* is religious preaching by men on Islam. It should be noted that the some preaching is contentious as not reflecting “proper” Islam, undermining women, inculcating intolerance.

public; boys learning how to cook and eliciting appreciation from their families for cooking, challenging the notion of masculinity that excludes cooking as a purely feminine skill. Adolescents speak of picking up skills that they are specifically interested in—playing football, bowling in cricket, painting, etc. For instance, a girl from the rural school talked about how she downloads content from Google on the subject that she has to paint in the competitions she enters. She then watches YouTube to learn how to draw those particular shapes. These are opportunities that they would not have had without the internet. Adolescents use the internet to seek help in subjects where they are weak. A recent research on Bangladeshi female adolescents (Amin and Mesunas, 2020) found that English and Maths skills had a very strong impact on empowerment indicators for adolescents.

An important finding is what the adolescents are watching, what is drawing their attention or pricking their curiosity, the apps they use, etc. is to some extent related to the physical and normative (socio-cultural) context they are in, and the kind of support they get from the school. Thus we find, students of the slum school are less familiar with different apps compared to students of English medium schools and are in general, less likely to use the internet for educational purposes due to the lack of Wi-Fi; adolescents from the rural school are interested in debating on YouTube because the school encourages them to do so. As they share devices and because of their particular normative contexts, adolescents in the slum school watch a lot of Islamic videos that their parents/older siblings watch. Uploading Youtube videos or videos on Facebook of oneself dancing by girls is considered “daring” in a particular context but not worth mentioning in another, such as by some of the girls from the English medium school.

### **4.3 Internet Enabling Adolescents’ Agency in Developing Relationships**

This section focuses on how mobile phone and internet use is changing the landscape of traditional views of friendships and relationships between adolescents in Bangladesh and the adolescents’ agency in circumventing barriers to it.

As discussed previously in the report, dating is not acceptable in Bangladeshi culture. This may no longer be the case for many Dhaka city dwellers belonging to higher socio-economic groups, but it is still a valid generalisation. Girls and boys can interact (for example, in school) but opposite-sex friendships are not encouraged by parents or the

community, and “relationships” between girls and boys are certainly not acceptable. According to a female student of the rural school,

*“No, my mother doesn’t approve of all this. My mother doesn’t like it. I don’t like it either. In my life, I haven’t seen any girl or boy who has been successful in a romantic relationship or has benefited from it. I have witnessed that all the female students who are in relationships, crying and moping all the time. Even our teachers can’t stand the sight of those who are in relationships.”*

Often, if parents find out about a relationship, the fear of losing their honour prompts them to get the girl married as soon as possible, usually to a groom of their choice. In such cases, the girl loses her right to refuse marriage. The repercussion on the boy is not so severe.

Mobile phones and the internet have changed the nature of these clandestine relationships. Our young respondents could also compare and reflect on how these relationships have evolved. According to an adolescent girl from the English medium school,

*“In the past, it was very difficult for them to communicate with each other because many of them didn’t go to the same schools. They wouldn’t get to meet, so they would secretly call each other. They had to meet each other in secret. Back then, parents were very strict too. That’s why it was very difficult. But now we all have evolved and our parents have become more understanding. Social media helps too. For instance, we can communicate with them on social media and see pictures of each other. And we get to talk to them. So, there are many differences. I mean, in the past, things were much more difficult but now it has gotten easier.”*

Online platforms such as Messenger, Facebook, Instagram, etc. have also made getting in and out of relationships easier. According to our respondents, the internet has caused an increased tendency among people towards falling in love. Boys and girls get to communicate with each other easily. Approaching people has also become easier. As one adolescent boy from the Bengali medium school said, *“If I like a girl, I can approach her by sending her a friend request or ‘knocking’ her on Messenger.”*

According to the adolescents, in the past, relationships were more sustainable. Couples put in more effort and time in maintaining relationships. However, in current times, social media has ruined this.

*“Now there is no fun. People do not meet each other. They just talk over the phone, and once they meet in real life, they find out that one of them is a predator.”*

- An adolescent girl from the English medium school

All the respondents (boys and girls from all schools) reported that having virtual romantic relationships increases the chances of cyber-crime, sexual harassment, multiple relationships, and cheating. They were able to bring in several examples to prove their perspectives. According to them, boys and girls of their age get involved in multiple romantic relationships by using fake accounts. Without the internet, this would not have been possible. Some of the respondents even criticised their peers' characters. According to an adolescent girl from the slum school, “On Messenger one girl can get proposals from multiple boys. If she wants, a girl can continue to have multiple relationships and no one will know. Girls are getting spoiled because of the internet.”

The views of adolescents on relationships are discussed below by the various socio-economic groups and gender. It shows that while their voice and agency in having relationships have increased, they are also keenly aware of this agency being misused.

### ***Bengali Medium School***

Boys from the Bengali medium school did not report having any online relationships. However, they particularly reported blackmail as possible aftermath of these relationships. Couples dating online exchange personal and intimate pictures among themselves. According to them, when these relationships break, one person can blackmail the other by threatening to share their private pictures publicly, in return for money or some other favour.

Girls from the Bengali medium shared examples of their classmates and reported how online relationships evolve through the use of Facebook. If a boy likes a girl, he sends a Facebook friend request and they communicate over Messenger. Respondents reported that boys open fake accounts for these relationships. These accounts use fake pictures and names, and these relationships often do not last long. According to one adolescent girl from the Bengali medium school, *“Having romantic relationships online is a common thing now. People just do it for the sake of doing it. These are not real.”* The respondents also added that online relationships are a form of “time pass” for some girls. According to another female student of the Bengali medium school,

*“Some girls aim to get into relationships with boys on the internet. Of course, they don’t intend to meet them. It’s just a pastime.”*

But they blamed boys for initiating “fake relationships.” They linked these with the restriction bias between girls and boys. One of the adolescent girls from the Bengali medium school said, *“Girls are kept under much stricter observation. They have many restrictions. They are not allowed to do certain things, go to certain places, and use the phone. But boys can easily go out and visit places.”* Like our male respondents, they also brought up the issue of blackmail. *“Suppose you had a relationship with someone in the past,”* said one adolescent girl from Bengali medium school, *“When you refuse to continue the relationship with him, he starts blackmailing you with pictures. The boy might add her family members, friends, and neighbours to his Facebook friend list and threaten to expose the pictures.”* This was considered by the adolescents to be a common occurrence and more importantly, a common threat.

### ***English Medium School***

Boys from the English medium school were more comfortable in discussing online relationships. According to them, most relationships in current times develop through online platforms. Some of the respondents admitted to having online relationships and reported that they communicate through Instagram. However, they talked about the possibilities of being cheated through these kinds of relationships. They identified that these relationships can cause threats to one’s privacy. They reported how people could create fake IDs, pretend to be someone else and extract information from their partners to use against them. They could also identify how these relationships could increase the chances of girls being sexually harassed over the internet.

According to the girls from the English medium school, online relationships do not last long. These relationships trigger jealousy and insecurities, which eventually lead to breakups. An adolescent girl shared, *“Many people become over-possessive. A girl may charge her boyfriend for liking pictures of other girls. A boyfriend might charge his girlfriend when she talks to other boys. I think social media has a big impact, as everyone gets to communicate with many others on these platforms. Breakups would have happened in the absence of social media too, but less frequently.”* Like students from all the other schools, they linked online relationships with the risks of cyber-crime and sexual harassment.

They brought in a new perspective on blackmail in these relationships. *“Sometimes boys emotionally blackmail girls and ask for pictures as proof of love. It’s like a sense of pressure. ‘I love you so much. If you love me then send me your nude pictures’.”* None of the respondents approved of online romantic relationships. Social media can be used as a means of communication between couples, but one needs to know his/her partner in real life before communicating through online platforms. The respondents were, however, comfortable in discussing their relationship status and admitted communicating with their partners over the internet. They spoke of how social media has made maintaining relationships easier, unlike in the past. Now communication is made easier and couples can keep track of each other’s activities by following their posts. They viewed these as an added advantage.

### ***Rural School***

Adolescent boys from the rural school reported that they were aware of online relationships and that the internet was responsible for increased romantic relationships between boys and girls. Though none of them were comfortable sharing their relationship status, they stated that their friends have online relationships and chat over Messenger. They talked about how boys take great care to put up proper profile pictures to impress girls on Facebook, hoping they will receive more friend requests and eventually have online relationships. They also talked about fake IDs and how these are used to get into relationships. According to them, online relationships do not last long as the couples do not get to meet each other face-to-face. According to an adolescent boy, *“This doesn’t last as they don’t get to meet each other in real life and perhaps at some point they get frustrated. They even lie to each other.”*

They also cited these relationships as contributing factors to child marriage. In rural areas, young couples are often married off by their families to avoid rumours and society’s condemnation. One of the adolescents stated, *“My friend’s father was not educated enough, and got him married to his online girlfriend. My friend is now in deep trouble as his family is not economically solvent and this is a burden. I confronted his father and accused him of ruining my friend’s life.”*

Girls from the rural school were the most reserved in discussing their personal relationship status. However, they admitted being aware of online relationships. They reported that online relationships can be risky, as a person’s attitude and character cannot be judged virtually. People can be “frauds” and can misuse one’s trust.

According to a female student, *“On the internet, a person may hide his or her shortcomings or negative sides. I prefer meeting someone physically to get to know him, rather than maintaining a relationship on the internet. He may try to present false information.”* Like all the other schools, respondents talked about the different risks associated with online relationships. These included violation of privacy, misuse of personal pictures, and multiple relationships. They preferred real-life relationships over virtual ones.

### **Slum School**

The male respondents from the slum school believed that boys and girls of their age can only have relationships if they use social media platforms like Facebook. Respondents also reported that boys of their age use social media to communicate with their partners. For instance, a student shared, *“I have seen my friends keeping their mobile phones with them when they study. They connect to Wi-Fi and speak to girls for a long time up till 1:00 or 2:00 am.”* They cited that the internet has made getting in and out of relationships easier and as a result, virtual relationships neither last long nor end well. One of the adolescent boys jokingly stated, *“Previously skies and winds were the witnesses of love but now its chats and screenshots.”* Like all other students, they reported extensively on the risks associated with virtual relationships. According to them, these relationships are created for purposes of blackmail. One adolescent boy said, *“There are some people who open fake accounts and disturb others, copy photos from girls’ profiles, and share them after editing (use their head on someone else’s body). They try to build a romantic relationship to be able to blackmail their partners.”*

The female respondents from the slum school reported that the internet plays an important role in developing romantic relationships among people. These even lead to multiple relationships. Creating fake Facebook accounts is a good starting point for multiple relationships. A female student explained, *“Girls and boys cannot talk on the streets always, as people will know about their relationship. If they use Messenger they can talk any time. Nobody will know and they can continue having multiple relationships.”* According to them, boys of their age mostly use Facebook for fun and are not serious about relationships. They can misuse their partners’ pictures and circulate those. Online relationships can easily result in the defamation of girls and therefore most of the respondents did not approve of being involved in them.

In keeping with the prevalent social norms, the research found that neither parents nor teachers were approving of “relationships” between the boys and girls.

### ***Perspectives of Parents***

Virtual romantic relationships are the parents’ biggest complaints about their children’s use of mobile phones and the internet. They realise that in present times, getting involved in relationships is much easier and they do not view this positively. Just like the adolescents, they also feel that online relationships are related to various forms of cyber-crime. Parents of girls were particularly concerned by these potential threats. According to the mother of an adolescent girl from the Bengali medium school, *“Boys and girls exchange pictures of themselves, and then those pictures are edited and abused. People get into relationships on Facebook. Eventually, a girl is asked to meet and she gets raped. We don’t have any social security.”*

Girls are kept under strict supervision by their parents compared to boys, particularly in the rural area. Parents in the rural area were most concerned and vocal about this. The mother of a female student of the rural school said, *“She doesn’t use the mobile phone even for a second. Not in front of me, or when I’m not around. Actually, a girl’s attention might shift to something else. That’s why a mother has to keep an eye on her daughter.”* Even the adolescent boys’ parents thought it necessary to be stricter with girls to ensure they do not engage in any romantic relationships. *“Before giving your daughter a mobile phone, you should consider that she may meet someone on Facebook and start talking to him. You see, she might fall for someone, and he may start growing on her. This is the reason you should not give mobile phones to your daughters,”* said the mother of a male student from the rural school. Girls are kept under strict observation, as their relationships are often associated with the family’s honour and dignity. Like other mothers, the mother of a female student from the rural school said, *“I must keep an eye on my daughter for the sake of our honour and dignity. So, yes, I am more careful about my daughter than my son.”*

Parents reported they were more relaxed when it came to restrictions on mobile use by their sons. The reason, according to a mother of an adolescent boy in the rural school, is, *“Well, when a boy makes a mistake, he can get away with it. It will pass. But when a girl makes a mistake, everyone focuses on that and starts gossiping about it.”* Another parent of a girl from the Bengali medium school reported, *“These days, giving birth to a girl means you live the rest of your life in fear.”* On the other hand, parents of the

adolescent boys reported that romantic relationships were not appropriate for boys of their age. Playing games is permissible, but romantic relationships are not. The mother of a boy from the Bengali medium school believes, *“This is not the age for a boy to engage in a relationship with a girl and do something wrong. They can play games on the mobile or can pick up smoking; but not relationships.”*

### ***Perspectives of Teachers***

Even though most of the teachers are aware of romantic relationships between adolescents using the internet, they do not approve. Their main reason is that the students are too young. Teachers are also aware of the cyberbullying that goes around in response to virtual relationships. They reported giving students advice on how to act responsibly in the virtual world. According to a teacher of the Bengali medium school, *“We, the teachers, tell the students that there will be punishment for those who engage in something like this. He will be issued a transfer certificate (TC) [i.e. expelled] and that such activities are strictly unacceptable. I personally tell them to respect girls.”*

Teachers believe that giving mobile phones to adolescents at such an early age is a major part of the problem. A teacher of the slum school said, *“We made the students and the parents understand that such problems are created when you entrust your children with phones and internet at such a young age. Complications are bound to arise.”* Only the English medium school teachers had nothing much to say about this as they think it is natural for adolescents to develop crushes at this age.

To sum up, the research thus shows that while all adolescents believe that mobile phones and the internet have made relationships easier, it has changed their nature (faster getting in and getting out) and they were particularly circumspect about the fallouts of these relationships. All of the adolescents, particularly girls, were more likely to say that face-to-face interactions are needed and the best for relationships, even though social media may make it easier to maintain communication. But the fact that the adolescents were at all talking about relationships is a change from previous literature, where there is little evidence of them discussing this at any length. Rural school students were least likely to say anything positive about online relationships. This would seem to show that they have more traditional attitudes towards romantic relationships. The reactions and perceptions of their parents, in particular, reveal that the stigma of adolescents having romantic relations is still very much prevalent and that it is a potential area of confrontation between parents and adolescents.

## 4.4 Internet Influencing Adolescents' Ability to Voice Opinions and Play a Role in Decision-making

One of the reasons we looked into decision-making by adolescents is not only to investigate their voice and agency but also to explore ways in which household power dynamics are affected. The opinion of adolescents is usually never sought when making household decisions. However, we found several ways in which information gained through the use of ICT enabled adolescents to contribute to household decision-making.

One of the most common arenas of household decision-making that adolescents participate in is the purchase of various household goods, clothes, and gadgets by various members of the family. This is regardless of their socio-economic background. A female student from the slum school shared, *“Mother wanted to buy a blender. My brother and I suggested, ‘If we are to buy one, we will buy a quality blender that is moderately large so that it can be used for most of our blending purposes.’ Thus the decision was taken. My brother browsed for blenders on the internet. Well, my brother searched for a blender to find out which brands of blenders were better and purposes of different sizes of jars.”* One of the male adolescents from the slum school talked about helping his sister buy a hair straightener online from Daraz. He researched the prices of products and opted for the websites that provided the best price. *“My sister wanted to buy a hair straightener; she said the price is more than BDT 1,000. Then, I searched for it on Daraz and found out they are selling products for a 15-25% discount. So, I told my sister to buy it from Daraz and they will deliver it at home.”* These are two of the many examples of adolescents helping family members choose products online, where their opinions are taken into consideration.

Respondents also reported helping their families decide on places to visit for trips and vacations through searching the internet. A male student from the Bengali medium school, who decided on visiting Cox's Bazar with his family after browsing photos said, *“My father wanted to go to Sylhet for our family picnic, but I wanted to go to Cox's Bazar. My father always tries to take our opinions seriously, so we went to Cox's Bazar. I have been looking up Cox's Bazar on the internet and that's why I wanted to go.”* Similarly, a female student of the Bengali medium school reported looking at pictures before deciding on places to visit. She said, *“When my family wants to visit a place, I suggest the best destinations after a search on YouTube. Many people visit various places and upload pictures.”*

Some adolescents talked about their families valuing the skills they learn online. For example, a boy from the slum school mentioned using the electrical skills that he picked up from YouTube. He said, *“When we shifted to a new home, my parents asked me to set up the fans and lights. I can also fix the [electrical] circuit when needed. I watch the map of the circuit [online] where I can see which point is earthing, which one is negative, and which one is positive.”* A girl reported making a lot of use of the barcode scanner to find information about products. In all these cases, adolescents felt that their opinions were valued by their families.

Respondents reported helping parents access new information as well as learning new skills. For instance, a female student from the Bengali medium school helped her mother learn more about her medication. A boy from the same school also talked about helping family members find different features on phones. Another boy from the English medium school helps his mother search and download recipes.

Adolescents report using the internet to make their own decisions, especially when there is no one to ask. A girl from the English medium school who uses the internet to research all topics taught at school, learn German, read up on photography, try out her skills in art and editing, follow celebrities and keep up with fashion. She also has a health check-up app that she uses to look after herself, and a nutrition app that guided her through a diet. It is not surprising she went online to learn about how to deal with menstruation. *“When I experienced menstruation for the first time, I didn’t know what or how to do anything about it. I had a severe stomach ache. So, I searched Google for a remedy and found that I could use a hot water bag to alleviate the pain. My mother wasn’t at home. My father was at home. But I couldn’t tell my father about it. I knew that my mother and my sister use sanitary napkins. But I didn’t know how to use those. So, I sought help on the internet,”* she shared. In a country and culture where menstruation is still a taboo subject and not to be discussed with males (even fathers), this adolescent girl coped with this transition on her own.

Respondents also felt that by using the internet, they would be able to decide on their future aspirations. They felt that they could choose which career path to embark on, and believed that their parents would be supportive of their decisions. *“When our country is fully digitalized, instead of carrying books, we will just carry a tab with all the study materials. I will learn graphic design, using online sources, and earn money from home. I am already doing many things using the internet,”* stated a male student of the slum school. A boy from the Bengali medium school said, *“It can help me with my*

*studies. If I apply for a scholarship after graduating, the internet can help me find out which country will be better for me. I could do many kinds of work for money using the internet in the future.”* A female adolescent from the slum school said that the internet would help her become a doctor in the future. She said, *“Through the internet, I can look at different laboratories and doctors. I can watch videos online of how doctors are performing operations.”* Another boy from the rural school has very specific plans. *“For instance, if I become an engineer in the future, I will be able to take orders for delivering different electrical and mechanical components through the internet,”* he stated, *“I will be able to do it faster.”*

However, an examination of all the interviews of the adolescents reveals that boys are more likely to specifically link their future aspirations with their knowledge or use of ICT than girls. One or two of the girls from English medium schools did report how their overall skills and range of skills will improve their chances of getting into good universities, but their aspirations were not as specific as the boys’. But perhaps that is a choice in itself, as a girl from the English medium school said, *“For instance, many students have selected their future profession. They have decided upon what they want to be when they grow up. But I wouldn’t do that. At first, I would try to find out what I like best. I learned about this on the internet too. It is not right to choose a profession after being inspired by seeing someone in that profession, for instance, whether one should be a doctor. I will do whatever I feel like doing.”*

Most adolescents can explore different sites, form opinions, and contribute to decision-making in the family, especially when choosing products or holiday destinations and helping parents/siblings in other ways. When parents or siblings are looking for something specific online, these adolescents are often handed the phone to help or sit beside them while they browse sites and share their opinions.

However, the exception was girls from the rural school. They reported that their opinion is not appreciated by their parents. *“I can’t express my opinion on matters that are considered as adults’ business. They don’t approve of it. They say that it is not right to interfere with grown-ups when they are talking,”* a female student from the rural school shared.

This is not surprising, given the attitude of the parents of the female students of the rural school. Both parents of boys and girls of the rural school only think of the negative aspects of mobile phone and internet use. While they have difficulty with their sons’ access to and use of mobile phones and the internet, they exercise absolute

control over their daughters. Parents complained that the boys only use it to play games and watch pornography. But they refused to consider that their daughters may need to use the mobile phone and particularly the internet. The risks it poses and the loss of their honour in society stemmed naturally from a conversation about usage.

Parents from the other schools also spoke about the negative impact of mobile phones and the internet on their children but had some positive things to say about the skills their children acquire. All parents stated that they asked their child to notify them if something happens to their phone and it stops working. They talked about their children learning how to craft and their repairing skills. They also shared concrete examples of their children helping them with recipes, designs for sewing, seeking home remedies for minor health issues, and making doctors' appointments. A mother of a boy studying in the slum school was amazed by her son's ability to find a location. *"For example, once I wanted to go to a house in Gulshan. I was thinking about how I would find it. Then my son asked me for the address. After some time, he told me in detail how to go there, using Google Maps. I asked him 'How do you know?' and he told me about Google Maps. I didn't pay much attention to what he was saying at that point. But when I got there, I found it was exactly where he said it would be!"*

## **4.5 Adolescents' Perception of Risks and Mitigation Strategies**

We looked into risk perception and mitigation as part of adolescent voice and agency in this research because first, identifying risks is a skill that adolescents must possess to navigate the internet, especially because it is new technology and experience to many of them; and second, being able to mitigate the risks is a new skill, which enhances their agency in navigating it safely.

### **4.5.1 Risk Identification**

Adolescents of all socio-economic backgrounds reported a number of harassment issues and the risks they face—personally or as a group. The perceived risks run the gamut from relatively minor ones like harassment through repeated calls/messaging, to extremely serious ones of trafficking and including within the range sexual harassment, blackmail, cyberbullying, fake accounts, and deception under false pretense, invasion of privacy and leaking/misuse of private information, body shaming, sending explicit content/pornography distortion/photoshopping images, etc. Some seem to be more common across classes, meaning it happens to students, or their friends, such as deception through fake accounts and false pretense, leaking of private

information, cyberbullying, and harassment by photoshopping images. It is difficult to extricate the different types of risks, as they are interrelated. While the themes were common across all respondent groups, children of the Bengali medium schools were least likely to report risks or have knowledge about the different types of risks (possibly as their internet activity is limited and monitored). There were some issues specific to adolescents from the English medium school (from upper-class families), such as “body-shaming” and “glorifying depression” which are commonly found among the youth in the global North.

The data gathered on risks is very large. In this section, we will try to use some examples to illustrate the nature of risks adolescents face using ICT, recognising that these are usually issues the respondents have heard about from others, and only in some cases experienced it themselves. It may not be possible to differentiate between actual experiences and hearsay, but the fact that they spoke at length about these issues shows that this is something that they are aware of and concerned about.

One of the most common forms of violence reported using ICT is “blackmail”. The perception that this is a problem was common among adolescents in all schools and they all had stories to tell. A boy from the rural school shared his story:

*“I used to hang out with a senior student at my school. He had been talking to a female friend on Facebook. Slowly, they began talking for long periods. Eventually, he fell in love with her. The girl sent the boy a few pictures of herself and he also sent her some of his pictures. When she refused to be his girlfriend, he installed an app from the Google Play Store. He used that app to modify that girl’s photos into naked ones.”*

This sort of story was reported by many of the adolescents as happening to other students in their school. According to them, the pictures were then circulated over the internet and spread to students and family members. Many of the respondents talked about apps that can alter body parts to make one appear nude. A girl from the slum school said, *“Many abuse this opportunity and do bad things. They edit pictures and spread those online. You know, you can dress up like anyone through editing. If you want longer hair, you can have it. If you want a smile, you can have it. You can be anything. Just like make-up, there are body parts which you can edit the picture in the ‘wrong’ way.”*

The second most common form of violence is opening a fake account and spreading rumours, lies, or pictures about someone. A female student from the English medium

school described how she experienced this after other students misunderstood the nature of her relationship with her male best friend:

*“Rumors were spread that we were dating. It’s a total lie! There a lot of big drama regarding this. The girl, I mean my friend’s girlfriend became angry after hearing this. Her friends said many bad things to me. They created a fake account on Instagram using my name. From that account, they sent bad messages to all my teachers. Later, the teachers told the principal that I was sending them those messages. But I wasn’t.”*

This was experienced by the respondents themselves, in the various contexts we studied. These instances cause a lot of anxiety and distress for them and some cope with the issue with the assistance of teachers.

Male and female adolescents expressed concerns that they might be entrapped by someone pretending to be someone they are not, stringing them along into thinking they are in a relationship, and finally revealing themselves. For instance, they do this by pretending to be the same age as the adolescent and later turn out to be much older; or by pretending to be of the opposite sex that they are.

A boy from the slum school said *“I was chatting with a person on Facebook. That person was sharing naked pictures of girls. So was my friend. At one point when my friend asked for her real picture, he found out it was a guy. He was shocked because he thought it was a girl.”*

This was also mentioned by several adolescents from different contexts as being a very common incident. In such cases, respondents reported that they are often asked to send nude or provocative photos of themselves, which are then circulated over the internet. A girl from the slum school explained, *“Now if I send a picture to a boy I trust, and if he turns out to be a fraud, he will crop my picture and paste it on an inappropriate picture and spread rumours about me.”*

Adolescent boys are also vulnerable to being cheated and used by other boys or men. A boy from the slum school shared his experience:

*“This happened on Messenger. A person who is a hujur (religious teacher) told me to send him an inappropriate picture on Messenger. I told him that you are a hujur and I spoke to you recently. He used abusive language and told me to send it quickly. Then I verbally abused him too in a video call. I blocked him on Facebook afterward.”*

Then there are common instances of harassment through persistent calling/messaging among the adolescents. A girl from the Bengali medium school stated,

*“I would keep the mobile phone with me back then, but he used to call me all the time. How could I pay attention to my studies if he called me so very often? He called me again and again. At one point, I felt so angry that I felt like smashing the mobile phone into pieces because of him. It was too much!”*

Cyberbullying takes various forms. Not all are sexually motivated. As a male student from the English medium school explained, *“Some boys from other schools bully other boys over their financial status. They brag about their riches and say, ‘Shut up! You will never be as rich as me!’ I saw many [Instagram] screenshots of such sessions of bullying.”*

It also takes the form of body-shaming. A female student of the slum school shared her experience of posting a selfie on Facebook:

*“I looked nice in the selfie. But people make bad comments. Like, ‘Who is this?’ or sometimes they simply can’t process your beauty. Inappropriate comments can therefore come from both men and women. They sometimes say, ‘That girl is not looking nice,’ or ‘You look ugly.’ Because of this, I now refrain from posting pictures of myself.”*

This was a form of bullying that girls from the English medium school also spoke a lot about.

Adolescents also reported that leaking personal information or emotions/relationships are also common. A girl from the rural school stated it simply: *“Yes, it is possible to harass someone on the internet. Suppose someone is keeping a secret. If leaked, this might get her in trouble. Now someone may threaten her to share that information publicly unless she does something in return.”* Although the respondent hypothetically phrased this, this was a concern of all the rural school girls, which makes it probable that it is a common occurrence in their society.

Lastly, many of the adolescents, particularly the boys, admitted to watching pornography. It must be understood that in Bangladesh, pornographic films were previously not that easily available. As one of the boys said earlier, you had to buy it from a shop, which meant that the shopkeeper would know that you are watching them. In small communities, this knowledge can spread, especially to other family members. But with the internet, it has become easily accessible and you can do it

without anyone knowing. A boy from the slum school talks frankly about watching pornography:

*“Because I am a boy, I have desires. We used to follow the elders from our childhood. We want to follow them to experience what they do, to see what it feels like to do these things. It doesn’t matter whether it is good or bad, we just want to experience it first. So, boys my age all watch this. Truth is, I also watch it.”*

The fact that adolescent girls also watch pornography, or have watched at least once, was unexpected. A girl from the English medium school said she watched a film when she was in Class Five. *“Yes, I have. Everyone our age has watched these movies. I was curious about what everyone my age watches.”* The opportunity to watch pornography is available as these films are advertised on Facebook or other social media apps. Girls tend to watch out of curiosity or are recommended by those who have seen it. Unlike boys, they do not watch in groups. And many talked about the acts portrayed as extreme.

Girls from all the schools identified a connection between the greater availability of pornography and a premature interest in the opposite sex, which in some cases manifested as teasing or sexual harassment. A female student from the Bengali medium school said, *“When boys my age watch the videos, they tease girls even more. They tease girls about their bodies. Boys and girls weren’t like this in the past. The older boys were very gentle. But today’s boys and girls are way ahead of their time.”*

Another female student from the slum school said, *“If someone searches for it out of curiosity, that is okay, but it may turn into a habit one day. The person then starts searching for these videos regularly and turns into a bad boy or bad girl and gets married too early. The main reason behind this is these videos. They change after watching these videos.”*

The risks discussed above were described in detail by both male and female adolescents of all schools. Females studying in the English medium school spoke about two other types of risks. They were the only ones to mention memes<sup>7</sup> and how sometimes jokes get out of hand: *“Once they made a meme of me and posted it on a story where everyone could see it. That’s when I got offended. I was really offended because I wanted those things to be between us. We wanted to have fun amongst*

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<sup>7</sup> an image, video, piece of text, etc., typically humorous in nature, that is copied and spread rapidly by internet users, often with slight variations.

*ourselves and not get anyone else involved. I was really angry and directly messaged them to delete these. Other people already took screenshots of it, and they were then posting these screenshots in their stories. Everything got messy.”*

The other risk is stalking, which only one girl from the English medium school spoke about. *“I had an Instagram account in the past. But I was being stalked,”* she said. *“The stalker had found my location. He somehow knew what I was doing. He could tell what I was doing at home. He also knew my school’s name. He told me not to tell my parents about it. He threatened to kill my parents had I told them about it. Yet, I gathered the courage to tell my parents about it. After hearing everything, my parents became very angry and afraid at the same time”*. The parents of this girl filed a report at the police station and the girl deleted her Instagram account.

#### **4.5.2 Risk Mitigation**

It is a part of developing personal agency to be able to control their own risky behaviour online and to minimise vulnerability to online risks. And this agency is seen among some of the adolescents, though varies by location and gender.

The most common way adolescents know how to protect themselves from people who send unwanted messages is to block them or “unfriend” them. All the female respondents talked about it, except girls from the rural school, who did not answer when asked how they could protect themselves.

Some of the adolescents said that the competition for popularity made them initially accept friend requests from unknown people. They were eager to be able to boast about the hundreds of “friends” they have on Facebook. But gradually, they have come to realise that the number is not important. It is more important to know who your “friends” are than to allow strangers access to their accounts, information, and photographs. Filtering friend requests and message requests are lessons that most of the adolescents have already learnt.

Another way to reduce the risks brought up by respondents is by identifying fraud and fake accounts, through which friend requests and offensive messages are filtered. A tech-savvy adolescent boy from the slum school explained,

*“The profile of someone with a fake ID will be usually a short one because people don’t use them often. You can also check when the account was opened. A real Facebook profile will have a very long history of posts which you will not find in fake accounts.”*

Another way to easily protect oneself, according to the respondents is to set your account on private mode. This was specifically mentioned in the context of getting follower requests on Instagram by the girls from the English medium school. A boy from the same school explained his preference for Instagram over Facebook: “On Facebook, even when someone’s account is private, his old pictures will pop up. But that’s not the case with Instagram. Instagram will show a message such as ‘This account is private.’ So, other people can’t view anything about that person.”

A female student from the English medium school also said that if a person she blocks creates another identity to harass her, she can report that person as a “spammer”. She elaborated, “*Spam often sounds very robotic. It sounds unnatural. I often receive many spam messages that may read like, ‘Hello, I am X, and I want to do these things with you’. And if you check the profile picture, you might see a nude picture of a girl. A normal person would never send a message like that to another person. That’s how you can understand that it is spam.*”

Another way to remove someone who is harassing you is by reporting that person. An adolescent boy from the English medium school stated that “*Reporting doesn’t do much. However, when someone sends a request with wicked intentions, you may report him. If he gets 10 reports against him, his account will be blocked.*”

Lastly, adolescents mentioned switching to apps that allow greater safety measures. For instance, some of the English medium school girls talked about switching from Facebook to Instagram. Some also said that they stopped using Snapchat because it has a feature that shows their location.

Blocking, unfriending, and filtering are the most common measures that nearly all the respondents spoke about, except for adolescent girls in the rural school. Privacy modes, switching apps, and reporting were mentioned only by the students of the English medium school. This may be because girls from the rural school have the least access to mobile phones and the internet, and their usage time is limited, leaving them with fewer opportunities of either being able to talk about different kinds of online risks and ways of mitigating them. The English medium adolescents have their own mobiles, have access to Wi-Fi, spend more time on the internet, and are, therefore, more likely to have had more knowledge of different types of risks online. A discussion with their teachers also revealed, these are problems that the students face and with which the English medium school helps them deal with. The school also educates the

adolescents to identify different types of harassment and measures to protect themselves online through discussions in class, or by arranging separate workshops with experts on the topic.

#### **4.6 Internet as Enabling Engagement with Virtual Community and Their Involvement in Movements**

*“I’m communicating with my friends, watching YouTube videos and this creates new thoughts in my head. I’m very aware of current affairs.”*

- An adolescent boy from the English medium school

In this section, we try to understand adolescents’ voice and agency in a broader arena beyond their families, gained particularly through mobile phone and internet use. The purpose is to understand their engagement with a wider community and larger causes. So, what are the ways in which adolescents connect to and feel a part of a larger virtual community?

One way is through the creation or expansion of friendships. The research shows that the number and diversity of friends depend partly on the social communication app used and access to the device and the internet. Students of English medium schools who own their devices have a large number of friends in their network. They are mostly Instagram users and have “followers” who include family members, school friends, older or younger students of the school, cousins, and their friends.

*“I have 856 followers. I follow 249 accounts. I don’t know all the people who follow me, but I know all the people I follow.”*

Most of the English medium school students (boys and girls) said that they were familiar with most of their followers in real life. They are quite cautious about accepting requests from unknown people. They talk to them first and also try to ensure that others among their friends also know that person. But new friendships are also formed. One of the female students of the English medium school said,

*“I have made friends with many people on the internet. I like that I have made many friends. I talk more to my internet friends than I talk to my school friends. They are from around the world. Some of them are from America, some from Australia. In this group, we don’t judge anyone by their bodies. Here, we only judge someone by the things he or she says. I like it a lot. But in real life, people judge others by the colour of their skin and*

*body shapes. I have about 15 best friends with whom I chat regularly on the internet. We are of more or less the same age. I share my personal problems with them. Whenever I feel sad, I chat with them.”*

The few Facebook users of the other schools rarely spoke of making new friends through the internet. They have a few “friends”, most of whom are schoolmates and family members. A boy from the slum school was the only one who said he has 500 “friends”.

*“All of them are Bangladeshi. When I first opened a Facebook account, I accepted all friend requests; I accepted whether they were from Africa or wherever. But when I was in Class Seven and opened another account, I became choosy about accepting requests since some friends were unknown,”* he shared.

Adolescent girls, particularly those from the rural school were found to have the lowest number of friends. Nearly all rural school students use the Instant Messaging Operation (IMO) app. They usually operate through their parents’ IMO account, so they add a limited number of friends. The number of friends is also limited by those who also have IMO accounts in their community/school. Boys also usually have access to their parents’ accounts, but somehow manage to gain access to the phone more often, or for longer periods of time than girls. They spend some of their time on communication, but most of it playing games, watching songs, dance videos, and short YouTube shows.

Another way of expanding networks with other adolescents is through gaming. Boys from the English medium school are most likely to play online multiplayer games, but gaming is popular among girls as well. However, most girls play “solo” games and games that do not necessarily require the internet. Even among boys, “multi-player” games are played by those who have greater access to the internet.

A male student from the slum school said, *“To play Clash of Clans, you have to stay online all the time to protect your clan. I played a game called Hay Day, where you have a home and a garden; you have to feed your animals, cutting down fruits from the trees, etc. You don’t have to stay active online the whole time to play this game (but it is multiplayer).”*

Multiplayer games are usually played with friends. In some cases, players are strangers, and you do not build a relationship with them. But in some cases, they do lead to new friendships. Another boy from the slum school said,

*“Yes, I have some international friends in PUBG. I also have some friends in FREE FIRE [a multiplayer game], we play together. They are from India; I talk to them in Hindi, asking where the enemies are and all that game stuff.”*

Adolescent boys from the Bengali medium school have limited opportunities to play online games, which is also true for boys from the rural school.

Another way that adolescents expand their networks is through joining different kinds of online groups. Some groups are school-based, formed to exchange notes, update each other on tests and homework, share notices, and keep up with what is happening in their class. These groups were found amongst students of most schools, but, of course, limited to those who have easy access to phones.

However, there were other groups that the adolescents follow, that are formed around interests. A boy from the English medium school and a boy from the Bengali medium school talked about football groups. There are groups based around certain identities like the Puran Dhaka group, of which a boy from the Bengali medium school is a member, that shares posts on the heritage and food of old Dhaka, or the group named after the school where current students and alumni meet. Other groups were formed around mutual interests. A boy from the rural school spoke of the group “Ochena balok” (Unknown Boy) of which he is a member.

*“The group had many good posts. And it felt really good to communicate with the group members. They would share various educational videos, videos of cultural functions, music, and emotional dialogues, etc.”* he said. The most unusual is the group which one of the boys from the slum school is a member of. *“These are Facebook groups of Stuntman Rakib Hossen and R.S. Fahim Chowdhury. I follow them and am also a member of their groups. They explain what a stunt is, how to perform stunts, and how to modify your cycle in order to do stunts. I can get ideas from there.”*

Two girls spoke about the groups they belong to. One of the adolescent girls from the Bengali medium school talked about hers, *“Yes, I am a member of one of the photography groups on Facebook. There’s another group called Boys vs. Girls. I am a member of that group too. In that group, girls share funny videos that mock boys and boys share videos to make fun of girls. We have a lot of fun there.”* The other was a

student of the English medium school who said, *“I mostly follow those who make or do things that I like. For instance, my favourite band is Arctic Monkeys. I also follow other artists who draw and paint things, I mean, painters. These are the things I do and it inspires me to see how good they are doing! I know how to play basketball. So, I also follow basketball players.”* However, none of the girls from the rural and slum school mentioned any groups. Both these groups of girls have very limited access to mobile phones.

These groups are instrumental in educating the respondents about the craft or subject they are interested in, and in establishing a network with others who have similar interests, which would not be possible without the internet.

We finally looked at adolescents’ engagement with the virtual world through their participation in movements. The movement we focused our vignette on for the FGDs was the Nirapod Shorok Andolon<sup>8</sup> (Safe Roads Movement). It was a movement that started online in 2018, spearheaded by the youth to protest the deaths of several students in road accidents every year, as well as the absence of proper licensing and maintenance of traffic regulations.

Nearly all the respondents in our research were aware of the Safe Roads Movement. Many shared posts, pictures, videos, and commented on this movement online. Along with participating in a formal movement, some shared videos showing bad behaviour by the authorities. A boy from the English medium school said, *“On my Instagram story, I also shared some videos where Bangladesh Student Leaguers are torturing general students.”* Sharing videos was also mentioned by a boy from the slum school who said *“A video uploaded by my friends from Imperial College during the movement showed that the police were riding bikes without any license and many vehicles were parked illegally on the road.”* This movement sparked protests in the different districts of Bangladesh. One of the boys from the rural school said, *“One of the older boys in my neighbourhood told me to join everyone else on Facebook to make sure that nobody can drive a vehicle without a license. In case the driver couldn’t show them his license, they took the ignition key of the vehicle. Those older boys from my neighbourhood*

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<sup>8</sup> The Safe Roads Movement was held initially in Dhaka from 29 July-8 Aug 2018 sparked off by the death of two high school students when a bus ran over them. The movement spread all over Bangladesh. At one stage the protests became a target for violence allegedly by pro-government workers and people were arrested. Please read more on [https://en.wikipedia.org/wiki/2018\\_Bangladesh\\_road-safety\\_protests](https://en.wikipedia.org/wiki/2018_Bangladesh_road-safety_protests). You can read more about student movements and specifically the Safe Roads Movement in this link: <https://www.newagebd.net/article/47635/youth-movement-for-road-safety-students-speaking-truth-to-power>

*participated in that movement on Facebook. I supported them.”*

Girls are more likely to be restricted even in online participation because they share their Facebook accounts with their siblings or parents. A girl from the Bengali medium school reported that she was restrained by her older sister, with whom she shares an account, from joining the online protest movement: *“She doesn’t let me do anything that she doesn’t do herself. Of course, I sometimes share pictures and stories without letting her know about them. If she finds, I’ll be so dead!”*

Only one or two adolescents from among our respondents physically participated in political events as they often resulted in violence (this was the case with the Safe Roads Movement). Girls were also constrained by general restrictions on their mobility.

All respondents discussed and protested the national incidents that stirred public sentiment. For example, a female student from the Bengali medium school spoke about the student named Nusrat who was set on fire in a madrasah after she had protested sexual harassment by the Principal:

*“Many posts appeared on Facebook, which demanded punishment for her murder. I shared the news on my profile so other people would become aware of it.”*

Another finding of our research was that students from the English Medium school were most likely to be a part of global online and hashtag movements. They participated in climate change movements (are familiar with Greta Thunberg), hashtag movements that show support by retweeting or posting, and online petitions. One boy described how *“There was also a hashtag movement during the fires in the Amazon; I also took part in that to save the Amazon. I couldn’t donate money because I don’t have any credit cards but I did what I could. This world is like a gift to us and we are constantly exploiting it. We need to do something about this.”*

We asked some of the respondents what kind of online movements they would like to lead. A female student from the slum school said,

*“I want to be a part of movements against child marriage, dowry, eve-teasing, etc. I will get involved by telling my friends. I will let them know through a Facebook post. After that, people will discuss it and share their opinions about how to proceed with such movements.”*

This was echoed by a few other girls from the slum and rural schools. These girls are

not a part of any online movements.

Although no definitive conclusion can be drawn from these engagements, such interests among these young adolescents show a building of opinion, and perhaps, very optimistically, a will to fight against injustice or a call for change.

Most parents and schools did not show much interest in developing these interests in the children. We do not know the perception of the parents of English medium school adolescents. Parents were more or less exclusively focused on their children doing well in exams. Only the English medium school was found to actively engage students in movements, particularly focusing on climate change. Perhaps, as a result, the English medium school students were very well informed of the issues of climate change and particularly the challenges Bangladesh faces.

## 5. Conclusion

The broad central question that this research sought to answer was “what are the implications, both positive and negative, of mobile phone and internet use for adolescent voice and agency in Bangladesh?”. This paper specifically attempted to address the question of how mobile phone and internet use and the effect on their voice and agency differs between school-going adolescent boys and girls, between adolescents of well-off and poor families, and between adolescents living in Dhaka city and Cumilla.

In this research, our focus was on ownership and access to mobile phones and other devices and use of the internet; to what extent the devices and internet enhance adolescents’ opportunity to access information; to what extent the devices and internet enhance adolescents’ opportunity to learn new skills; how and to what extent this information and skills enhance their opportunity to build relationships with the opposite sex; how and to what extent this information and skills enhance their opportunity to participate in a decision-making role in the household; how and to what extent this information and skills enhance their ability to recognise risks and mitigate them; and how and to what extent the connectivity enhances their feeling of belonging to a wider group (as opposed to being secluded) and build foundations for participation in movements. And we explored these issues across different genders, socio-economic classes, and locations. We also explored the perspectives of the schools and the parents of adolescents.

Below is a summary of findings on access and ownership of mobile phone and internet use and how these positively and negatively affect adolescent voice and agency. We also explore factors significant for building adolescent voice and agency and contributing to their online security.

### ***Issues of ownership and access (by class, sex, and location)***

In terms of mobile phone ownership, children from more affluent socio-economic classes are likely to own their mobile phones, computers, and various other devices. In most cases, it was found that these 14-year-old adolescents are handed down phones, computers, etc., from their parents or older siblings. Only a few are bought new ones. Children from middle-class and poorer families and those from rural areas rarely own their own mobile phones. Neither do they own nor have access to computers,

especially since the schools they attend do not have the resources for them to use computers. This creates inequality in terms of their computer skills. However, we did not find gender differences at this age, in terms of ownership (except the few urban Bengali medium adolescents girls who are more likely to own than their counterparts) because both boys and girls belonging to upper socio-economic groups own them and neither boys nor girls of middle, poorer, and rural children are likely to own them.

Access to mobile phones is more equitable across class, location, and gender, but this is only if we consider whether they have access to mobile phones or not. But the quality of the access varies among the class, gender, and location. We find that the adolescents belonging to the higher socio-economic groups have unlimited access to using their phones or other devices for educational purposes. In school, each has access to computers, and much of their curriculum is taught using ICT; at home, they have their own devices to work with. However, there is some level of monitoring when it comes to accessing their phones and devices for purposes of gaming or social media. In such cases, some of the parents (according to the adolescents) have rules that restrict the time they spend on their devices.

However, since most of the adolescents belonging to the other socio-economic groups share the devices of their parents or siblings, the time they spend on them is much more limited. In some cases, the parents may be out working and take their phones with them, so the adolescents get a short period in the evenings to use them. Or the sibling they share it with might restrict use. Though these adolescents know about various ways in which the internet may be used for educational purposes, it appears that their actual use may be limited to playing games for the short time they get their hands on the device. So access also shapes the use of mobile phones.

There are gender differences when it comes to the use of mobile phones even when they have access. Girls from middle and poorer socio-economic groups and mostly girls from the rural area are heavily restricted by parents in their use of phones. As a girl from the rural school mentioned, her mother keeps the phone locked as she believes that girls become “spoiled” by using mobile phones.

Access to the internet varies by class. Adolescents belonging to the higher socio-economic groups have unlimited access to the internet because they have Wi-Fi at home and most other places they visit. This allows them to spend more time on the internet for different purposes. The findings show that these adolescents do a lot of research on their devices, an opportunity that other adolescents do not have. Hardly

any of the adolescents belonging to any other class have Wi-Fi at home. They all use mobile data either paid for by their parents/siblings or bought by themselves with savings from lunch money mostly. In Bangladesh, as mentioned earlier, data packages are very cheap and in a price range for all types of usages. Even then, the cost limits the use of the internet, and we find that the internet is used for educational purposes only when necessary. It is mostly used for social media or downloading songs and movies. It is used for gaming by a few but live gaming is also limited by the opportunity and the cost of how long you have to be online. It is also evident that the exploration of the internet by most of these adolescents is sometimes influenced by the preferences and likes of their parents and siblings.

There are gender differences in access to the internet as well. For instance, boys use their friends' phones or they can access public Wi-Fi as they are more mobile. Some know how to hack Wi-Fi passwords, some buy mobile data, and some boys get together and watch shows. Girls are limited by the fact that they have less physical mobility so they cannot meet their friends in public spaces. None of the girls mentioned buying their own mobile data either, which the boys regularly do to use the internet.

### ***What enhanced adolescent voice and agency (by class, sex, and location)***

As is evident from the discussion above, access to mobile phones and the internet has a strong impact on adolescent voice agency. Evidence from our research shows that male and female adolescents have gained a voice through mobile and internet use that they did not have before. Armed with information, various ways of being and doing, they form and express opinions of their own, feel encouraged and confident to showcase their skills, discover hidden talents that they were unaware of, hone interpersonal skills, and contribute to decision-making on certain matters at the household level. In these matters, disparity by class, gender, and location is not that evident. But there is diversity. Girls may have different interests and spend their time on their devices or the internet differently from boys or have differences with girls from other socio-economic groups or locations, but each adolescent develops and feels a change in their agency in their own way. Some girls may be learning new languages and strengthening their application for higher studies, while other girls may feel more empowered by learning dancing or applying make-up to look good. When it comes to decision-making, all adolescents seem to be able to contribute on some level.

In terms of their education, the internet gives the adolescents access to reference materials that were not available before, new arrays of ideas, and support for the subjects that they are weak in, to which they otherwise would not have had access to. The use of apps for educational purposes, particularly taking help in subjects that students are weak in (for instance, English and Maths), is something we found across socio-economic groups, locations, and gender. Recent research has shown (Amin and Misunas, 2020), tutoring in mathematics and English language creates changes in adolescent empowerment, particularly in terms of increased school competency, self-confidence, and more progressive values amongst Bangladeshi adolescent girls. Ownership of devices and having access to Wi-Fi, combined with the fact that their education system integrates the use of the internet, means that adolescents from higher socio-economic groups can and must access the internet for their education. However, the parents of adolescents who belong to the middle and lower classes and those from the rural areas perceive the use of the internet and education to be at odds with each other. This is because, to these parents, using the internet means being on social media or gaming.

In terms of agency, adolescents learn new skills, engage with a virtual group of friends, participate in online movements that engage them in concerns larger than themselves and which also give them an arena to exercise their moral development. There are some class differences. Students of the English medium school were far more likely to be engaged in global movements. Learning new skills enabled them to also create changes in society, for example, by girls learning to dance in the rural areas, or by boys who developed an interest in cooking, both of which challenged prevailing gender norms of what is suitable for girls and boys of that age. These actions contribute to modifying gender stereotypes and gender norms of Bangladesh. We have also found that the internet can ignite and inspire their aspirations for the future. This was more evident amongst the boys, irrespective of which class they belong to, where their aspirations are more specifically linked to the internet, such as using it to set up business in a rural area.

Lastly, we find that certain adolescents develop personal agency to regulate their online behaviours and manage their online risks. This was evident among all the young adolescents to some degree. Boys and girls from middle and lower socio-economic groups and rural areas have learnt to be more cautious about accepting “friends” and using their own photos on social media—practices which protect them to some extent from online risks. Adolescents from the higher socio-economic group spend much

more time on the internet and are vulnerable to a greater variety of risks as a result. They have also developed better abilities, for example, about learning rules and boundaries, maintaining social relations, and keeping themselves safe from online risks.

### ***What constrained or had a negative effect on adolescent voice and agency***

Online risks were found to be common across all divides—class, location, and gender. However, the nature of risks may vary. Irrespective of how regularly they used the internet, all FGDs with adolescents showed that some risks are common, such as “blackmail,” “deception,” “body-shaming.” This was expressed as own experiences, mostly by those who used the internet regularly and as stories they heard by those who used it less. Other risks were only mentioned by adolescents from higher socio-economic groups, such as “stalking.” The research also shows that while girls are vulnerable to violence, boys are vulnerable too, for instance, to sexual harassment or cyberbullying. However, adolescents from higher socio-economic groups, particularly with help from their school, were more cognisant of the different types of risks they face and are more consciously made aware of ways to protect themselves. This role of the school in educating adolescents about online risks was absent among the students from middle and lower socio-economic groups and the rural area.

The adolescents can themselves identify the negative impact of mobile and ICT use on their lives. They can identify various types of risks they face online. Some of these risks they face from others’ behaviour, such as being deceived, or their photographs being altered. Others, they face from their own behaviour, such as seeking popularity by increasing the number of friends, thus exposing them to the risk of accepting unknown requests. However, their capacity to deal with, or prevent these risks is also developed, which prepares them for issues that may arise as they grow older, and their lives and livelihoods engage them with the virtual world more intimately. They are also conscious of their admitted or potential “addiction” to mobile phones and using the internet, although this is something that they are less willing to address, which results in altercations with parents.

Adolescents’, particularly younger ones’, access to pornography through ICT seems to be easier and it is widespread among those belonging to different socio-economic groups, both in an urban and rural context. Boys were more likely to have watched pornography than girls, and some watched it when they were younger on the devices of

their older brothers. At their current ages, they follow the links to such movies that pop up on their screen when they watch YouTube, or they download it from VidMate where there is no restriction of age. All of the girls who have watched pornography pointed to the advertised links to pornographic movies that appear on their screens. They all admitted to watching such movies out of curiosity, but for most, their reaction was negative, including being scared. In Bangladesh, where the taboo of sex is so strong that it is not even taught in schools, despite being part of the curriculum, pornography is one of the few ways that adolescents learn about sex. It is of grave concern because these movies represent a distorted impression of sexual relations and male-female relations.

One issue that requires further research is the effect of *waz* or Islamic videos that some adolescents seem to watch or listen to. While our research shows that there are positive messages of respecting women and so forth being transmitted through these, there are also violent depictions of women's suffering if they do not observe purdah. What effect does that have on the adolescent minds? How do they interpret it and what effect does it have on their voice and agency?

The attitude of the gatekeepers may also inhibit adolescent voice and agency. Most of the parents (except parents of English medium students whom we could not talk to) view adolescents and the use of mobiles and ICT as primarily a negative combination. The preoccupation of parents around possible romantic relationships their children may get involved in clouds their view. Moreover, they do not see the relationship between education and the internet. They are, of course, also concerned that the amount of time that the adolescents spend on their devices is harmful to them. Common among all the classes is that parents invariably monitor their daughters' use of mobile phones and the internet and are more restrictive of the time they spend on it and are more skeptical of their use of it.

In addition, we found that school teachers may also have biases towards the students' use of computers and ICT. The rural school teachers were very sure that boys are more interested in computers, they are better at handling them and therefore, get more opportunities to work directly on the computers.

### ***Factors/conditions that influence adolescent voice and agency***

Our research finds that the school plays a major role in shaping the voice and agency of adolescents through the use of the internet. Despite the fact that the Government of

Bangladesh has made it mandatory for secondary schools to have multimedia classrooms and computer labs, we find that these are in poor condition in some places, not enough in others, and are not allowed to be used by the students of Class Eight in some schools. In Bengali medium, slum, and rural schools, it is mainly the ICT teacher who uses and indeed knows how to use computers and the internet and not teachers of all subjects. In most cases (Bengali medium mainly because Class Eight students are not allowed to use the internet, and slum schools, mainly because there are no other computers in the school apart from those of the teachers'), during ICT class, the students are shown their lesson over a projector rather than allowed to work on computers hands-on. The students only get to watch and listen, and not learn to use or gain proficiency. In case there is a computer lab in a rural school, many students have to share a computer and boys are given preference by the teacher for this opportunity. Thus, resources, teacher's training, and teachers' attitudes influence adolescents' skills in using computers and the internet and thereby their voice and agency gained through them. In contrast to these schools, the English medium school starts educating students on ICT much earlier in Class Three or Four and they have ample computers for the students, and all the teachers use the internet as a matter of course of their education.

Schools have a huge role to play in empowering the adolescents' agency in their ICT use, alerting them to the kind of risks, and supporting them when they are harassed or bullied. This was most evident in the English medium school and least so in the Bengali medium school. Some teachers, for instance, those of the English medium school, believe in building the capacity of the adolescents to handle various situations, given the reality that they will indeed need to learn to use ICT safely. However, other schools and teachers do not seem to have engaged with the issue of adolescents and ICT use and tend to steer clear of dealing with them. There is a definite gap in terms of teachers' training and orientation towards ICT.

Schools also play a big role in adolescents' interaction with local and global movements, as evident from the English medium school in particular. The guidance that teachers can provide needs to be addressed through teacher training in all schools. Involvement in online movements even if marginally, seems to open up the world to adolescents, in terms of choices and arguments for their choices, questioning policies such as regarding climate change, different understandings of justice, and the path of activism. However, they need guidance to help them weigh the different choices.

Parents influence the agency and voice of adolescents through mobile phone and internet use. In many cases, they are themselves not proficient in using the internet apart from using social media platforms. They are therefore not going to be supportive of their children's use of it either. In addition, they have different standards for their sons and daughters. Simple restrictions by parents on usage and forbidding adolescents to open social media accounts are obviously not working. Parents and teachers have to accept that the virtual world is a reality for adolescents. This is the world they belong to and will be spending increasingly more time in. Therefore, they need to be educated on it and help guide adolescents to be safe in the virtual world and support them when they fall victim to harassment, bullying, and shaming.

The overall context also seems to play a role in terms of what kind of information or sites adolescents are accessing. Thus, we find the tendency to watch *waz* among the adolescents from the slum, as their parents seem to watch it. This tendency was absent among other groups of adolescents. The culture of memes was only seen among the respondents from the higher socio-economic groups, who are on the whole, more exposed to and more involved in what is happening globally.

### ***Factors contributing to increasing security for mobile and internet use***

The discussion above clearly indicates the stakeholders or gatekeepers who have a significant role to play in building a safe environment for adolescents' mobile and internet use.

The first is the parents of adolescents. Parents need to adapt to the digital arena. They need to be educated about the positive links between education and internet use. They need to understand that access to the internet is needed by both their daughters and sons. Parents also have to be educated about risky online behaviour and how to manage online risks. In Bangladesh, this precondition of parental digital literacy is needed before parents can play a more constructive role in ensuring that their children can safely avail the opportunity of the internet.

The second is schools, which have a very important role to play in enabling ICT use of students, introducing sites where adolescents can seek help with certain subjects, encouraging internet use in doing research, educating students about and managing online risks, and finally in supporting adolescent students to handle any backlash from online risks. Schools can also play a role in constructively enhancing adolescent voice and agency in social and global issues.

Third, government policies have a role to play in ensuring resources, both physical and human resources to all schools. The government's ICT policy and their introduction of computer labs and multi-media classrooms is a step in the right direction to engage adolescents with ICT. However, this has to be accompanied by comprehensive teacher training on ICT and in particular, using ICT in education. The government also has to institute stronger measures or controls that make it more difficult for under-aged children to access age-inappropriate material and to protect them from online risks, whether in school or at home.

To sum up, this research presents the perspective of young male and female adolescents of what they think about using mobile phones and the internet. Young adolescents have found ways of using them that have connected them, and have enhanced their voice and agency. Despite differences, they are excited by their use and they are adept at it too. Their use holds immense potential for not only change in adolescents, but wider social change too. Schools and parents have to be brought on board to support adolescents in maximising the opportunities that are possible through mobile phone and internet use and to guide them constructively. ICT should support adolescents in their developmental goals (Wisniewski, 2018) and develop their voice and agency to seek out information, learn about rules and boundaries, and maintain social relationships, as well as keep them safe from online risks.

## References

- A2i ((Access to Information programme), PMO (2011). Strategic Priorities of Digital Bangladesh. GoB and UNDP
- A2i and United Nations Development Program (2013) *Report on assessment of Multimedia classrooms (MMC) And Teacher- Led Content Development 2013*. Bangladesh: A2I and UNDP
- ADB - Asian Development Bank (2018) *Report on Working Together for a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific*. Annual Report. Bangladesh: ADB
- Afrin, D., Islam, M. U., Rabbiand, F., & Hossain, A. (2017). The school-level factors associated with internet addiction among adolescents: A cross-sectional study in Bangladesh. *Journal of Addiction and Dependence*, 3(2), 170–174
- Ainul, S., Bajracharya, A., Reichenbach, L., & Gilles, K. (2017). Adolescents in Bangladesh: a situation analysis of programmatic approaches to sexual and reproductive health education and services.
- Alam, S. (2019, December 07). SDGs implementation: Where does Bangladesh stand? *The Financial Express*. Retrieved 10 January 2021, from <https://www.thefinancialexpress.com.bd/views/views/sdgs-implementation-where-does-bangladesh-stand-1575730124>
- Al-Jubayer, S. M. (2013). Use of social networking sites among teenagers: A study of Facebook use in Dhaka City. *Journal of International Social Issues (March 2013)*, 2(1), 35-44.
- Ali, M. S., & Hossain, M. A. (2019) Physical and Psycho-Social Impact of Mobile Phone Usage among the High School Students of Rural Areas in Bangladesh.
- Amin, S. (2015) Urban adolescents needs assessment survey in Bangladesh. New York: Population Council.

Amin, S. and Misunas, C. (2020) Skills that Empower. Presentation at webinar on 23 Sept 2020. Population Council, GAGE and UK Aid.

Asadullah, Niaz (2020) COVID-19, SCHOOLING AND LEARNING - presentation at webinar on 25 June 2020, University of Malaya

Babu, R. and Nath, S. (2017) Use of ICT in Secondary Education in Bangladesh: Policies and Practices, ANTRIEP Newsletter, Vol. 23, No. 1 January - June 2017. Retrieved 10 January 2021, from [https://www.researchgate.net/publication/321026266\\_Use\\_of\\_ICT\\_in\\_Secondary\\_Education\\_in\\_Bangladesh\\_Policies\\_and\\_Practices](https://www.researchgate.net/publication/321026266_Use_of_ICT_in_Secondary_Education_in_Bangladesh_Policies_and_Practices)

Baird, S., Bhutta, Z. A., Hamad, B. A., Hicks, J. H., Jones, N., & Muz, J. (2019). Do restrictive gender attitudes and norms influence physical and mental health during very young adolescence? Evidence from Bangladesh and Ethiopia. *SSM-Population Health*, 9, 100480.

BANBEIS (2017). Annual Training Calendar. Retrieved 10 January 2021 from [http://banbeis.portal.gov.bd/sites/default/files/files/banbeis.portal.gov.bd/page/2fccd2aa\\_5ece\\_470f\\_9b55\\_14a17a3f7373/UIRTRCE\\_Training.pdf](http://banbeis.portal.gov.bd/sites/default/files/files/banbeis.portal.gov.bd/page/2fccd2aa_5ece_470f_9b55_14a17a3f7373/UIRTRCE_Training.pdf)

Bangladesh Bureau of Statistics (BBS) (2017) *Report on Education Scenario in Bangladesh: Gender perspective*. Dhaka: BBS

Bangladesh Bureau of Statistics (BBS) (2019). Progotir Pathay, Bangladesh Multiple Indicator Cluster Survey 2019, Key Findings. Dhaka, Bangladesh: Bangladesh Bureau of Statistics (BBS).

BTRC (2012). Internet Subscribers in Bangladesh February, 2012 | BTRC. [Btrc.gov.bd](http://www.btrc.gov.bd). (2012). Retrieved 10 January 2021, from <http://www.btrc.gov.bd/content/internet-subscribers-bangladesh-february-2012>.

BTRC (2020). Internet Subscribers in Bangladesh October, 2020. | BTRC. [Btrc.gov.bd](http://www.btrc.gov.bd). (2020). Retrieved 10 January 2021, from <http://www.btrc.gov.bd/content/internet-subscribers-bangladesh-october-2020>.

- Camfield, L., Rashid, S. F. and Sultan, M. (2017) *Exploring Bangladeshi adolescents' gendered experiences and perspectives*. London: Gender and Adolescence: Global Evidence.
- Chandrima, R. M., Kircaburun, K., Kabir, H., Riaz, B. K., Kuss, D. J., Griffiths, M. D., & Mamun, M. A. (2020). Adolescent problematic internet use and parental mediation: A Bangladeshi structured interview study. *Addictive Behaviors Reports*, 100288.
- Chowdhury, S. A., & Islam, S. R. S. (2019). Teaching-Learning Practices of Information and Communication Technology in Secondary Schools of Bangladesh.
- Chowdhury, S., Basu, B. K., & Laskar, M. S. (2018). Impact of smartphone use on health among higher secondary level students in Khulna, Bangladesh. *Mediscope*, 6(1), 1–5. <https://doi.org/10.3329/mediscope.v6i1.38936>
- Save the Children. (2018). *Counting Youth Pulse*.  
[https://resourcecentre.savethechildren.net/node/13117/pdf/counting\\_youth\\_pulse.pdf](https://resourcecentre.savethechildren.net/node/13117/pdf/counting_youth_pulse.pdf)
- Cummings, C., & O'Neil, T. (2015). Do digital information and communications technologies increase the voice and influence of women and girls. *A rapid review of the evidence*. Overseas Development Institute.
- GAGE Consortium (2017). Gender and Adolescence: Why understanding adolescent capabilities, change strategies and contexts matters
- General Economics Division, Planning Commission of Bangladesh. (2011). 6th Five Year Plan FY2011–FY2015. Ministry of Planning. Government of the People's Republic of Bangladesh.
- General Economics Division, Planning Commission of Bangladesh. (2015). 7th Five Year Plan FY2016–FY2020. Ministry of Planning. Government of the People's Republic of Bangladesh.

General Economics Division, Planning Commission of Bangladesh. (2018). Sustainable Development Goals: Bangladesh First Progress Report 2018. Ministry of Planning. Government of the People's Republic of Bangladesh. Retrieved 10 January 2021, from [https://www.sdg.gov.bd/public/img/upload/resources/5d353f353117d\\_doc\\_file.pdf](https://www.sdg.gov.bd/public/img/upload/resources/5d353f353117d_doc_file.pdf)

Global Partnership for Education (GPE), (2020). Results Report 2020. Retrieved 10 January 2021, from <https://www.globalpartnership.org/content/results-report-2020>

GSMA (2019) Mobile Gender Gap Report. Retrieved from: <https://www.gsma.com/mobilefordevelopment/resources/mobile-gender-gap-report-2019>

Gurumurthy, A., & Chami, N. (2014). Gender equality in the information society. *Bangalore: IT for Change*.

Hassan, T., Alam, M. M., Wahab, A., & Hawlader, M. D. (2020). Prevalence and associated factors of internet addiction among young adults in Bangladesh. *Journal of the Egyptian Public Health Association*, 95(1), 3.

Hossain, A. (2017). The School-Level Factors Associated with Internet Addiction among Adolescents: A cross-Sectional Study in Bangladesh. (2017) *J Addict Depend* 3 (2): 170-174. *Research Article Open Access*.

Hossain, Z., Hashmi, Y., & Mezbah-ul-Islam, M. (2019). ICT Facilities and Literacy in Rural Non-Government Secondary School Libraries of Bangladesh. *School Libraries Worldwide*, 25(2).

H. Zaman and R. Uzzaman. Achieving digital Bangladesh by 2021 and beyond. Background paper for the 7th Five Year Plan (7FYP), 2015.

Internet World Stats (2020). Retrieved 10 January 2021, from <https://www.internetworldstats.com/asia.htm#bd>

- Imon, M. M. I. (2017). *ICT integration in Secondary Education in Bangladesh: A Study of Policy and Practice* (Master's thesis)
- Irani, B. (2017, April 27). Little scope for rural girls to study ICT. Dhaka Tribune, Bangladesh. Retrieved 10 January 2021, from <https://www.dhakatribune.com/bangladesh/2017/04/27/little-scope-rural-girls-study-ict>
- Islam, M. A., & Hossin, M. Z. (2016). Prevalence and risk factors of problematic internet use and the associated psychological distress among graduate students of Bangladesh. *Asian Journal of Gambling Issues and Public Health*, 6(1), e11.
- Karim, A. R., & Nigar, N. (2014). The internet addiction test: Assessing its psychometric properties in Bangladeshi culture. *Asian Journal of Psychiatry*, 10, 75-83.
- LIRNEasia (2018). AfterAccess: ICT access and use in Asia and the Global South. <https://lirneasia.net/wp-content/uploads/2018/10/LIRNEasia-AfterAccess-Asia-Report.pdf>
- Livingstone, S., Nandi, A., Banaji, S., & Stoilova, M. (2017). Young adolescents and digital media: uses, risks and opportunities in low-and middle-income countries: a rapid evidence review.
- Mamun, M. A., & Griffiths, M. D. (2019). The assessment of internet addiction in Bangladesh: Why are prevalence rates so different?. *Asian journal of psychiatry*.
- Mamun, M. A., Hossain, M. S., Siddique, A. B., Sikder, M. T., Kuss, D. J., & Griffiths, M. D. (2019). Problematic internet use in Bangladeshi students: the role of socio-demographic factors, depression, anxiety, and stress. *Asian journal of psychiatry*, 44, 48-54.
- MoE - Bangladesh Ministry of Education (2019) *Master Plan for ICT in Education in Bangladesh 2012-2021*. Bangladesh: MoE
- MoE - Bangladesh Ministry of Education (2010) *National Education Policy 2010*. Bangladesh: MoE

- Matin Chandrima, R., Kircaburun, K., Kabir, H., Khorshid Riaz, B., Kuss, D. J., Griffiths, M. D., & Mamun, M. A. (2020). Adolescent problematic internet use and parental mediation: a Bangladeshi structured interview study. *Addictive Behaviors Reports, 12*.
- Mezbah-ul-Islam, M. (2015). Challenges and Opportunities of Knowledge Management in University Library: A Case Study of Dhaka University Library in Bangladesh.
- Mohammad, Z., Sultan, M., Camfield, L., Rashid, S. and Muz, J. (2019) *Adolescent psychosocial well-being and voice and agency in Dhaka, Bangladesh*. Policy Note. London: Gender and Adolescence: Global Evidence.
- Nahar, P. van Reeuwijk, M. and Reis, R. (2013) Contextualising sexual harassment of adolescent girls in Bangladesh, *Reproductive Health Matters, 21:41, 78-86*, DOI: 10.1016/S0968-8080(13)41696-8
- Naripokkho (2016). National Report on The State of the Region Report on Sexual and Reproductive Health and Rights: ICPD+25. Retrieved 10 January 2021, from [https://arrow.org.my/wp-content/uploads/2019/04/NARIPOKKHO-ICPD25-Monitoring-and-Research-Report-final\\_1st-April-2019.pdf](https://arrow.org.my/wp-content/uploads/2019/04/NARIPOKKHO-ICPD25-Monitoring-and-Research-Report-final_1st-April-2019.pdf)
- Naved, R. T., Chowdhury, S., Arman, S., & Sethuraman, K. (2007). Mobility of unmarried adolescent girls in rural Bangladesh. *Economic and Political weekly, 63-70*.
- NIPORT et.al (2016) *Bangladesh demographic and health survey 2014*. Technical report, National Institute of Population Research and Training (NIPORT), Mitra and Associates, and ICF International, Dhaka, Bangladesh, and Rockville, Maryland, USA: NIPORT, Mitra and Associates, and ICF International. 2013. <http://microdata.worldbank.org/index.php/catalog/2562>.
- NIPORT (2019) Bangladesh Demographic And Household Survey: Key Indicators 2017-2018. Retrieved 10 January 2021, from <https://dhsprogram.com/pubs/pdf/PR104/PR104.pdf>
- Our Purpose*. (2020, June 22). New Pedagogies for Deep Learning. Retrieved 10 January 2021, from <https://www.npdl.global/>

- Presley-Marshall, E. and Stavropoulou, M. (2017) *Adolescent girls' capabilities in Bangladesh: a synopsis of the evidence*. London: Gender and Adolescence: Global Evidence.
- Prity, Nahida (2015). ICT Policy of Bangladesh. Retrieved 10 January 2021, from [https://www.academia.edu/15235366/ICT\\_Policy\\_of\\_BD](https://www.academia.edu/15235366/ICT_Policy_of_BD).
- Prothom Alo (2020) “77 pc school children watch pornography”. Retrieved 10 January 2021, from <https://en.prothomalo.com/bangladesh/77pc-schoolchildren-watch-pornography>
- Rahaman, M. M., & Akter, N. (2017). ICT used in education sector considering primary and secondary level schools in rural areas: a study of Sylhet division in Bangladesh. *IOSR Journal of Business and Management*, 19(4), 1-6.
- Shadat, W.B., Islam, S., Zahan, I., and Matin, M. (2020) ‘Digital Literacy in Rural Bangladesh’, presentation at webinar on Digital Inclusion Series, organized by BIGD, 13 Sept 2020.
- Shamim, M. R. H., & Raihan, M. A. (2016). Effectiveness of using ICTs to promote teaching and learning in technical education: Case of Bangladesh. *International Journal of Vocational and Technical Education*, 8(2), 12-19.
- Stavropoulou, M., Marcus, R., Rezel, E., Gupta-Archer, N. and Noland, C. (2017) *Adolescent girls' capabilities in Bangladesh: the state of the evidence on programme effectiveness*. London: Gender and Adolescence: Global Evidence
- The Daily Star - “Bangladesh lags behind peers in internet usage” (Oct 3, 2018).
- “Mobile, Internet Use: Women far behind men” (Mar 08, 2019).
- Tyers, A. (2012). A Gender Digital Divide? Women Learning English through ICTs in Bangladesh. In *mLearn* (pp. 94-100).
- Uddin, M. S., Al Mamun, A., Iqbal, M. A., Nasrullah, M., Asaduzzaman, M., Sarwar, M. S., & Amran, M. S. (2016). Internet addiction disorder and its pathogenicity to

psychological distress and depression among university students: A cross-sectional pilot study in Bangladesh. *Psychology*, 7(08), 1126.

UNB News - Mobile phone users in Bangladesh hit 162.920 mn in April: BTRC (June 19, 2020) <http://unb.com.bd/category/bangladesh/mobile-phone-users-in-bangladesh-hit-162920-mn-in-april-btrc/53299>

Waldman, L., Ahmed, T., Scott, N., Akter, S., Standing, H., & Rasheed, S. (2018). 'We have the internet in our hands': Bangladeshi college students' use of ICTs for health information. *Globalization and health*, 14(1), 31.

Wisniewski, Pamela (2018). Risk Resilience. The Privacy Paradox of Adolescent Online Safety: A Matter of Risk Prevention or Risk Resilience? March 2018 IEEE Security and Privacy Magazine 16(2):86-90 DOI: 10.1109/MSP.2018.1870874

World Economic Forum. (2018). *Annual Report 2017–2018*. Retrieved 10 January 2021, from [http://www3.weforum.org/docs/WEF\\_Annual\\_Report\\_2017-2018.pdf](http://www3.weforum.org/docs/WEF_Annual_Report_2017-2018.pdf)

Yarrow, E., Apland, K., Anderson, K. and Hamilton, C. (2015) *Getting the evidence: Asia Child Marriage Initiative*. Research report. Coram International and Plan International

Zaman, H. and Uzzaman, R. (2015) Achieving digital Bangladesh by 2021 and beyond. Background paper for the 7th Five Year Plan (7FYP), 2015.

## **Annexe 1: Feedback from research dissemination at the schools**

Feedback sessions were organized in all four schools.

### ***Feedback from Bengali Medium School***

Around 87 to 90 students from Class Eight were present at the workshop and both male and female participated in the workshop. The students did not have any particular opinion about our research findings and agreed with them.

Some of the students asked how they should avoid fake IDs. Since their parents do not allow them to open Facebook accounts, they open fake ones. They reported that if their parents permitted operating Facebook, they would not have opened these fake IDs.

### ***Feedback from English Medium School***

One of the students mentioned followers. Some people will accept followers if there are mutual friends. There may not be an instant threat in accepting an unknown follower, as it is possible to filter the content that is shown to people. This can be used as a precautionary measure to protect oneself. Instagram has options to make different lists of people to show your pictures to. Even if you have a lot of followers, it is possible to show one's content to the right people.

With this feedback, the Principal asked the students if it is important to have a lot of followers on Instagram. Students responded that it depends on the person. A lot of people care about their followers. There is a mentality that the more followers one has, the more popular they are. This starts to create a mentality that they are better than everyone else.

Students brought up the issue of being perfect on social media. People use Photoshop and bring in unrealistic standards. Being happy or sad. Students felt this is controversial, but it has to be spoken about. Using Photoshop is not necessarily bad. People should have the right to use Photoshop for their own sake and do not have to regard others in this matter. Even if a person is using Photoshop, they should not be judged for doing so. They are not asking another person to use it. Someone who uses Photoshop should not be responsible if others are influenced by it.

The Principal talked about one's self-worth. It is not possible to close your eyes and ears and stop looking at and hearing about things. *"It is up to the individual to choose between the good and the bad. It is about your self-worth and your confidence level. The whole world is your choice; you matter the most. The internet gives the freedom where one can exercise it the most and do great things. Alternatively, someone else could use it for the lowest of things. It is just a tool, which one can use for the better or worse."*

When one of the students mentioned that it is nice to see influencers talk about mental health, the Principal responded that it is important to understand who is saying what and how much you are willing to take in. There must be a filter. Just because an influencer or very popular person is saying something, that does not mean it is right. One needs to have the ability to know what is good or bad. If a popular person online says that he/she will now kill themselves, then others would follow and start killing themselves as well. It is very risky as a follower if you do not understand the context of the material they are posting. Even if adolescent children think they know everything, they are not ready. It is easy to follow a great idea, but eventually one may start to find problems that arise from it. This is food for thought.

The school has taken steps regarding the children's internet use; GrameenPhone has helped in many ways through the launching of their campaign. It applies to students of grades three and four as that is the time when students develop an interest in using the internet.

### ***Feedback from Slum School***

One of the teachers reported that students know more about the internet than the teachers. Teachers also mentioned that they did not know details about the students' usage of the internet before the presentation.

Students reported that they were able to learn about many sides of the internet from the presentation, this included the risks and negative sides as well. They reported that many friends update their Facebook status about their depression and ask for solutions in the comment sections. One also asked what should be done when someone from Facebook tries blackmail. Students were also interested to know how our research will benefit students from other schools and how we will spread awareness.

Students agreed with the findings that were disseminated and engaged well in the overall discussion.

### *Feedback from Rural School*

Some of the female students discussed the usage of mobile phones during examinations. They reported that parents discourage them to use devices when exams are ahead. As per the students, they feel examinations cannot stop them from using the internet. They are sincere and can use devices responsibly. Even during exams, after studying all day, they might feel the need to take a break and use devices for recreation. According to them, this should be allowed.

One of the female respondents mentioned the gender difference in the use of devices. She reported that her parents are more lenient towards her brother who uses a mobile. However, it is different in her case, and rules and monitoring are stricter. She feels this attitude should change.

There was feedback from teachers as well. One of the teachers mentioned that ICT has both good and bad sides; since it is a form of media. It is important to absorb the good sides only. Teachers do not want to discourage students from using devices and ICT, but to use it responsibly. Even the government wants students to learn ICT. Hence it is compulsory to learn. It is an open secret that 80% of students of the class use Facebook, but they will never admit it. In order to guide these students, teachers will always be open and ready.

Teachers also mentioned the advantages of using the internet for educational purposes. This includes using dictionaries, searching for book chapters, learning from different tutorials, etc. One could also be aware of global news with the mobile phone and the internet.

The Principal re-emphasised the government's initiative of "Digital Bangladesh." He mentioned that Bangladesh has undergone massive digitisation in the education sector. Starting from school admissions, filling up examination forms to searching for results online; everything is digitised. ICT use is a necessity, and it should be used by all the students. However, there should be a time limit for adolescents when using devices. Schools should also discourage students from bringing their mobile phones to the campuses. Boys and girls should have equal opportunities in using ICT.

## Annexe 2: Research Tools

### *IDI with Students*

#### **Background**

ID: School\_StudentSl\_M/F\_Date

Age:

Father's occupation

Mother's Occupation

Number and sex of siblings

Respondent's serial (among siblings)

#### **Devices**

Type of devices owned by respondent

Type of devices respondent has access to

For each device,

When did you get it

What do you use it for

Where do you use it

How much time do you spend on it?

Do you set the password?

Do your parents have access to it?

Which device do you use the most? Why?

How much money do you spend on your internet? Who pays for it?

#### **Apps**

Do you use any social media with your computer/laptop and mobile phone?

If yes, then which social media sites do you use? (Probe- Facebook, Instagram, WhatsApp, IMO, Snapchat, Viber, Messenger)

What do you use each app for?

Which one do you use most? Why do you prefer it over others?

Do you set the password?

Do your parents have access to it?

### **Networking**

How many friends/followers do you have on social media? (number of friends in case of Facebook, number of followers in case of Instagram, number of people the adolescent follows in Instagram)

Do you know all these people personally/in-real life?

Do you interact/chat with them? If yes, then what are your conversations like? What do you talk about?

Where do these friends live? (community/classmate/Bangladesh/overseas)

What else do you do using these?

Have you opened an account with your real name/identity?

How many social media accounts do you have? (multiple IDs)

Are you the same person in all your accounts? If not, why do you have different selves?

Are your parents on your friends' list?

If age-wise you are not eligible to open an account, how did you open one?

Are you comfortable chatting online with your friends when in front of your family members? If yes then why? If not, then why? When do you like it, and when do you not?

Do you always have the phone with you? Even during the night?

Do you have a special friend? If yes, then through which medium do you interact with each other? What are the things you do with that person through social media?

### **Use of ICT**

Are there any computer courses in your school?

For education/ studies (– ten minute school, PDF, tutorial, Batayon)

For information; what type of information; any information that you cannot ask anybody (sex education)

For entertainment

To lodge complaint

To access services (Foodpanda, buy tickets...)

To access emergency services

Any particular information apps such as Maya app

Have you learnt any new skills from the internet (baking, fixing things, origami, etc)

Have any of these skills helped you to earn an income?

Have you ever done freelancing?

### **Risks**

What are the good and bad things about this form of social media? What do you think?

Harassment, cyberbullying – what kind of incidents? Do you know of any incident that happened in your school? To anyone you know? To you?

Do children of your age watch pornography/ pornographic material/ photos?

### **Civic engagement**

Do you belong to any online groups? What do you do together?

Have you ever participated in an online movement or any movement that has been organized online?

### **Perception on ICT Use**

Do you think that you have gained confidence/ knowledge/ skills through ICT that affects your relationship with your parents? Do they appreciate your skills? Are you able to help any family members using your skills/ knowledge?

Have you ever been able to use the knowledge or skills you gathered through the internet to help in any family member's decision-making? Are you able to make any decisions regarding yourself based on anything you have learnt through the internet?

How do you see this virtual world? How do you see our future with access ICT – where it is going; how is it going to shape our lives in the future?

Knowledge of ICT policy

### *FGD Guideline for Adolescents*

#### **Vignette 1**

Tarek is 15-years-old and studies in Class Eight. He loves the smartphone he got from his parents for his birthday. He cannot wait to come back from school and get on to his Facebook, Instagram accounts, and games. Recently he has learnt how to record his guitar pieces and upload them. His followers and likes have increased a lot since then. He would like to put more time into it, but that would upset his parents. In any case, he already got into trouble when his parents found out that he plays PUBG all night long.

Mina is a regular follower of Tarek. She has developed quite a crush on him and knocks him on Facebook. Sadly, she cannot do it as often as she wants because she doesn't have a phone and secretly uses her mother's phone when she gets a chance. Mina is now wondering how to attract his attention. At the same time, Mina is worried about the incidents that have happened with girls her age. Mina has tried to convince her mother to buy her a phone by telling her how she can use it to help with her studies, as well as sell her baked goods.

Are the stories familiar?

Other than smartphones, what other devices do young people use?

How do they pay for the internet?

What kind of apps do they use? Why do they like these apps? What do you use these apps for? Any other apps apart from the usual ones? Have you used any apps for services, or make complaints?

Do you upload videos? What kind of videos?

Are these useful to gain popularity? How important is it to be popular? How far would you go to be popular? What happens if you are not that popular?

How many friends do you have online? How many of them do you know in real life? Do you have parents on your friend's list? (Separate accounts?)

Do relationships develop online like this? What do you think Mina can do to attract his attention? Why is she indecisive? Do sexual harassment and cyberbullying actually happen

among your age group? Do you think that Tarek and Mina actually know each other in real life? What could be an ending to their story?

Do you have the freedom to use your devices all the time? For what purposes are parents happy for you to use it? What makes them unhappy?

What would you say are the positive aspects of using the internet? (Information, (using Google) Education, entertainment, expression of talent, income earning...)

Are there any issues that you cannot ask your parents or school, but want to know about, that you use the internet to learn about? Such as what?

Has ICT changed the kind and number of relationships you can have? Has ICT changed the way you think about marriage? Do you have any role model/ personality whom you follow and who showed you what girls/ boys are capable of doing?

#### Checklist

1. Access – ownership, cost, device/ internet
2. Use – cost, time, use of apps
3. Control
4. Privacy
5. Popularity
6. Online security/ Harassment
7. Relationships
8. Information/ Creativity/ skills/ education/ learning
9. ICT education
10. Gender roles, relationships, role models

#### **Vignette 2**

Humaira was stunned to see the news on her Facebook homepage. A couple of students her age were waiting for a bus after school when they were rammed down by an out of control bus. This wasn't the first time. Time and time again similar news surfaced on the internet. Humaira saw the live-streaming of the protests organised by the students of that school, which was being shared by her friends. Outraged students from all over the country were posting constant status updates, sharing their opinion in volumes. Humaira too felt that enough was enough – it was time to take action. Humaira opened a group chat on Facebook Messenger and mobilised her friends into action. Though the protestors initially faced police brutality, the state ultimately acknowledged their protest. The movement became a hashtag movement and spread widely, capturing the attention of the international media.

Is this incident familiar to you? Share your experience.

How did you engage with it? How did people around you react? Do you think the movement was successful? Why?

Do you know of any other issue around which people, particularly children were mobilized? What other types of movements can you think about?

Do you know of or have participated in any kind of mobilization or protest over the internet on any issue in your school or your neighbourhood?

Do you think the internet is a space for you to air your opinion, mobilize against any injustice? On what other types of issues can you mobilize around?

Can children be change-makers? How?

What can be reasons for children not to participate in such online movements?

How do parents/ adults react to children's voice and agency? How does the state react?

Have you ever participated online in any international movement? In any form, for example, sharing your opinion, sharing posts, signing petitions, hashtags, etc.

What other reasons do adolescents come together? (Probe: any common interest like animal lovers, environment, sports, music)

### ***FGD Guideline for Teachers***

What kind of computer and internet facilities do you have in the school? Is it open for everyone? Do both boys and girls use it?

Do you educate children on ICT? Do boys and girls perform equally well?

What are the school rules regarding smartphones, iPads, laptops, other devices?

Do most children in your class own or have access to any such device (outside school)? Any difference by sex?

For what purpose do you encourage students to use the internet? (Probe: downloading books/ material, giving homework, group chats/ Facebook groups with teachers to share lessons, interactive teaching, etc)

For what purposes do you discourage the students to use the internet?

Do you take any steps to monitor them?

Do you take any steps or precautions (awareness-raising, etc) to try and secure the safety of the students?

Has the internet been used for harassment or cyberbullying in your school? What were the steps taken? Should the school have a role to play?

What kind of rules/ regulations/ laws do you think would be beneficial to protect children?

Do you think using the internet has changed your child? In terms of their personality/ behaviour and in terms of what they can do? (Positive and negative)? In terms of their knowledge? In any other capacity?

Do you have a bridge with parents on the issue of children's use of ICT? Do parents bring complaints about their children's internet/ mobile use?

What is your opinion regarding children's involvement in movements that happen over social media? Have any of the children in your school participated in them? What is the school's stand on this matter?

### ***FGD Guideline for Parent***

At what age did your children start using any of these devices – phones, smartphones, iPad, tablets... Why were they given these devices? Where did they learn? What kind of shows/ games/ apps did they start with?

When did you allow them to have any kind of accounts – Facebook, Instagram, Snapchat? Do you think they had these accounts before you gave them permission to open it?

Do you follow them online?

Do you know of all their accounts? Are you on their friend list?

Who pays for their internet use?

Do you set any time limits? Do you set parental control? What happens when they cross boundaries?

Is it different when it comes to your sons and your daughters?

What do you see as the positive aspect of their using the internet?

What do you see as the negative aspects? (Probe)

In what ways do you think it is harmful to them (physical, mental)?

In what ways do you think it is risky for them?

What do you think should be done to ensure their safety and protection?

When did you start using the internet? Do you have any anxieties that they start using at a much younger age?

Is there anything that your children teach you anything new? Do they help you to do things (show direction, calculate, get information)?

Do you think using the internet has changed your child? In terms of their personality/behaviour and in terms of what they can do? (Positive and negative)? In terms of their knowledge? In any other capacity?

Has the nature of your conversations with them changed? How? Do they seem more informed?

As you know, children sometimes get involved or get organized for movements online, for example, the *Nirapod Sharak* movement? What is your opinion about their engagement in such events?

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