UGANDA COMMUNICATIONS COMMISSION

FINAL REPORT

UGANDAN CHILDREN'S ONLINE SURVEY 2020

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LIST OF ACRONYMS

APP	:	Application
CAO	:	Chief Administrative Officer
CAPI	:	Computer-Assisted Personal Interviews
DCF	:	Data Collection Facilitator
EA	:	Enumeration Areas
ED	:	Executive Director
GPS	:	Global Positioning System
GSM	:	Global System for Mobile Communications
ICT	:	Information and Communications Technology
IPS	:	In-Plane Switching
ITU	:	International Telecommunications Union
NDTBI	:	National Data Transmission Backbone Infrastructure
ODK	:	Open Data Kit
PPS	:	Probability Proportional to Size
PSU	:	Primary Sampling Units
RDC	:	Resident District Commissioner
SPSS	:	Statistical Package for the Social Sciences
UBOS	:	Uganda Bureau of Statistics
UCC	:	Uganda Communications Commission
UNEB	:	Uganda National Examination Board
WSIS	:	World Summit on the Information Society
WTDC	:	World Telecommunication Development Conference

EXECUTIVE SUMMARY

Uganda's increased Internet usage has brought forth both great benefits and serious risks, particularly for our most vulnerable citizens, "the children online." Just like it is in other developing nations. To this end, the first National Survey on Ugandan children's internet behaviour was commissioned by the Uganda Communications Commission (UCC) in December 2019.

The goal of this study was to examine and produce a clear understanding of the experiences that Ugandan Children (youngsters) have when using the internet. The study's ultimate output is this report. As a result, the study gathered data on children's access to and use of the Internet, their online behaviours, and the opportunities and hazards associated with using the Internet among children aged 6 to 17 and their parents/guardians. This study, as originally intended, provides the crucial data regarding children's Internet use in Uganda, which will help influence both program and policy measures required to keep Ugandan kids safe online.

A mixed-methods approach was used for the survey, combining qualitative and quantitative techniques. 3,600 survey participants were interviewed. 2,766 of them were children, and 834 were their parents or guardians in ninety-six (96) districts across the Country. The survey was originally planned to use a school-based approach to gather data, but because of Uganda National Examination Board (UNEB) preparations that fell during the earlier anticipated data collection period, the survey switched to a household approach, interviewing parents and kids from the same household whenever it was feasible.

This provided us with the chance to compare the extent of parental involvement, support, and monitoring, as well as their overall comprehension of their children's Internet use, together with their level of digital literacy and that of the children.

Key highlights of the survey findings are as follows: -

Key demographics: Of the 2,766 children aged 6-17 years interviewed, 53% were boys and 47% girls. Children aged 6 to 8 years contributed the smallest proportion (4%), while those aged 15 to 17 years made up the majority (58%) of the sampled children. 7 out of every 10 of the children sampled lived in an urban area, while 2 in every 10 was lived in a rural area, and only 1 out of 10 lived in a peri-urban area. In addition, about half of the sampled children were in lower secondary (S1-S2) while 2 in every 10 were in upper primary (P.6 –P.7).

On the other hand, most of the parents / guardians were female (53%) and in the age bracket of 35-44 years. Of these, 9 in every 10 reported having attended some form of education while only one (1) in every ten (10) reported having completed upper secondary, and slightly more than half (60%), about 6 in every 10, reported having been employed. Majority 84.93% of the employed parents / guardians said they were earning less than Uganda shillings 500,000 on average per month.

Age of first Internet use: Regardless of gender, children began using the Internet on average when they were 13 years old. Most kids said they started using the Internet at age 14, a clear indication that children begin to use the Internet in Uganda at an earlier age. Most children (81%) spend less than 2 hours on a weekday on the Internet. Of these, slightly more than half (55%) spend less than one hour, while about 1% of the children are always on the Internet. The amount of time that males and girls spend online does not significantly differ.

Internet know-how and access: About 8 in every 10 children interviewed had some level of digital literacy or knew how to use the Internet. To put this into perspective, this involves, among other things as described in the research, using social media to exchange images, browsing the internet, and installing apps on devices. Among them, 22% were in rural areas, while 68% were in urban areas. No matter where they lived, 9 out of 10 children had used the Internet in the previous year.

Turning to the parents/ guardians, only 27% of parents acknowledged using the Internet for a few months, and 5 out of 10 parents said they had never used it. More females (25.7%) compared to males (21.3%) had never accessed the Internet. Internet usage was highest in parents/guardians below 35 years while nearly no parents above 65 years had used the Internet. Parents and guardians under the age of 35 were more likely than those 65 and older to use the Internet. Only about 3 out of 10 parents (26.2%) reported having constant access to the Internet. Only 1.4% of parents who were 15 to 24 years old said they had unlimited access to the Internet. The younger parents, though, were more likely to use the Internet. In comparison with their children, more kids (81%) than their own parents (53%) were familiar with using the Internet.

When asked whether they knew what children could use or were using the internet, only 34% of parents were certain that they knew their kids were using the internet.

The major access to Internet barriers reported were the cost of Internet-enabled devices and the price of data, while a substantial number of parents also reported that it was difficult to use the Internet. This was a clear indication of the knowledge gap in Internet use especially among the parents.

Place of use and devices: 9 out of 10 children interviewed said they used a smart phone or a feature phone to access the Internet and this was being done from home and particularly in their beds. Only 3 out of 10 children reported accessing and using the Internet at school. Most children were using the internet at home due to paid Internet by their parents. For those who used the internet at school, majority reported being constrained by not only an infrastructural constraint in the schools, but mainly due to rules that prohibit the use of Internet enabled devices such as phones while at school. Thus, for those who were using these devices in school, used them secretly.

Online Risks: There were disturbing trends around the risks or threats online. Less than half of children who use the Internet (44.6%) said they knew how to act in different situations online. Despite this, 85.3% of the children said they never contacted their parents about issues they encountered online.

Most Children said they had not personally been bothered by anything online but for those that had faced some issues, they said they were upset by the occurrence of these issues but they either did nothing or sorted OUT the issue by themselves. A clear indication that there are unsettling patterns regarding the threats online.

Opportunities and practices: Overall, 61.8% of the kids said that there were many positive things on the Internet for kids. the kids claimed with confidence that they knew a lot about the Internet and as detailed in this report, majority of the kids were found to possess some basic digital skills. However, only a minority reported being able to complete more complex tasks, such as designing a website. The parents' skills were not any better, with their own technical skills not being high. The implication is that children have to rely on parents who have never used the Internet and may therefore be ill-equipped to understand their children's experiences.

The implication is that kids must rely on parents who have never used the Internet and may not be able to comprehend or are ill-equipped to understand what their kids are going through online.

Unwanted sex experiences and exposure: 1 in every 5 children online had seen a sexual image online in the past 12 months prior to the survey, in terms of gender, slightly more boys (28.1%) than girls (22.6%) had seen a sexual image. More children (40.4%) in urban areas were exposed to sexual images, especially those above the age of 11. Social networking sites were the most common place where children claimed to have seen these sexual photos, and nearly half of them (44.7%) were accessed through a mobile device with Internet access. Only about 1 in every 10 children had shared a sexual image. These acts manifested more among the boys in rural areas, aged 15-17 years.

Peer mediation: Approximately 7 out of 10 children interviewed claimed to have friends whom they can rely on to help them or count on when things go wrong, and nearly four out of five kids (77%) believe that their friends have genuinely attempted to help them. Additionally, at least 5 in every 10 of one's friends were more inclined to encourage them to explore and learn things on the Internet.

Parental mediation: About 7 in every 10 children have never been engaged by their parents about their Internet use and nor have they ever been encouraged by their parents to explore and learn new things online. There is limited involvement of parents in the lives of the children's online activities. About 76.8 %, that is almost eight (8) in every ten (10) parents, are not involved as to what their children are doing online.

Additionally, to keep Ugandan children safe online, the following suggestions are made based on the findings.

1) Over the next five (5) years, the Uganda Communications Commission (UCC) should emphasize parental control and kid internet safety measures through the Annual Communications Consumer Parliament and all its outreach consumer awareness campaigns.

2) The Ministry of ICT and National Guidance (MOICT), through the National ICT Initiatives Support Program (NIISP) should promote local Innovative Ideas that enable parental control for Android apps that offer age- and category-based filters to prevent kids from accessing unsuitable online material.

3) UCC and interested parties should look for financing opportunities that support or encourage children's safe Internet usage. For instance, Google established a $1 million (approximately UGX 3.7 billion) pan-African Google.org fund to support creative ideas around privacy, trust, and safety for families online across sub-Saharan Africa on February 9, 2020, in commemoration of Safer Internet Day.

4) To combat child pornography, UCC through (Computer Emergency Response Team) CERT shall collaborate with interested national and international agencies to continuously monitor, restrict or block the distribution of such content, and track down the sources or origins for prosecution.

5) There needs to be a concerted effort to launch widespread child internet protection awareness efforts that also offer channels for recourse if one comes across cybercrime or online threats.

6) The parents/guardians should consider doing the following to minimize online risks.

7) To reduce or minimise the risks associated with using the internet, parents and guardians should consider doing the following: -

    a) Pick interest and keep an eye on what their child(ren) are doing online, including, but not limited to, the websites they visit, the social media platforms they use, and, whenever feasible, who they are interacting with and whether they know them in real life.
    b) While using the Internet at home, keep kids in view.
    c) Monitor your child's online conversations, for instance, by frequently looking at their browser history.
    d) Be on the lookout for possible indicators of child online abuse, such as attempts to hide online activity, changes in how Internet-enabled devices are used, withdrawn behavior, irrational outbursts, anxiety, and sadness.
    e) Always "friend" or "follow" your kids on social media sites like YouTube, WhatsApp, Facebook, Twitter, Instagram, and other well-known platforms.
    f) Talk to kids about online safety and the value of taking control of their personal data when using the internet.
    g) Consider installing parental restrictions on the kids' Internet-accessing gadgets, particularly portable ones.

h) For instance, parental control option is incorporated into browsers like Google, Firefox, Duck, and Safari; make sure this is enabled.
i) Place time restrictions on how much time kids can spend online each day.
j) Ask your Internet Service Providers (ISP) for free parental control software, which can assist parents in keeping their kids safe online.
k) Think about participating in your kids' online activities so they can learn how to supervise them and develop responsible online behavior.
l) Promote open communication and dialogues with the kids so they feel comfortable asking for help.
m) Ensure that they establish Internet usage guidelines and talk about them with their kids so that they are aware of the limits of what they are permitted to do on Internet-enabled gadgets.
n) Explain to kids how to use each game's and app's blocking and reporting features so they can stop bullies and strangers from contacting them.
o) Show kids how to report issues and/or get assistance if they are exposed to online risks.
p) Continuously remind kids not to post private information, pictures, or videos online or to interact with strangers they have never met in person.

8) To better help Ugandans who, use the internet, especially our youngsters, there is a need to publicize and make Ugandans aware of the support systems available in case someone had an issue online.

9) Internet Service Providers (ISP) should be mandated to provide additional free parental control tools, which block or restrict access to certain types of content, as well as limiting the amount of time spent on devices.

10) There is need to investigate how the teachers in Ugandan schools are coping with ensuring that the Ugandan children remain not only safe as they use the Internet, but also the extent to which the teachers themselves are aware of effective ways of how to safeguard themselves from Internet risks.

11) Children should be actively encouraged to report any requests for sexual activity or other improper behavior they receive while using the Internet to a parent, guardian, or other trusted adult.

12) Ugandans must always be urged to report immediately any suspicion of child sexual exploitation or online enticement by using the toll-free, available 24/7.

13) Plans and projects should be made specifically to improve child protection and the technology capability of law enforcement organizations to deal with child online abuse.

14) Starting in primary school, Ugandan children should be taught digital skills, especially online safety.

15) There is need to develop and undertake a multi-stakeholder coordinated strategy for awareness raising and education on child online safety for different actors. This should engage with and empower the parents / guardians, teachers, and any other relevant authorities with whom young people regularly interact.

1. INTRODUCTION

1.0 Overview

The Uganda Communications Commission (UCC) is the regulator of the communications services in Uganda through a mandate proffered by the Uganda Communications Act, 2013. In the execution of its mandate as enshrined in the law, UCC requires up to date information on both consumer and operators. Among other functions, the act mandates UCC to coordinate and collaborate with the relevant national and international organisations in matters relating to communications.

In 2005, the World Summit on the Information Society (WSIS) adopted the Tunis Agenda[1], which specifically called for safeguards within the ICT environment "incorporating regulatory, self-regulatory, and other effective policies and frameworks to protect children and young people from abuse and exploitation through ICTs" and integrating them "into national plans of action and e-strategies". These goalsare supported by recommendations in resolution 67 of the World Telecommunication Development Conference, Dubai, 2014[2] and resolution 179 of ITU Plenipotentiary Conference, Busan, 2014[3] and Dubai 2018[4].The world over, an estimated 4,833,521,806people are using the internet of which 566,138,772 are in Africa as of June 2020, according to Internet world statistics[5], with a penetration rate of 42.2%.

In Uganda, the total market Iinternet penetration as of September 2019 stood at 38%[6]. This high penetration rate is facilitated by among other factors the increased investment in Internet infrastructure by licensed operators, the National Data Transmission Backbone Infrastructure (NBI), increased online presence of the government services, as well as the ever-increasing online presence of children and youth. The children and youth are increasingly exposed to the digital world, which is inevitably becoming their way of life. This is where research and schoolwork are done, plans are made via social networking sites, games are played, conversations are had over chat and text and movies, TV shows and music are streamed at any time over the Internet. The children are thus exposed to vices such as stalking, hate speech, e-threats, paedophilia, “revenge” pornography and cyberbullying.

In cognizance of these online risks and the need to protect Uganda’s youngest and vulnerable digital citizens, UCC together with other government agencies, the private sector, multinational firms, teachers, and some parents have made strides in the protection of children online despite limited documented literature on Ugandan children’s online experiences.

In the bid to close this knowledge gap and to cultivate relevant or useful interventions on Uganda’s children online, UCC commissioned *“The 2019 Study on Children Online in*

[1] https://www.itu.int/net/wsis/docs2/tunis/off/6rev1.html
[2] https://www.itu.int/en/ITU-D/Cybersecurity/Documents/67revDubai.pdf
[3] https://www.itu.int/en/action/cybersecurity/Documents/Resolutions/pp-14_Res.%20179.pdf
[4] https://www.itu.int/en/action/cybersecurity/PublishingImages/Lists/resolutions/AllItems/Res%20179.pdf
[5] https://www.internetworldstats.com/stats.htm
[6] https://www.ucc.co.ug/wp-content/uploads/2017/09/Communication-sector-performance-Report-for-the-quarter-ending-September-2019.pdf

Uganda". This study sought to examine and generate a clear understanding of the online experiences of Ugandan children as well as their online behavioural characteristics.

This report presents the findings of the 2019 study of Ugandan children and youth online across the country. In understanding what the parents are doing as regards their children's safety online, the study relies on data collected through interviews with some of the parents whose children are online.UCC contracted a team of data collection facilitators led by Dr. Primrose Nakazibwe (PHD), an Independent Consultant of Mbarara University of Science and Technology, and Mr. Godfrey Ssebagala, Head of Projects, IT & IM Department, Uganda Police Force, to provide data collection services for this study.

1.1 Study Objectives

The main objective of the study was to examine and generate a clear understanding of Ugandan children's online experiences.

Specifically, the study sought to: -

1. Assess usage including profiling and content
2. Assess threats to Ugandan children online
3. Assess the level of awareness of threats and available help
4. Assess the attitude to threats and protection
5. Assess the barriers to accessing help
6. Assess the sufficiency of the legal and regulatory framework

1.2 Structure of the Report

This report has four chapters, namely: Introduction, Methodology, Survey Findings, and Recommendations and Conclusion. The chapter on survey findings is presented in two parts; first, children's access and use of the Internet; and second, the parents' perception of their children's use of the Internet.

2. METHODOLOGY

In this section, we detail the survey design, data sources, data collection techniques, sampling of the respondents, data collection instruments, survey organisation and the challenges encountered during the survey cycle.

2.0 Survey Design

The 2019 Ugandan children and youth online survey adopted a mixed methods approach, which combined qualitative and quantitative methods to facilitate triangulation of the findings and help enrich the outcomes of the study.

2.1 Sample Size and Sampling Design

2.1.1 Sample Size

The UCC research team defined the sample to consist of 2,500 children and approximately five hundred (500) parents, making a total representation of 3,000 respondents. This sample size was designed to allow for generation of separate estimates at the national level, for urban and rural areas and for the fifteen (15) sub-regions of Uganda.

2.1.2 Sampling Design

A three-stage stratified sampling design was used.

a) At the first stage, the designate Enumeration Areas (EAs) were grouped by districts of similar socio-economic characteristics and by rural-urban residence within the 15 sub regions. The EAs were then drawn using Probability Proportional to Size (PPS).

b) At the second stage, households that are the ultimate sampling units were drawn using Systematic Random Sampling. That is once in the EA, Enumerators selected a random start point and working in teams of five, 1 supervisor and 4 enumerators, they dispersed in the compass direction. The Enumerators counted 10 households on the right and interviewed the 11th household before alternating and counting the same number of HH and taking the second HH.

c) At the third stage, a child aged 8-17 using the Internet was selected in the list of children in that household and the parent interviewed. The enumerators had to alternate between male and female Internet users; that is if the first child interviewed was a male, the next child interviewed had to be a female.

A total of 2,772 EAs were selected from the 2014 National Population and Housing Census (NPHC) list of EAs. Ninety-six (96) districts distributed across all the fifteen (15) domains and because of common socio-demographic characteristics were included as depicted below.

No.	Regional Categorisation	Districts covered
1	Acholi	Agago, Amuru, Gulu, Kitgum, Lamwo, Nwoya and Pader
2	Ankole	Buhweju, Bushenyi, Ibanda, Isingiro, Kiruhura, Mbarara, Mitooma, Ntungamo, Rubirizi and Sheema
3	Bukedi	Budaka, Busia, Butaleja, Kibuku, Pallisa and Tororo
4	Bunyoro	Buliisa, Hoima, Kibaale, Kiryandongo and Masindi
5	Busoga	Bugiri, Buyende, Iganga, Jinja, Kaliro, Kamuli, Luuka, Mayuge, Namayingo and Namutumba
6	Central I	Bukomansimbi, Butambala, Gomba, Kalangala, Kalungu, Lwengo, Lyantonde, Masaka, Mpigi, Rakai, Ssembabule and Wakiso
7	Central II	Buikwe, Buvuma, Kayunga, Kiboga, Kyankwanzi, Luwero, Mityana, Mubende, Mukono, Nakaseke and Nakasongola
8	Elgon	Bududa, Bukwo, Bulambuli, Kapchorwa, Kween, Manafwa, Mbale and Sironko
9	Kampala	Kampala
10	Karamoja	Abim, Amudat, Kaabong, Kotido, Moroto, Nakapiripirit and Napak
11	Kigezi	Kabale, Kanungu, Kisoro and Rukungiri
12	Lango	Alebtong, Amolatar, Apac, Dokolo, Kole, Lira, Otuke and Oyam
13	Teso	Amuria, Bukedea, Kaberamaido, Katakwi, Kumi, Ngora, Serere and Soroti
14	Tooro	Bundibugyo, Kabarole, Kamwenge, Kasese, Kyegegwa, Kyenjojo and Ntoroko
15	West-Nile	Adjumani, Arua, Koboko, Maracha, Moyo, Nebbi, Yumbe and Zombo

Table 1: The sampled districts for this survey from the 15-sub regions

2.2 Coverage and Scope

2.2.1 Coverage

In terms of coverage, the survey was designed to be nationally representative in terms of geographical coverage and as such covered ninety-six (96) districts of the 134 districts in Uganda at the time. The survey data collection was planned in such a way that the sampled EAs covered were spread out in the proportion of each sub region contribution to the entire country population estimate as projected by UBOS.

The target population included all children aged between 8-17 and their parents. The respondents were restricted to a subset of those randomly selected from participating households and between the age of 8 and 17 years, and parents in the randomly selected households.

Figure 1: Map showing children GPS data collection points across the country

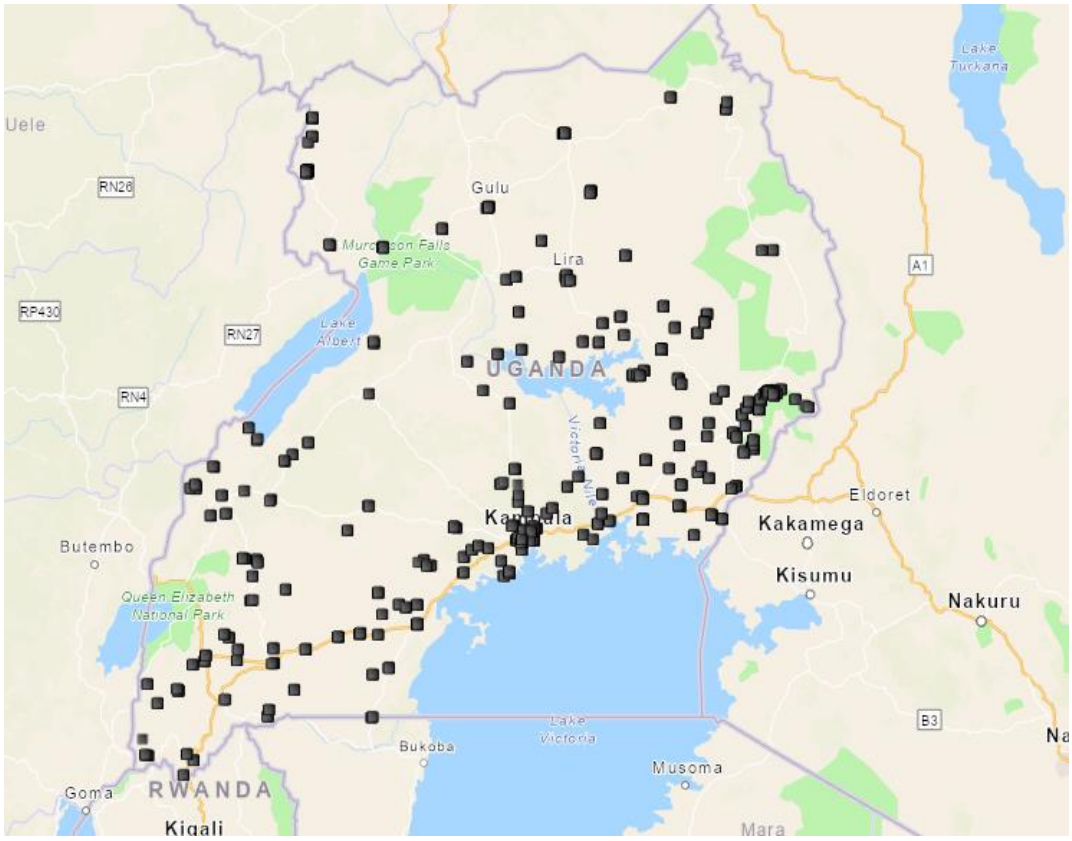
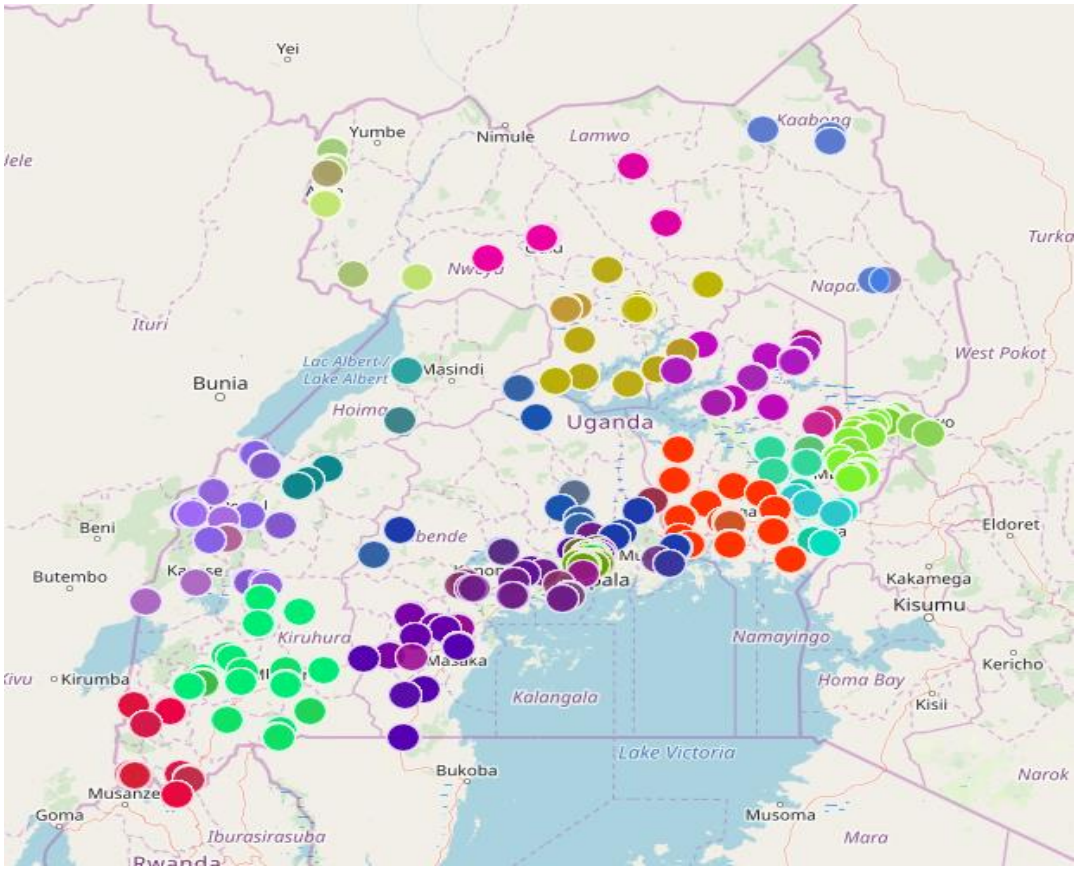


Figure 2: Map showing parents GPS data collection points across the country



2.2.2 Scope

The two main survey instruments; that is, the children and parents' questionnaires,' were designed by the Uganda Communications Commission research team. These captured demographic and user access and usage information about children online, like age, sex, devices used, cyber bulling, sexual harassment, etc. The parents' questionnaire captured their perception of their children's online behaviours and what they have done to protect their children online, among other characteristics.

A**: ADMINISTRATIVE SECTION**	Recording the PSU, District, County, Sub County, Parish/Ward, Town/Village, among others
B: INDIVIDUAL AND HOUSEHOLD ROSTER	Profiling the individual and household attributes such as education, cultural origin, and general bio data
C: INTERNET USE	This had several aspects, including: 1. Knowledge 2. First time use 3. Place of access 4. Devices used 5. Time spent on the net 6. Skills in using the net a) operational skills b) information/browsing skills c) social skills d) creative skills mobile skills
D: RISKS	1. Attitude towards risk 2. Events and frequency 3. Remedial actions 4. Harassment and indecent exposition 5. Source of harassment and indecent exposition
E: WELLBEING	1. Esteem and feeling
F: FAMILY AND COMMUNITY	1. How easy is it for you to talk to your parent/guardian about things that upset you? 2. Supervision

Table 2: Modules in the Children's Tool

A: ADMINISTRATIVE SECTION	Recording the PSU, District, County, Sub County, Parish/Ward, Town/Village, among others
B: INDIVIDUAL AND HOUSEHOLD ROSTER	Profiling the individual and household attributes such as education, cultural origin, and general bio data
C: EDUCATION	Level of education attained
D: EMPLOYMENT	Are you currently employed? What is your average individual income range per month? Does your child face difficulties that mean they cannot do what other children do?
E: INTERNET USE	Do you use the internet yourself?
	How often do you go online or use the Internet at the following places?
	How often do you go online or use the Internet using the following devices?
	Think about how you use the Internet. How true are these things for you?
F: SKILLS	Operational skills
	Information/Browsing skills
	Social skills
	Creative skills
	Mobile skills
	Enabling Mediation Parental Technical Mediation Restrictive Mediation
G: PARENTAL PERCEPTION OF CHILD'S ONLINE HARM	Eliciting opinion and knowledge of whether online harm was a reality in the parent's view
H: PARENTAL PERCEPTION OF CHILD'S ONLINE RISK	
I: SOURCES OF INFORMATION	Understanding where parents obtain their information from; Digital options included
J: FAMILY CULTURE	Learning about the culture of the family from a parent's perspective

Table 3: Modules in the Parents Questionnaire

2.3 Pre-test, Enumerator Training and Fieldwork

2.3.1 Pre-test

Prior to the main fieldwork, the data collection tools were pretested at two levels, first between the UCC team and the data collection team, and secondly by the trained enumerators. This aimed at ensuring that the questions were clear and could be well understood by the respondents. The contracted data collection facilitator (DCF) and UCC team trained on how to administer and pretested the questionnaires in the period 2nd to 3rd December 2019.

Feedback on the flow and ease of administering the questions was provided and discussed, and the questionnaires were further refined in preparation for the enumerator training.

2.3.2 Enumerator Training

The data collection facilitator recruited and trained thirty-five (35) experienced research assistants comprising both male and female adults to serve as team supervisors and interviewers for the survey. The team research assistants trained for the period 4th to 9th December 2019. The main approach of the training comprised instructions in relation to interviewing techniques and field procedures, a detailed review of the data collection questionnaires, in class mock interviews, inclass practical interview sessions with children, and practice using hand-held Computer Assisted Personal Interviews (CAPI) devices. Team supervisors were further trained indata quality control procedures and coordination of fieldwork activities.

The pre-test was conducted for a two-day period starting 10th December 2019 in Kampala and Wakiso districts, and the results informed the final questionnaires that were used. The questionnaires were shortened to ensure the respondents' attention, especially through the programming of the necessary skip logics. This wasdone without compromising the set objectives. As such, the final tool attended to all the set objectives capturing the requisite information.

2.3.3 Fieldwork

Fieldwork commenced on 12th December 2019 through 31st January 2020. Prior to the deployment of fieldwork teams, team leaders were appointed, and these were given a route plan of the sampled EAs.

A supervisor, four enumerators, and a driver made up each team's five members, except for the Lango, Acholi, and Kampala teams, who preferred to use motorcycles, which were considered more convenient than cars. To enable ease of field activities, in addition to prior introduction done at district level, each enumerator was equipped with the following:

a) An Android tablet with both the child and parents' questionnaire programmed on it, and a power bank.
b) A maximum of 40 paper questionnaires for use in case of emergencies while in the field.
c) An introductory letter signed by the ED UCC, copied to the local leadership, specifically the LC, RDC and CAO.
d) An identification tag that was valid through to March 2020.
e) An information packet to familiarise themselves with the objectives of the survey.

In addition, a team of regional and senior supervisors undertook several other survey activities in line with the survey, including data scrutiny, field monitoring, coordination, and supervision, among others.

2.3.4 Quality Control

The DCF adopted a multi-faceted approach involving mechanisms embedded at each level of the research process to ensure the quality of the collected data. These included:

a) Pretesting of the questionnaires at two levels; first, between UCC research team and the DCF, and secondly with the trained enumerators.
b) Deployment of enumerators in areas where they were able to speak the local language, with a full time on ground data collection supervisor.
c) The enumerators were well trained and supervised throughout the data collection process.
d) Real-time monitoring and quality checks for the data collection was done as data kept being submitted or sent in by the enumerators.
e) Recruitment of competent and experienced enumerators.
f) Each team had a field supervisor and an overall quality control person during the data collection process.

2.3.5 Data Processing and Management

The data collection facilitator collected and directly captured data electronically using Computer Assisted Personal Interviews (CAPI) devices while in the field. The questionnaires were deployed using KoBoCollect application (app), a free and open-source platform based on OpenDataKit (ODK)[7] for digital data collection using mobile phones and tablets. With this app, you enter data from interviews or other primary data both online and offline.

There are no limits on the number of forms, questions, or submissions (including photos and other media) that can be saved on the device. Each enumerator was equipped with either a Samsung Galaxy A6 (with a 5.60-inch touchscreen) or a Techno P701 Tablet (with a 7-inch IPS touchscreen display) and Power Banks for interviewers. Field supervisors were equipped with Laptops and Internet Modems.

The data processing involved designing the data collection form for each of the questionnaire, programing consistency checks, skipping patterns and validation rules. All tablets were data-enabled, allowing them to use the GSM network to transmit data to the server, and in addition, the application enabled offline collection of data by allowing enumerators to cache questionnaires on their tablets, collect data in areas that had no coverage, and later submit the data when they next encountered network coverage.

The tablets were also location enabled and the questionnaires used to capture the Global Positioning System (GPS) coordinates of the location where an enumerator interviewed a selected respondent, allowing the server to aggregate and map data as it came in from the field in real-time as shown in Figure 1 and 2.

[7] https://opendatakit.org/

2.4 Funding of the Survey

The Uganda Communications Commission (UCC) provided funding for this survey.

2.5 Data Analysis

Mobile data collection eliminated basic errors and the need for data entry, allowing the team to quickly transition from data collection to analysis. The data was exported from the server in a Comma Separated Vales (CSV) file format and imported into the IBM SPSS STATISTICS 21, STATA8 statistical softwares, as well as Excel (xls) for further analysis and generation of statistical tables.

2.6 Response Rate

Table 4 shows that, of the total 3,019 respondents targeted for the National ICT study, 2019 3,576 were successfully interviewed, giving a response rate of 118 percent. The response rate was evenly distributed between urban areas (49.5%) and rural areas (50.5%).

	UBOS Sub region	PARENTS			CHILDREN			
		Female	Male	**Total**	Female	Male	Total	Total
1.	Acholi	19	19	**38**	49	57	**106**	144
2.	Ankole	38	39	**77**	91	79	**170**	247
3.	Bukedi	16	14	**30**	45	45	**90**	120
4.	Bunyoro	6	5	**11**	19	19	**38**	49
5.	Busoga	92	81	**173**	139	166	**305**	478
6.	Central 1	51	43	**94**	186	181	**367**	461
7.	Central 2	13	16	**29**	51	118	**169**	198
8.	Elgon	51	54	**105**	223	250	**473**	578
9.	Kampala	34	19	**53**	87	112	**199**	252
10.	Karamoja	4	4	**8**	25	22	**47**	55
11.	Kigezi	12	17	**29**	41	42	**83**	112
12.	Lango	25	20	**45**	52	56	**108**	153
13.	Teso	29	25	**54**	108	123	**231**	285
14.	Tooro	25	22	**47**	51	50	**101**	148
15.	West Nile	31	10	**41**	133	146	**279**	320
	Total	446	388	**834**	1,300	1,466	**2,766**	**3,600**

Table 4: Regional distribution of respondents (n=3,600)

2.7 Challenges encountered during the survey

The data collection team faced a few challenges during the data collection period. Some of these are outlinedbelow:

(i) Change in the original data collection method from school to household. The study wasinitially proposed to use a school-based approach in the collection of the required data. However, by the time of planning, training of research assistants and availing the

[8]Stata from Stata Corporation, http://www.stata.com

data collection funds to the data collection facilitator, Uganda National Examination Board (UNEB) had started off the examination period and a few schools approached couldnot allow the enumerators in the school premises for, among others, fear that they could be UNEB scouts disguising as enumerators. As a result, the DCF and UCC agreed to adjust the planned approach from a school-based approach to a household-based approach.

(ii) Some unsafe Enumeration Areas (EAs). During the data collection period, some of the sampled areas in Karamoja sub-region were unsafe for enumeration. In between October 2019 and early January 2020, cattle rustling by Karimojong warriors had resumed. As such, the sub-region had been a dreaded place as raiding Karimojong cattle rustlers caused havoc on the communities. Whereas government deployed security personnel to avert the situation, the DCF and UCC project manager agreed to replace the high-risk sampled areas with much safer areas within the sub-region.

(iii) Under estimation of the execution time of a single questionnaire: The DCF estimated on average 45 minutes; however, on ground, after deploying the first recruits, it was realised that some children needed more time to complete the questionnaire. To mitigate this yet at the same time attain the required sample size as had been defined by UCC, the DCF and the UCC team agreed to extend the planned person enumerator-days.

3. SURVEY FINDINGS

3.0 Demographic characteristics of the respondents

In this section, we explore the demographic characteristics of the respondents (that is children and youth interviewed as well as the parents) in this study. As seen in this section, the sample size was distributed proportionate to size as per the 2014 census frame. The proportion of boys interviewed was slightly higher than that of the girls (53% and 47%, n=2,766 respectively), while on the other hand, majority of the parents interviewed were mothers 53.76%, n=834), as detailed below.

3.1 Children Demographics

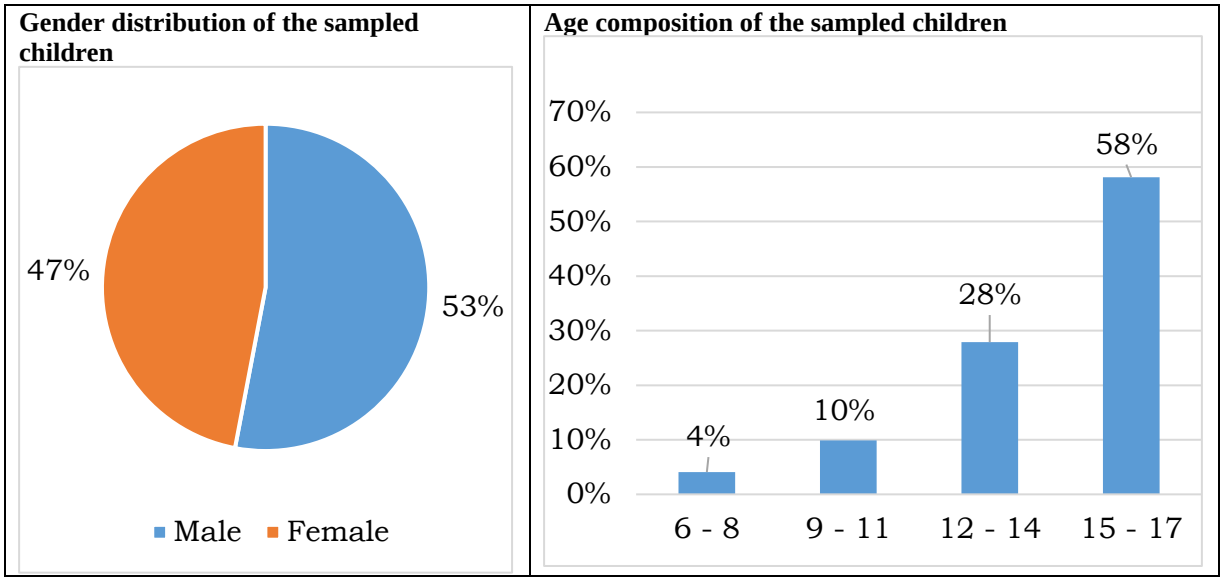
3.1.1 Children's gender and age composition

A total of 2,766 school going children aged 6 - 17 were interviewed in this survey. Of these, the proportion of boys (53%) interviewed was slightly higher than the girls (47%).

On the other hand, majority of the sampled children were in the age bracket of 15-17 years (58%), and therein there was slightly more boys (55%) than girls (45%). For the rest of the age brackets, the children were almost evenly distributed. For instance, the 12-14 age bracket had 28% of both genders (51% male, 49% female).

The 9-11 years' age bracket constituted 10%, whilst 6-8 bracket had 4%, as detailed in **Figure 3** below.

Figure 3: Gender and age of sampled children



3.1.2 Regional Distribution

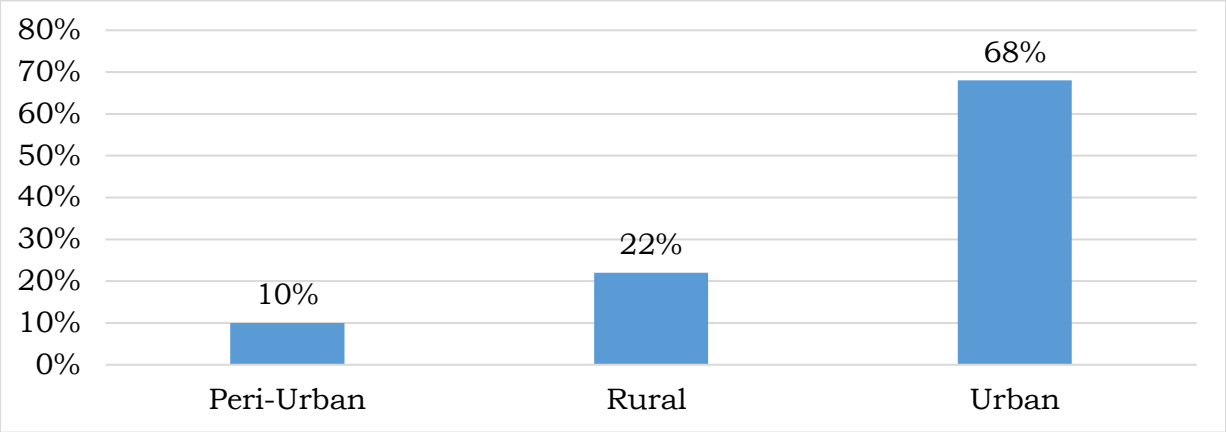
The sample size was distributed across all the fifteen (15) sub regions as defined by Uganda, proportionate to the population size of the region. That is regions with bigger populations contributed more to the sample. In addition, we also took into consideration the residential area

of the respondents. In Uganda, residential areas have been categorised into three (3); that is, urban, peri-urban, and rural areas. However, the definition of urban areas has been changing over time. The 2002 and 2014 censuses defined urban areas to include only the gazetted urban centres.

As a result, in this study, we maintain this definition. We further categorise peri urban as areas around cities and towns characterised by rapid demographic, economic, environmental, social, and cultural changes.

Majority of the sampled children (68%) were in urban areas, followed by 22% in rural areas and about 10% in the peri-urban areas.

Figure 4: Percentage distribution of the sampled children by residence



From a regional perspective, the sampled districts have been grouped into fifteen (15) sub-regions with similar characteristics. The sub-regions are Kampala, Central-1, Central-2, Bukedi, Busoga, Elgon, Teso, Karamoja, West Nile, Lango, Acholi, Ankole, Kigezi, Bunyoro and Toro, as categorised by UBOS.

In addition, as will be seen throughout the report, attempts have been made to present the patterns of findings by background characteristics, including categorisation by peri urban, rural, and urban residence, gender, and age, and the fifteen sub-regions.

As depicted in table 5, Busoga sub region had more children (30.99%) interviewed in the peri urban area followed by Central 1 at 27.82%. On the other hand, majority 31.18% of the sampled children in the rural areas were from Elgon sub region.

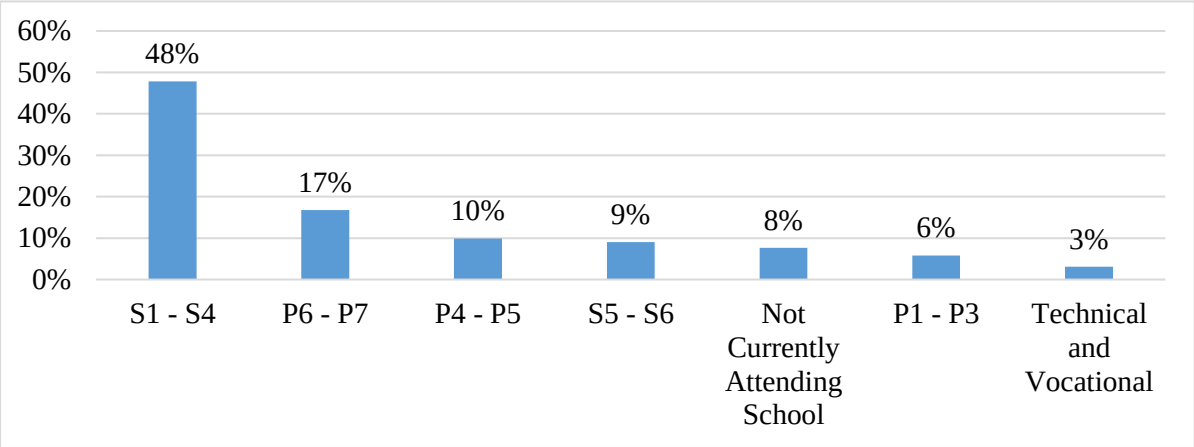
Characteristics	Age group				Residence			Gender	
Sub-Region	12 - 14	15 - 17	6 - 8	9 - 11	Peri Urban	Rural	Urban	Female	Male
Acholi	4.92%	2.80%	0.00%	8.42%	0.35%	0.00%	5.59%	3.77%	3.89%
Ankole	8.55%	4.48%	10.62%	7.33%	0.35%	6.80%	6.81%	7.00%	5.39%
Bukedi	3.89%	3.05%	0.88%	3.66%	4.23%	5.47%	2.39%	3.46%	3.07%
Bunyoro	2.20%	0.75%	3.54%	1.83%	1.06%	5.64%	0.05%	1.46%	1.30%
Busoga	10.23%	11.07%	19.47%	9.52%	30.99%	7.96%	8.99%	10.69%	11.32%
Central-1	15.80%	13.00%	5.31%	10.99%	27.82%	11.94%	11.50%	14.31%	12.35%
Central-2	4.27%	7.65%	5.31%	2.56%	4.93%	1.33%	7.82%	3.92%	8.05%
Elgon	12.56%	20.90%	8.85%	10.99%	2.46%	31.18%	14.80%	17.15%	17.05%
Kampala	6.74%	7.77%	5.31%	5.86%	0.00%	0.17%	10.54%	6.69%	7.64%
Karamoja	2.20%	0.81%	6.19%	3.66%	11.62%	1.82%	0.16%	1.92%	1.50%
Kigezi	3.37%	2.49%	5.31%	4.03%	3.17%	2.16%	3.25%	3.15%	2.86%
Lango	5.05%	2.61%	0.00%	9.89%	0.00%	9.45%	2.71%	4.00%	3.82%
Teso	5.70%	8.89%	20.35%	7.69%	0.00%	9.45%	9.26%	8.31%	8.39%
Tooro	5.57%	2.11%	7.08%	5.86%	3.17%	6.63%	2.77%	3.92%	3.41%
West Nile	8.94%	11.63%	1.77%	7.69%	9.86%	0.00%	13.36%	10.23%	9.96%
Total	27.91%	58.13%	4.09%	9.87%	10.27%	21.80%	67.93%	47.00%	53.00%

Table 5: Percentage distribution of sampled children by age group, residence, and gender across the sub regions

3.1.3 Level of education of sampled children

In the survey, we assessed the level of education of the sampled children. This aimed at correlating the same with their Internet access and usage. Almost half of the sampled children (48%) were in lower secondary (S1-S4). This was closely followed by upper primary (P.6 – P.7) at 17%. 8% of the sampled children were currently not attending school, while 3% of the sampled children were either in technical or vocational institutes, as depicted in Figure 5 below.

Figure 5: Children level of education



Disaggregation of the education level by region, residence as well as the children's gender indicated no significant differences in terms of gender. In terms of sub-regionals, the Busoga region had the highest percentage of the children not attending school (36%), followed by Elgon (18%) as depicted in Table 6.

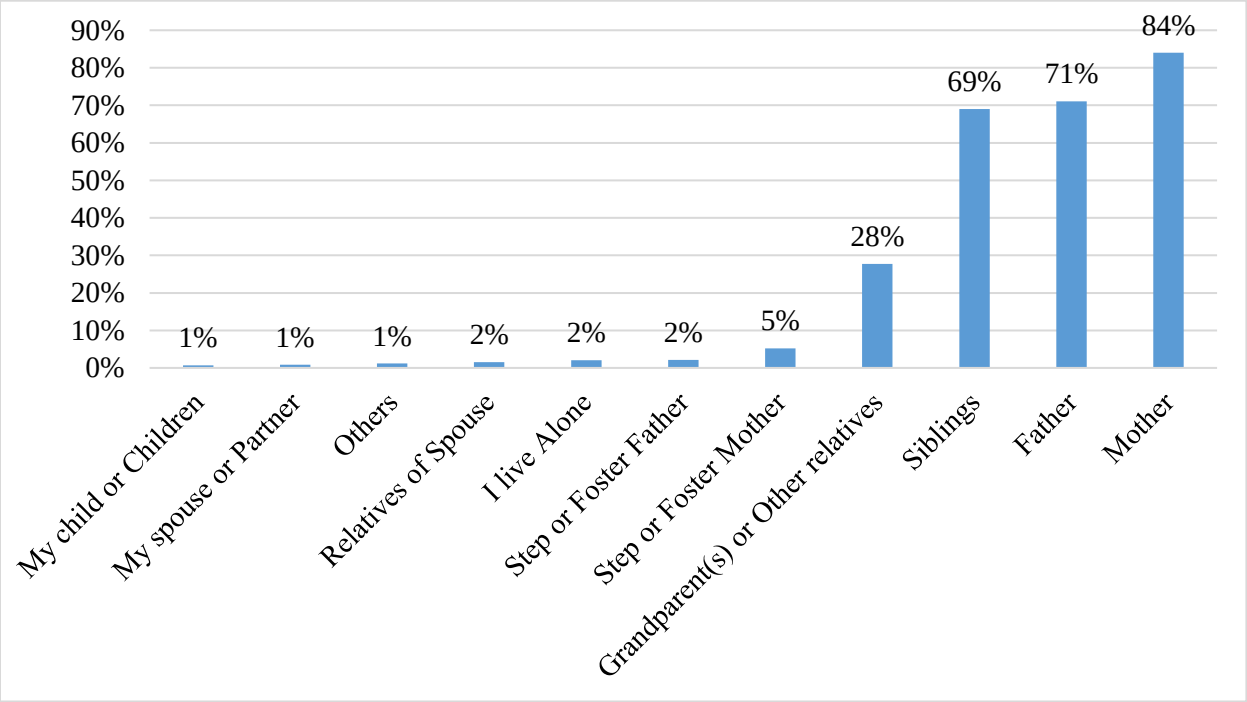
	Lower Primary P1- P3	Lower Secondary S1- S4	Middle Primary P4-P5	Not Currently Attending School	Technical and Vocational Training	Upper Primary P6- P7	Upper Secondary S5-S6	**Total**
Gender								
Female	6%	47%	10%	8%	3%	16%	9%	47%
Male	5%	49%	10%	7%	3%	17%	9%	53%
Residence								
Peri Urban	9%	44%	11%	12%	2%	14%	8%	10%
Rural	9%	44%	11%	9%	3%	19%	5%	22%
Urban	4%	50%	9%	6%	3%	16%	10%	68%
Sub-region								
Acholi	3%	4%	7%	0%	0%	6%	2%	4%
Ankole	1%	7%	8%	9%	2%	6%	6%	6%
Bukedi	1%	4%	2%	4%	2%	3%	2%	3%
Bunyoro	3%	0%	3%	0%	0%	4%	0%	1%
Busoga	20%	6%	16%	36%	22%	6%	10%	11%
Central 1	4%	14%	11%	6%	4%	17%	20%	13%
Central 2	5%	8%	2%	1%	5%	6%	8%	6%
Elgon	4%	25%	5%	18%	32%	10%	7%	17%
Kampala	6%	7%	4%	2%	9%	8%	13%	7%
Karamoja	7%	1%	3%	9%	0%	1%	0%	2%
Kigezi	1%	3%	6%	3%	7%	3%	2%	3%
Lango	14%	2%	10%	0%	0%	5%	2%	4%
Teso	18%	8%	8%	7%	8%	7%	10%	8%
Tooro	7%	2%	7%	3%	0%	6%	2%	4%
West Nile	6%	10%	10%	4%	8%	11%	16%	10%

Table 6: Percentage distribution of level of education by key demographics

3.1.4 Household composition of sampled children

In the study, we set out to also determine the relationships between the sampled child in every household and the members of the household. Overall, majority of the children are living with their parents (84% Mothers, 71% Fathers) and siblings (69%). About 2% of the sampled children were either in child headed households or in early marriages, indicated by approximately 1% of the children living with either their partners or their children as depicted in **Figure 6**.

Figure 6: Distribution of people staying with the sampled children



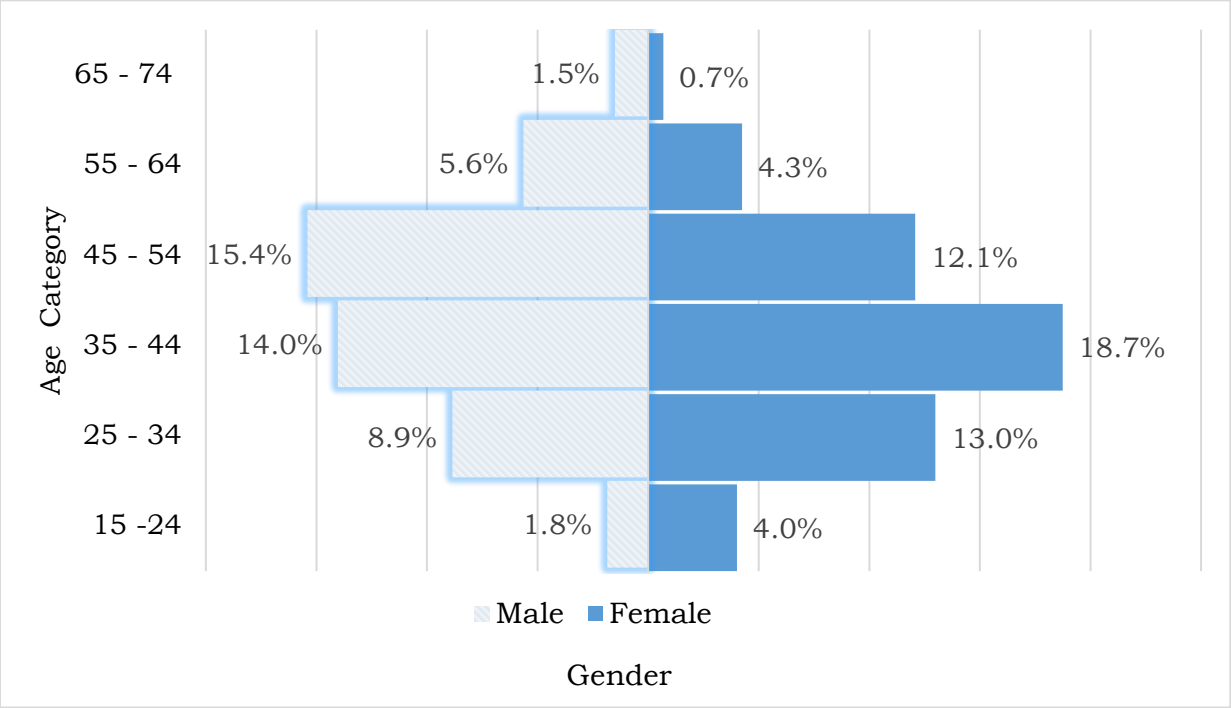
3.2 Parents/Guardians demographics

3.2.1 Parents/ guardians gender and age

Majority (53%, n=834) of the sampled parents/ guardians were female. The biggest proportion (about 33%) were aged between 34 – 35 years of age. One (1) in every five (5) was in the age category of 45 -54, or 21 – 34 years. Only one (1) in every ten (10) was aged 55 -64 years.

There were also registered cases of early marriages observed; that is about 5.86% of the interviewed parents were in the age bracket of 15 – 24 years, while the age band of 65 – 75 registered the least number (2.1%) of parents interviewed, as detailed in Figure 7 below.

Figure 7: Parents/guardians gender and age group



3.2.2 Parents/ guardians level of education and employment

The survey also assessed the level of education of the parents/guardians. At least 93.6% of the parents/ guardians had attended some form of education. As seen in the table below, about 30.2% of the parents/guardians had attended lower secondary, followed by 22.8% who reported attending technical and vocational training. Only about one (1) in every ten (10) reported having completed upper secondary, while 6.4% reported they had never attended school at all.

As regards employment, slightly more than half (about 60%) of the parents/guardians reported to have been employed. Of these, 30.46% were male while 29.31% were female. Thus, there were slightly more employed male respondents.

Regionally, Busoga, Central 1 and Kampala were among the regions that had the highest percentage of respondents that were employed. These had 15.75%, 11.49% and 4.83% of the respondents respectively.

Conversely, 39.66% of the respondents indicated that they were unemployed, and these were mainly female parents (23.22%) compared to 16.44% male.

		What is your Highest Level of Education?							
		Did not Go to School	Lower Primary P1- P3	Lower Secondary S1- S4	Middle Primary P4-P5	Technical and Vocational Training (Specify Year).	Upper Primary P6- P7	Upper Secondary S5-S6	Grand Total
Gender	Female	3.4%	2.3%	15.9%	3.0%	10.9%	11.3%	6.0%	52.8%
	Male	3.0%	1.5%	14.4%	3.2%	11.8%	8.4%	4.9%	47.2%
Sub region	Acholi	0.6%	0.8%	0.6%	1.0%	0.3%	0.7%	0.3%	4.4%
	Ankole	0.2%	0.0%	2.6%	0.7%	1.5%	2.2%	1.8%	9.1%
	Bukedi	0.2%	0.0%	0.7%	0.2%	1.0%	0.7%	0.6%	3.4%
	Bunyoro	0.0%	0.1%	0.5%	0.0%	0.0%	0.7%	0.0%	1.3%
	Busoga	2.4%	0.7%	5.9%	1.4%	4.5%	3.3%	1.7%	19.9%
	Central 1	0.2%	0.0%	6.0%	0.1%	2.1%	2.1%	2.2%	12.6%
	Central 2	0.2%	0.0%	2.3%	0.2%	0.8%	0.8%	0.6%	4.9%
	Elgon	1.3%	0.0%	3.2%	0.3%	3.8%	2.0%	1.7%	12.3%
	Kampala	0.3%	0.0%	2.1%	0.0%	2.3%	0.7%	0.7%	6.1%
	Karamoja	0.2%	0.1%	0.1%	0.1%	0.2%	0.1%	0.0%	0.9%
	Kigezi	0.0%	0.2%	0.6%	0.6%	0.7%	1.0%	0.2%	3.3%
	Lango	0.3%	0.7%	1.3%	0.5%	0.7%	1.7%	0.1%	5.3%
	Teso	0.0%	0.6%	2.2%	0.2%	1.5%	1.6%	0.1%	6.2%
	Tooro	0.3%	0.6%	1.7%	0.8%	0.2%	1.5%	0.3%	5.5%
	West Nile	0.0%	0.0%	0.6%	0.0%	3.1%	0.6%	0.5%	4.7%
	Total	**6.4%**	**3.8%**	**30.2%**	**6.2%**	**22.8%**	**19.7%**	**10.9%**	**100%**

Table 7: Level of education of the parents/guardians by demographics

		Are you currently employed?			
		I prefer not to Say	No	Yes	Total
Sub region	Acholi	0.00%	3.56%	0.80%	4.37%
	Ankole	0.11%	2.76%	6.21%	9.08%
	Bukedi	0.00%	2.41%	1.03%	3.45%
	Bunyoro	0.00%	0.11%	1.15%	1.26%
	Busoga	0.34%	3.79%	15.75%	19.89%
	Central 1	0.00%	1.15%	11.49%	12.64%
	Central 2	0.00%	1.26%	3.68%	4.94%
	Elgon	0.00%	8.51%	3.79%	12.30%
	Kampala	0.00%	1.26%	4.83%	6.09%
	Karamoja	0.00%	0.69%	0.23%	0.92%
	Kigezi	0.00%	1.03%	2.30%	3.33%
	Lango	0.00%	4.37%	0.92%	5.29%
	Teso	0.00%	3.79%	2.41%	6.21%
	Tooro	0.11%	3.68%	1.72%	5.52%
	West Nile	0.00%	1.26%	3.45%	4.71%
Gender	Female	0.23%	23.22%	29.31%	52.76%
	Male	0.34%	16.44%	30.46%	47.24%
	Total	**0.57%**	**39.66%**	**59.77%**	**100%**

Table 8: Employment status of the parents/guardians

Having asked the parents whether they were employed or not, we further asked the employed parents to indicate the kind of employment they had. As depicted in Table 9, majority of the parents (55.4%) were self-employed whereas 41.3% indicated that they were engaged in paid employment. 2.7% of the parents indicated that they were engaged in unpaid housework, while 0.2% indicated that they were retired.

		If yes, what is your employment situation?					
		Disabled Unable to Work	Paid employee	Retired	Self-employed (includes paid family work)	Unpaid housework (e.g., housewife)	Total
Sub region	Acholi	0.0%	1.0%	0.0%	0.4%	0.0%	1.3%
	Ankole	0.0%	3.7%	0.0%	6.7%	0.0%	10.4%
	Bukedi	0.0%	1.5%	0.0%	0.0%	0.2%	1.7%
	Bunyoro	0.0%	0.2%	0.0%	1.7%	0.0%	1.9%
	Busoga	0.0%	7.7%	0.2%	18.1%	0.4%	26.3%
	Central 1	0.0%	7.9%	0.0%	11.0%	0.4%	19.2%
	Central 2	0.0%	2.7%	0.0%	3.5%	0.0%	6.2%
	Elgon	0.0%	4.8%	0.2%	1.3%	0.0%	6.3%
	Kampala	0.0%	3.5%	0.0%	3.8%	0.8%	8.1%
	Karamoja	0.2%	0.2%	0.0%	0.0%	0.0%	0.4%
	Kigezi	0.0%	1.7%	0.0%	2.1%	0.0%	3.8%
	Lango	0.0%	1.0%	0.0%	0.6%	0.0%	1.5%
	Teso	0.0%	1.3%	0.0%	2.5%	0.2%	4.0%
	Tooro	0.0%	1.0%	0.0%	1.2%	0.8%	2.9%

	West Nile	0.0%	3.3%	0.0%	2.5%	0.0%	5.8%
Gender	Female	0.0%	21.5%	0.2%	25.8%	1.5%	49.0%
	Male	0.2%	19.8%	0.2%	29.6%	1.2%	51.0%
	Total	**0.2%**	**41.3%**	**0.4%**	**55.4%**	**2.7%**	**100%**

Table 9: Employment situation of the sampled parents

The parents were asked what their primary source of income was and majority, 53.79%, indicated Business Retained Earnings (Profits, rental income, etc) whilst 29.54% indicated paid salary/wages. 12.18% of the respondents indicated that their primary source of income was transfer earnings. Only 2.4% of parents indicated that they depended on charity, whilst 1.72% and 0.34% indicated that they depended on pension/retirement benefits and handouts from NGO/Government respectively.

		What is your primary source of income?						
		Business Retained Earnings	Handouts from NGO/Government	I depend on Charity)	Pension/Retirement benefits	Salary/Wage	Transfers Earnings family	Total
Sub region	Acholi	2.87%	0.00%	0.23%	0.00%	0.80%	0.46%	4.37%
	Ankole	5.17%	0.00%	0.34%	0.57%	2.53%	0.46%	9.08%
	Bukedi	1.26%	0.00%	0.11%	0.00%	1.49%	0.57%	3.45%
	Bunyoro	0.23%	0.00%	0.11%	0.00%	0.11%	0.80%	1.26%
	Busoga	12.53%	0.11%	0.46%	0.23%	4.94%	1.61%	19.89%
	Central 1	4.37%	0.11%	0.11%	0.00%	7.24%	0.80%	12.64%
	Central 2	2.53%	0.00%	0.11%	0.23%	1.61%	0.46%	4.94%
	Elgon	7.59%	0.11%	0.23%	0.34%	3.10%	0.92%	12.30%
	Kampala	2.18%	0.00%	0.00%	0.00%	2.30%	1.61%	6.09%
	Karamoja	0.46%	0.00%	0.23%	0.11%	0.11%	0.00%	0.92%
	Kigezi	1.95%	0.00%	0.00%	0.00%	1.03%	0.34%	3.33%
	Lango	3.91%	0.00%	0.11%	0.11%	0.69%	0.46%	5.29%
	Teso	3.10%	0.00%	0.23%	0.00%	0.80%	2.07%	6.21%
	Tooro	3.68%	0.00%	0.11%	0.00%	0.80%	0.92%	5.52%
	West Nile	1.95%	0.00%	0.00%	0.11%	1.95%	0.69%	4.71%
Gender	Female	27.93%	0.23%	1.03%	0.57%	14.83%	8.16%	52.76%
	Male	25.86%	0.11%	1.38%	1.15%	14.71%	4.02%	47.24%
	Total	53.79%	0.34%	2.41%	1.72%	29.54%	12.18%	100 %

Table 10: The sampled parents' primary source of income

We further sought to understand the sampled parents' earnings. Majority of the parents, 31.72%, indicated that they earned between 201,000 and 500,000 per month. There was not much distinction gender wise; that is, 16.32% of males compared to 15.40% of females in this income band.

The income bands of between 101,000 and 200,000 and, 50,000 and 100,000 monthly were cited by 22.53% and 21.3% of the respondents respectively, while that of between 501,000 and 1,000,000 was cited by 11.6% of the respondents. 9.31%of the respondents indicated that they earned less than 50,000 monthly.

Only 3.4% of the respondents indicated that they earned above 1 million shillings.

		What is your average individual income range per month?						
		Above 1,000,000	Between 101,000 and 200,000	Between 201,000 and 500,000	Between 50,000 and 100,000	Between 501,000 and 1000,000	Less than 50,000	Total
Sub region	Acholi	0.00%	1.26%	1.49%	1.15%	0.46%	0.00%	4.37%
	Ankole	0.69%	1.72%	3.56%	1.38%	1.72%	0.00%	9.08%
	Bukedi	0.00%	0.80%	0.80%	0.92%	0.57%	0.34%	3.45%
	Bunyoro	0.00%	0.46%	0.11%	0.34%	0.00%	0.34%	1.26%
	Busoga	0.11%	3.45%	5.63%	4.94%	0.69%	5.06%	19.89%
	Central 1	0.69%	2.76%	4.71%	1.38%	2.87%	0.23%	12.64%
	Central 2	0.00%	1.49%	2.41%	0.11%	0.46%	0.46%	4.94%
	Elgon	0.23%	4.02%	3.79%	3.22%	0.80%	0.23%	12.30%
	Kampala	0.34%	1.03%	2.53%	0.80%	1.38%	0.00%	6.09%
	Karamoja	0.00%	0.00%	0.23%	0.34%	0.11%	0.23%	0.92%
	Kigezi	0.11%	1.38%	1.03%	0.57%	0.23%	0.00%	3.33%
	Lango	0.00%	0.92%	1.95%	1.84%	0.23%	0.34%	5.29%
	Teso	0.34%	1.26%	1.61%	1.84%	0.00%	1.15%	6.21%
	Tooro	0.11%	0.92%	1.03%	2.07%	0.69%	0.69%	5.52%
	West Nile	0.80%	1.03%	0.80%	0.46%	1.38%	0.23%	4.71%
Gender	Female	1.49%	12.99%	15.40%	12.41%	4.60%	5.86%	52.76%
	Male	1.95%	9.54%	16.32%	8.97%	7.01%	3.45%	47.24%
	Total	3.45%	22.53%	31.72%	21.38%	11.61%	9.31%	100%

Table 11:Sampled parents average monthly income

3.0 Access and Use of the Internet

In this section, we explore three major questions, starting with the Ugandan children's use of the Internet, access to the Internet, as well as the devices they use or own for this purpose. The aim is to find out more about children's access to the Internet and the parent's perception of this access.

3.3 Children's Internet Use

3.3.1 Children use of the Internet

In the survey, we asked all the sampled children if they knew how to use the Internet, and as can be seen, of allthe children interviewed, 81% knew how to use the Internet. More than half of these were in urban areas; that is 68% compared to 22% in rural areas. From a gender perspective, more boys than girls reported knowing how to use the Internet; that is, 53% boys compared to 47% girls.

Do you know how to use the Internet? n=2,766

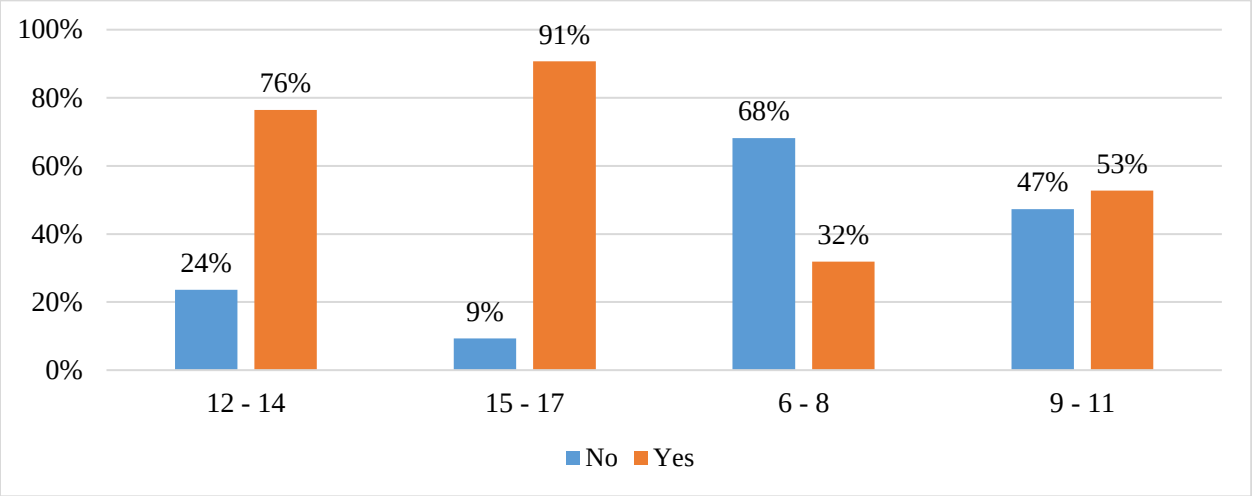
		No	Yes	Total
Residence	Peri Urban	20%	10%	10%
	Rural	42%	16%	22%
	Urban	12%	74%	68%
Gender	Female	51%	46%	47%
	Male	49%	54%	53%
Sub-Region	Acholi	6%	3%	4%
	Ankole	7%	6%	6%
	Bukedi	4%	3%	3%
	Bunyoro	6%	0%	1%
	Busoga	7%	12%	11%
	Central 1	1%	16%	13%
	Central 2	4%	7%	6%
	Elgon	14%	18%	17%
	Kampala	0%	9%	7%
	Karamoja	7%	0%	2%
	Kigezi	1%	3%	3%
	Lango	13%	2%	4%
	Teso	14%	7%	8%
	Tooro	12%	2%	4%
	West Nile	4%	11%	10%
	Total	**19%**	**81%**	**100%**

Table 12: Children's knowledge of how to use the Internet

An assessment of the sub regional knowledge of use of Internet reveals that the Elgon and Teso sub regions had the highest number of children who did not know how to use the Internet (14%), Lango (13%) and Tooro closely followed at 12%. There were minimal significant differences in the know-how of Internet use by regions. Significant to note is that all sampled children in Kampala knew how to use the Internet, while Bunyoro and Karamoja sub regions never registered any children who knew how to use the Internet. On the other hand, an assessment from the age

categorization reveals that the older one is in Uganda, the more likely he or she can use the Internet as detailed in **Figure 8** below

Figure 8: Percentage distribution of use of Internet by age category



3.3.2 Age at first use of the Internet

On average, children started using the Internet at the age of 13 years. There were no significant differences across gender. As shown in the figure below, most children stated they first accessed the Internet at the age of 14 years. Slightly more than half of the children access the Internet between the ages of 11 -15 years.

Figure 9: Children's age of first Internet use

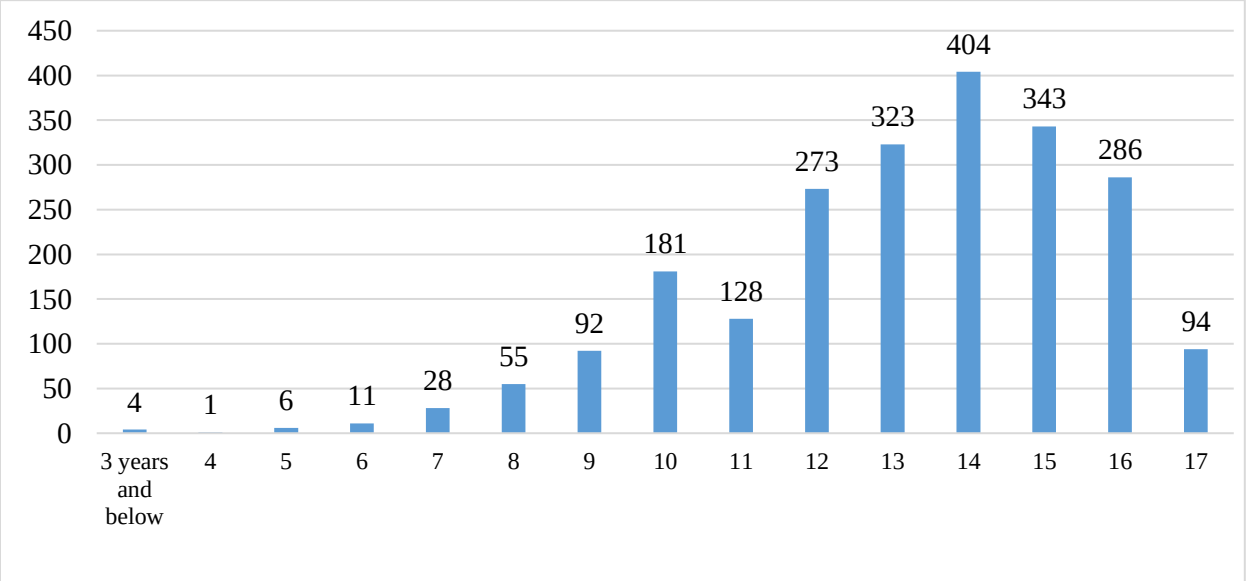
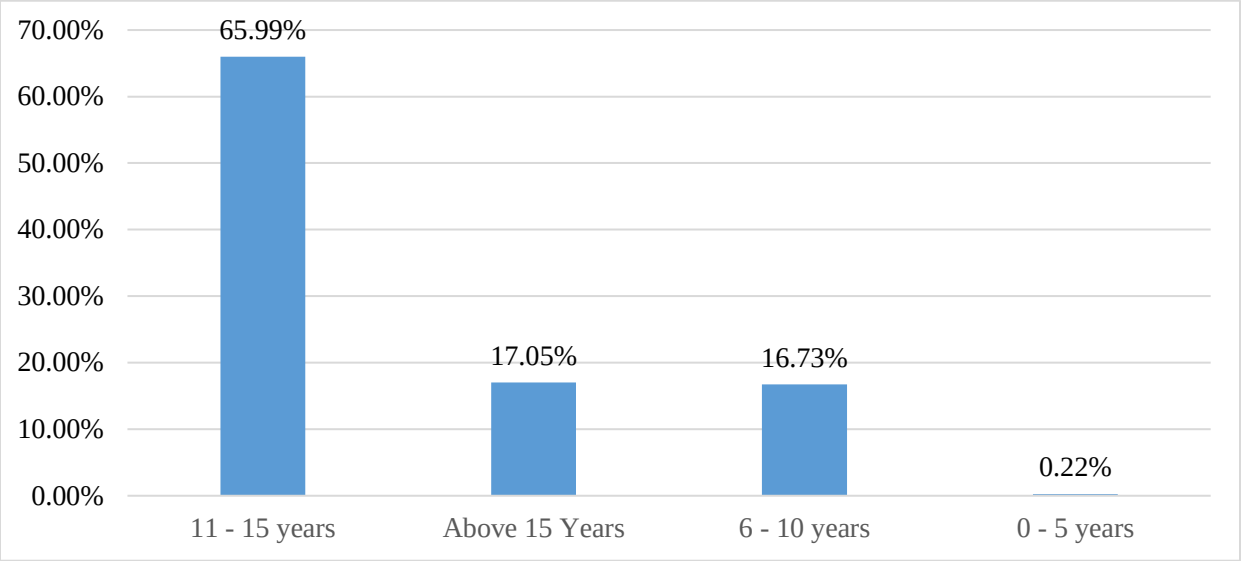


Figure 10: Percentage distribution of age of first Internet use

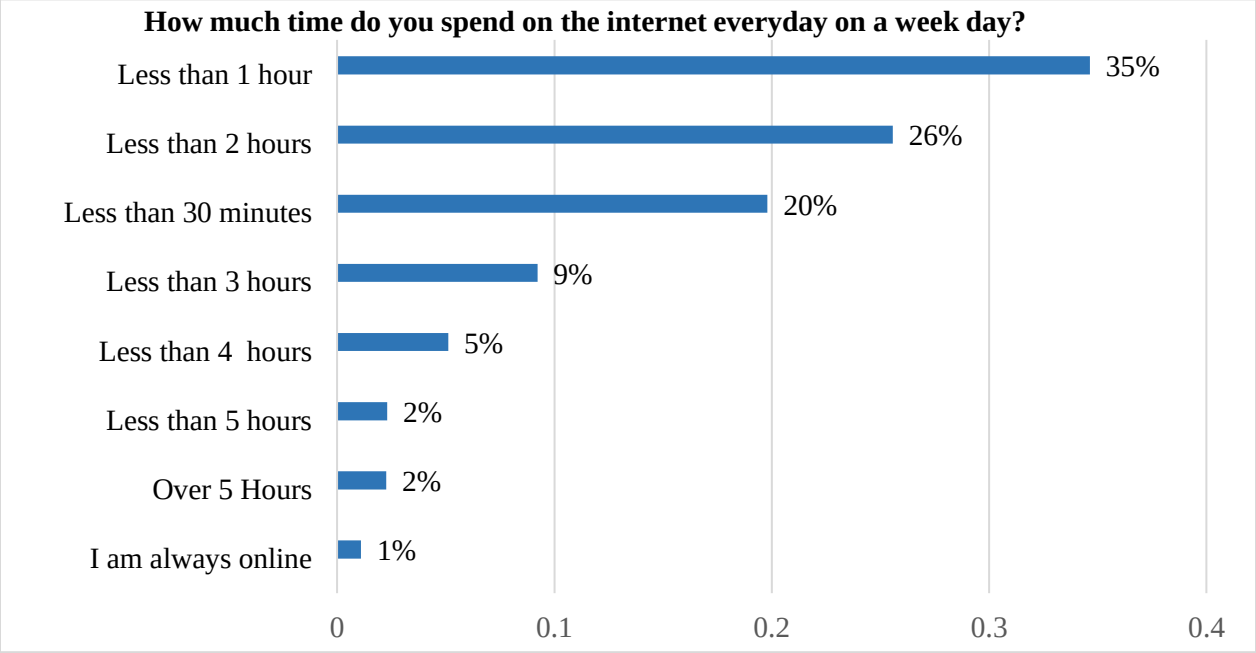


The implication is that the older the child becomes, the more likely he or she is to have their first access or use of the Internet.

3.3.3 Time spent on the Internet

Most children (81%) spend less than 2 hours on a weekday on the Internet. Of these, slightly more than half (55%) spend less than one hour. About 1% of the children are always on the Internet, as detailed in **Figure 11**below.

Figure 11: Time spent on the Internet



From a gender perspective, there is no significant difference on the time spent online by the boys and girls. While disaggregation by age category reveals that, the older one becomes, the more time they are likely to spend on the Internet as detailed in the table below.

How much time do you spend using the Internet on a weekday (Monday –Friday)?								
	I am always online	Less than 1 hour	Less than 2 hours	Less than 3 hours	Less than 30 minutes	Less than 4 hours	Less than 5 hours	Over 5 Hours
Female	1%	16%	11%	4%	9%	2%	1%	1%
Male	1%	18%	14%	5%	10%	3%	1%	1%
12 - 14	0%	11%	6%	1%	8%	1%	0%	0%
15 - 17	1%	20%	19%	8%	9%	4%	2%	2%
6 - 8	0%	1%	0%	0%	1%	0%	0%	0%
9 - 11	0%	3%	1%	0%	2%	0%	0%	0%

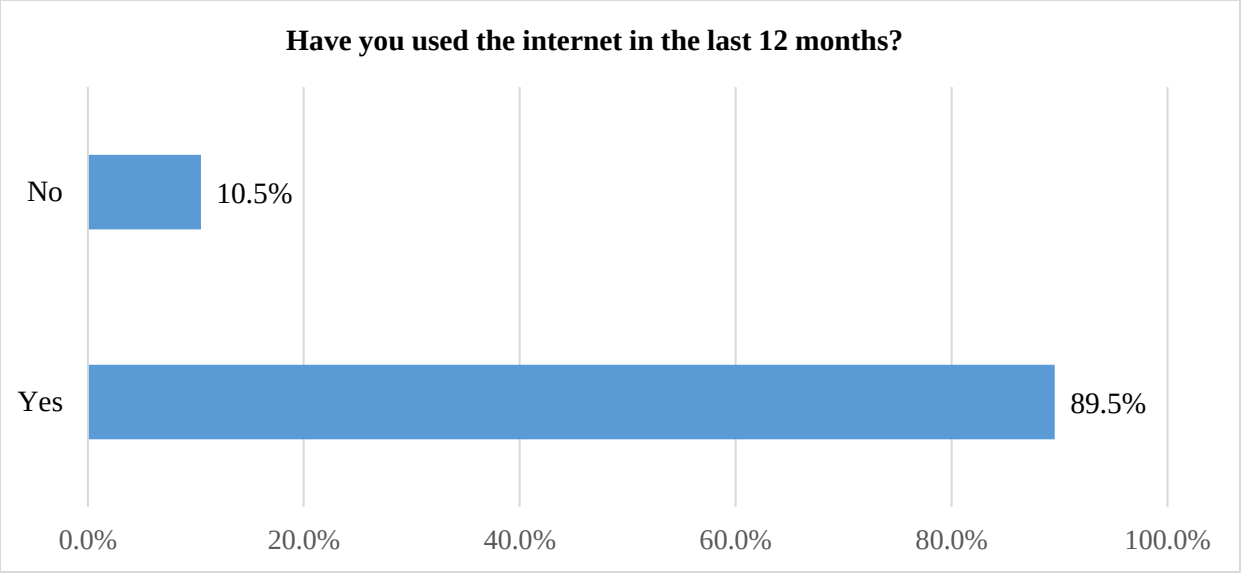
Table 13: Time spent on the Internet by gender and age group

3.3.4 Internet use in the last 12 months

The children were asked if they had used the Internet in the last 12 months. Nine (9) in every ten (10) children had used the Internet in the last 12 months irrespective of residence.

Figure below shows that overall, 89.5% of children had used the Internet in the last 12 months irrespective of residence.

Figure 12: Use of Internet by children in the last 12 months



3.4 Parents' Internet Use

3.4.1 Parents' use of the Internet

About half (47%) of the sampled parents/guardians reported that they had never used the Internet. Approximately 27% reported to have used the Internet for few months only, while the other category had either used the Internet for a few years or a year; 16.3% and 9.8% of the parents, respectively. The implication is that about half the parents cannot guide their own children on the use of the Internet since they themselves have never interfaced with the Internet. This increases the risk of children online.

From a gender perspective, more female parents (25.7%) compared to male parents (21.3%) had never accessed the Internet. This is a clear indication that the female parents were less likely than males to report using the Internet, which further reinforces the socio-cultural norms that exclude and rob the women of opportunities. These exclusions in socio-economic spaces seem to extend to the digital/Internet access spaces.

		Do you use the internet yourself?				
		No, I have never used it	Yes, I have used it for a few months	Yes, I have used it for a few years	Yes, I have used it for about a year	**Total (n=834)**
Gender	Female	25.7%	14.9%	7.8%	5.2%	446
	Male	21.3%	12.0%	8.5%	4.7%	388
Age Profile	15—24	2.4%	1.4%	0.8%	1.0%	5.6%
	25—34	8.4%	6.8%	2.9%	3.1%	21.2%
	35—44	14.0%	9.2%	7.0%	2.5%	32.7%
	45—54	12.8%	7.2%	5.4%	2.5%	27.9%
	55—64	7.4%	1.9%	0.2%	0.6%	10.2%
	65—74	1.9%	0.2%	0.0%	0.1%	2.3%
Sub Region	Acholi	2.6%	0.4%	1.1%	0.5%	4.6%
	Ankole	3.4%	1.6%	3.7%	0.6%	9.2%
	Bukedi	1.8%	1.2%	0.2%	0.4%	3.6%
	Bunyoro	1.1%	0.0%	0.0%	0.2%	1.3%
	Busoga	12.5%	3.8%	1.9%	2.5%	20.7%
	Central 1	2.2%	5.3%	2.9%	1.0%	11.3%
	Central 2	1.7%	0.8%	0.0%	1.0%	3.5%
	Elgon	3.7%	7.0%	0.6%	1.3%	12.6%
	Kampala	2.9%	1.6%	1.8%	0.1%	6.4%
	Karamoja	0.7%	0.2%	0.0%	0.0%	1.0%
	Kigezi	1.6%	0.7%	0.7%	0.5%	3.5%
	Lango	4.0%	0.0%	0.7%	0.7%	5.4%
	Teso	4.6%	0.6%	0.7%	0.6%	6.5%
	Tooro	4.1%	1.1%	0.4%	0.1%	5.6%
	West Nile	0.4%	2.6%	1.6%	0.4%	4.9%
	Total	47.0%	26.9%	16.3%	9.8%	100.0%

Table 14: Use of Internet by key demographics among the parents/guardians

From the table above, profiling the access by age revealed that Internet usage was highest in parents/guardians below 35 years. Nearly all parents that are 65 and above had never used the Internet. Those that had used it reported intermittent usage (within a year). As seen in this section, more children (81%) compared to their own parents (53%), meaning about 8 in every 10 children compared to 5 in every 10 parents, knew how to use the Internet. This result points to a digital parenting divide, as a significant number of the children cannot rely on their own parents as regards the use of Internet since their own parents have not interfaced with the Internet.

In addition, the parents who have never used the Internet are likely to be ill equipped to understand their children's experiences. As such, it would be difficult for such parents to monitor or support their children when they go online. Another clear trend is that the older parents are less likely thantheir younger counterparts to access the Internet, and less likely to frequently use it. This could point to the fact that in Uganda, like many African countries, Internet use surged in the last 15 years, causing generational exclusion. All this points to a challenge for older parents in supporting their children or grandchildren when they go online, a situation that is likely to be compounded in the future.

3.4.2 Use of Internet whenever wanted or needed

Majority (54.5%) of the parents/ guardians reported accessing the Internet only sometimes whenever they wanted or needed it. Only 26.2% of parents/guardians reported to access the Internet always whenever they needed it.

		Are you able to access the Internet when you want to or need to?				
		Always	Never	Often	Sometimes	Total
Gender	Female	13.1%	0.9%	9.5%	29.0%	52.5%
	Male	13.1%	1.4%	7.5%	25.6%	47.5%
Age Profile	15—24	1.4%	0.0%	0.0%	4.8%	6.1%
	25—34	8.1%	0.5%	3.2%	12.4%	24.2%
	35—44	8.1%	0.5%	6.8%	19.9%	35.3%
	45—54	7.5%	1.1%	5.9%	14.0%	28.5%
	55—64	1.1%	0.2%	0.9%	2.9%	5.2%
	65—74	0.0%	0.0%	0.2%	0.5%	0.7%
UBOS Sub-Region	Acholi	1.4%	0.0%	1.4%	0.9%	3.6%
	Ankole	3.6%	0.5%	2.9%	4.1%	11.1%
	Bukedi	0.2%	0.2%	0.9%	2.0%	3.4%
	Bunyoro	0.2%	0.0%	0.0%	0.2%	0.5%
	Busoga	0.0%	0.0%	0.2%	15.4%	15.6%
	Central 1	5.0%	0.5%	3.2%	8.6%	17.2%
	Central 2	1.6%	0.0%	0.2%	1.6%	3.4%
	Elgon	4.1%	0.2%	3.6%	8.8%	16.7%
	Kampala	2.5%	0.0%	1.1%	2.9%	6.6%
	Karamoja	0.0%	0.0%	0.2%	0.2%	0.5%
	Kigezi	0.9%	0.0%	0.5%	2.3%	3.6%
	Lango	1.6%	0.0%	0.9%	0.2%	2.7%
	Teso	0.9%	0.0%	1.1%	1.6%	3.6%
	Tooro	0.5%	0.2%	0.5%	1.8%	2.9%
	West Nile	3.8%	0.7%	0.2%	3.8%	8.6%
	Total	26.2%	2.3%	17.0%	54.5%	100.0%

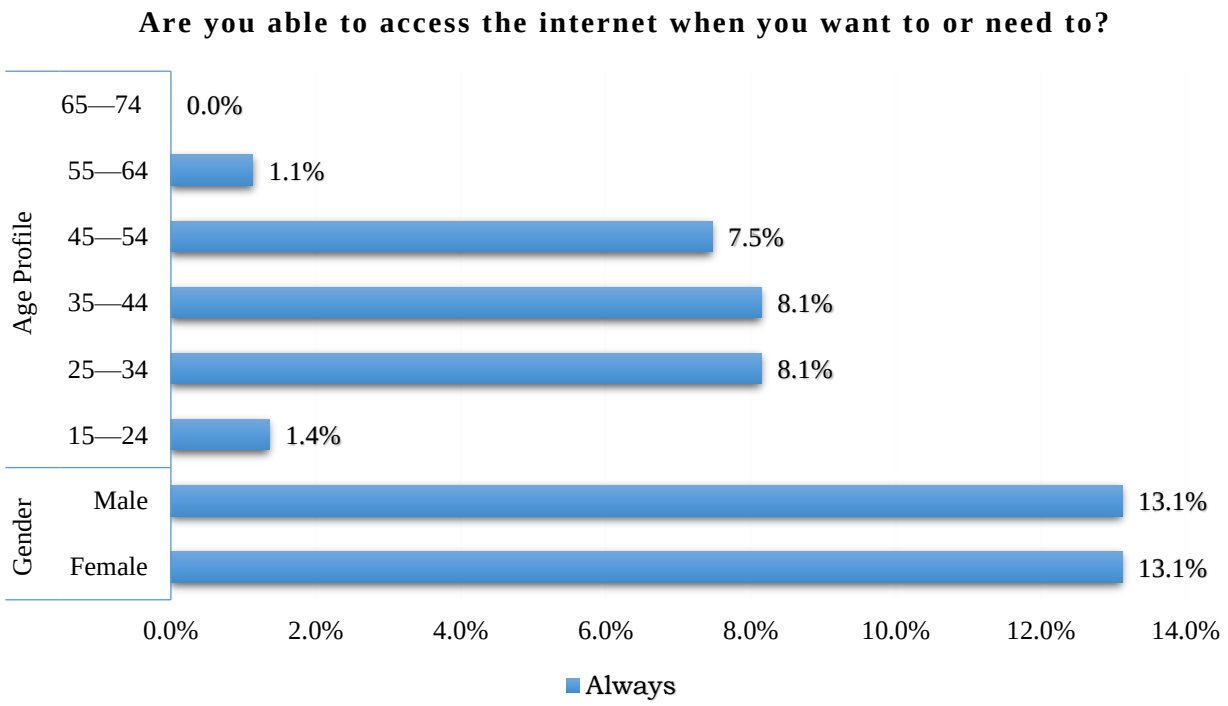
Table 15: Access to Internet by guardians/parents whenever needed

From a gender perspective, there is no significant difference between the female and the male for those who access the Internet whenever they want or need to.

On the other hand, only 1.4% of the younger parents or guardians, between the ages of 15 – 24, reported having access to the Internet whenever they wanted to. This could easily be attributed to the low economic empowerment.

8.1% and 7.5% of the parents/guardians between 24 - 44 years and 45-54 years respectively reported having access to the Internet always whenever they wanted to, compared to only 1.1% above the age of 55 as reflected in **Figure 13** below.

Figure 13: Access to the Internet always by key demographics



From the figure, it is clearer that the youthful parents are more likely to access the Internet always whenever they want to, compared to those in other age groups. There is also a higher likelihood that parents that are 65 years and above are challenged in supporting children online. Not only are they not able to use the Internet, but even those that are able to use it reported that they could not always get access whenever they needed it.

3.4.3 Frequency of Internet use

40.3% of the parents/guardians that use the Internet used it at least every week.

33.9% used the Internet every day, where only 2.7% of the parents/guardians reported to using the Internet almost all the time. On the other hand, 18.16% reported using the Internet at least every

month. 7.7% of the parents/guardians reported hardly ever, or never using the Internet.This may indicate that access to the Internet is also a significant barrier in Internet use.

Parents/ guardians in the 35 – 44 years age bracket used the Internet more than their other counterparts did, while from a gender perspective, slightly more females (39%) compared to males (35.2%) accessed the Internet as detailed in the table below.

		How often do you use the Internet?							
		Almost all the time	At least every month	At least every week	Daily or almost daily	Hardly ever	Never	Several times each day	Total
Gender	Female	0.9%	9.7%	22.9%	10.9%	3.2%	0.7%	4.3%	52.5%
	Male	1.8%	8.4%	17.4%	12.4%	3.6%	0.2%	3.6%	47.5%
Age Profile	15—24	0.2%	1.8%	2.0%	0.9%	0.7%	0.0%	0.5%	6.1%
	25—34	0.5%	3.2%	9.0%	7.9%	2.0%	0.2%	1.4%	24.2%
	35—44	0.9%	5.9%	14.9%	8.1%	1.6%	0.2%	3.6%	35.3%
	45—54	1.1%	5.9%	12.2%	4.5%	2.3%	0.2%	2.3%	28.5%
	55—64	0.0%	0.9%	2.0%	1.8%	0.2%	0.2%	0.0%	5.2%
	65—74	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.2%	0.7%
	All	2.7%	18.1%	40.3%	23.3%	6.8%	0.9%	7.9%	100.0%

Table 16: Frequency of use of the Internet

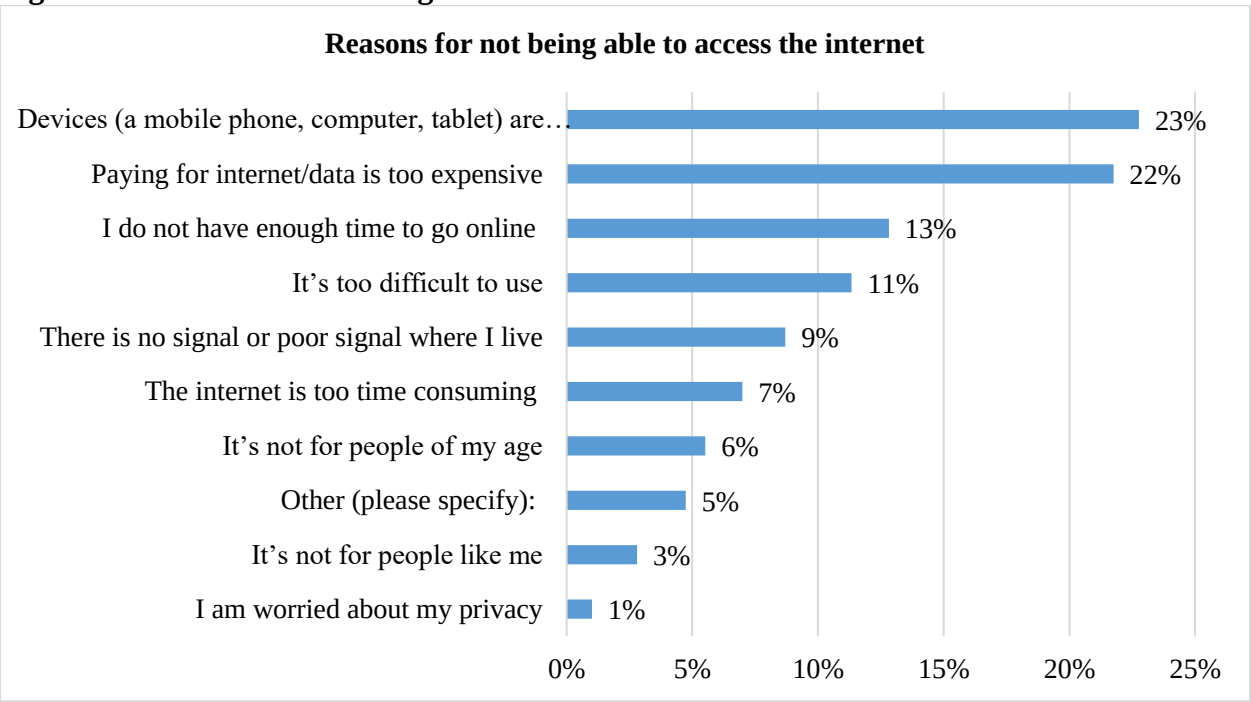
3.4.4 Barriers to Access

In the survey, we also accessed or sought to understand why parents were not able to access the Internet. As seen in this section, the reasons were majorly around the costs associated with it.

Most of the parents/guardians (23%) who were interviewed reported that the costs associated with the devices (a mobile phone, computer, tablet) were high. This was closely followed by about 22% who indicated that paying for the Internet or data was too expensive.

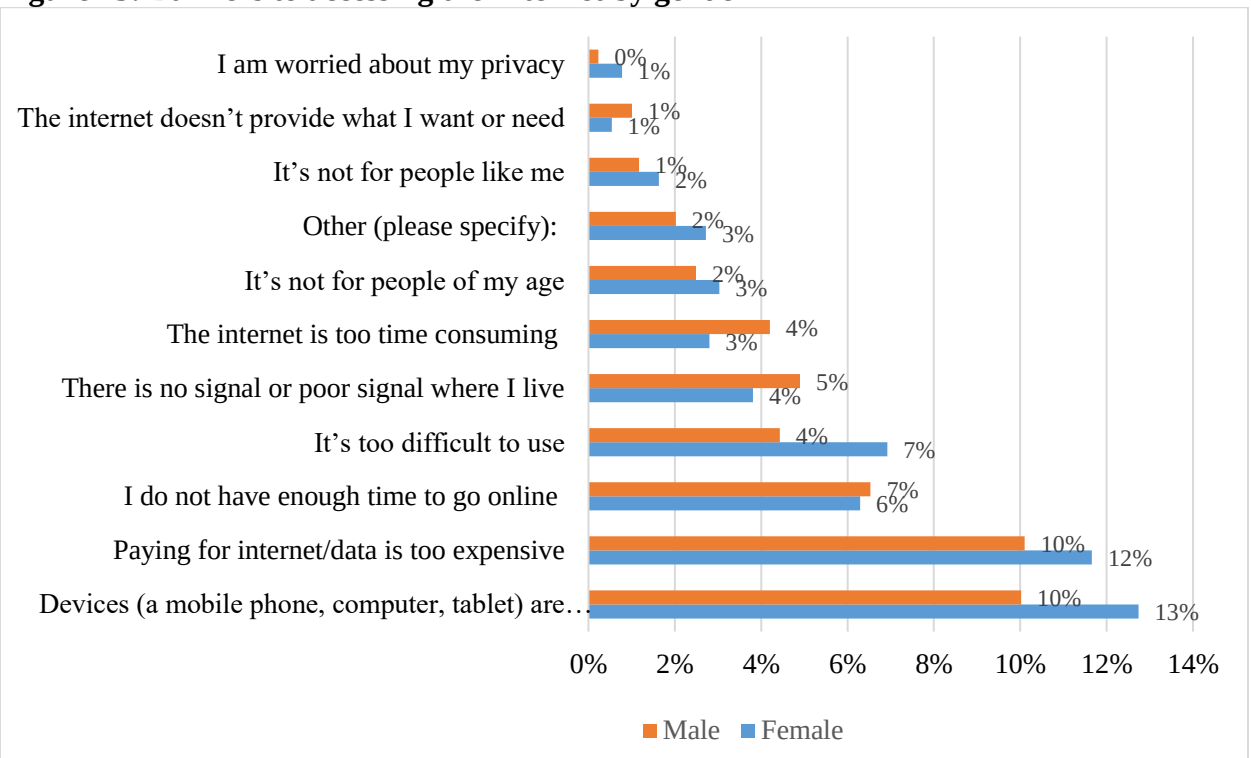
The other cited reasons were related to the Internet being difficult to use and having no time to access the Internet cited by 11.34% and 12.82% respectively. The latter category can be looked at with the 6.99% that indicated that the Internet was too time-consuming for them. These, it can be assumed, do not appreciate the value of the Internet, which is a knowledge gap. 8.7% indicated that there was no signal or poor signal where they lived.

Figure 14: Barriers to accessing the Internet



From a gender perspective, it is important to note that whereas there were no significant differences in most of the reasons across the female and male gender, the perception that the Internet is difficult to use limited more women from using it. On the other hand, whereas women were worried about their online privacy, their male counterparts were less bothered.

Figure 15: Barriers to accessing the Internet by gender



Furthermore, in the table below we explore the reasons for limited access by region and gender

		When you are unable to access the Internet, what are the reasons?										
		Devices (a mobile phone, computer, tablet) are too expensive	There is no signal or poor signal where I live	Paying for internet/data is too expensive	The internet does not provide what I want or need	It is too difficult to use	I do not have enough time to go online	The internet is too time consuming	I am worried about my privacy	It is not for people of my age	It is not for people like me	Other (please specify):
Sub region	Acholi	1.17%	0.00%	0.85%	0.00%	1.55%	0.00%	0.31%	0.00%	0.39%	0.31%	0.00%
	Ankole	1.94%	1.86%	1.32%	0.00%	0.16%	0.78%	0.08%	0.00%	0.16%	0.00%	0.78%
	Bukedi	1.24%	0.39%	1.09%	0.23%	0.85%	0.39%	0.16%	0.00%	0.23%	0.23%	0.00%
	Bunyoro	0.54%	0.00%	0.00%	0.08%	0.08%	0.08%	0.00%	0.00%	0.00%	0.08%	0.08%
	Busoga	6.14%	1.48%	5.44%	0.23%	1.71%	2.64%	0.39%	0.00%	2.10%	0.16%	0.93%
	Central 1	0.47%	0.47%	3.42%	0.08%	0.62%	2.64%	2.41%	0.08%	0.31%	0.08%	0.08%
	Central 2	1.24%	0.16%	1.40%	0.00%	0.00%	0.47%	0.31%	0.00%	0.08%	0.23%	0.39%
	Elgon	3.65%	1.94%	3.81%	0.08%	1.55%	1.32%	1.09%	0.47%	0.70%	0.31%	0.00%
	Kampala	0.39%	0.16%	0.78%	0.00%	0.54%	1.24%	0.93%	0.00%	0.23%	0.00%	0.23%
	Karamoja	0.39%	0.16%	0.54%	0.16%	0.16%	0.08%	0.16%	0.00%	0.08%	0.16%	0.08%
	Kigezi	0.54%	0.54%	0.62%	0.08%	0.00%	0.78%	0.31%	0.00%	0.23%	0.16%	0.08%
	Lango	1.55%	0.16%	0.54%	0.00%	2.25%	0.85%	0.16%	0.23%	0.31%	0.39%	0.31%
	Teso	1.40%	0.31%	0.39%	0.08%	1.17%	0.47%	0.00%	0.00%	0.16%	0.16%	0.93%
	Tooro	1.86%	0.78%	0.39%	0.16%	0.54%	0.70%	0.39%	0.00%	0.31%	0.39%	0.39%
	West Nile	0.23%	0.31%	1.17%	0.39%	0.16%	0.39%	0.31%	0.23%	0.23%	0.16%	0.47%
Gender	Female	12.74%	3.81%	11.66%	0.54%	6.92%	6.29%	2.80%	0.78%	3.03%	1.63%	2.72%
	Male	10.02%	4.90%	10.10%	1.01%	4.43%	6.53%	4.20%	0.23%	2.49%	1.17%	2.02%
	Total	22.77%	8.70%	21.76%	1.55%	11.34%	12.82%	6.99%	1.01%	5.52%	2.80%	4.74%

Table 17: Barriers to Internet access by key demographics

3.5 Place and devices used to connect to the Internet

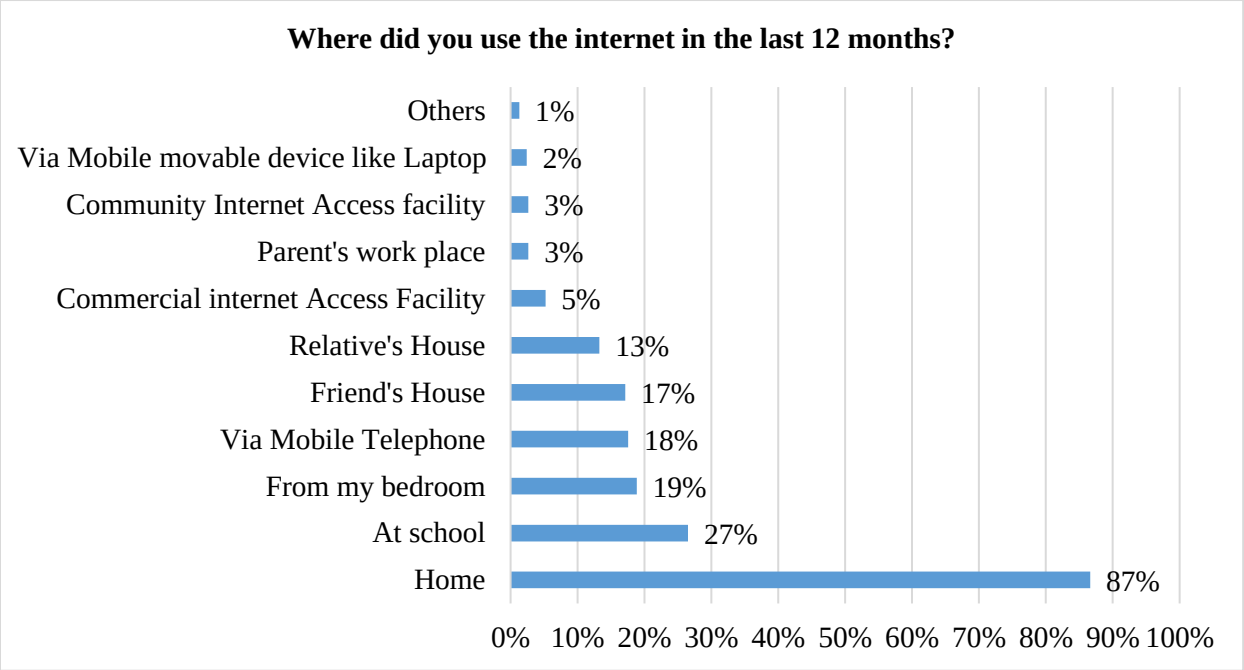
In this section, we explore the place of use of the Internet and the devices both the children and parents/guardians use to connect to the Internet.

3.5.1 Place where children access the Internet

The children who accessed the Internet in the last 12 months were asked the place where they accessed it from. As depicted in the figure below, most children (87%) access and use the Internet from home. Approximately nine (9) in every ten (10) children access and use the Internet from home.

In addition, a relatively big proportion (27%) also access and use the Internet from school. The implication is that majority of the children relied on the Internet provided to them by either their parents or paid for at school.

Figure 16: Place of use of the Internet by children



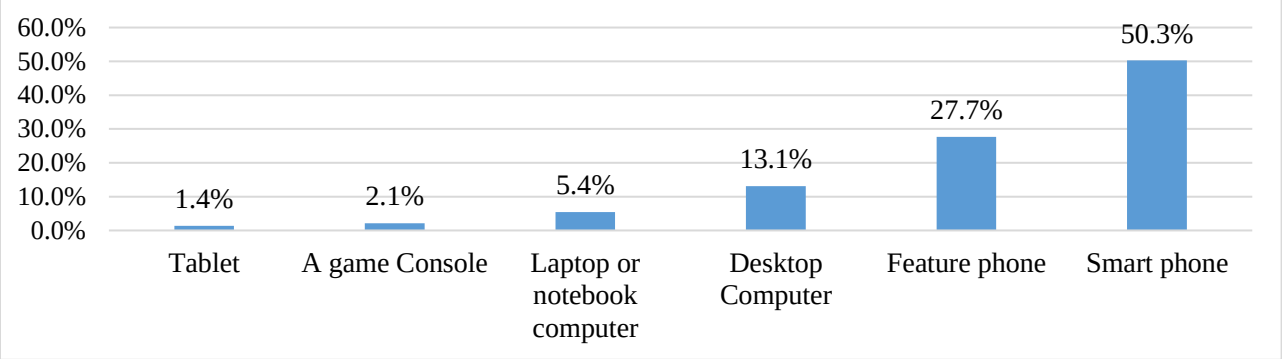
Key to note also is that a large proportion of the children reported using the Internet when they were by themselves, indicating that most children had the opportunity to use the Internet in total privacy. This may suggest low levels of parent/guardian involvement in children's Internet use, and perhaps have implications for their safety online.

In addition, the findings point to a more leisurely Internet usage by most children than in formal learning spaces. The logical conclusion is an infrastructural constraint in the schools, or rules that prohibit the use of personal devices at the school campuses.

3.5.2 Devices used by the children to access the Internet

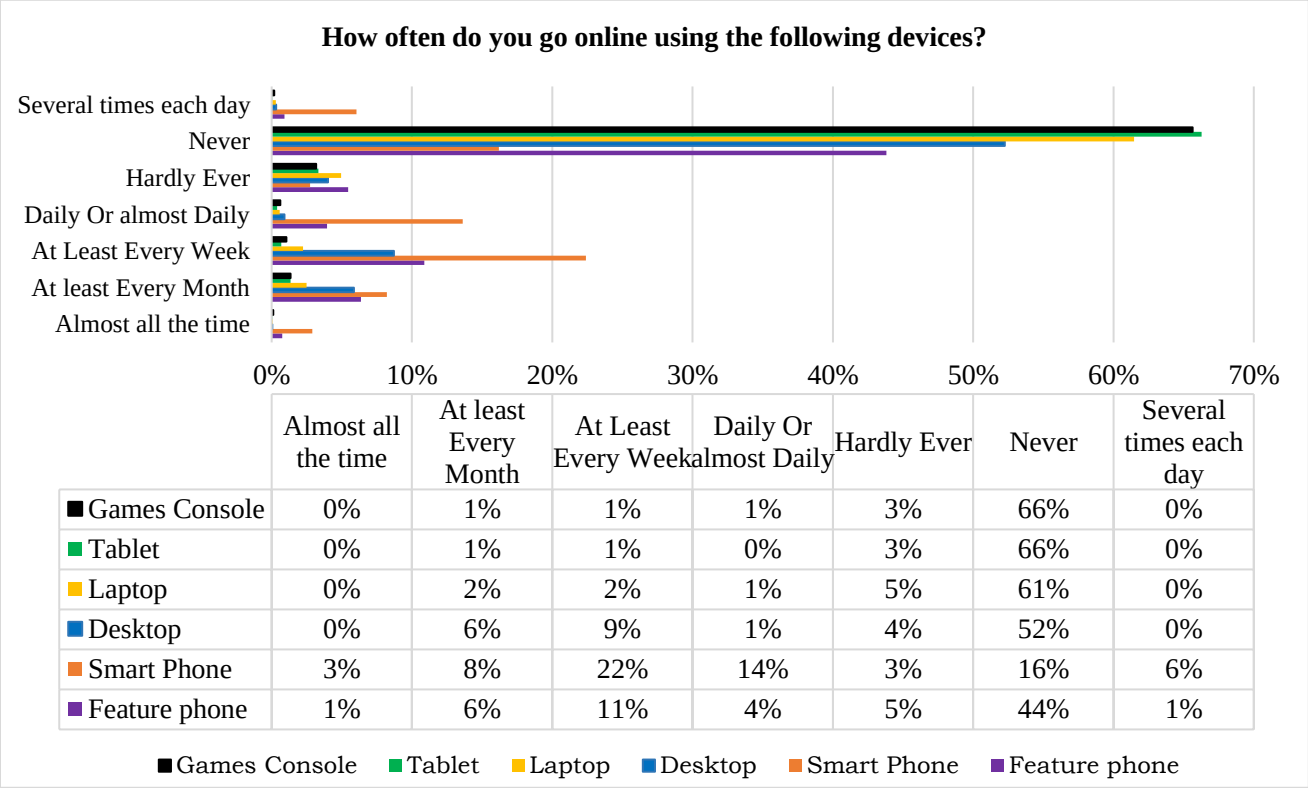
We further assess the device types used by the children in accessing the Internet in the last 12 months. Children in accessing the Internet use mobile internet access devices most often. About eight (8) in every ten (10) children reported accessing the Internet using either a smart phone or a feature phone. This may imply that the children may be accessing the Internet either through the Internet enabled phones owned by their parents or due to the low costs of the Internet-enabled phones compared to laptops or computers. In addition, in terms of frequency, the mobile phones were the most frequently used devices.

Figure 17: Devices used to access the Internet



3.5.3 Frequency of use of these devices online

Figure 18: Frequency of devices used to access the Internet

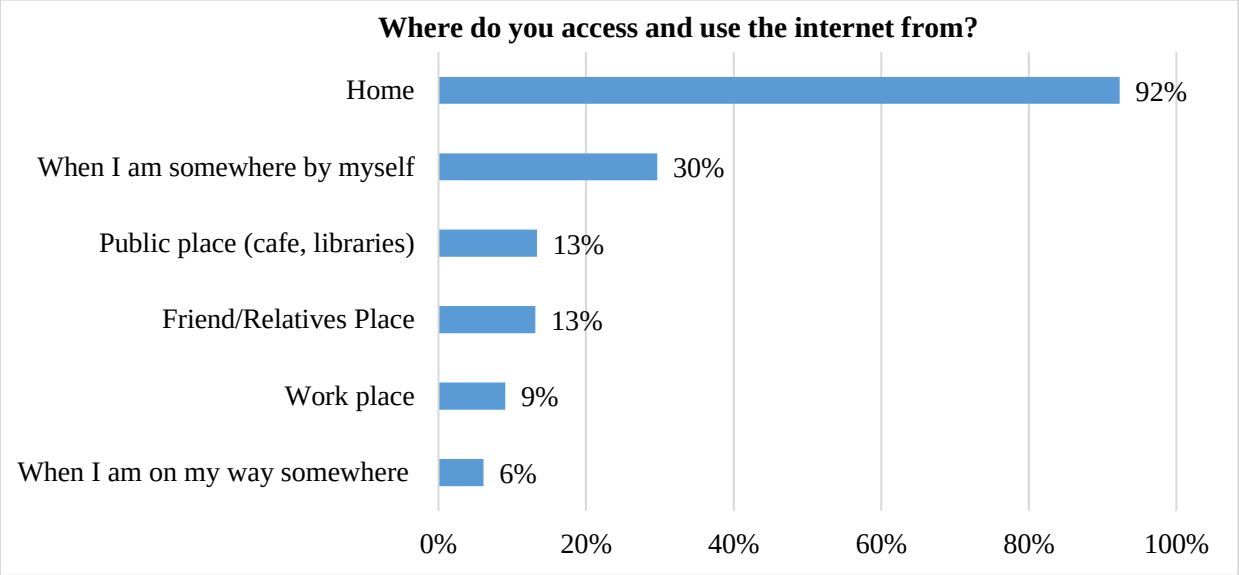


	Almost all the time	At least Every Month	At Least Every Week	Daily Or almost Daily	Hardly Ever	Never	Several times each day
Games Console	0%	1%	1%	1%	3%	66%	0%
Tablet	0%	1%	1%	0%	3%	66%	0%
Laptop	0%	2%	2%	1%	5%	61%	0%
Desktop	0%	6%	9%	1%	4%	52%	0%
Smart Phone	3%	8%	22%	14%	3%	16%	6%
Feature phone	1%	6%	11%	4%	5%	44%	1%

3.5.4 Place where the parents' access and use the Internet

9 in every 10 parents/guardian use the Internet while at home. Only about 1 in every 10 parents accesses the Internet through the Internet café. This may be mainly because most of the parents/guardians use majorly mobile Internet enabled devices to access the Internet. Surprisingly, only 9% accessed and used the Internet at their place of work as detailed in the figure below.

Figure 19: Place of use of the Internet by parents/guardians



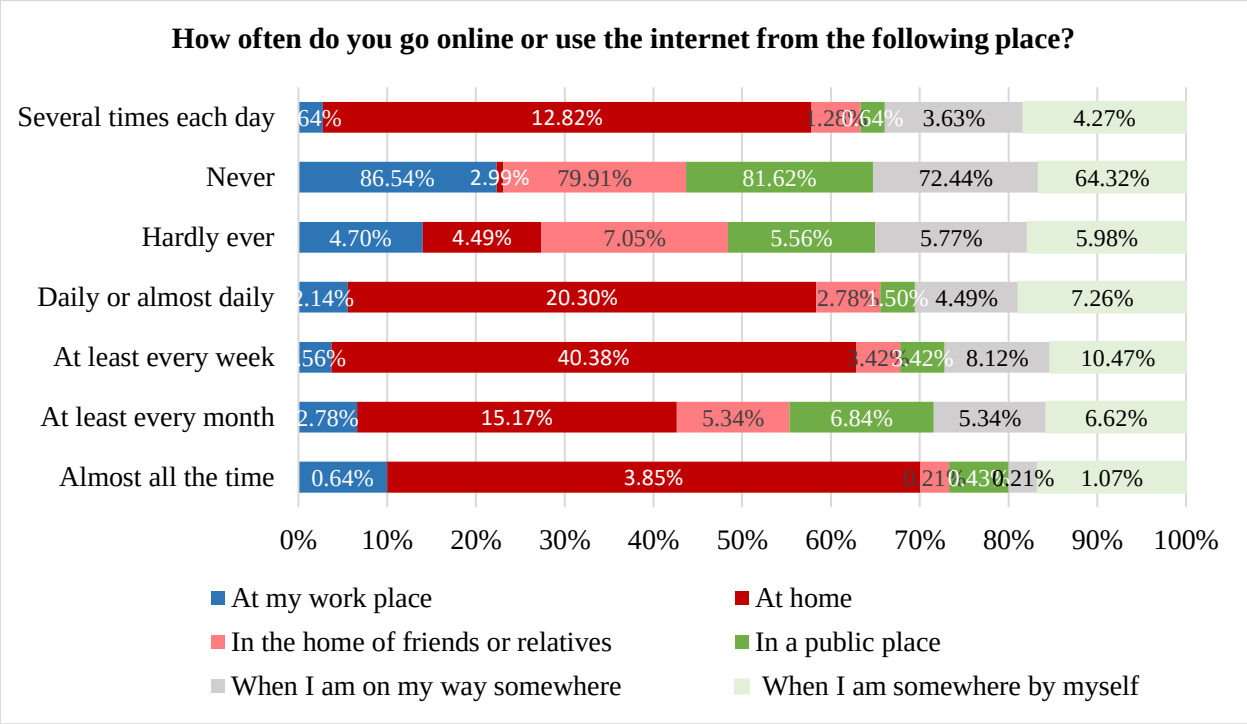
3.5.5 Frequency of place used to access the Internet

It was important to know where the parents/guardians accessed the Internet and the most cited place for accessing the Internet was home. This was like what the children had reported. At the very extreme, the usage of Internet at home elicited the lowest frequency for the choice of hardly ever (2.99%) and had the highest frequency for almost all the time (3.85%).

Also, for other categories like almost every week, at least every month, several times each day, daily or almost daily, the home was the most cited place with frequencies of 40.3%, 15.1%, 12.8% and 20.3% respectively.

Interestingly, parents were less likely to access Internet from public places, homes of relatives or friends, workplace, on their way somewhere, or when they were by themselves. This was evidenced by 81%, 79.9%, 86.5%, 72% and 64% 'never' frequency respectively for these places.

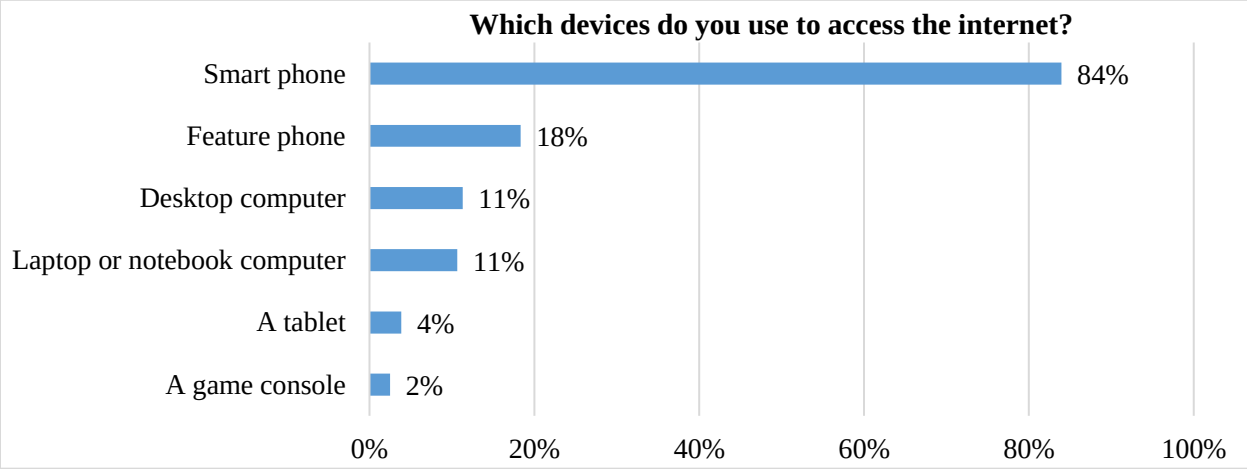
Figure 20: Frequency of place used for accessing the internet by parents



3.5.6 Devices the Parents use to access the Internet

In the survey, we also sought to understand the main devices parents/guardians were using to access the Internet. As seen below, the mobile/portable Internet devices were the most used devices by the parents in accessing theInternet. In addition, like in the case of the children, the smart phone was the most used device to access the Internet. 84% of the parents were accessing the Internet using a smart phone while 18% used a feature phone.

Figure 21: Devices used to access the Internet



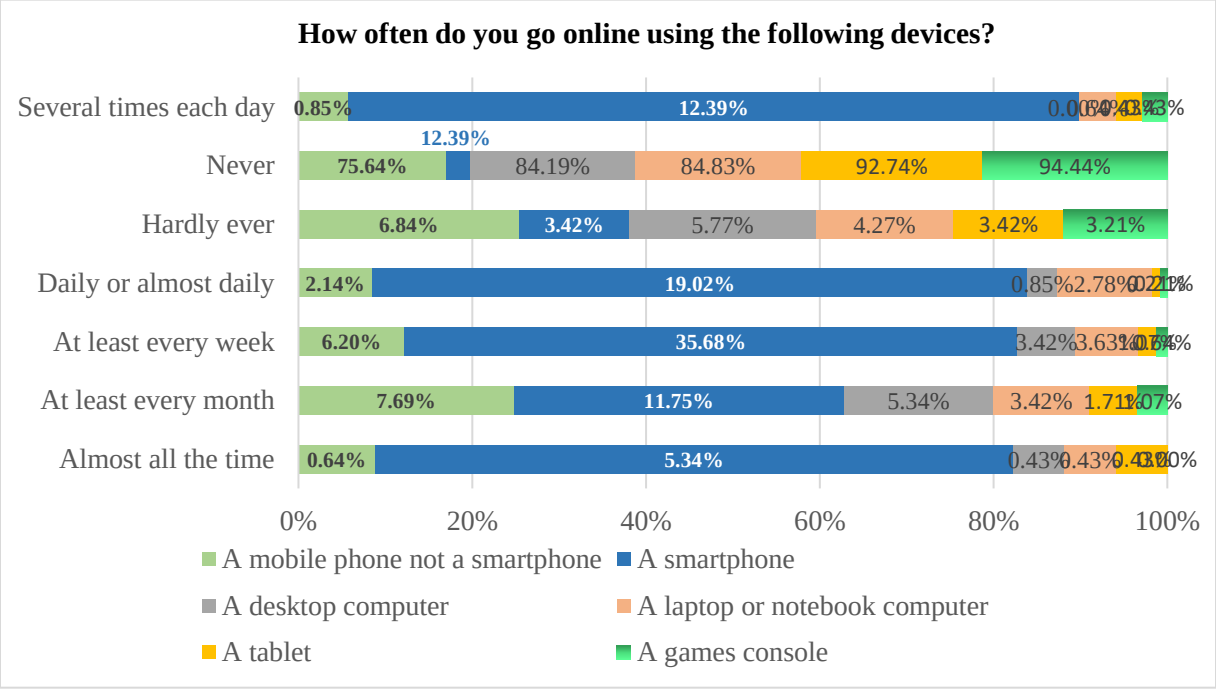
Analysis from a gender perspective revealed that the men were more likely to access the Internet-enabled devices than their female counterparts were, while the more youthful parents between the ages of 25 and 54 were more likely to access the Internet via a smart phone.

3.5.7 Frequency of devices used by parents to access the Internet

The other commonly cited device by parents was a feature phone (mobile phone that is not a smart phone), as well as the desktop PC and laptops. The least cited devices were a tablet and game Consoles; 92.74% and 94.4% of the parents/guardians respectively indicated that they had never used these.

The implication of these findings is that parents/guardians have access to smart phones and feature phones possibly due to the convenience and affordability of these devices, as compared to laptops, tablets or game consoles. This further explains why most parents and guardians indicated accessing the Internet at home.

Figure 22: Frequency of devices used by the parents to access the Internet



3.5.8 Parents' knowledge of what their children are doing on the Internet

For parents to monitor and/or support their children online, they need not only the skills to do so, but also have to be aware of what their children are accessing or doing while on the Internet. The survey thus asked if parents/guardians were aware if their children had access to the Internet.

Disturbingly, only 34% of the parents/guardians could speak with certainty to the knowledge of their children having access to the Internet. 41.8% of the parents indicated that they did not know if their children had access to the Internet whilst 15% indicated that it is difficult to say, a response that was similar to that of 8.3% who indicated that they suspected that their children had access. In addition, female parents were more likely to know if their children had access to Internet, as detailed in the table below.

		Do you know if your child has access to the Internet?				
		No	Yes	Difficult to say, I am not always with them	I suspect they have access	Total
Gender	Female	23.8%	17.6%	6.9%	4.3%	52.6%
	Male	18.0%	16.6%	8.8%	4.0%	47.4%
Sub region	Acholi	1.6%	2.4%	0.2%	0.1%	4.4%
	Ankole	4.2%	2.5%	0.9%	1.4%	9.0%
	Bukedi	1.2%	0.7%	0.9%	0.7%	3.5%
	Bunyoro	1.2%	0.1%	0.0%	0.0%	1.3%
	Busoga	13.0%	3.6%	2.9%	0.5%	20.0%
	Central 1	1.4%	9.9%	0.8%	0.6%	12.7%
	Central 2	2.3%	1.2%	1.0%	0.5%	5.0%
	Elgon	3.2%	2.7%	4.8%	1.6%	12.3%
	Kampala	0.9%	4.6%	0.0%	0.3%	5.9%
	Karamoja	0.6%	0.0%	0.3%	0.0%	0.9%
	Kigezi	1.0%	1.2%	0.9%	0.2%	3.3%
	Lango	2.8%	1.8%	0.1%	0.6%	5.3%
	Teso	4.0%	1.0%	0.6%	0.6%	6.2%
	Tooro	2.4%	0.7%	1.6%	0.8%	5.5%
	West Nile	2.0%	1.8%	0.5%	0.5%	4.7%
	Total	**41.8%**	**34.3%**	**15.7%**	**8.3%**	**100%**

Table 18: Parents knowledge about their children`s access to the Internet

3.5.9 Parents' engagement in children Internet usage

We further sought to understand the level of parents /guardians' engagement in children's Internet usage. As can be seen from the table below, there was little parental engagement. A series of activities were enumerated, and parents were supposed to highlight which ones they did in support of their children's online interfacing. What comes across at face value are the high percentages in the "Never" and "Not Applicable" columns.

Only 3.7% of the parents indicated that, very often, they encourage their children to explore and learn things on the Internet, while 35.7% indicated that they had never encouraged their children to explore and learn things on the Internet. On using the Internet safely, only 4.8% of the parents/guardians indicated that they suggested to their children's ways to use the Internet safely, whilst 38.7% indicated they never did this.

Disturbingly, even concerning risky behaviour online, most parents indicated never helping their children. On talking to their children about what they did online, 39.2% of the parents indicated that they never while 27.2% indicated that this was not applicable. Only 4.8% indicated they do this often. They also indicated that they do not stay around to monitor what their children did

online; 49.4% indicated never, 26.7% said this was not applicable to them, and only 1.5% said they often did this monitoring.

We learned that whilst children might be exposed to commercial activities online, only 4.3% of the parents often talked to them about this risk; 49.5% indicated that they never did and 27% indicated that this was not applicable to them. Children must decide for themselves if particular sites are either appropriate or inappropriate, considering that only 7.9% of the parents interviewed indicated they offered this guidance to their children, and majority indicated that they never did this (43.9%), or it was not applicable to them (27%).

Even when their children are botheredby online activity, most parents said they never talk to them about what to do if something bothered them online (46.7%), or it was not applicable to them (27%). Only 2.6% of the parents said they often help their children when something bothers them online whilst the largest number indicated that they never did (51.8%), or this was not applicable to them (26.8%).

When your child uses the Internet, how often do you do these things?						
	Hardly ever	**Never**	**Not Applicable**	**Often**	**Sometimes**	**Very often**
Encourage your child to explore and learn things on the internet	6.8%	35.7%	26.3%	13.4%	14.0%	3.7%
Suggest ways to use the internet safely	6.9%	38.7%	26.7%	11.4%	11.5%	4.8%
Talk to your child about what he/she does on the internet	5.3%	39.2%	27.2%	11.4%	12.1%	4.8%
Sit with your child while he/she uses the internet	7.0%	49.2%	26.8%	2.3%	13.2%	1.5%
Stay nearby when your child uses the internet	6.0%	49.4%	26.7%	2.3%	14.1%	1.5%
Do shared activities together with your child on the internet	7.6%	52.6%	26.9%	2.2%	9.3%	1.4%
Talk to your child about what to do if something online bothers or upsets him/her	6.8%	46.7%	27.0%	6.9%	10.0%	2.6%
Help your child when something is difficult to do or find on the internet	6.8%	47.1%	26.8%	6.2%	10.3%	2.8%
Explain why some websites are appropriate or inappropriate	4.9%	43.9%	27.0%	8.6%	7.6%	7.9%
Help your child when something bothers him/her on the internet	7.5%	51.8%	26.8%	3.3%	7.9%	2.6%
Talk to your child about the commercial activities he/she is exposed to online	5.5%	49.5%	27.1%	5.4%	8.2%	4.3%

Table 19: Parents engagement in their children`s Internet usage

The disturbing trend points to a lack of supervision for children online but also a missing support structure in case something happened to them online. The results put into context the findings on access and usage by the parents; the fact that most parents had never used the Internet and those that used it did in an intermittent manner and in places where their children might not be.

The study sought then to look at the issue from a demand-side where the children seek support.

Has your child ever done any of these things?						
	Hardly ever	**I do not Know**	**Never**	**Often**	**Sometimes**	**Very often**
Told you about things that bother or upset her/him on the internet	5.0%	6.3%	77.6%	2.2%	8.1%	0.8%
Helped you to do something you found difficult on the internet	4.7%	6.2%	72.9%	2.0%	12.9%	1.4%
Started a discussion with you about what she/he does on the internet	5.5%	6.1%	65.6%	5.5%	15.1%	1.7%
Asked for your advice on how she/he should act online	5.0%	6.1%	71.6%	5.5%	10.5%	1.3%
Asked you for something that she/he saw advertised online	3.6%	6.1%	78.7%	2.9%	6.6%	2.0%
Asked for your help with a situation on the internet that she/he cannot handle	5.0%	6.2%	73.2%	3.2%	10.5%	1.7%

Table 20: How the children and parents relate with the Internet

Parents indicated that their children never told them about things that upset or bother them whilst online (77.6%). Only 0.8% stated that their children did that very often while 2.2% indicated that they often supported their children in with this.

As was the case above, parents indicated that their children never asked for advice on how to act online (71.6%) and they never started a discussion with them about what they did online (65.6%). Many parents indicated that their children did not ask for help with a situation they could not handle online (73.2%). For all use cases, the percentage points for “very often” never exceeded 2 and “often” never exceeded 5.5 percentage points.

3.6 Digital skills and literacies

In this section, the survey sought to understand the digital skills of both the children and their parents. To assess this, several statements were read to the respondents who were in turn required to rate how true each of the statements were, ranging from, a bit true, fairly true, not true, and very true.

3.6.1 Children operational digital skills

Under the digital operational skills, we asked the children about a range of different skills deemed operational in the use of the Internet. The questions were in statement format to which the children responded by stating self-reported skills.

From a gender perspective, on average boys were more likely to report that they know how to save photos, change their privacy settings, and download information online than girls, while on the other hand, most of the older children but fewer younger children reported knowing how to undertake these digital operations. However, the common trend observed was that the girls lagged as detailed in the table below.

		I know how to save a photo that I find online			
		A bit true for me	Fairly true for me	Not true for me	Very true for me
Gender Profile	Female	6.9%	3.9%	9.5%	24.8%
	Male	8.0%	2.6%	11.8%	32.5%
Age Profile	12 - 14	5.4%	1.7%	7.5%	11.7%
	15-17	7.9%	4.6%	9.2%	43.8%
	9 -11	1.2%	0.2%	3.7%	1.5%
	6 - 8	0.5%	0.1%	1.0%	0.3%
	I know how to change my privacy settings (e.g., on asocial networking site)				
Gender Profile	Female	8.1%	2.1%	18.2%	16.7%
	Male	8.2%	2.1%	21.9%	22.7%
Age Profile	12 - 14	4.3%	0.9%	15.6%	5.5%
	15-17	10.9%	3.2%	18.0%	33.4%
	9 -11	0.9%	0.1%	5.1%	0.5%
	6 - 8	0.3%	0.0%	1.4%	0.1%
	I know how to open downloaded files				
Gender Profile	Female	7.8%	2.4%	11.1%	23.8%
	Male	8.3%	3.0%	13.1%	30.5%
Age Profile	12 - 14	4.9%	1.2%	9.0%	11.2%
	15-17	9.0%	4.0%	12.0%	40.5%
	9 -11	1.9%	0.1%	2.2%	2.4%
	6 - 8	0.4%	0.2%	1.0%	0.3%
	I know how to use shortcut keys (e.g., CTRL-C for copy, CTRL-S for save)				
Gender Profile	Female	6.5%	1.4%	22.0%	15.2%
	Male	7.3%	1.6%	27.3%	18.7%
Age Profile	12 - 14	3.6%	0.7%	17.2%	4.8%
	15-17	9.3%	2.4%	25.3%	28.6%
	9 -11	0.7%	0.0%	5.3%	0.6%
	6 - 8	0.3%	0.0%	1.4%	0.1%

Table 21: Self-reported children's operational digital skills

For instance, while 35.1% of the boys could save a photo found online, only 28.7% of the girls could do the same. In terms of age profiling, over 48% of the persons that could save a photo found online were aged 15 to 17.

Similarly, 24.8% of boys could change their privacy settings compared to only 18.8% of girls. 36.8% of these were older children aged between 15 to 17 whist over 6% were aged 12-14. Of the childrenengaged, 33.5% boys could open a downloaded file compared to 26.2% of the girls. 44.5% of these were aged 15-17 whilst 12.4% were aged 12 to 14.The other age brackets accounted for only 3% of children that could open a downloaded file.The percentage of childrenthat could use shortcut keys was the lowest for the operational skills, averaging 20.3% for boys and 16.6 % for girls.The age bracket 15-17 accounted for 31% of children with skills and the age band 12-14 accounted for 5.5% of the children with the skills. Aggregately, children below 12 with these skills accounted for only 0.7%.

3.6.2 Internet browsing skills

In reference to the browsing skills, whereas the reported information browsing skills were lower than the operational skills, the trends observed in the operational skills as regards the gender and age categorization remained consistent. As seen, more boys could verify the truthfulness of information online than girls; that is, 22.2% boys compared to 14.8% girls. 30.1% were aged 15 to 17 years, 6.1% were between 12 and 14 while the other two age bands accounted for a mere 1% of children that could perform this verification. Only 23.4% of the boys and 13.8% of the girls had the skill to choose the best keywords for online searches.

		I find it easy to check if the information I find online is true			
		A bit true for me	**Fairly true for me**	**Not true for me**	**Very true for me**
Gender Profile	Female	8.9%	3.7%	21.5%	11.1%
	Male	10.0%	3.7%	22.7%	18.5%
Age Profile	12 -14	5.0%	1.9%	15.2%	4.2%
	15 - 17	12.8%	5.4%	22.6%	24.7%
	9 - 11	0.9%	0.1%	4.9%	0.7%
	6 - 8	0.2%	0.1%	1.5%	0.1%
		I find it easy to choose the best keywords for online searches			
Gender Profile	Female	9.9%	2.4%	18.4%	14.5%
	Male	10.8%	3.1%	20.9%	20.2%
Age Profile	12 - 14	6.5%	1.2%	12.8%	5.7%
	15 - 17	12.7%	4.1%	21.1%	27.7%
	9 - 11	1.2%	0.2%	4.1%	1.2%
	6 - 8	0.3%	0.0%	1.3%	0.2%
		I find it easy to find a website I have visited before			
Gender Profile	Female	9.3%	2.5%	19.5%	13.9%
	Male	8.9%	3.4%	21.4%	21.2%
Age Profile	12 - 14	5.5%	1.4%	13.9%	5.4%
	15 - 17	11.4%	4.4%	21.0%	28.7%
	9 - 11	1.1%	0.1%	4.5%	0.9%
	6 - 8	0.2%	0.0%	1.5%	0.1%
		I find it easy to decide if a website can be trusted			
Gender Profile	Female	8.5%	1.8%	25.7%	9.1%
	Male	8.2%	3.1%	30.6%	13.0%
Age Profile	12—14	4.4%	1.1%	17.8%	3.0%
	15—17	11.0%	3.8%	31.8%	18.9%
	9—11	1.1%	0.1%	5.2%	0.3%
	6 - 8	0.3%	0.0%	1.5%	0.0%
		Sometimes I end up on websites without knowing how I got there			
Gender Profile	Female	7.7%	3.9%	17.5%	16.0%
	Male	8.5%	5.1%	20.2%	21.2%
Age Profile	12—14	4.4%	2.2%	11.6%	8.1%
	15—17	10.6%	6.3%	22.1%	26.6%
	9—11	1.0%	0.5%	2.8%	2.3%
	6 - 8	0.2%	0.1%	1.3%	0.2%

Table 22: Self-reported information browsing digital skills

Merely 24.5% of boys and 16.4% of girls had the skill to find a website they had visited before. Even fewer childrencould decide if a given website could be trusted or not; that is, 16.1% boys

and only 10.9% girls. On web navigation, only 20.7% of the boys indicated that they never got on websites without knowing how they got there compared to 17.5% of the girls.

3.6.3 Social online skills

As regards social online skills, the level self-reported by the children wasquite high. As can be seen in the table below, about half (50.3%) of the children who knew how to use the Internet indicated that they knew which information to share and not share online; of these 29.8% were boys and 21.4% were girls. 49.5% of these were older children, above 12 years.

		I know which information I should and should not share online			
		A bit true for me	**Fairly true for me**	**Not true for me**	**Very true for me**
Gender Profile	Female	9.6%	3.0%	14.1%	18.4%
	Male	9.6%	3.6%	16.4%	25.3%
Age Profile	12 - 14	5.8%	1.4%	13.0%	6.0%
	15 - 17	12.1%	4.9%	11.3%	37.2%
	9 -11	1.1%	0.2%	4.9%	0.4%
	6 - 8	0.3%	0.0%	1.4%	0.2%
	I know how to remove people from my contact lists				
Gender	Female	5.5%	1.9%	14.7%	23.0%
	Male	6.9%	2.2%	16.6%	29.3%
Age profile	12 -14	4.5%	1.0%	13.2%	7.6%
	15 - 17	7.0%	3.1%	12.1%	43.3%
	9 - 11	0.8%	0.0%	4.7%	1.1%
	6 - 8	0.1%	0.0%	1.4%	0.3%
	I know when I should and should not share information online				
	Female	8.9%	2.4%	16.1%	17.6%
	Male	9.0%	3.5%	17.6%	24.7%
	12 - 14	5.3%	1.3%	13.7%	5.9%
	15 - 17	11.7%	4.5%	13.4%	35.9%
	9 - 11	0.7%	0.2%	5.2%	0.5%
	6 - 8	0.2%	0.1%	1.5%	0.1%
	I know how to behave according to the situation online				
	Female	10.0%	2.5%	16.1%	16.5%
	Male	10.6%	2.8%	18.6%	22.9%
	12 - 14	6.1%	1.0%	13.3%	5.9%
	15 - 17	13.5%	4.0%	15.4%	32.6%
	9 - 11	1.1%	0.2%	4.7%	0.6%
	6 - 8	0.1%	0.1%	1.4%	0.3%
	I know how to change who I share content with (e.g., friends, friends of friends or everyone)				
	Female	8.3%	1.8%	19.9%	15.1%
	Male	8.6%	2.1%	23.0%	21.2%
	12 - 14	4.2%	1.1%	17.1%	3.9%
	15 - 17	12.0%	2.7%	18.9%	31.9%
	9 - 11	0.6%	0.1%	5.4%	0.4%
	6 - 8	0.2%	0.1%	1.5%	0.1%

Table 23: Self-reported internet social skills

56% of the childrenindicated that they knew how to remove people from their contact lists, 31.4% of which were boys and 25% girls.55% of these were above 12 years of age. However, less than half of the children that use the Internet (44.6%) indicated that they knew how to behave according to the situation online. Girls accounted for only 18.9% of these, whilst boys accounted for 25.6%.

Again, these were mainly above 12 years of age at 43.5%. In addition, only 40% indicated that they knew how to change whom they shared content with (e.g., friends, friends of friends or everyone), and females lagged their male counterparts; that is, 16.8% compared to 23.3%.

3.6.4 Mobile devices online skills

The assessment of the children's skills regarding the use of mobile devices revealed that 48.8% of the children knew how to install apps on a mobile device and 47.1% of these were above 12 years whilst 29.8% were boys and 19% were girls.

A paucity of children engaged (13.8%) indicated that they could keep track of the costs of mobile app use with 74.6% indicating they did not have this mobile skill. An even fewer number, 11.3%, indicated that they knew how to make an app purchase.

		I know how to install apps on a mobile device (e.g., phone or tablet)			
		A bit true for me	**Fairly true for me**	**Not true for me**	**Very true for me**
Gender Profile	Female	4.7%	2.2%	21.4%	16.8%
	Male	5.0%	2.7%	20.1%	27.1%
Age Profile	12 - 14	2.8%	1.1%	15.2%	7.2%
	15 - 17	6.3%	3.5%	20.5%	35.3%
	9 - 11	0.6%	0.4%	4.5%	1.1%
	6 - 8	0.2%	0.1%	1.4%	0.2%
		I know how to keep track of the costs of mobile app use			
Gender Profile	Female	5.4%	1.5%	33.7%	4.5%
	Male	6.2%	1.7%	40.9%	6.2%
Age Profile	12 - 14	2.2%	0.5%	22.3%	1.3%
	15 - 17	9.3%	2.6%	44.6%	9.0%
	9 - 11	0.2%	0.0%	6.0%	0.4%
	6 - 8	0.0%	0.0%	1.8%	0.0%
		I know how to make an in-app purchase			
Gender Profile	Female	4.4%	1.6%	36.1%	3.1%
	Male	4.7%	1.3%	43.6%	5.4%
Age Profile	12 - 14	2.0%	0.5%	22.6%	1.2%
	15 - 17	6.9%	2.4%	49.2%	7.1%
	9 - 11	0.2%	0.1%	6.1%	0.2%
	6 - 8	0.0%	0.0%	1.8%	0.0%

Table 24: Self-reported mobile skills

In addition, 35.8% of the childreninterviewed indicated that they knew how to post an online video or music that they created themselves. 19.6% indicated that they knew how to edit or

make basic changes to online content that others had created. 8.5% of these were boys whilst 6.4% were girls, and the children below 12 years accounted for just 0.3%.

14.9% indicated that they knew how to create something new from video or music that they found online. Of these, 8.5% were male whilst 6.4% were female. 12.4% of these were between 15 and 17 years whilst 2.3% were between 12 and 14 years.

Only 7.6% indicated that they knew how to design a website and, interestingly, there was not much distinction gender wise, with boys accounting for 4.1% and girls accounting for 3.6%.

		I know how to post online video or music that I have created myself			
		A bit true for me	Fairly true for me	Not true for me	Very true for me
Gender	Female	6.0%	2.3%	24.3%	12.6%
Profile	Male	5.5%	2.9%	28.4%	18.1%
	12 - 14	2.7%	1.3%	17.9%	4.4%
	15 - 17	8.5%	3.6%	27.4%	26.1%
Age	9 - 11	0.4%	0.2%	5.8%	0.2%
Profile	6 - 8	0.0%	0.1%	1.6%	0.1%
	I know how to edit or make basic changes to online content that others have created				
	Female	5.2%	1.7%	30.8%	7.5%
Gender	Male	7.0%	2.1%	37.4%	8.4%
	12 - 14	3.0%	0.8%	20.7%	1.9%
	15 - 17	9.0%	3.0%	39.8%	13.7%
Age	9 - 11	0.3%	0.0%	6.0%	0.3%
Profile	6 - 8	0.1%	0.0%	1.7%	0.1%
	I know how to create something new from video or music that I found online				
Gender	Female	5.5%	1.4%	33.2%	5.1%
Profile	Male	5.2%	1.7%	41.3%	6.8%
	12 - 14	2.7%	0.8%	21.2%	1.6%
	15 - 17	7.7%	2.2%	45.4%	10.2%
Age	9 - 11	0.2%	0.1%	6.2%	0.2%
Profile	6 - 8	0.1%	0.0%	1.7%	0.0%

Table 25: Self-reported online skills

3.6.5 Parents /guardians digital skills

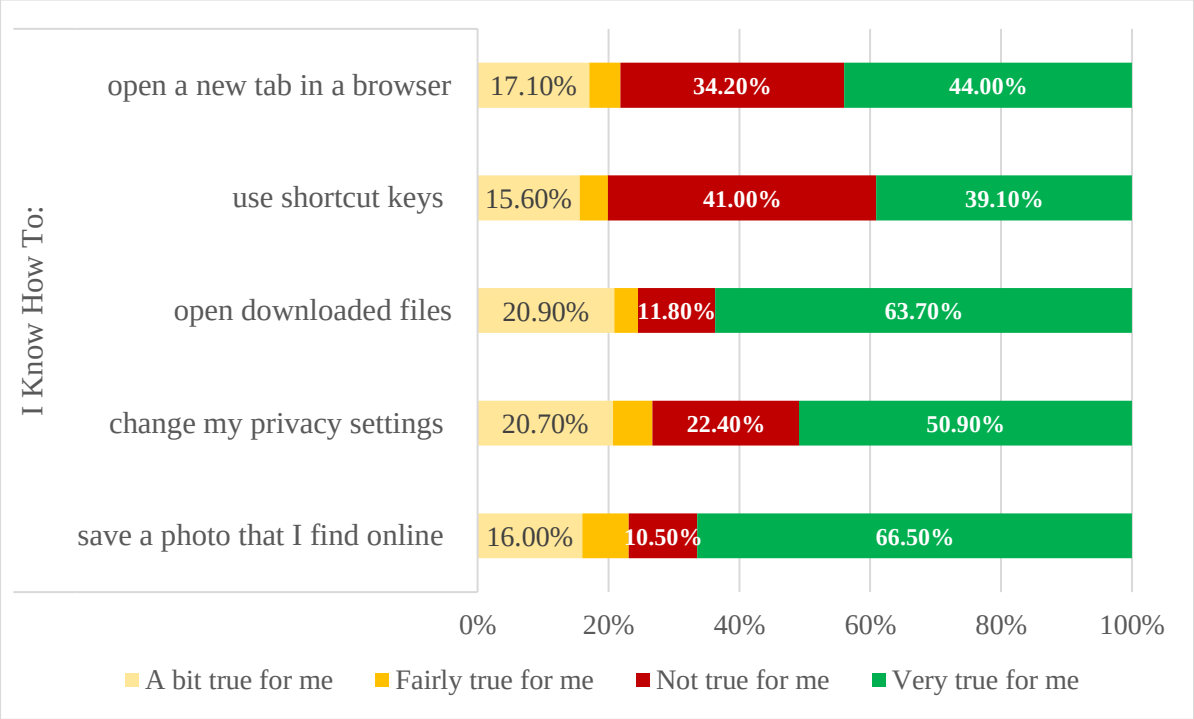
In this section, the parents, like their own children, were asked how much they knew about using different functions and features on the Internet. The questions or statements ranged from basic (operational) to more advanced skills, and we adopted the self-reported “very true” and “true” as the measure of knowledge.

3.6.6 Parents / guardians operational digital skills

More parents/guardians reported to have had operational skills compared to those that did not have these skills. Opening a tab in a browser, downloading files, changing privacy settings, as well as saving a photo from an online platform elicited agreement scores of 44%, 63.7%, 50.9% and 66.5% compared to 34.2%, 11.8%, 22.4% and 10.5% respectively.

Regarding the use of short cut keys, more parents indicated that they did not have the skill than those that had the skills (41% compared to 39.1%).

Figure 23: Parents/guardians operational digital skills



Further probing on the parents/guardians' skills revealed that whereas they were relatively comfortable online, they were not so sure on whether a particular site could be trusted.

43.6% of the parents/guardians that use the Internet reported that they found it easy to verifyinformation online while only 24.1% indicated that this was "not true" for them.

When it came to the ease of choosing the best key words for online searches, 46.2% of the parents reported that this was "very true" for them whilst only 22.4% reported that this was "not true" for them.45.3% of the parents that use the Internet indicated that they found it easy to find a site they had visited before whilst 25.6% indicated that this was "not true" for them. 37.8% of the parents that used the Internet indicated that they sometimes ended up on sites not knowing how they got there whilst 33% said this was "not true" for them.

More parents, 40%, indicated that it was "not true" that they found it easy to decide if a website could be trusted compared to 29.7% who said this was "very true" for them.

Think about how you use the Internet. How true are these things for you?					
	Statements	A bit true for me	Fairly true for me	Not true for me	Very true for me
I find it easy to:	Check if the information I find online is true	24.8%	7.5%	24.1%	43.6%
	Choose the best keywords for online searches	25.2%	6.2%	22.4%	46.2%
	Find a website I have visited before	23.7%	5.3%	25.6%	45.3%
	Decide if a website can be trusted	24.1%	5.8%	40.4%	29.7%
	Sometimes I end up on websites without knowing how I got there	21.6%	7.3%	33.3%	37.8%

Table 26: Parents/guardians experience on the Internet

3.6.7 Parents' own perception on Internet use

About half (50%) of all the parents/guardians that use the Internet reported that they exercised good judgement whilst online. On knowing what information, they should not share online, majority of the parents/guardians (62.4%) were confident that they know what to share or not to while about one (1) in every 10 parents reported being ignorant. Almost similar results were observed (65.4%) when they were asked if they knew how to remove people from their own contact lists.

Concerning knowledge of when one should and should not share information online, 59.8% of the parents indicated that this was "true" for them whilst only 12% reported that this was "not true" for them. 54.3% of parents/guardians indicated that they knew how to behave according to a situation online and only 16.2% indicated that they did not know how to behave. Finally, on knowing how to change whom they shared content with, 52.4% this was "very true" for them whilst only 20.1% said this was "not true" for them.

Think about how you use the Internet. How true are these things for you?					
		A bit true for me	**Fairly true for me**	**Not true for me**	**Very true for me**
I know	Which information I should and should not share online	19.4%	9.0%	9.2%	62.4%
	How to remove people from my contact lists	19.4%	5.1%	10.0%	65.4%
	When I should and should not share information online	20.1%	8.1%	12.0%	59.8%
	How to behave according to the situation online	23.3%	6.2%	16.2%	54.3%
	How to change who I share content with (e.g., friends, friends of friends or everyone)	23.3%	4.3%	20.1%	52.4%

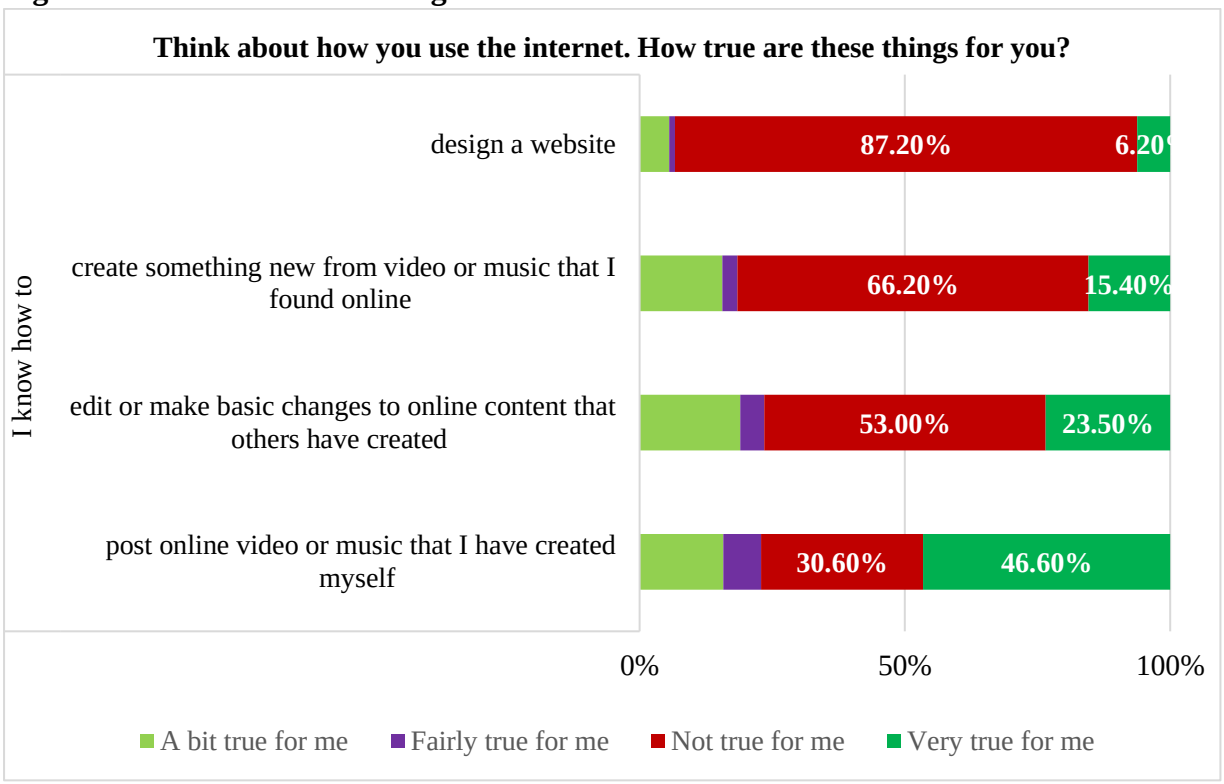
Table 27: Parents/guardians view on how they use the Internet

3.6.8 Parents / guardians advanced digital skills

Except for the skill of posting a photo or a music they created for themselves where more parents/guardiansreported having the skill (46.6%) than not having it (30.6%), the rest of the skills parents indicated that they did not have. For instance, designing a website, only 6.2% of the parents indicated having this skill whilst 87.2% indicated they did not have it.

The same was reportedfor creating something new from a video or music that was found online, with 66.2% indicating that they did not have this skill whilst only 15.4% said they had the skill. Also, for editing or making basic changes to online content that others created, 53% of the parents said they lacked the skill whilst only 23.5% said they had it.

Figure 24: Parents advanced digital skills



3.7 Perception of Internet

In the study, it was important to understand the children's perceptions about the Internet from the children's viewpoint. To understand this, the children were asked their perception of the usefulness of the content on the Internet.

3.7.1 Children's perception of the goodness of Internet

As observed in the table below, overall, 61.8% of the children felt that there are lot of things on the Internet that are good for children. This is more common among boys and older children (15-17 years) in Central 1, Elgon and Kampala regions and might be attributed to the fact that boys and older childrenin urban areas have more access and have used the Internet for a longer time, and therefore have more experience with it that they can use to their advantage.

		What do you think about this sentence: 'There are lots of things on the internet that are good for children of my age'?				
		A bit true	**Fairly true**	**Not true**	**Very True**	**Grand Total**
Gender	Female	6.3%	10.9%	1.9%	26.9%	46.1%
	Male	5.1%	11.1%	2.8%	34.9%	53.9%
Age Profile	12 - 14	3.8%	5.8%	1.2%	15.6%	26.4%
	15 - 17	6.8%	14.4%	3.3%	41.0%	65.6%
	9 - 11	0.6%	1.5%	0.1%	4.2%	6.4%
	6 - 8	0.3%	0.3%	0.0%	1.0%	1.6%
UBOS Sub-Region	Acholi	0.0%	0.2%	0.0%	3.2%	3.4%
	Ankole	0.4%	1.3%	0.0%	4.5%	6.1%
	Bukedi	0.3%	1.4%	0.4%	1.1%	3.1%
	Bunyoro	0.0%	0.1%	0.0%	0.2%	0.4%
	Busoga	2.2%	2.9%	0.8%	6.0%	12.0%
	Central 1	4.1%	2.2%	0.8%	9.0%	16.2%
	Central 2	0.9%	0.9%	0.9%	3.9%	6.6%
	Elgon	1.6%	6.5%	0.4%	9.4%	17.9%
	Kampala	0.1%	0.6%	0.3%	7.7%	8.8%
	Karamoja	0.0%	0.1%	0.0%	0.2%	0.3%
	Kigezi	0.2%	0.5%	0.0%	2.7%	3.4%
	Lango	0.0%	0.4%	0.0%	1.4%	1.8%
	Teso	0.2%	0.6%	0.0%	6.1%	7.0%
	Tooro	0.0%	0.2%	0.0%	1.3%	1.5%
	West Nile	1.3%	4.1%	1.0%	5.0%	11.5%
	Grand Total	**11.5%**	**22.0%**	**4.7%**	**61.8%**	**100.0%**

Table 28: Percentage distribution of the children's perception that there are many good things on the Internet

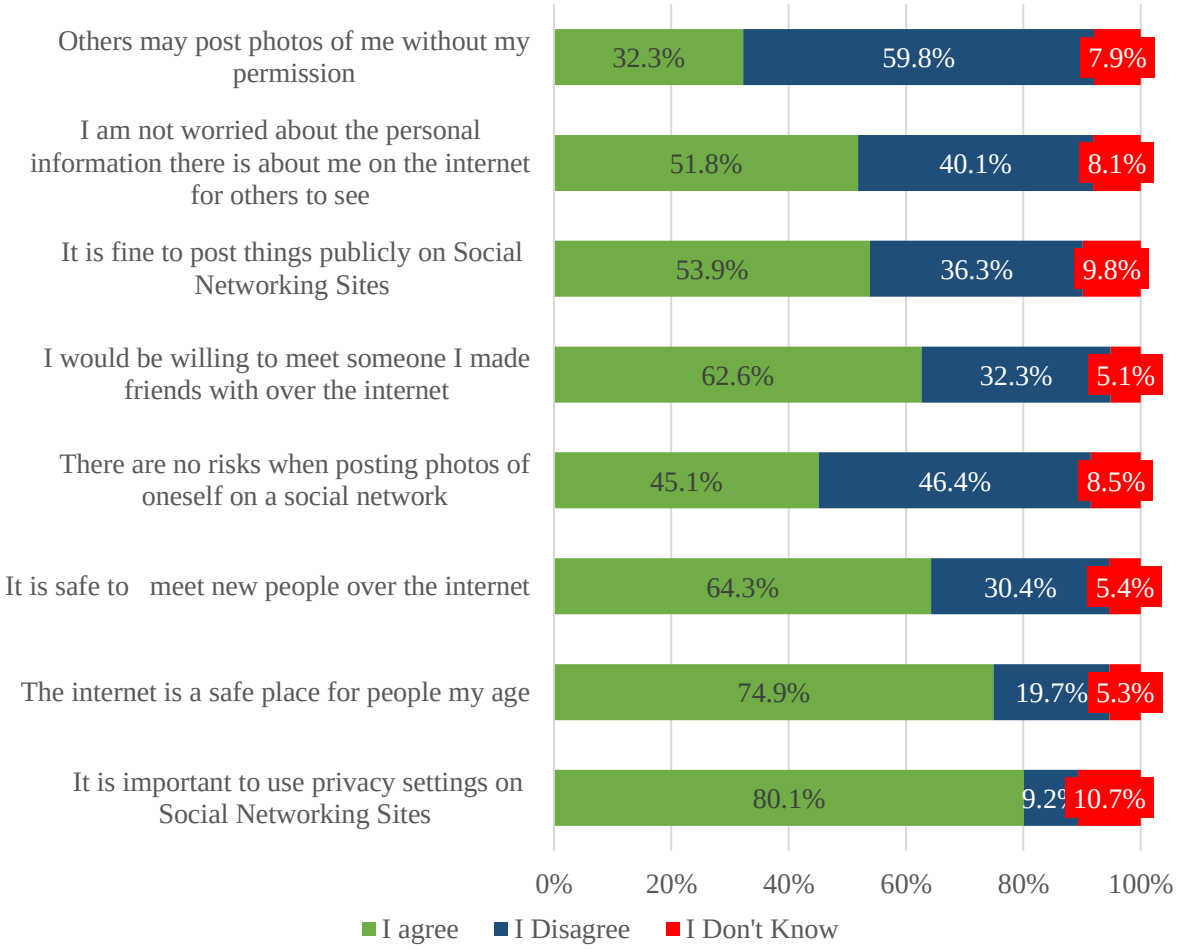
3.7.2 Children's perception about the Internet risks

In the survey, we also sought to understand children's perception about the Internet risk. As can be seen in the figure below, majority of the children interviewed (80%) thought it was important to use privacy settings on social networking sites; 44% of these were male whilst 35% were female. Notably, these were mainly older children aged 15 to 17 (57%).

Further, the biggest number of children engaged, 74.9%, thought that the Internet was a safe place for children their age whilst 19.7% disagreed with this. In terms of the category that agreed with the statement that the Internet was a safe space for children their age, 41.9% were boys and 33.1% were girls. Children of 6 to 8 years accounted for 0.9%, 9 to 11 accounted for 4.6%, 12 to 14 accounted for 19.4, whilst 15 to 17 accounted for 50.1%.

64.3% of the children engaged thought it was safe to meet new people online whilst 30.4% indicated that they did not think it was safe, and 5.4% did not know. In the case of agreeing with the statement, girls lagged behind than boys by 9.5%, and there was no salient difference with both genders standing at 15.2% as seen in the figure below.

Figure 25: Perception of the risk of using the Internet



As regards the statement, "There are no risks when posting photos of oneself on a social network", whereas this was intended to be looked at in the negative sense, there were more children that disagreed with this than agreed; that is, 46.4% compared to 45.1%. The older children, 15.7%, accounted for most of the disagreeing category at 21%.

Over 53% of the children engaged indicated that it was fine to post things publicly on social networking sites; 26.2% were boys and 19.1% girls.

51.8% indicated that they were not worried about their personal information being online for others to see but 40% indicated that they were worried.

Interestingly, majority of the children interviewed advocated for accountability whilst online, 59.8% did not agree with other people posting their photos without permission, and 32% were okay with this. More details in the table below.

	It is important to use privacy settings on Social Networking Sites			
		I agree	**I Disagree**	**I Don't Know**
Gender	Female	35.8%	4.9%	4.4%
	Male	44.3%	4.3%	6.3%
Age Profile	12 - 14	18.9%	2.7%	4.5%
	15 - 17	57.3%	5.1%	3.2%
	9 - 11	3.1%	1.2%	2.2%
	6 - 8	0.8%	0.2%	0.8%
	The internet is a safe place for people my age			
Gender	Female	33.1%	9.7%	2.3%
	Male	41.9%	10.1%	3.0%
Age Profile	12 - 14	19.4%	5.2%	1.5%
	15 - 17	50.1%	13.2%	2.4%
	9 - 11	4.6%	1.1%	0.8%
	6 - 8	0.9%	0.2%	0.7%
	It is safe to meet new people over the internet			
Gender	Female	27.4%	15.2%	2.5%
	Male	36.9%	15.2%	2.9%
Age Profile	12 - 14	16.3%	8.1%	1.7%
	15 - 17	43.7%	19.6%	2.3%
	9 - 11	3.6%	2.1%	0.8%
	6 - 8	0.7%	0.5%	0.6%
	There are no risks when posting photos of oneself on a social network			
Gender	Female	19.1%	22.3%	3.7%
	Male	26.0%	24.1%	4.8%
Age Profile	12 - 14	11.3%	11.9%	3.0%
	15 - 17	31.1%	31.5%	3.1%
	9 - 11	2.4%	2.6%	1.5%
	6 - 8	0.4%	0.5%	0.9%
	I would be willing to meet someone I made friends with over the internet			
Gender	Female	26.2%	16.7%	2.1%
	Male	36.4%	15.5%	3.0%
Age Profile	12 - 14	16.1%	8.6%	1.4%
	15 - 17	42.4%	21.3%	1.9%
	9 - 11	3.5%	2.0%	1.1%
	6 - 8	0.7%	0.4%	0.8%
	It is fine to post things publicly on Social Networking Sites			
Gender	Female	23.6%	17.3%	4.2%
	Male	30.3%	19.0%	5.6%
Age Profile	12 - 14	13.3%	9.3%	3.5%
	15 - 17	37.1%	25.0%	3.5%
	9 - 11	3.0%	1.5%	2.0%
	6 - 8	0.5%	0.5%	0.9%
	I am not worried about the personal information there is about me on the internet for others to see			
Gender	Female	23.7%	17.8%	3.6%
	Male	28.1%	22.2%	4.6%
Age Profile	12 - 14	13.1%	10.2%	2.9%
	15 - 17	35.0%	27.8%	2.8%
	9 - 11	3.2%	1.7%	1.6%
	6 - 8	0.5%	0.4%	0.9%
	Others may post photos of me without my permission			
Gender	Female	13.6%	27.9%	3.6%
	Male	18.7%	31.9%	4.3%
Age Profile	12 - 14	7.6%	15.8%	2.7%
	15 - 17	22.2%	40.5%	3.0%
	9 - 11	2.1%	3.0%	1.5%
	6 - 8	0.5%	0.5%	0.8%

Table 29: Children's opinion on Internet use

3.8 Risky Online Practices

While going online provides enormous opportunities for both adults and children, it can also expose them to risks or unwanted experiences that may ultimately cause them harm, especially to the children. As such, in this section we aimed at understanding the exposure or experiences of risks that the children were facing online.

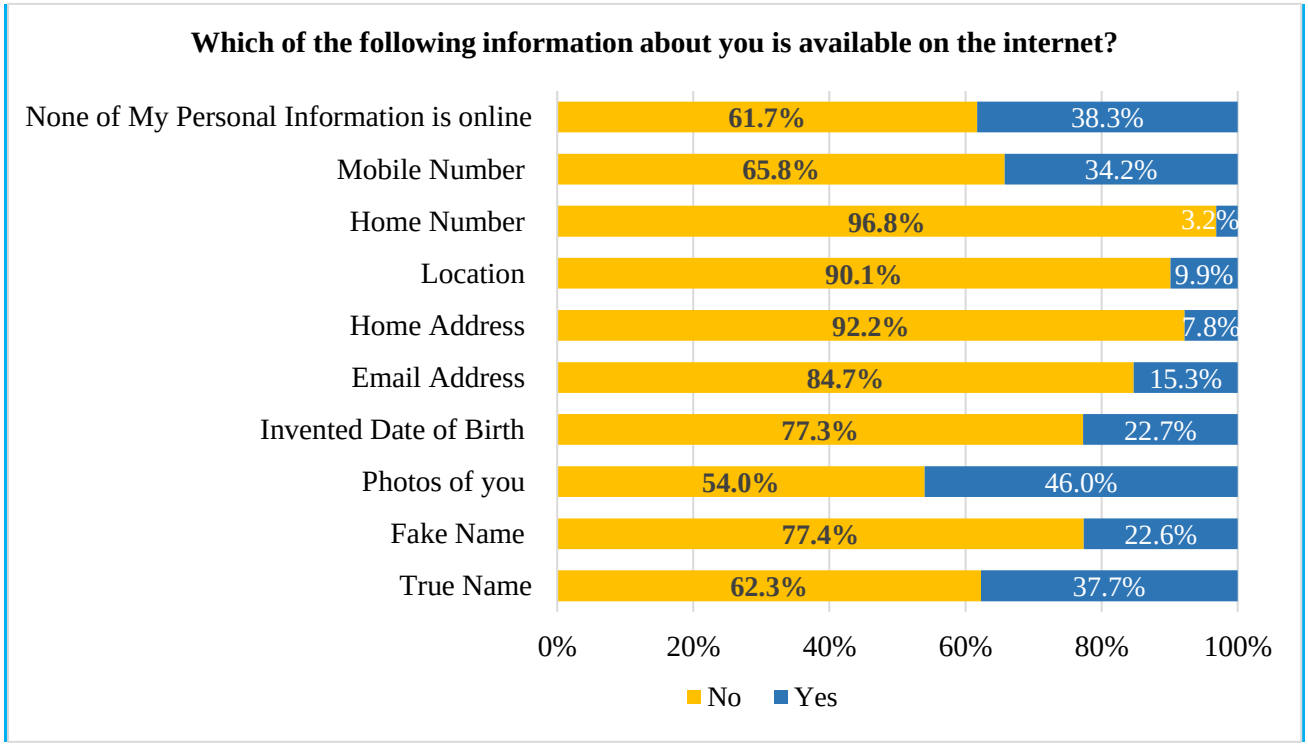
To better comprehend the risks, we classified them in three major categories; content risk, contact risk and conduct risk. We defined these as; risk due to exposure, interaction, and one's behavior online. Exposure to the risks that fall into these three broad categories is inevitable when children are online, but this exposure is not necessarily harmful if the users have the knowledge and coping mechanisms to avoid harm and a support structure that protects them from these and rehabilitates them in case they are exposed. This study elicited from the children if they had been exposed, how this had affected them, and their perception of these risks generally.

3.8.1 Children Information Online

To better understand the children online experiences, we started by asking the children about their information that was online.

61.7%, approximately six (6) in every ten (10) children online, reported having their information online, while only 38.3% of the children reported otherwise. Almost half (46%) of the children reported having their photos online. It is significant to note, however, that on average only one (1) in every ten (10) children have their home address online.

Figure 26: Children information online

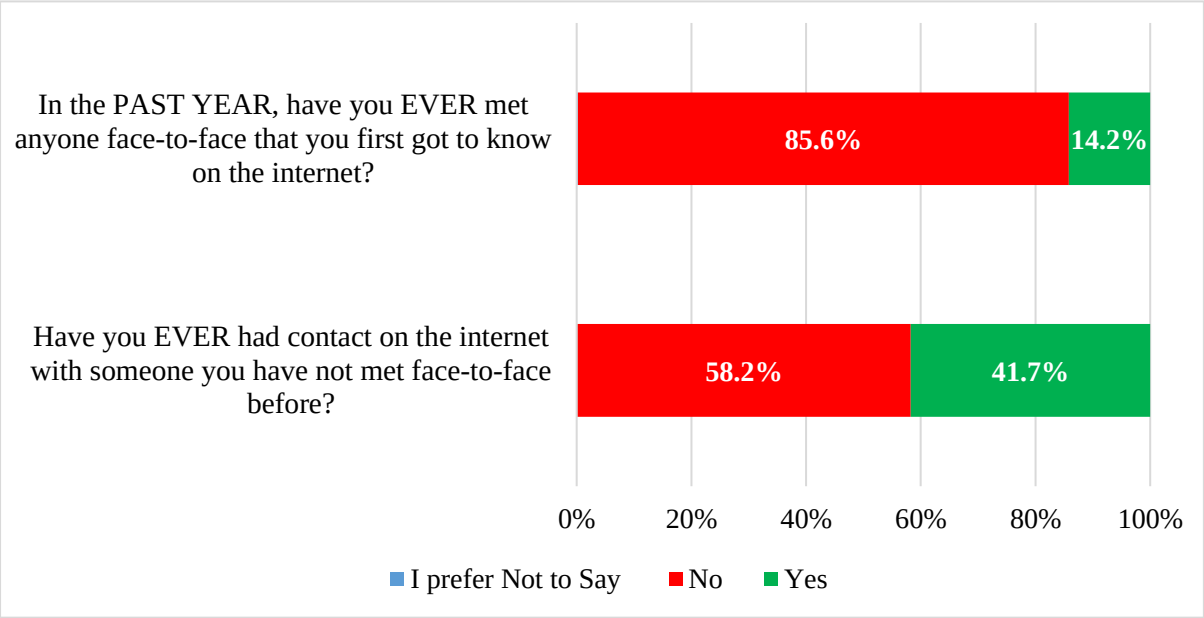


3.8.2 Contact with online strangers

The children were asked if strangers online had ever contacted them and if they had ever met with any of them. That is being contacted by or meeting someone they had never met face to face before.

As depicted in the figure below, 41.7% said they had had contact with a stranger online, whilst 14.2% said that they had met with someone that they first got to know online in the past year.

Figure 27: Meeting new people online among the children



From a demographic perspective, there was no significant difference between boys and girls regarding meeting new people online. This maybe probably because of limited restrictions from the parents. Urban, peri- urban and older children were more likely to be contacted online or meet offline with strangers.

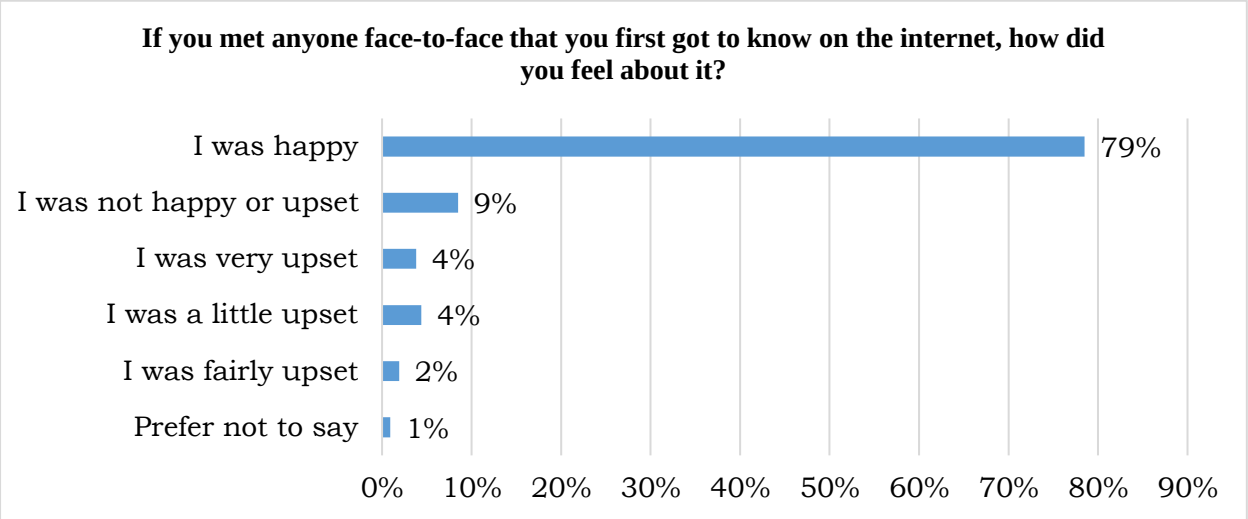
		Have you ever had contact on the internet with someone you have not met face to face before?	In the PAST YEAR, have you ever met anyone face to face that you first got to know on the internet?
	Total	42%	14%
Gender	Female	33%	10%
	Male	34%	12%
Age category	12 - 14	20%	7%
	15 - 17	47%	16%
	6 - 8	4%	2%
	9 - 11	5%	3%
Residence	Peri Urban	27%	10%
	Rural	18%	7%
	Urban	40%	13%

Table 30: Meeting new people online among children by key demographics

3.8.3 Feelings of meeting online strangers offline

About eight (8) in every ten (10) children that met online strangers offline reported being happy with this experience. Only about one (1) in every ten (10) was neither happy nor upset, and 3.8% were very upset, 4.4% were a little upset while 1.9% were fairly upset.

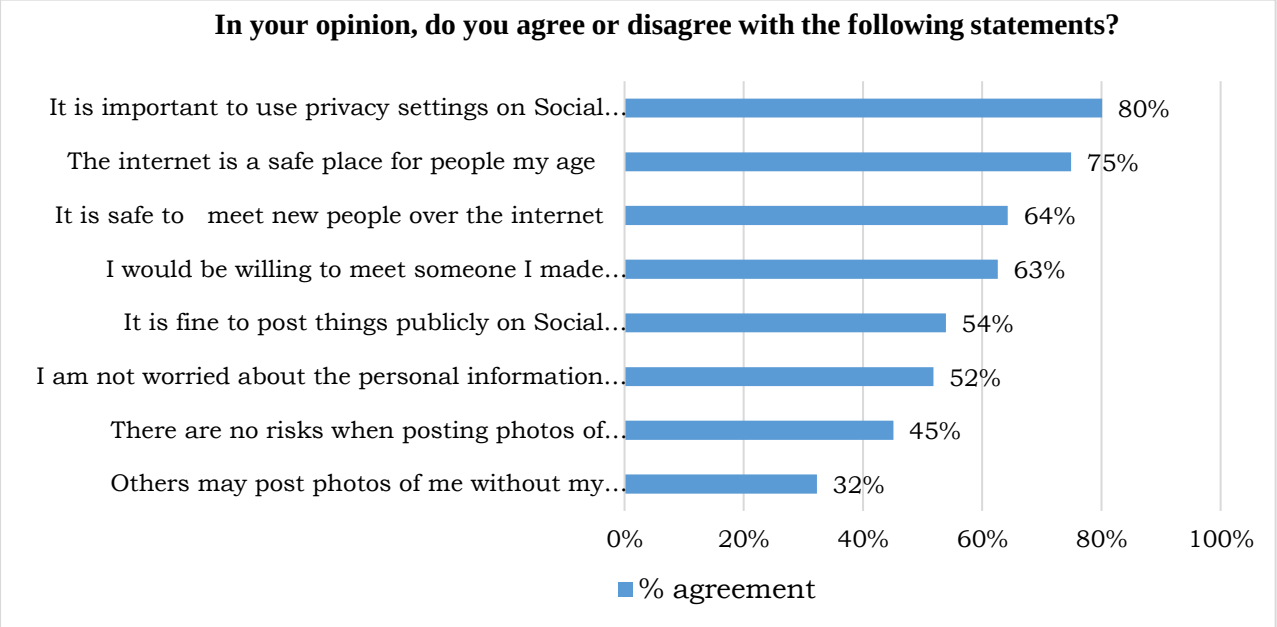
Figure 28: Feelings of meeting online strangers offline



3.8.4 Children's perception about online risks

In terms of the childrens' perceptions about the risks online, the findings indicate a relatively high level of appreciation of online risks. Majority of the children (80%) indicated that it was important to use privacy settings on social networking sites, 75% indicated that the Internet was a safe place for persons their age, whilst 64% indicated that it was safe to meet new people online.

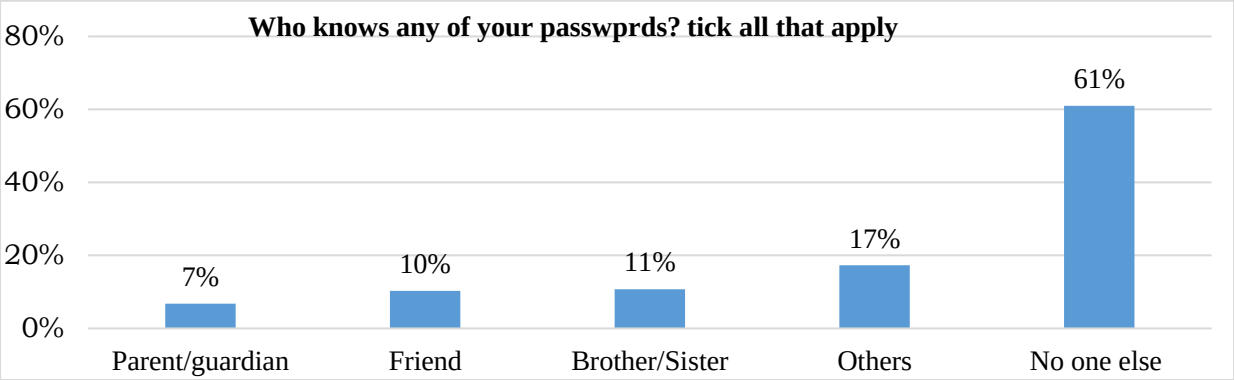
Figure 29: Parcentage of children agreement scores on online risks



3.8.5 Sharing one's password with someone else

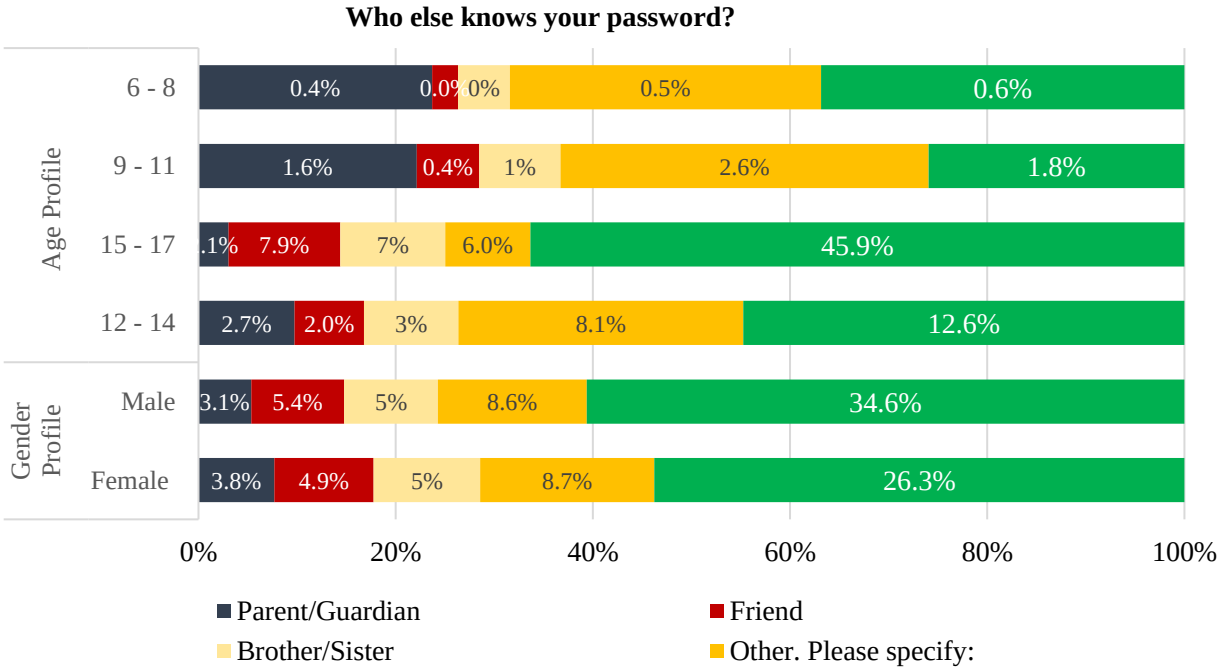
Information online is only as secure as the security protocols one puts in place as regards their online accounts or presence. To this end, in the survey we sought to learn about the childrens' own password privacy. We asked the children to tell us whether anyone knew any of their passwords. 61% of the children reported that no one knows their passwords, while 17%, 11% and 10% said that others, siblings, or a friend, respectively, knew their passwords. Surprisingly, only 7% mentioned that their parents/guardians knew their passwords.

Figure 30: People who know the child's password



When disaggregated by gender and age profile, almost all the children below 12 years shared a password with someone, as depicted in the figure below.

Figure 31: People who know the child's password by gender and agegroup.



Only 12.6% of the children aged between 12 and 14 reported that no one knew their password whilst about 1.8% aged 9 to 11 indicated that no one knew their password. For children aged 6 to 8, only 0.6% indicated that no one knew their password.

Disturbingly, for the parties that knew the childrens' passwords, parents/guardians accounted for the least, not exceeding 3.8%. Boys were more security cautious than girls; 34.6% of the boys indicated that no one knew their password whilst 26.3 of the girls indicated that no one knew their password.

3.8.6 Children experience of risk online

The children were asked whether they had any experiences of risk from a list provided in the questionnaire. As shown in the figure below, on average about seven (7) in every ten (10) children mentioned that they had experiences of unpleasant or inappropriate pictures or videos on the Internet. 61% reported encountering pop-ups online, while only 10% reported hacking.

3.8.7 Presence of content that bothered children online

The childrens' opinion on the risks online were elicited and when asked about whether they thought there were things on the Internet that bothered or upset children their age, majority (55.1%) did not agree whilst 44.9% thought that there were indeed things that bothered or upset children online. The children that thought that there were no threats online were mainly urban, male and between the age of 15 to 17 years.

Regarding what bothered them in the past year online, 73.5% reported not experiencing anything as detailed below.

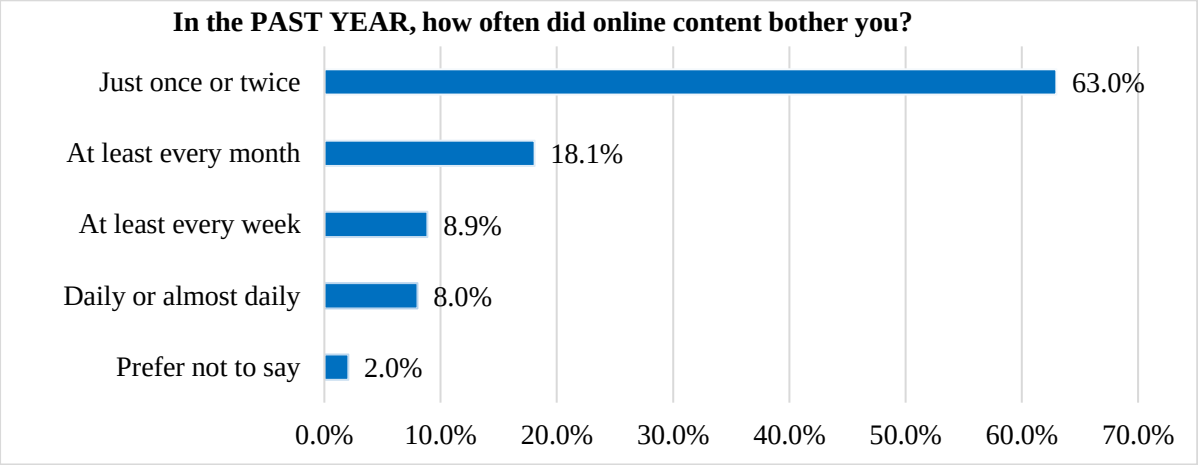
		Do you think there are things on the internet that bother or upset people of your age?		In the PAST YEAR, has anything EVER happened online that bothered or upset you in some way		
		No	Yes	I prefer Not to Say	No	Yes
	Peri Urban	5.7%	4.6%	0.0%	7.6%	2.6%
	Rural	10.6%	5.3%	0.0%	12.8%	2.9%
Residence	Urban	38.9%	35.0%	0.2%	53.1%	20.8%
	Female	26.4%	19.7%	0.1%	33.6%	12.4%
Gender	Male	28.7%	25.1%	0.1%	39.9%	13.9%
	12 - 14	16.9%	9.6%	0.0%	20.7%	5.8%
	15 - 17	32.4%	33.1%	0.2%	46.2%	19.1%
Age	9 - 11	4.4%	2.0%	0.0%	5.1%	1.3%
Profile	6 - 8	1.5%	0.1%	0.0%	1.5%	0.1%
	Total	55.1%	44.9%	0.2%	73.5%	26.3%

Table 31: Presence of online content that bothered children

3.8.8 Frequency of occurrence of content that bothered children online

Slightly more than half (63%) of the children reported that the online content that bothered them happened just once or twice, whilst 18.1% indicated it had happened at least every month. 8.9% indicated at least every week, while 8% said daily or almost daily.

Figure 32: Occurrence of online content that bother or upset children



We further probed the children on how they felt the last time online content bothered them. Most of the children (87.3%) indicated that they were either "upset" or "very upset" by the happening of something that bothered them online.

Slightly more girls (23.5%) than boys (23%) indicated being "very upset" by the event that bothered them online. Of the children engaged, 10.8% indicated that they were not upset by the event that bothered them online.

		Thinking now about the LAST TIME this happened to you, tell me about your feelings		
		Not Upset at all	**Upset**	**Very Upset**
Gender	Female	4.6%	18.9%	23.5%
	Male	6.1%	23.7%	23.0%
Age Profile	12 - 14	2.2%	7.5%	12.3%
	15 - 17	7.7%	33.1%	31.7%
	9 - 11	0.9%	1.9%	2.2%
	6 - 8	0.0%	0.2%	0.3%
Residence	Peri Urban	1.0%	6.0%	2.9%
	Rural	1.4%	4.9%	4.8%
	Urban	8.4%	31.7%	38.9%
	Total	**10.8%**	**42.7%**	**46.6%**

Table 32: Feelings of children that were bothered or upset online

3.8.9 Actions taken by the children when upset online

Having known how the children felt, we sought to understand the actions they took thereafter. As such, we asked the children what they did once they were faced with something that bothered them online.

Majority of the children (37%) reported that they did nothing while only 32.4% indicated that they had spoken to someone about it. 15.4% indicated that they had sorted it out on their own whilst 10.1% indicated that they felt guilty or ashamed.

		Thinking now about the LAST TIME this happened to you, tell me about your actions?					
		Did Nothing	Felt Guilty or Ashamed	Hoped It would Go away	Phoned Police	Sorted on My Own	Spoke to Some one
Gender	Female	16.4%	5.5%	2.7%	0.0%	7.2%	15.4%
Profile	Male	20.6%	4.6%	2.0%	0.3%	8.2%	17.1%
	12 - 14	5.5%	1.4%	1.5%	0.2%	2.7%	10.8%
	15 - 17	29.4%	8.5%	2.9%	0.2%	12.1%	19.5%
Age	9 - 11	2.2%	0.0%	0.3%	0.0%	0.3%	2.0%
Profile	6 - 8	0.0%	0.2%	0.0%	0.0%	0.2%	0.2%
	Peri Urban	2.6%	1.2%	0.0%	0.2%	1.9%	4.1%
Residence	Rural	4.8%	1.0%	0.5%	0.0%	1.4%	3.4%
	Urban	29.7%	7.8%	4.3%	0.2%	12.1%	24.9%
	Total	**37.0%**	**10.1%**	**4.8%**	**0.3%**	**15.4%**	**32.4%**

Table 33: Children's action the last time they were upset online

Gender wise, boys were more likely to act when upset online than girls were, and the children in urban areas were more likely to act compared to their rural counterparts. In addition, the older one was the more likely they were to act once upset online.

3.8.10 Treatment of children in a hurtful way online

About 72.7% of the children reported that they had not been treated in a harmful or nasty way, 27% indicated that they had been treated as such, whilst 0.3% preferred not to say.

We further probed the frequency of the hurtful or nasty treatment while online. As depicted in the figure below, when asked about how often the hurtful and nasty treatment happened, 63.8% of the children reported that this happened just once or twice in the past year. 18.9% indicated that it happened at least every month, 9.1% indicated that it happened at least every week, and 6.8% indicated that it happened daily or almost daily. Thus, about 4 in every 10 children online experience hurtful treatment at least every month in Uganda.

Figure 33: Treatment in a hurtful or nasty way while on the Internet

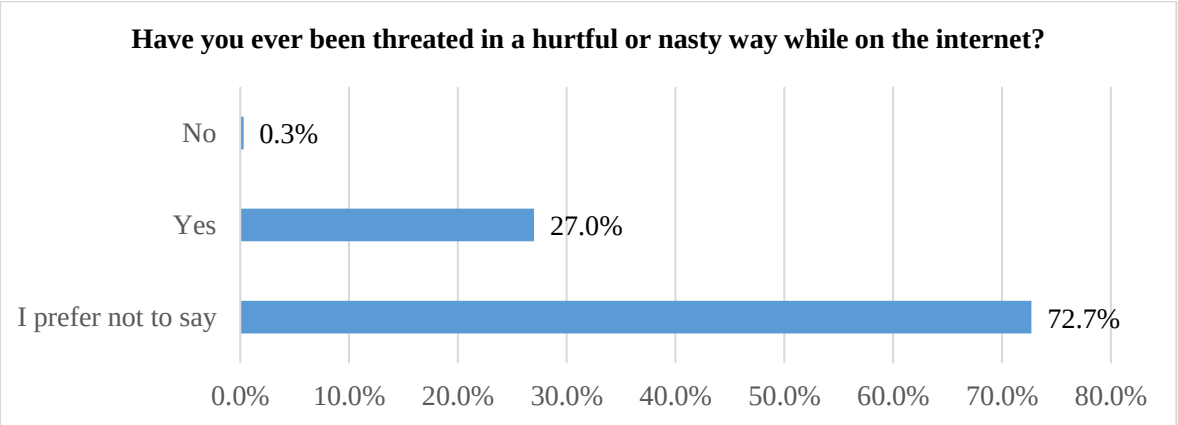
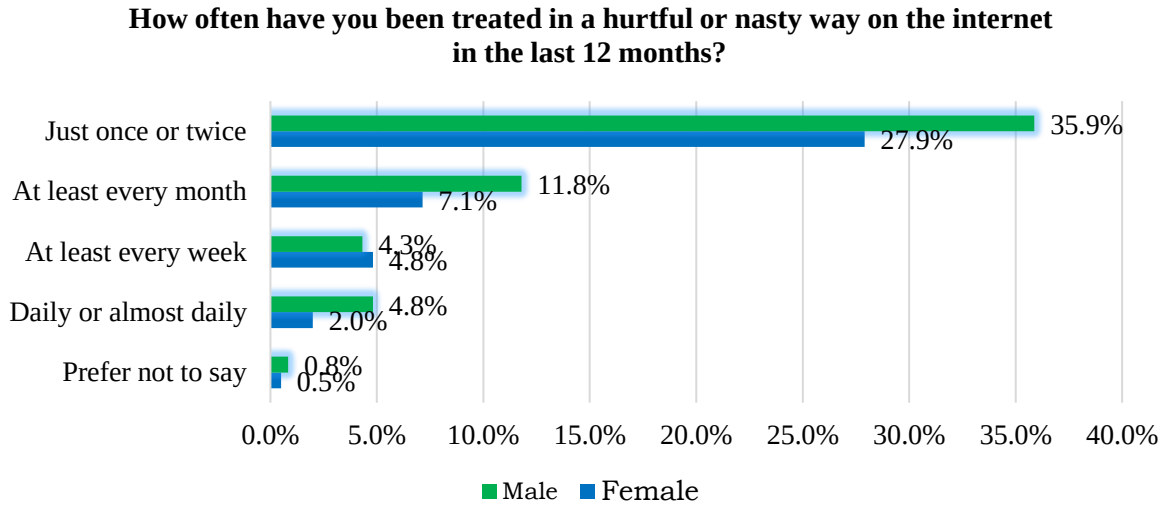
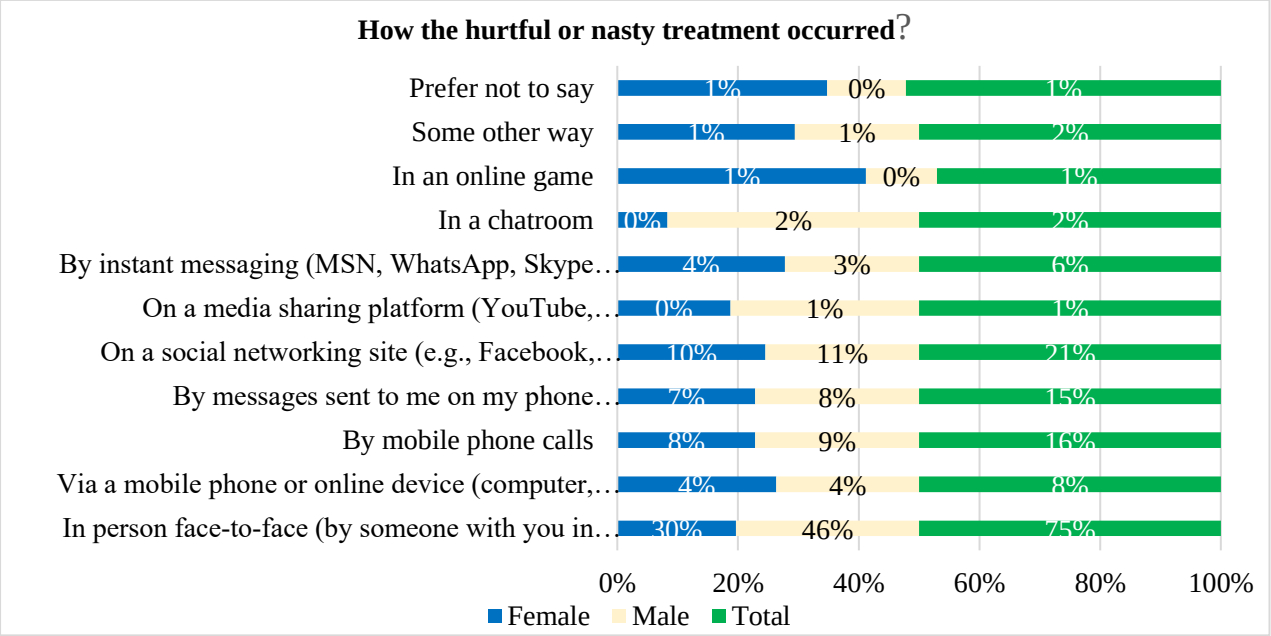


Figure 34: Frequency of Childrens' treatment in a hurtful or nasty way



When asked how the hurtful or nasty event occurred, majority of the children (75%) reported that it had occurred face to face. 21.2% were hurt or treated in a nasty way via a social networking site, while 28.9% were hurt or treated in a nasty way via the mobile phone through either phone calls or SMS, or a mobile device. 6.3% of the children were hurt via an instant messaging platform.

Figure 35: How the hurtful or nasty event treatment occurred



3.8.11 Unwanted sexual experiences

The survey included an additional module that explored the unwanted sexual experiences children may have had online. The module was divided into questions on respondents' exposure to unwanted sexual content, and respondents being asked to provide sexual content of themselves when they did not want to do so.

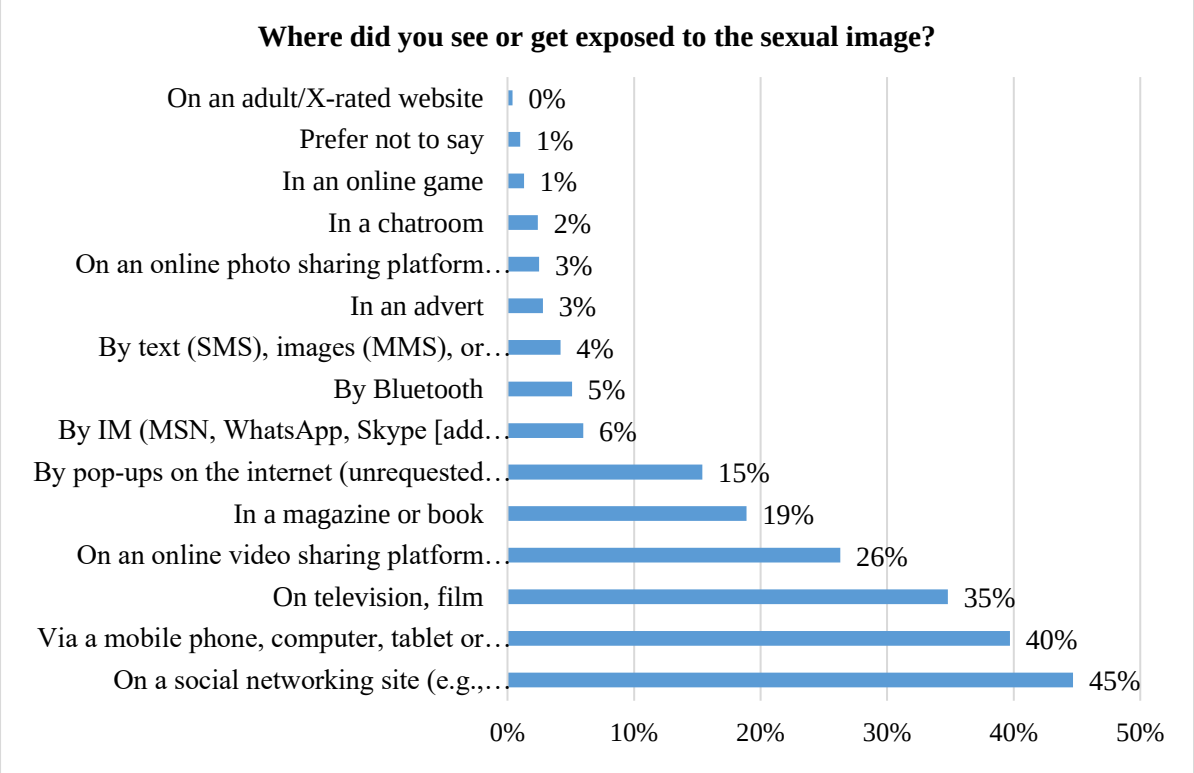
Overall, more than half of the surveyed children (50.7%) had encountered unwanted sexual messages online in the past 12 months whilst 48.8% reported that they had not seen a sexual image. These were mainly urban (40.4%), male and above 12 years of age.

		In the PAST YEAR, have you EVER SEEN any sexual images?		
		I Prefer not Say	No	Yes
Residence	Peri Urban	0.0%	6.1%	4.0%
	Rural	0.1%	9.3%	6.3%
	Urban	0.4%	33.4%	40.4%
Gender	Female	0.2%	23.2%	22.6%
	Male	0.3%	25.6%	28.1%
Age Profile	12 - 14	0.2%	16.2%	10.1%
	15 - 17	0.3%	27.3%	37.8%
	9 - 11	0.0%	4.2%	2.2%
	6 - 8	0.0%	1.0%	0.6%
	Grand Total	**0.5%**	**48.8%**	**50.7%**

Table 34: Exposure to unwanted sexual images

We further probed the source or place where the children were exposed to the unwanted sexual images. The most cited source was social networking sites, accounting for 44.7%. Other sources were via a mobile phone, computer, tablet, or any other online device cited by 39.7% of the children. On television, film (34,8%), on an online video sharing platform (e.g., YouTube) (26.3%), in a magazine or book (18.9%) and through pop-ups on the Internet (unrequested windows that appear during web surfing) (15.4%).

Figure 36: Online platform on which children were exposed to sexual images



In addition, 31.5% of the children reported to have seen or received a sexual message (picture or video) in the past 12 months whilst 68% had not. The children that had received these messages were mainly between 15 and 17 years, urban and male, as detailed in the figure below.

		In the past year, have you ever received any sexual messages?			Have you ever sent or posted any sexual messages?		
		I Prefer not to Say	No	Yes	I Prefer not to Say	No	Yes
Gender	Female	0.2%	31.6%	14.3%	0.1%	42.0%	3.9%
	Male	0.3%	36.4%	17.2%	0.2%	48.4%	5.4%
Residence	Peri Urban	0.1%	7.9%	2.2%	0.0%	9.7%	0.4%
	Rural	0.0%	11.9%	3.8%	0.1%	14.4%	1.3%
	Urban	0.3%	48.2%	25.5%	0.2%	66.2%	7.7%
Age	12 - 14	0.3%	21.8%	4.4%	0.2%	25.1%	1.1%
	15 - 17	0.2%	39.5%	25.8%	0.1%	57.6%	7.9%
	9 - 11	0.0%	5.4%	1.0%	0.0%	6.3%	0.2%
	6 - 8	0.0%	1.3%	0.3%	0.0%	1.4%	0.1%
	Total	0.5%	68.0%	31.5%	0.3%	90.4%	9.3%

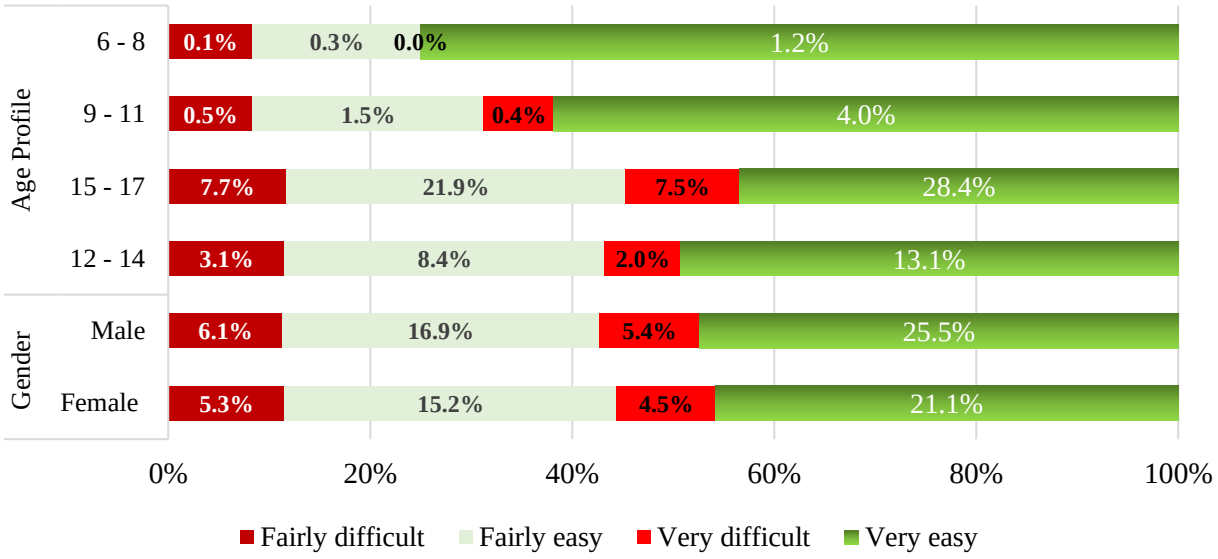
Table 35: Sending and receiving sexual messages by children demographics

However, a small number of children, 9.3%, had sent or posted some sexual messages whilst 90.4% said they had not sent such messages, Again, older children aged between 15 and 17 years accounted for the most (7.9%) among those that had sent sexual messages, mainly urban (7.7%) and male (5.4%).

3.9 Family environment and parent mediation

In the study, the children were asked about their relationship with their parents with the intent of learning how parents mediated their children's Internet use and how they supported their children emotionally in case of trauma suffered online and general advice to guard against dangers online. To start with, the children were asked how easy it was for them to talk to their parents about things that upset them.

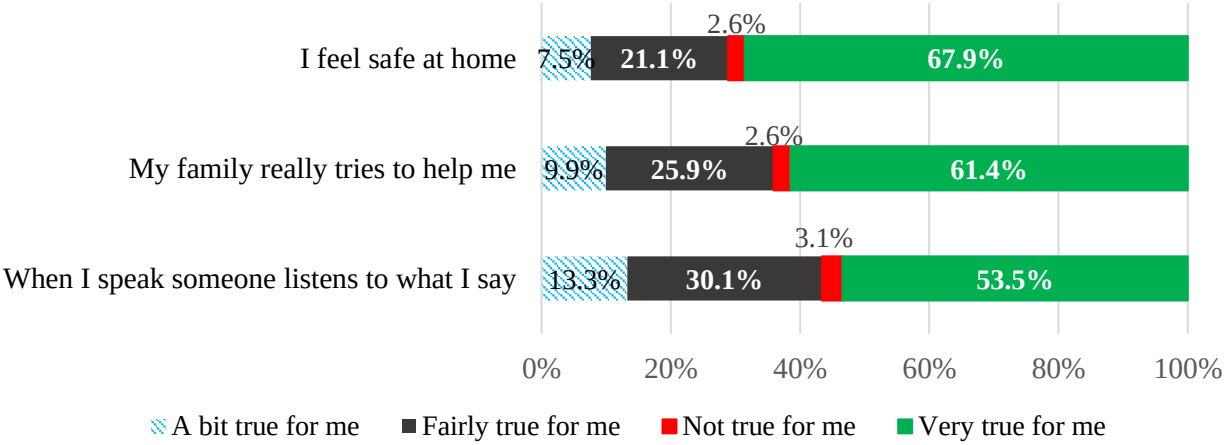
Figure 37: How easy is it for you to talk to your parent/carer about things that upset you?



Taking responses of fairly easy and very easy as the measure of ease of talking about something that upset the children, when asked about how their parents and family treated them generally, 78.7% of children felt it was "easy" or "very easy" to speak to their parents. This was easier for boys who accounted for 42.4% than girls that accounted for 36.3%.

21.2% indicated that it was difficult to talk to their parents as detailed in figure 38.

Figure 38: Feeling about one's family



When asked whether their family listened to what they said when they spoke, 83.6% felt that it was "fairly true" or "very true" that their family did listen to them. Almost all respondents (87.3%) felt that it was "fairly true" or "very true" that their family really tried to help them, and 89% stated that it was "fairly true" or "very true" that they felt safe at home.

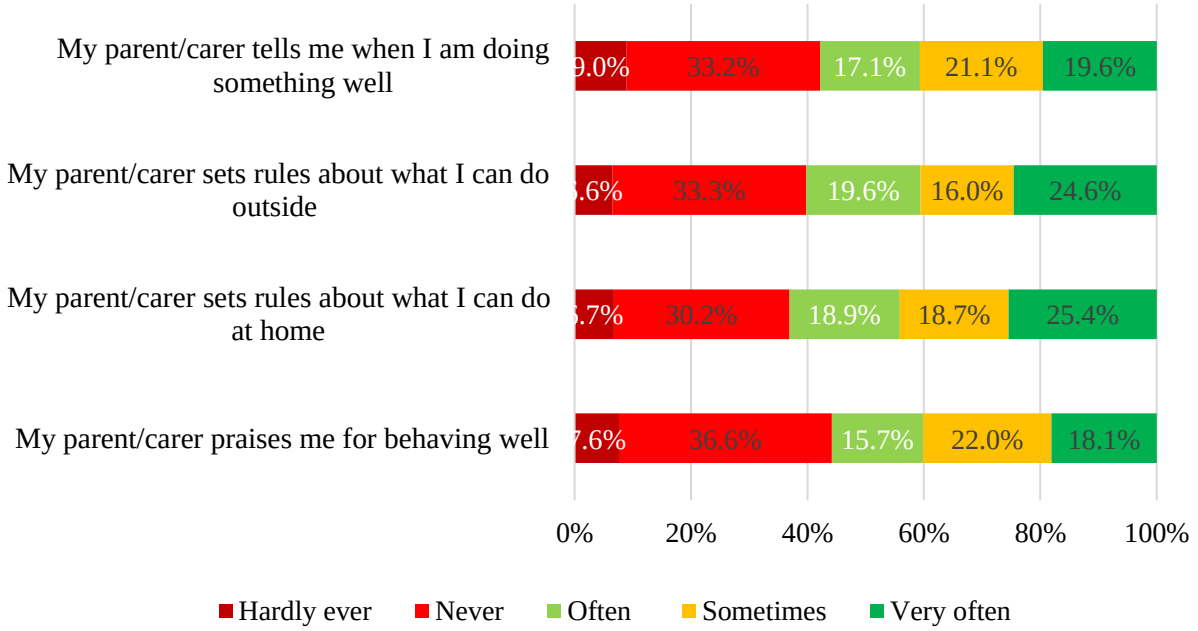
3.9.1 Parental mediation online

In this section, we explore both the children's perception of their parent/guardian mediation of online activities, as well as the parents/guardians' perception of their mediation or control of their children's online activities.

3.9.2 Children's perception of parental mediation on the internet

We also explored the parental mediation of online activities by their children. As depicted in the figure below, about 3 in every 10 children (38%) reported being praised by their parents for behaving well "often" or "very often", while about 4 in every 10 parents (44.3%) set rules about what could be done in the home "often" or "very often". In general, therefore, it can be concluded that the Ugandan parents are not very engaged in their children's affairs even when this is risky behavior.

Figure 39: Children's perception of their parental mediation

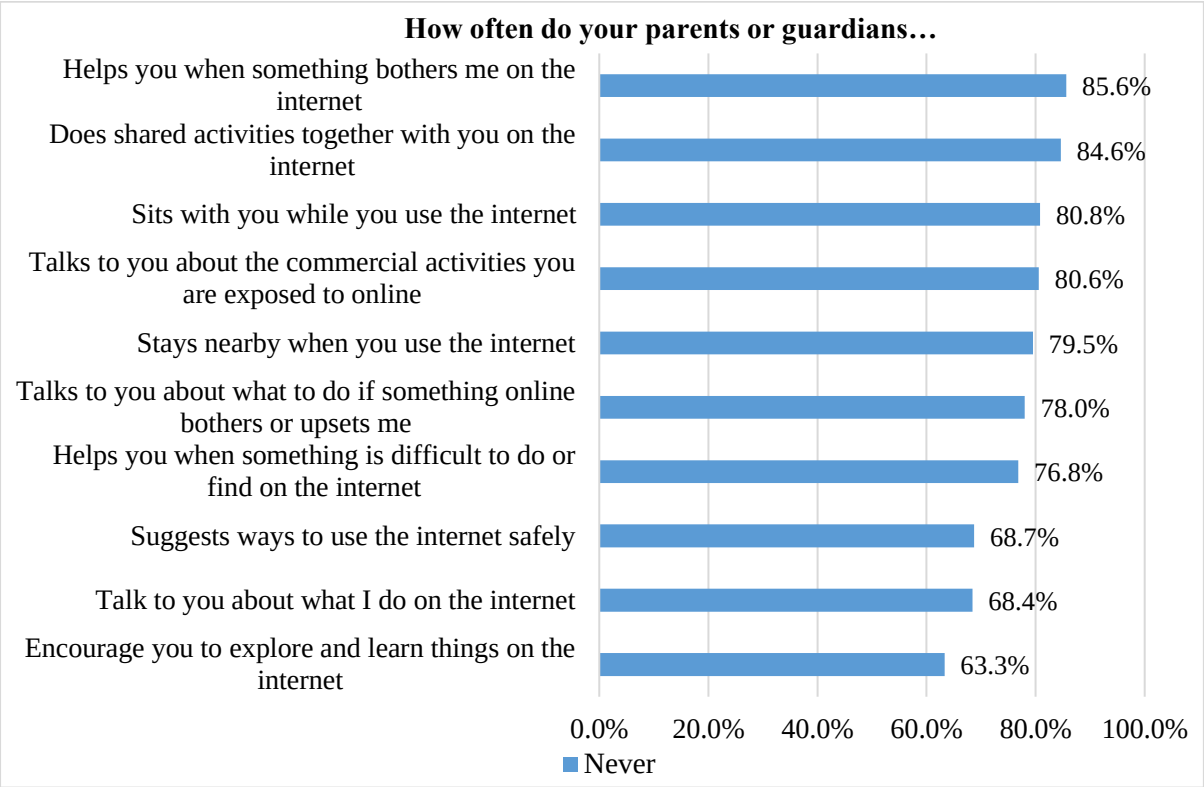


According to the children, most of their parents were not actively involved in mediating their Internet use.

Over two thirds of the children who used the Internet (68.4%) said that they never or hardly ever spoke to their parents about their Internet use and 63.3% were never or hardly ever encouraged by their parents to explore and learn new things online.

Nearly four in five children (79.5%) reported that their parents never or hardly ever stayed nearby while they used the Internet, and 84% said they had never or hardly ever done shared activities online with their parents.

Figure 40: Children's perception of their parents engagement in their online activities



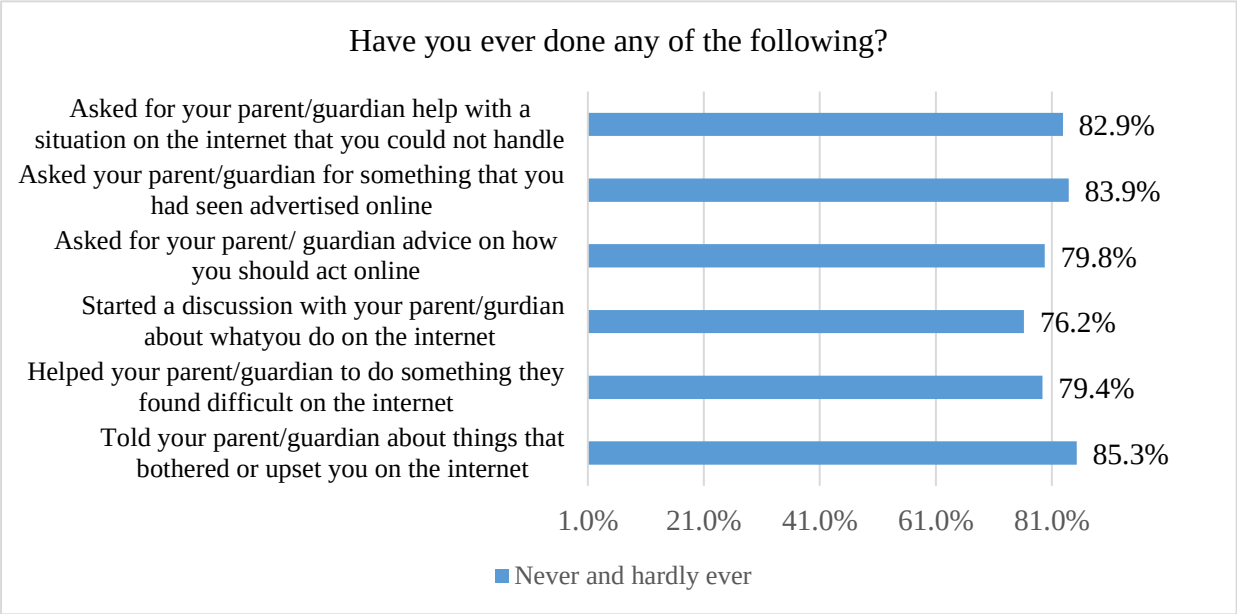
As depicted in the figure above, 68.7% of parents never suggested ways for their children to use the Internet safely and 78% never spoke to their children about what to do if something online bothered or upset them.

68.4% of the respondents never or hardly ever started a discussion with their parents about what they did on the Internet, and 76.8% never or hardly ever helped their children when something bothered or upset them online. Parents are never in their kids' presence when they are using the Internet; 80.8% of the children engaged said their parents hardly ever or never sit with them when they used the Internet, and 79.5% indicated that their parents hardly ever or never stay nearby when they used the Internet. 76.8 % of the children indicated that their parents hardly ever or never help them when something is difficult to do or find on the Internet, and 80% hardly ever or never talk to their children about the commercial activities they are exposed to online. In summary, there is limited involvement of parents in the lives of the children's online activities as indicated by eight (8) in every ten (10) parents who are not involved in what their children are doing online.

We further investigated if the children ever take their own initiatives to engage their parents as regards their online activities. Almost 9 in every 10 children (85.3%) indicated that they never told their parents about things that bothered them on the Internet.

79.4% indicated that they never sought help from their parents to do something they found difficult on the Internet, while 76.2% of the children engaged indicated that they never started a discussion with their parents about what to do online as depicted in the figure below.

Figure 41: Children engagement of their parents/guardians on the use of internet

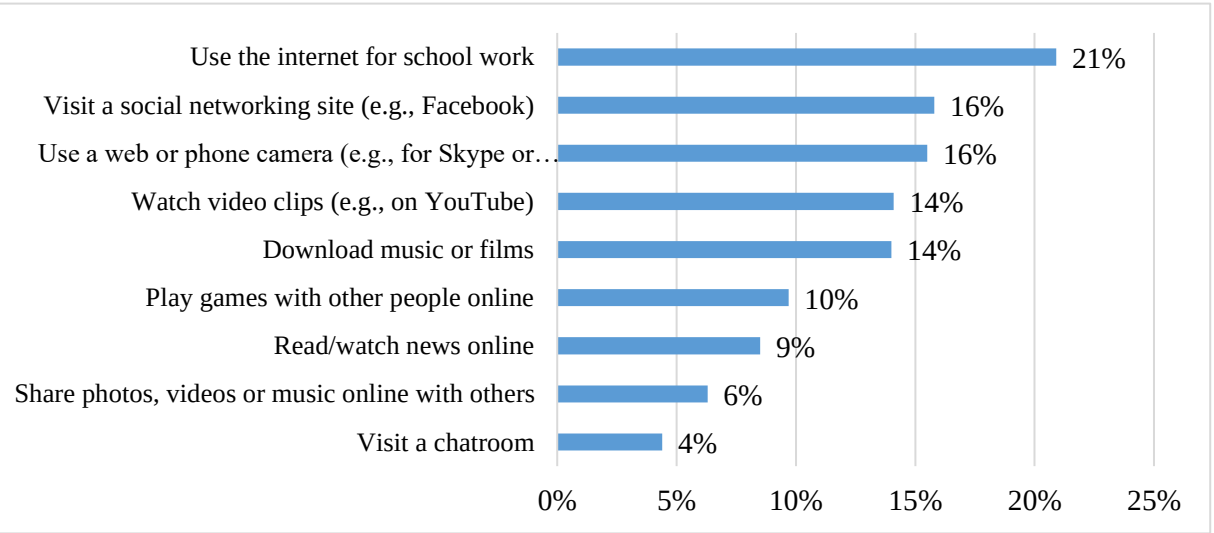


When asked about engaging their parents/guardians to seek help with the situation on the Internet they could not handle, 79.8% indicated that they had never asked parents for advice on how they should act online whilst 83.9% never asked their parent for something that they had seen advertised online.

3.9.3 Seeking parents' consent/ permission to undertake online activities

Among children, a known barrier to using the Internet is obtaining adults' permission. When asked whether they needed permission to perform certain activities online, children tended either to never be able to do something, or to not need permission or supervision. On average, only about 1 in every 10 children sought some form of permission to engage in online activities from their parents as depicted in the figure below.

Figure 42: Children who seek permission to use Internet for different online activities



As depicted in the figure above, about 21% of the children sought permission from their parents/guardians to use the Internet for schoolwork while 16% sought permission to visit either a social networking site or use a web or phone camera. On the other hand, only about 4% of the children sought permission to visit a chatroom while 6% if they needed to share photos, videos, or music online with others. Therefore, as seen in this section, majority of the Ugandan children believe they do not need permission from their own parents to be online.

3.9.4 Parents' engagement in children Internet usage

The survey also sought to understand the level of parents /guardians' engagement in children's Internet usage. As can be seen from the table below, there was very little parental engagement.

A series of activities were enumerated, and parents were supposed to highlight which ones they did in support of their children's online interfacing. What comes across at face value are the high percentages in the "Never" and "Not Applicable" columns.

Only 3.7% of the parents reported that, very often, they encourage their children to explore and learn things on the Internet whilst 35.7% indicated that they had never encouraged their children to explore and learn things on the Internet. On using the Internet safely, only 4.8% of the parents/guardians indicated that they suggested to their children's ways to use the Internet safely whilst 38.7% indicated they never did this.

When your child uses the internet, how often do you do these things?						
	Hardly ever	**Never**	**Not Applicable**	**Often**	**Sometimes**	**Very often**
Encourage your child to explore and learn things on the internet	6.8%	35.7%	26.3%	13.4%	14.0%	3.7%
Suggest ways to use the internet safely	6.9%	38.7%	26.7%	11.4%	11.5%	4.8%
Talk to your child about what he/she does on the internet	5.3%	39.2%	27.2%	11.4%	12.1%	4.8%
Sit with your child while he/she uses the internet	7.0%	49.2%	26.8%	2.3%	13.2%	1.5%
Stay nearby when your child uses the internet	6.0%	49.4%	26.7%	2.3%	14.1%	1.5%
Do shared activities together with your child on the internet	7.6%	52.6%	26.9%	2.2%	9.3%	1.4%
Talk to your child about what to do if something online bothers or upsets him/her	6.8%	46.7%	27.0%	6.9%	10.0%	2.6%
Help your child when something is difficult to do or find on the internet	6.8%	47.1%	26.8%	6.2%	10.3%	2.8%
Explain why some websites are appropriate or inappropriate	4.9%	43.9%	27.0%	8.6%	7.6%	7.9%
Help your child when something bothers him/her on the internet	7.5%	51.8%	26.8%	3.3%	7.9%	2.6%
Talk to your child about the commercial activities he/she is exposed to online	5.5%	49.5%	27.1%	5.4%	8.2%	4.3%

Table 36: Parents engagement in their children`s internet usage

Disturbingly, even on matters concerning risky behavior online, most parents indicated never helping their children. For one, parents indicated that they did not talk to their children about

what they did online, 39.2% indicated that they never did, while 27.2% indicated that this was not applicable and only 4.8% reported doing this often. They also indicated that they do not stay around to monitor what their children do online; 49.4% indicated never, 26.7% said this was not applicable to them, and only 1.5% said they often did this monitoring.

We learned that whilst children might be exposed to commercial activities online, only 4.3% of the parents often talked to them about this risk, 49.5% indicated that they never did and 27% indicated that this was not applicable to them. Children have to decide for themselves if particular sites are either appropriate or inappropriate considering that only 7.9% of the parents interviewed indicated they offered this guidance to their children and majority indicated that they never did this (43.9%), or it was not applicable to them (27%).

The disturbing trend points to a lack of supervision for children online but also a missing support structure in case something happened to them online. The results put into context the findings on access and usage by the parents; the fact that most parents had never used the Internet and those that used it did in an intermittent manner and in places where their children might not be.

We further sought to understand, from a parent/guardian's perspective how often their children sought for support. As can be seen in the table below, parents indicated that their children never told them about things that upset or bother them online (77.6%), while only 0.8% stated they do "very often" and 2.2% indicated that they "often" supported their children in with this.

Has your child ever done any of these things?						
	Hardly ever	**I do not Know**	**Never**	**Often**	**Sometimes**	**Very often**
Told you about things that bother or upset her/him on the internet	5.0%	6.3%	77.6%	2.2%	8.1%	0.8%
Helped you to do something you found difficult on the internet	4.7%	6.2%	72.9%	2.0%	12.9%	1.4%
Started a discussion with you about what she/he does on the internet	5.5%	6.1%	65.6%	5.5%	15.1%	1.7%
Asked for your advice on how she/he should act online	5.0%	6.1%	71.6%	5.5%	10.5%	1.3%
Asked you for something that she/he saw advertised online	3.6%	6.1%	78.7%	2.9%	6.6%	2.0%
Asked for your help with a situation on the internet that she/he cannot handle	5.0%	6.2%	73.2%	3.2%	10.5%	1.7%

Table 37: Parents' perspective on seeking support by their children

As was the case above, parents indicated that their children never asked for advice on how to act online (71.6%) and they never started a discussion with them about what they did online (65.6%). Many parents indicated that their children did not ask for help with a situation they

could not handle online (73.2%). For all use cases the percentage points for "very often" never exceeded 2 and "often" never exceeded 5.5 percentage points.

3.9.5 Parents' perception of own mediation of their children's online activities

In this section, we sought to understand parental control measures from their own perspective as regards their children's online activities. We started by inquiring from parents/guardians whether they allowed or gave permission for their children to do various activities on the Internet. For most of the activities, parents indicated that this was not applicable to them.

28.2% of the parents indicated that they allowed their children to use the web or phone camera with supervision whilst 20.8% and 8.5% indicated that they were "not allowed to do this" and "not allowed to do this anytime", respectively. 42.5% indicated that this was not applicable to them. Similarly, 28.3% of parents indicated that their kids were allowed to download music or films with supervision whilst 42.9% indicated that this was not applicable to them. 19.9% indicated that their kids were not allowed to download music or films anytime and 9% indicated they were not allowed to do this.

On visiting a social networking site (e.g., Facebook), most parents (43%) indicated that this was not applicable to them whilst 29.4% indicated that they allowed their kids to access these with supervision, and 21.1% and 14.9% indicated that their kids were "not allowed to do this any time" and "not allowed" respectively. Most of the parents, 42.6%, indicated that watching video clips (e.g., on YouTube) was not applicable to them. 29.4% indicated that they allowed their kids to do this with supervision. 17% indicated that their kids were "not allowed to do this anytime" whilst 10.9% indicated they were "not allowed to do this" as depicted in the table below.

Which of any of the following online activities have you given permission for to your children online?				
	Allowed to do this with permission or supervision	**Not allowed to do this**	**Not allowed to do this anytime**	**Not Applicable to Me**
Use a web or phone camera (or Skype or video chat)	28.2%	8.5%	20.8%	42.5%
Download music or films	28.3%	9.9%	19.0%	42.9%
Visit a social networking site (e.g., Facebook)	20.7%	14.9%	21.1%	43.2%
Watch video clips (e.g., on YouTube)	29.4%	10.9%	17.0%	42.6%
Play games with other people online	19.3%	17.2%	20.3%	43.1%
Visit a chat room	8.6%	21.0%	26.4%	43.9%
Use IM (instant messaging)	16.3%	16.9%	23.0%	43.8%
Read/watch news online	24.7%	12.3%	19.8%	43.2%
Use the internet for schoolwork	30.7%	10.8%	15.2%	43.3%
Share photos, videos, or music online with others (including on social networks or IM services)	16.7%	15.9%	24.5%	43.0%

Table 38: Permission granted to the children on the internet

Concerning use of the internet for schoolwork, 30.7% of the parents interviewed indicated that they allowed their children to do this with supervision while 15.2% indicated that they did not allow their children to use the Internet for this anytime, and 10.8% said their children were not allowed to do this. 43.3% of parents indicated that use of the Internet for school was not applicable to them.

3.9.6 Parental control of children online activities

It is often ideal for parents even though not involved in their children's online activities, to at least control the same. To this end, we asked parents/guardians about the actual measures, they employ in controlling their children online. The trend is not any different from what we have already seen, as most parents indicated that either did not use the controls suggested or they were not applicable to them as depicted in the table below.

For instance, for parental controls or other means of blocking or filtering some types of websites only 9.1% of the parents indicated using these whilst the majority, 59.4%, indicated they did not use these and 31.5% indicated these were not applicable to them. Only 15.7% of parents indicated that they used parental controls or other means of keeping track of the websites or apps their child visits, and 52.1% indicated that they did not use these controls whilst 32.2% indicated that this was not applicable to them.

For rules about how long or when children were allowed to go online, 47.7% indicated that they did not use these while 21.1% indicated using these and 31% said this was not applicable to them.

Do you (or other parent/carer) make use of any of the following…			
	No	**Not Applicable to Me**	**Yes**
Parental controls or other means of blocking or filtering some types of websites	59.4%	31.5%	9.1%
Parental controls or other means of keeping track of the websites or apps your child visits	52.1%	32.2%	15.7%
Rules about how long or when your child is allowed to go online	47.7%	31.0%	21.3%
A service or contract that limits the time your child spends on the internet	60.1%	31.7%	8.2%
Software to prevent spam or junk mail/viruses	60.7%	32.3%	7.0%
Parental controls that filter the apps your child can download	62.9%	31.3%	5.9%
Parental controls that alert you when your child wants to buy content (in-app purchase)	63.4%	31.4%	5.2%
Software that limits the people your child can be in touch with (through voice calls and messages (SMS, MMS, or IM)	63.4%	31.7%	4.8%
Ad blocking software	62.1%	32.3%	5.6%

Table 39: Parents/guardian control of children online activities

Furthermore, as can be seen in the table, over 60% of the parents interviewed indicated that they did not use any software or parental controls and over 31% indicated that this was not applicable to them. On the other side, about 2 in every 10 parents set rules about how long or when their children were allowed to go online.

3.9.7 Parental monitoring of their children's online activities

We also sought to understand whether the parents/ guardians are monitoring their children's online activities. As such, we asked how often they checked various things their children had accessed each time they used the Internet.

Only 3.1% of the parents/guardians often either checked which friends or contacts their child adds to their social networking profile/IM service or their profile on a social networking site or online community. On the other hand, 3.5% checked the messages in their children's email or other app for communicating with people, while about 6.6% checked which websites their children visited, as depicted in the table below. Overall, over 80% of the parents reported not using any monitoring protocols.

When your child uses the internet, how often do you (or other parent/carer) check the following things afterwards?						
	Hardly ever	**Never**	**Not Applicable**	**Often**	**Sometimes**	**Very Often**
Which friends or contacts he/she adds to his/her social networking profile/IM service	6.3%	43.3%	37.6%	1.5%	9.7%	1.6%
The messages in his/her email or other app for communicating with people	4.3%	46.1%	37.8%	2.0%	8.4%	1.5%
Which websites he/she visited	4.3%	43.9%	34.5%	4.9%	10.7%	1.7%
His/her profile on a social networking site or online community	4.4%	47.1%	37.7%	1.8%	7.7%	1.3%
The apps he/she downloaded	4.1%	43.8%	36.3%	3.6%	10.2%	2.0%
The in-app purchases he/she made	3.7%	51.1%	40.2%	0.8%	2.9%	1.3%

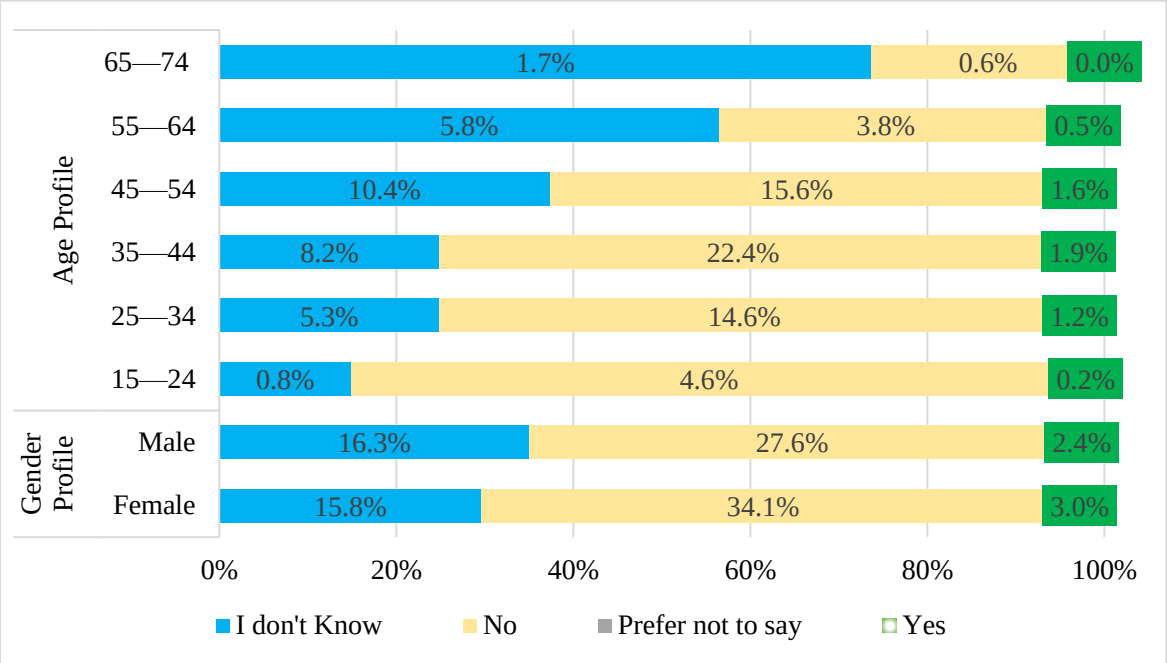
Table 40: Level of parental monitoring

Having determined the level of parental monitoring, the parents/guardians were further asked if they were aware of the things that upset or bothered their children online.

About 9 in every 10 parent/guardians (over 93%) indicated that they did not know or were not aware of the things that bothered their children online, and only 5.4% reported knowing the same as depicted in the figure below.

The age profiling revealed that older (above 55 years) and younger (below 25 years) parents were more unaware of the things or what bothered their children online. From a gender perspective, the female parents were 0.6 percentage points more aware than the male parents (2.4%).

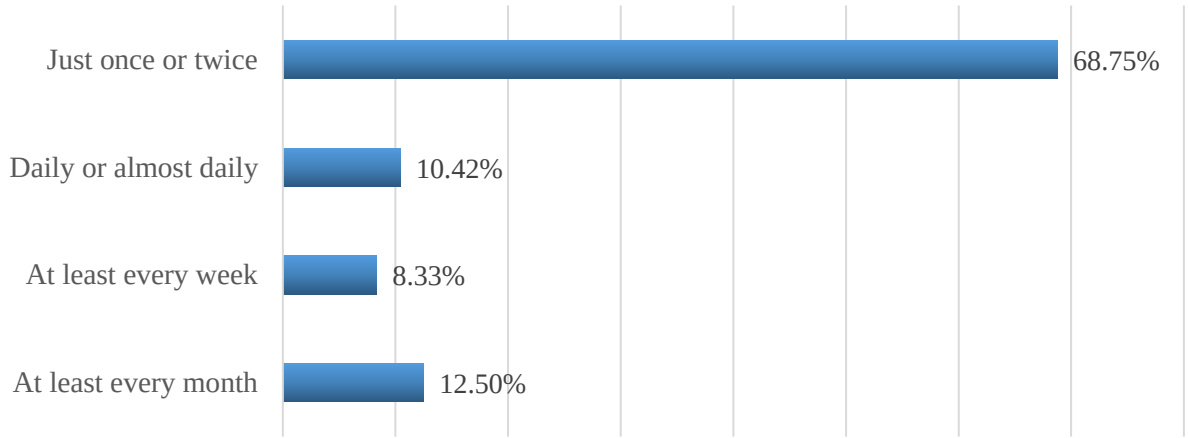
Figure 43: Parents' knowledge about things that upset or bothered the children



3.9.8 Frequency of the online things that upset children from the parents' perspective

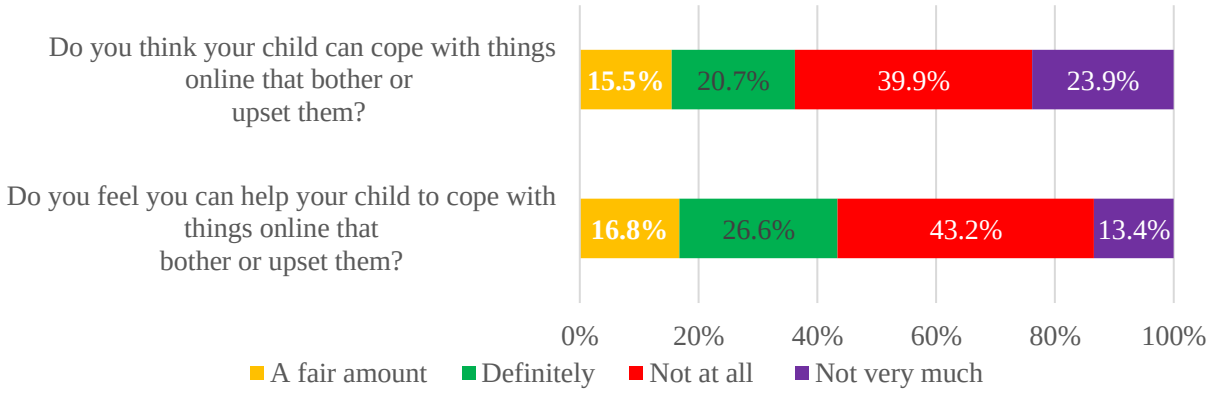
For the parents that were aware of their children being upset online, 68.75% indicated that such an upset had only happened just once or twice in the last year, 10.4% indicated that this happened daily or almost daily, 8.33% indicated that it happened at least every week, and 12.5% indicated it happened at least every month.

Figure 44: The frequency with which the children were bothered or upset online



We further asked the parents/guardians about their own ability to help their children regarding things that bothered them, as well as their perception of the children's abilities to handle what bothered them online in the last year. As depicted in the figure below, on their children's ability to cope with things that bother or upset them online, 39.9% indicated "not at all" while 23.9% indicated "not very much". 20.7% of the parents could speak with certitude to this whilst 15.5% indicated a fair amount of coping. Regarding whether the parents could help their children cope with things online that bother or upset them, only 20.7% could speak with certitude to this, 43.2% indicated "not at all" while 13.4% indicated "not very much". 26.6% of the parents could speak with certitude to this whilst 16.8% indicated a fair amount of coping.

Figure 45: Parents' perspective about things that bother the children online

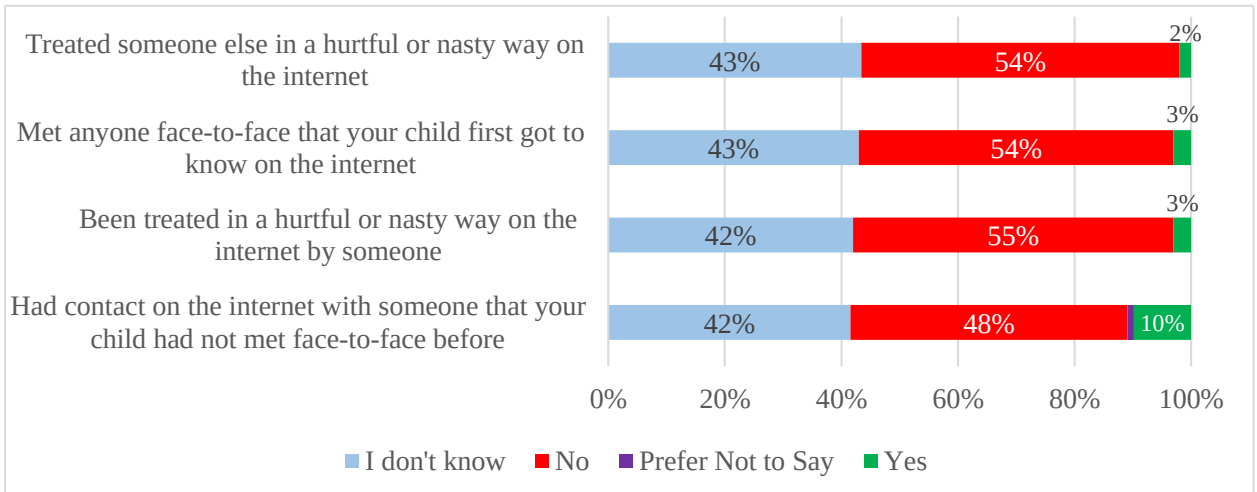


3.9.9 Parents/ guardians' perception of their own children's action on things that bothered them while on the internet

Most of the parents were also not aware of their children's actions online; on treating someone else in a hurtful of nasty way, 43% indicated they did not know whilst 54% indicated that this did not happen. 2% of the parents indicated that this happened.

Regarding meeting someone face-to-face that they had met online, again 43% indicated that they did not know whilst 54% indicated that this had not happened. 3% said this had happened.

Figure 46: Perception of the children's action on the internet by the parents



When asked if their child had ever been subjected to cruel or dangerous treatment online, 42% said they had no idea, while 55% said it had never happened. Regarding their child making online contact with someone they had never met in person, 42% of parents said they had no idea if it had happened, while 48% said it had not. Only 10% of parents stated that their kids had such interactions.

We also wanted to know if the parents were aware of any risks that might have occurred to their kids when they were online over the previous year. As seen in the table below, around 40.1% of parents on average did not know, and just 1.76% of them gave a yes answer.

As far as you are aware, in the past year, have any of these things happened to your child on the internet?				
	I Don't Know	**No**	**Prefer Not to Say**	**Yes**
Somebody used his or her personal information in a way he or she did not like	41.3%	56.7%	0.5%	1.6 %
The devices (e.g., phone, tablet, computer) s/he uses got a virus or spyware	40.3%	56.7%	0.5%	2.5 %
S/he lost money by being cheated on the internet	41.1%	57.2%	0.6%	1.0 %
Somebody used your child's password to access his or her information or to pretend to be him or her	40.3%	57.6%	0.5%	1.6 %
Somebody created a page or image about him or her that was hostile or hurtful	39.4%	59.1%	0.6%	0.9 %
S/he spent too much money on online games or in-app purchases	39.7%	56.6%	0.6%	3.2 %
S/he was asked to make an in-app purchase when playing an online game (e.g., to do well in the game)	40.1%	56.7%	0.8%	2.4 %
Someone found out where your child was because they tracked his/her phone or device	38.9%	59.5%	0.7%	0.9 %

Table 41: Parents' knowledge about potential online risks their children have experienced

On the devices (e.g., phone, tablet, computer), their kids used and got a virus or spyware. 40.3% of the parents indicated that they did not know if this had happened to their kids, 56.7% indicated that this had not happened, whilst only 2.5% indicated that this had happened.

57.6% suggested that nobody had used their child's password to access his or her information or to pretend to be him or her, 40.3% indicated that they did not know if this had happened, only 1.6% indicated that somebody had used their child's password.

56.6% indicated that their children had not spent too much money on online games or in-app purchases, 39.7% indicated that they did not know if this had happened, whilst 3.2% suggested that this had happened. 2.4% of the parents indicated that their children had been asked to make an in-app purchase when playing an online game (e.g., to do well in the game). 56.7% indicated that this did not happen while 40.1% did not know if this had ever happened.

3.9.10 Parents / guardian knowledge of the children's exposure to online risks

In relation to illicit exposure online, parents indicated that they did not know if this had happened, averaging at 46%. In addition, for all illicit exposure just about half the parents engaged could claim that this had not happened, as depicted in the table below.

As far as you are aware, in the past year, have any of these things happened to your child on the internet at least once?				
	I do not Know	**No**	**Prefer Not to Say**	**Yes**
S/he has seen images on the internet that are obviously sexual	46.9%	44.9 %	0.5%	7.7%
S/he has received a sexual message (this could be words, pictures, or videos)	46.3%	47.8 %	0.8%	5.1%
S/he has sent or posted a sexual message (this could be words, pictures or videos about him/herself or someone else)	46.3%	50.6 %	0.8%	2.3%
S/he was sent a message that s/he did not want with advertisements for or links to X-rated websites [use local term for 'X-rated']	46.1%	51.4 %	0.9%	1.6%
S/he opened a message or a link in a message that showed pictures of naked people or of people having sex that s/he did not want	46.1%	49.7 %	0.7%	3.6%
S/he has seen or received a sexual message, image, or video about someone else that s/he did not want	45.9%	48.7 %	0.8%	4.6%
S/he has been asked for sexual information about him/herself (like what his/her body looks like without clothes on or sexual things s/he has done) when s/he did not want to answer such questions	46.8%	51.0 %	0.7%	1.5%
S/he has been asked to talk about sexual acts with someone on the internet when s/he did not want to	46.1%	51.5 %	0.9%	1.5%
S/he has been asked by someone on the internet to do something sexual when s/he did not want to	46.3%	51.6 %	1.0%	1.0%
S/he has been asked on the internet for a photo or video showing her/his private parts [translate as appropriate] when s/he did not want to	46.2%	51.7 %	1.0%	1.0%

Table 42: Parents' knowledge about children online illicit exposure

As seen from the table, 46.9% of parents did not know if their children had seen images on the Internet that were obviously sexual while 44.9% indicated that their kids had not seen these and 7.7% indicated that their kids had seen these images.

For whether children had received a sexual message (this could be words, pictures, or videos), 5.5% of the parents interviewed indicated that they had received such images whilst 46.3% did not know if their kids had received such images and 47.8% indicated that their kids had not received these images.

2.3% of the parents interviewed indicated that their children had sent or posted a sexual message (this could be words, pictures, or videos) about themselves of someone else. 46.3% of the parents did not know if their children had done the same whilst 50.6% indicated that this had not happened.

51.4% of parents engaged indicated that their children had never been sent a message that they did not want with advertisements for or links to X-rated websites, 46.1% did not know if this had happened to their children and 1.6% indicated that it had happened to their kid.

3.6% of the parents indicated that their children had opened a message or a link in a message that showed pictures of naked people or of people having sex that they did not want, 49.7% indicated that this had never happened to their children while 46.1% indicated that they did not know if it had happened to their children.

Additionally, 4.6% of the parents engaged said that their children had seen or received a sexual message, image, or video about someone else that they did not want, 45.9% indicated that they did not know if it had happened to their children whilst 48.7% indicated that it had never happened to their kid.

51% of parents engaged indicated that their children had not been asked for sexual information about themselves (like what his/her body looks like without clothes on or sexual things s/he has done) when they did not want to answer such questions. 46.8% indicated that they did not know if this had happened to their kids whilst 1.5% indicated that it had happened to their children.

46.1% of the parents did not know if their kid had been asked to talk about sexual acts with someone on the Internet when they did not want to. 51.5% indicated that this had never happened to their children whilst 1.5% indicated that it had happened to their children.

1% of the parents said that their children had been asked by someone on the Internet to do something sexual when they did not want to whilst 46.3% indicated that they did not know if this had happened to their kid but 51.6% indicated that it had never happened to their children.

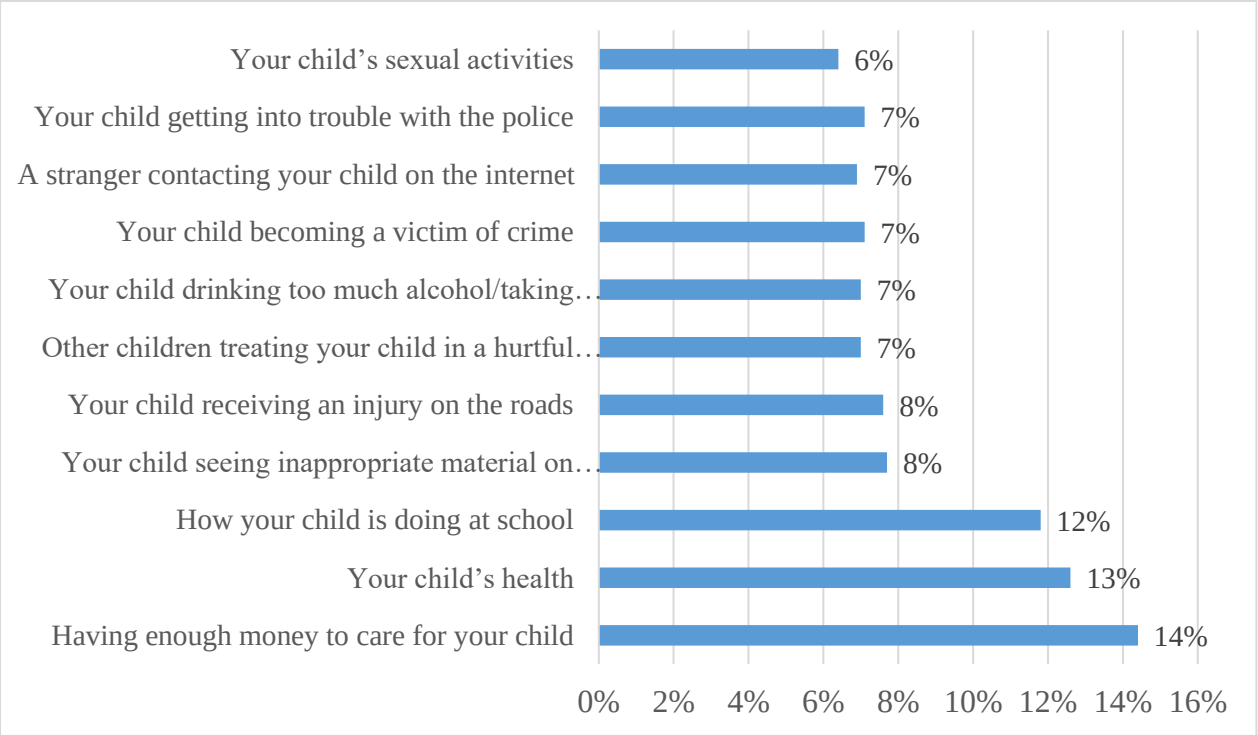
Concerning whether children had been asked on the Internet for a photo or video showing their private parts when they did not want to, 46.2% of the parents indicated that they did not know if this had happened to their children, 51.7% said it had never happened whilst 1% indicated that this had happened to their kid.

3.9.11 Parents' concerns for their children

In relation to the things that stressed parents about their children, the social aspects of life such as having enough money to take care of their children (14.4%), child health (12.6%), children doing well in school (11.8%) ranked high on their wish lists. Only 7.7% of the parents indicated that they were worried about their children seeing inappropriate material on the Internet. An almost equal percentage of the parents (7.1%) reported that they were worried about their children becoming a victim of crime or getting into trouble with the police.

Interestingly, only 4.4% of parents indicated that they worried about their children revealing personal information online.

Figure 47: What parents worry about a lot?

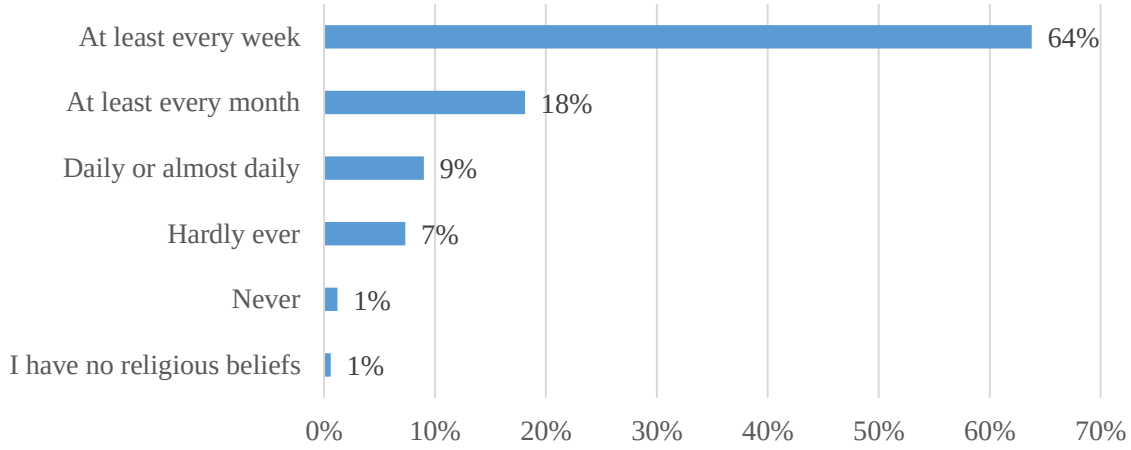


In order to understand the parents/guardians' psyche, the survey asked if they attended a place of worship.

As can be seen in the figure below, majority of the respondents, 64%, indicated that they attended a place of worship at least every week, 18% indicated that they attended at least every month whilst 9% indicated that they attended a place of worship at least daily or almost daily. Only 7% of the parents indicated they hardly ever go to a place of worship and 1% said they never attend a place of worship and 1% indicated they had no religious beliefs.

Generally, the population engaged had a high moral fiber evidenced by a strong religious orientation. Considering this reality, it can be concluded that they would not deliberately expose their children to harm through online interfacing.

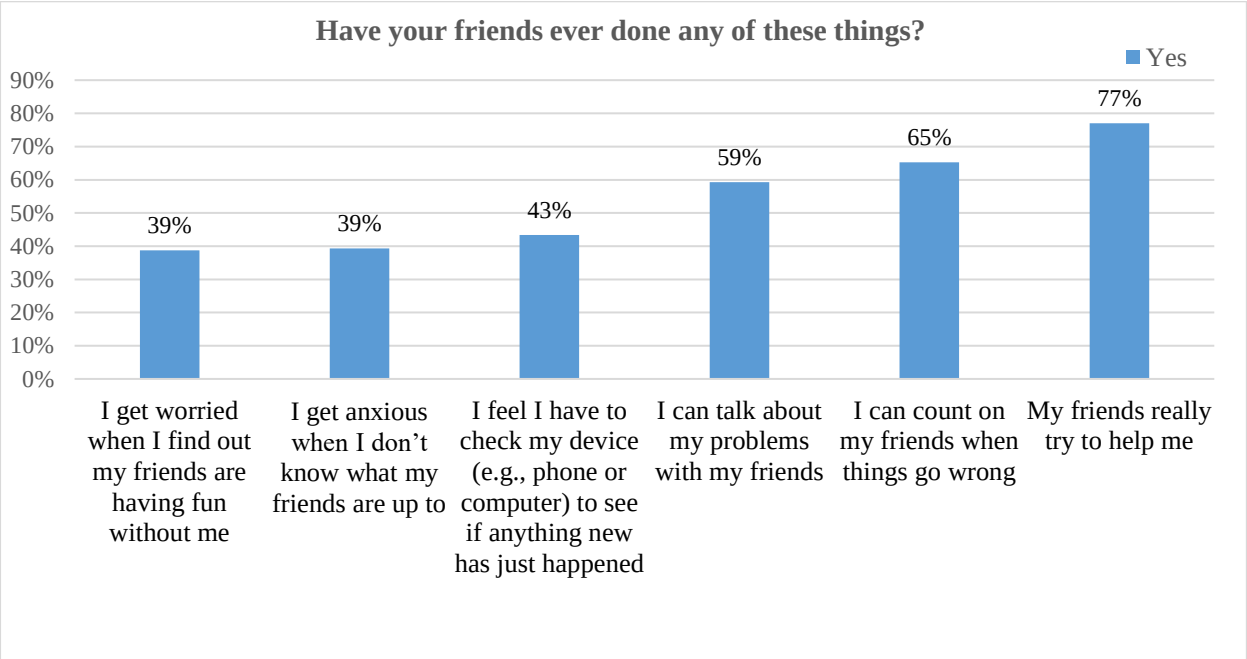
Figure 48: Attending place of worship



3.10 Peer effect in the use of internet among the children

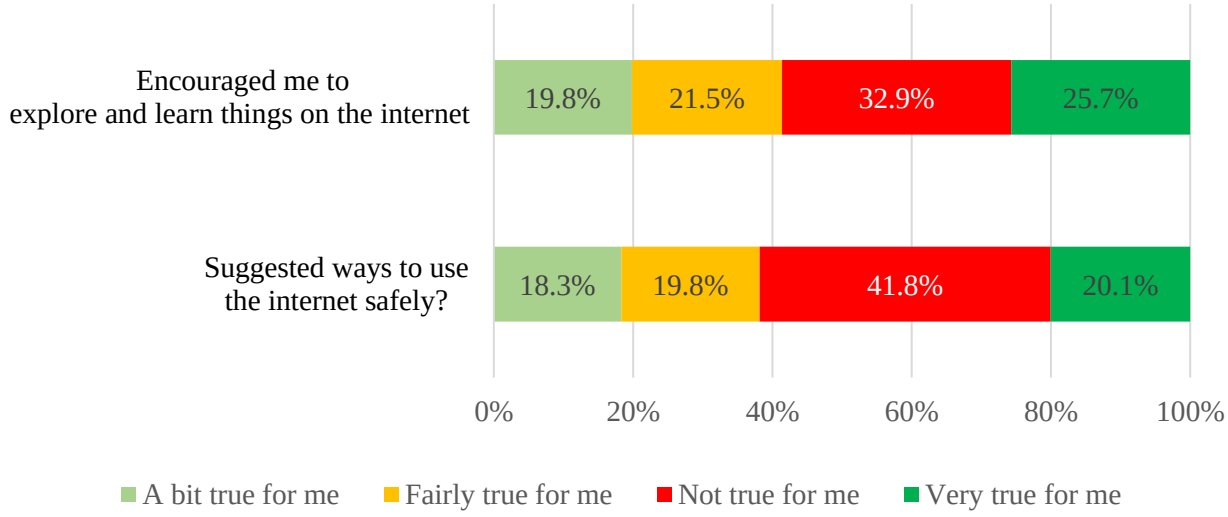
We explored the effect of the children's peers as regards their Internet use. As depicted in the figure below, nearly 4 in every 5 children (77%) felt that their friends really tried to help them. Thus, there appears to be a significant role played by peers regarding online activities and usage.

Figure 49: Friends' input in children's Internet use



In terms of children's Internet use, as can be seen in Figure 50 below, there was little support. Their friends were more inclined to encourage them to explore and learn things on the Internet (47.2%, fairly true and very true for me) than suggesting ways to use the Internet safely (39.9%, fairly true and very true for me).

Figure 50: Friends' input in children's internet use



4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

The study highlights not only the digital experiences of Ugandan children ages 6 to 17 but also their parents' and guardians' Internet usage and expectations of what the kids are doing online.

4.2 Recommendations

Considering the study's findings, we suggest that: -

1) Over the next five (5) years, the Uganda Communications Commission (UCC) should emphasize parental control and kid internet safety measures through the Annual Communications Consumer Parliament and all its outreach consumer awareness campaigns.

2) The Ministry of ICT and National Guidance (MOICT), through the National ICT Initiatives Support Program (NIISP) should promote local Innovative Ideas that enable parental control for Android apps that offer age- and category-based filters to prevent kids from accessing unsuitable online material.

3) UCC and interested parties should look for financing opportunities that support or encourage children's safe Internet usage. For instance, Google established a $1 million (approximately UGX 3.7 billion) pan-African Google.org fund to support creative ideas around privacy, trust, and safety for families online across sub-Saharan Africa on February 9, 2020, in commemoration of Safer Internet Day.

4) To combat child pornography, UCC through (Computer Emergency Response Team) CERT shall collaborate with interested national and international agencies to continuously monitor, restrict or block the distribution of such content, and track down the sources or origins for prosecution.

5) There needs to be a concerted effort to launch widespread child internet protection awareness efforts that also offer channels for recourse if one comes across cybercrime or online threats.

6) The parents/guardians should consider doing the following to minimize online risks.

7) To reduce or minimise the risks associated with using the internet, parents and guardians should consider doing the following: -

    a) Pick interest and keep an eye on what their child(ren) are doing online, including, but not limited to, the websites they visit, the social media platforms they use, and, whenever feasible, who they are interacting with and whether they know them in real life.

b) While using the Internet at home, keep kids in view.
c) Monitor your child's online conversations, for instance, by frequently looking at their browser history.
d) Be on the lookout for possible indicators of child online abuse, such as attempts to hide online activity, changes in how Internet-enabled devices are used, withdrawn behavior, irrational outbursts, anxiety, and sadness.
e) Always "friend" or "follow" your kids on social media sites like YouTube, WhatsApp, Facebook, Twitter, Instagram, and other well-known platforms.
f) Talk to kids about online safety and the value of taking control of their personal data when using the internet.
g) Consider installing parental restrictions on the kids' Internet-accessing gadgets, particularly portable ones.
h) For instance, parental control option is incorporated into browsers like Google, Firefox, Duck, and Safari; make sure this is enabled.
i) Place time restrictions on how much time kids can spend online each day.
j) Ask your Internet Service Providers (ISP) for free parental control software, which can assist parents in keeping their kids safe online.
k) Think about participating in your kids' online activities so they can learn how to supervise them and develop responsible online behavior.
l) Promote open communication and dialogues with the kids so they feel comfortable asking for help.
m) Ensure that they establish Internet usage guidelines and talk about them with their kids so that they are aware of the limits of what they are permitted to do on Internet-enabled gadgets.
n) Explain to kids how to use each game's and app's blocking and reporting features so they can stop bullies and strangers from contacting them.
o) Show kids how to report issues and/or get assistance if they are exposed to online risks.
p) Continuously remind kids not to post private information, pictures, or videos online or to interact with strangers they have never met in person.

8) To better help Ugandans who, use the internet, especially our youngsters, there is a need to publicize and make Ugandans aware of the support systems available in case someone had an issue online.

9) Internet Service Providers (ISP) should be mandated to provide additional free parental control tools, which block or restrict access to certain types of content, as well as limiting the amount of time spent on devices.

10) There is need to investigate how the teachers in Ugandan schools are coping with ensuring that the Ugandan children remain not only safe as they use the Internet, but also the extent to which the teachers themselves are aware of effective ways of how to safeguard themselves from Internet risks.

11) Children should be actively encouraged to report any requests for sexual activity or other improper behavior they receive while using the Internet to a parent, guardian, or other trusted adult.

12) Ugandans must always be urged to report immediately any suspicion of child sexual exploitation or online enticement by using the toll-free, available 24/7.

13) Plans and projects should be made specifically to improve child protection and the technology capability of law enforcement organizations to deal with child online abuse.

14) Starting in primary school, Ugandan children should be taught digital skills, especially online safety.

15) There is need to develop and undertake a multi-stakeholder coordinated strategy for awareness raising and education on child online safety for different actors. This should engage with and empower the parents / guardians, teachers, and any other relevant authorities with whom young people regularly interact.