



Utilizing Information and Communication Technology to Prevent Violence Against Children in Uganda

Dr. Richard Wotti Wamimbi ; Centres for Child Protection and Learning (CPL), Kampala, Uganda

June 2018

ACKNOWLEDGMENTS

The author is extremely grateful to all the individuals and agencies for generously sharing their experiences and technical insights to inform this study. Special thanks go to the leadership and staff from the AfriChild Centre at Makerere University and African Network for the Prevention and Protection against Child Abuse and Neglect (ANPPCAN) Uganda Chapter, who were the collaborating partners, for their technical and financial support towards this study. I am grateful to all the respondents, both adults and children, from Kampala, Wakiso, Mbale, Ibanda and Kayunga, for generously sharing their wealth of experiences, knowledge and exploring the complexities of ICT and violence against children to inform the development of this report. I acknowledge the Research Advisory Technical Team for their invaluable guidance and insights towards the successful completion of this research.

Dr. Richard Wamimbi Wotti - Principle Investigator

Research Advisory Technical Team

Robinson Nsamba Lyazi - Ministry of Education

Stella Ogwang - Ministry of Gender, Labour and Social Development

Deo Yiga - Impact Innovation and Development Centre

Agnes Wasikye - National Coordinator Child Protection Working Group,

Joyce Wanican - AfriChild Centre Makerere University

African Network for the Prevention and Protection against Child Abuse and Neglect (ANPPCAN) Uganda Chapter

Silas Ngabirano- Ministry of Information Communication and Technology

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ACRONYMS

ANPPCAN	African Network for the Prevention and Protection Against Child Abuse and Neglect
CAQDAS	Computer-Assisted Qualitative Data Analysis Software
CHW	Community Health Workers
CPP	Child Protection Partnership
COR	Circle Of Rights
eHealth	Electronic Health
EMIS	Education Management Information System
FGD(s)	Focus Group Discussion(s)
HIV/AIDS	Human Immune Virus/ Acquired Immune Deficiency Syndrome
ICT	Information Communication Technology
IICRD	International Institute for Child Rights and Development
INTERPOL	International Police
KII(s)	Key Informant Interview(s)
mHealth	Mobile Health
OVC	Orphans and Vulnerable Children
PI	Principle Investigator
SMS	Short Message Service
UCC	Uganda Communications Commission
UNDP	United Nations Development Program
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children’s Emergency Fund
VAC	Violence Against Children



EXECUTIVE SUMMARY

In the recent years, Uganda has experienced a rapid evolution in social media, increase in the use of smart phones and other forms of information and communications technology (ICT). Currently, the country has over 19.5 million people, out of a population of 35 million, who are subscribers to one or two telecom companies and over 4.4 million people with access to the Internet and these figures are growing at a very fast rate each year (Uganda Communications Commission, 2014). The influx of mobile phones and Internet connections is not limited to urban areas but has greatly penetrated the rural areas, where most of the children live.

Increasingly, many children of school-going age have access to telephone handsets and the Internet by either subscribing directly or through their parents or caregivers. Today, a pupil or student with a mobile device has instant access to millions of articles, books, essays, academic research, instructions and lectures on every imaginable subject. There is a growing number of schools with computer laboratories where children can learn or access information through the Internet. This not only expands children's learning opportunities but also puts the children at great exposure to the risks associated with these materials through social networks and applications such as Whatsapp, Face book, Viber, SMS, emails, video games and web-searching. The risks arise because there are no restrictions regarding access and utilization of ICT by children.

ICT-enabled child sexual violence and exploitation has gone beyond family and school borders and has become a larger concern that must not only be dealt with by schools and families but also by parents, policy makers and professionals working in the media arena and the community at large. Moreover, there is not much research in Uganda about the effects of ICT-enabled sexual abuse exploitation and other forms of violence on school performance, retention and overall child wellbeing or on how ICT is being utilized to achieve more in preventing violence against children in schools.

The general research purpose was understanding the utilization of ICT in preventing violence against children in and around schools and developing a model that can be applied by agencies to prevent violence against children. This research adopted a descriptive cross-sectional study design that involved quantitative and qualitative methods of data collection; to allow for diversity of views, triangulation, integration of knowledge and in-depth understanding of the ICT phenomenon in preventing and responding to violence against children in and around schools. Quantitative data was collected from 2,232 children aged 12 to 18 years, using semi-structured questionnaires; while qualitative data was collected from 175 parents/caregivers, teachers and other child protection duty bearers, using Key Informant Interviews and Focus Group Discussions.

This study was undertaken in four regions of Uganda, in six districts located in an urban or peri-urban/rural setting covering Kampala, Wakiso, Mbale, Lira, Kayunga and Ibanda districts, where children and their families are exposed and have access to mobile phones and computers. The study population included children drawn from 24 purposefully sampled schools, i.e. four from each district.

Findings

From the study, it was evident that children have access to ICT devices. While ownership was low (39.5% were found to own mobile phones, 8% owned television sets and 7% laptop computers), access was high as over 75% had access to at least one ICT device. The most commonly accessed ICT device was the mobile phone, accessed by 78% of children, followed by radio (74%), television (68%) and laptop computers (29%). Other owned or accessed devices included computers, cameras, tablets/iPads and video game sets. More children in the urban setting were found to own mobile phones and laptop computers, while more children from the rural setting owned television sets.

Among the ICT devices that were most used daily was television, reported at 52% and 36% for children in urban and rural settings respectively, followed by radio, which was more commonly used daily by children in rural setting (47%) as compared to those in urban settings (40%). Computer and iPads/tablets were used much less regularly; and more than half of the children in both rural and urban settings reported non-use of these devices. Among the households in which the children who participated in the study live, phones were the most commonly owned or accessed ICT devices reported at 83%, followed by radio at 80% and television sets at 70%. Devices such as computers, cameras, video games, iPads/tablets and desktops were minimally owned or accessed, especially for households in rural areas. Enquiry over whether children needed ICT devices, saw almost three quarters (74%) of the respondents affirming the need; with urban children having a higher percentage (77%) compared to children in rural settings (70%).

Children were found to share a wide spectrum of information with a variety of people, including parents, friends, relatives, siblings and teachers, religious leaders, social groups, police and community workers. Seven percent (7%) reported communicating with unknown people whom they meet online. The information encompassed educative, informative, inspirational, marketing and entertainment and even abusive forms. Children were more likely to share entertainment and abusive materials with their friends than with their parents. However, the use of ICT for sharing abusive material was much lower than for constructive content (educative, informative, inspirational, etc.).

Besides making calls, ICT devices that could access the Internet were found to be used mostly to access social platforms. Facebook as a social platform registered the highest percentage of access (42%), followed by online games (27%) and Whatsapp (21%). Other platforms accessed included YouTube, Twitter, Instagram and Skype. Indeed, ICT has had a significant role in driving and mitigating behaviour that contributes to violence against children as there were both benefits and risks associated with using the technologies.

Results show that ICT was being utilised to benefit children, as 81% of the respondents reported that the devices they used met various needs. The benefits included communication with other people, which registered the highest response (72%), increasing education opportunities (50%), information exchange (38%), entertainment (36%), processing and storing information (17%); increasing innovations and opportunities (12%), linking for emergency services (11%), financial services (9%) and marketing services (4%). Children were found to report inappropriate messages that they receive through ICT.

Among the risks reported to be faced by children while accessing, utilizing and consuming ICT, the most listed ones consisted of exposure to online child pornography (66%) and

talking to and meeting strangers (45%), watching/listening to violent content (25%), betting (22%), trafficking (14%), coordinating theft or robbery (14%), cyber bullying (12%) and exposure to extremist content (10%). The percentage of children in urban settings who reported watching and listening to violent or abusive material was twice (35%) that of children in rural settings (16%). Children in urban areas were, thus more exposed to the risks associated with ICT use.

Per the means of abuse through ICT, Facebook messages ranked the highest (54%) followed by Whatsapp messages (42%), voice calls (32%), SMS (19%), YouTube (14%) and games (11%). More female children reported abuse through Facebook and Whatsapp, while more male children reported abuse through SMS and YouTube. Findings from the survey show that 74% of the child respondents were aware that ICT-enabled child abuse exists and thought that children could be abused through ICT.

Children participate in perpetuating violence through ICT. 40% of the children reported children abusing fellow children through ICT. Other perpetrators included members of social networks or groups (19%), community workers (14%), relatives (11%), parents (9%), teachers (8%), police (7%), siblings (6%) and religious leaders (3%). Among online abusers, unknown people were reported by 60% of children with those in the urban setting having a significantly higher percentage (68%) than children in rural settings (53%).

Among categories of children that were most exposed to ICT-enabled violence, girls were the most mentioned at 49% followed by boys (22%), children from very poor families (12%), orphans (9%) and children with disabilities (4%). Girls were listed by 53% of the female respondents as compared to 44% of the male respondents. This could be probably because, being the more vulnerable, girls understand the experience better than the boys. The case was the same for primary and secondary school mentions; with more secondary school respondents (53%) citing girls being the more vulnerable category than boys (45%).

A specific investigation on the extent to which children were exposed to sexual violence while using ICT showed that the risk was acknowledged by a total of 81% of the children interviewed. A slightly higher percentage of children in rural settings (82%) reported being exposed to sexual abuse or violence while using ICT devices as compared to children in urban settings (80%). A gender-based analysis showed a similar difference whereby the percentage of females who reported sexual abuse or violence was only slightly higher (81%) as compared to that of males (80%). This indicates that children from both rural and urban areas as well both boys and girls acknowledge risks of abuse using ICT.

Results from the study show that most of the children (62%) confided in their parents if they received inappropriate messages through ICT devices, followed by police (49%), friends (30%), teachers (25%), ICT technicians (14%), neighbours (13) and CBO/NGO/religious leaders (8%), among others. The percentage of children in urban settings confiding in parents and police was lower (59% and 45% respectively) than that of children in rural settings (64% and 53% respectively). The case was the same for approaching teachers but the opposite for peers and ICT technicians as more children in urban settings (32% and 19% respectively) reported approaching peers and ICT technicians than children in rural settings.

Awareness by children, of any policy or law governing ICT in Uganda was found to be generally low. Only 40% of those who participated in the study were aware of such policies;

with 38% of respondents in rural areas being aware in contrast to 42% of respondents in urban areas.

Enquiry over how ICT devices was promoting values and influencing children's behaviour, saw a third of the children (66%) reporting that ICT devices had influenced children's behaviour in both negative and positive ways; with more urban children (69%) reporting the influence than rural children (63%).

Positively, children were observed to grow in their learning and development capacity as they could use ICT for learning, facilitating talent and career development, quickening communication and generating income. They also participated in self-protection by reporting inappropriate content or messages. The negative influence was equally substantial as children were said to spend much time using ICT devices and evade home and school responsibilities; copy inappropriate practices through ICT, which translated into disrespecting parents, stealing, trying out pornographic acts, seeking wrong fame, dropping out of school and physical violence. These observations were mostly made by the adult respondents.

The study examined possible constraints to ICT utilisation to prevent violence against children. Nearly 90% of the children who participated in the study reported experiencing challenges. Lack of steady and reliable access to electric power was reported as the major challenge faced by 54% of children in rural areas compared to 46% of children in urban areas. This was followed by lack of adult support as reported by 44% of the children; scoring higher for children in urban areas (52%) than for children in rural areas (37%). The other challenges included high cost of the Internet (48% for urban and 33% for rural), lack of reliable access to the Internet (42% for urban and 26% for rural) and cost of repair/replacement of ICT devices (36% for urban and 29% for rural).

To strengthen positive value enhancement among children, respondents listed messages that could be shared through ICT, which included moral and cultural; religious, educational, financial, health, inspirational and safety messages. The messages listed as unfit to be shared through ICT devices included those that are verbally and emotionally abusive; pornographic and immoral; have bad language; promote physical violence (wrestling, action-packed movies, etc.); and promote culturally immodest dressing.

Policy-level recommendations

a) Undertake nationwide dissemination of policies on ICT

Popularize the ICT policy and Computer Use and Anti-Pornography Act in both schools and communities: In this study, most respondents did not know about the ICT policies. This calls for the Government to create awareness on the ICT policy and the Computer Use and Anti-Pornography Act and ICT utilization in schools, communities and child-focused organisations. This will bring awareness, among the population, of both the good and the potential dangers of ICT utilisation and how to act in accordance. Engage civil society/NGOs/CBOs/FBOs in the sensitization and education programs, given that they operate at grass root levels and have much influence over communities.

b) Policy implementation and law enforcement

Guide players/actors in the ICT industry to regulate content: The Uganda Communications Commission should enforce guidelines on content channelled and transmitted by the various factors, including telecommunications companies, radio and television agencies, and Internet cafes, among others.

The Government should liaise with the online industry to create a safer and age-appropriate online environment (appropriate content, contact and conduct): Online safety is a community challenge and an opportunity for industry, government and civil society to work together to establish safety principles and practices. Industry can offer an array of technical approaches, tools and services for parents and children. These can include offering tools to develop new age-verification systems or to place restrictions on children's consumption of content and services, or to restrict the people with whom children might have contact or the times at which they may go online.

Build capacities of child protection actors in Government: Equip formal (e.g. law enforcement, teachers, social workers, community development departments etc) and non formal (families, religious, traditional leaders) actors with skills and competencies to better address ICT enabled child sexual abuse and exploitation. Government should provide leadership and commitment in building capacities of child protection actors and law enforcement officers in various ministries, departments and agencies to aid in preventing and responding to ICT-enabled VAC.

Programming recommendations

a) Recognising and involving children as own agency in preventing and responding to ict-enabled child abuse and exploitation

An effective child protection system strengthens the protective environment around children and, as well, strengthens the children themselves, to ensure their wellbeing and to fulfill their rights to protection from abuse, neglect, exploitation and other forms of violence. In the case of ICT, this calls for having children participate in both preventing and responding to ICT-related VAC.

Intentionally and systematically guide children regarding the benefits and dangers of ICT: Parents and teachers can guide children about both the advantages and potential dangers of ICT, while creating a friendly environment for children to confide in them about their experiences of utilizing the devices. Within schools, children could be provided with opportunities to hold open discussions concerning ICT. This could be achieved through school debates, clubs and fellowships that would aid in raising awareness and alerting the children on ICT-related abuse and how to respond to it.

Establish peer support ICT groups for children who are especially vulnerable to ICT-enabled sexual abuse: Although all children were found to be exposed to risks related to ICT utilisation, girls were the most vulnerable. For such categories, it is necessary to establish peer support ICT groups, which will not only create mutual accountability among the children regarding their use of ICT, but also quicken the reporting of abuse encountered while using these technologies.

Conduct value-based life skills building among children to strengthen their resilience against ICT-enabled violence against them. This could be carried out in existing structures within schools such as faith fellowships, clubs and debates.

b) Strengthen reporting and referral mechanisms on ict-enabled sexual abuse exploitation and other forms of violence

Children need to be trained and encouraged to actively participate in identification and reporting of all forms of child abuse and exploitation, including ICT-enabled abuse. This will help them to respond to such abuse and contribute to its reduction and/or elimination.

Popularize and expand the national child helpline (SAUTI) in all schools and communities in the country: The child helpline has been a breather in helping to address VAC. However, its popularity in schools and communities (both urban and rural) is still low. Government should, thus, popularize and expand the help line to respond to all forms of abuse, including ICT-related VAC in homes, schools and communities.

Support and connect vulnerable children to protective mechanisms and services that prevent and address ICT enabled child sexual abuse , exploitation and other forms of violence.

c) Address poverty and unemployment among young people

Create employment opportunities for out-of-school young people, to help them to meaningfully focus their energies on productive engagements that fetch income. It will also promote use of ICT in income generation and utilize ICT for positive economic benefits.

d) Recovery for the offended children

Facilitate rehabilitation of abused children: The Government should liaise with other relevant actors to provide recovery and rehabilitation for children who get abused through ICT.

e) Strengthen parent, caregiver and school capacity

Educate parents about ICT and its benefits and risks: Parents hold the primary responsibility for their children's welfare. As such, they are in a better position to decide what is appropriate for their children and should be aware of all risks to better protect their children and empower them to take action. However, as is with other developing countries, Ugandan parents sometimes have less understanding and knowledge of the Internet and mobile devices than children. In this case, they could be trained in ICT basics (e.g. for phone, Internet and television), how to avoid spam and manage privacy settings, about actions to take if a child is experiencing online bullying or grooming, and how to guide children of different age groups towards safer, more responsible and appropriate online and mobile phone experiences.

Parental supervision and control of ICT gadgets: Parents should regulated use and access to ICT devices while creating a friendly atmosphere and environment for children to confide in them about utilization of their phones. They should set passwords and parental control keys on ICT devices (phones, television sets, computers and others) to block off inappropriate content when no adult is around to supervise what children watch and listen to.**Modeling a positive image for the children:** Similarly, parents need to be role models to the children by strengthening privacy and, thus, avoid being seen consuming material that is inappropriate for children. This will help children to emulate good practices from the adults that they look to.

Equip children with value based assets and positive social norms: Parents should equip children with value based assets and positive social norms so as to enable children to make

positive decisions on ICT use. Children will therefore utilize ICT devices for sharing and transmitting values based and positive social norm messages

Support teachers with skills to understand and curb ICT-enabled sexual abuse and exploitation: Most teachers indicated inadequate knowledge of how they could help a child who has been abused or is being abused through ICT. Equipping them with appropriate skills for both preventing and responding to all forms of abuse, including ICT-enabled violence, could be useful.

Build evidence, research and learning on ICT enabled violence

Systematically conducting evidence based research and learning to measure the effectiveness of interventions designed to prevent and protect children from ICT sexual abuse and exploitation in communities and schools to guide programme design and policy efforts

Conclusion

The availability of and access to ICT by children presents many opportunities to utilize these technologies to both prevent and respond to ICT-based violence against children; and to promote positive values and behaviour among children. A coordinated multi-sectoral response is necessary to bridge the efforts of various formal and non-formal actors, players and stakeholders. These may primarily include government bodies, civil society, development partners, ICT industry, educationalists, parents/other caregivers and children.



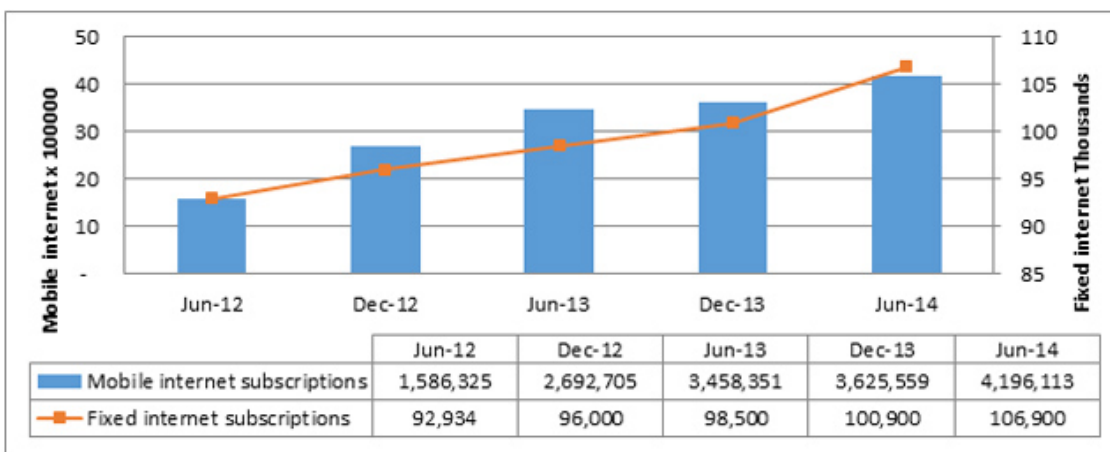
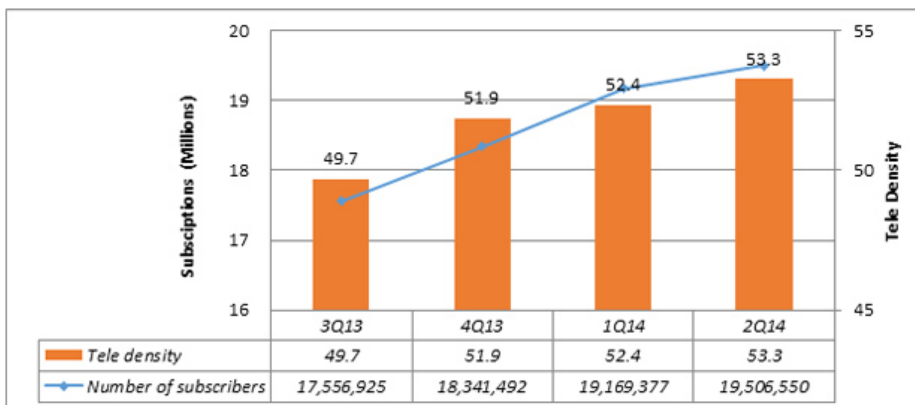
CHAPTER ONE: INTRODUCTION

1.0 Background to the Study

Crucially, several changes globally including the penetration of ICT have had impacts on the children and young people in so many ways. Responding to these global changes presents both challenges and opportunities to child protection—a relatively youthful social service sector compared with say health or education. The challenge of devising effective protection services is especially acute where new kinds of problems for children and youth arise as a result of evolving ICT. Traditional approaches to protecting children are insufficient to meet the complex issues they now face, and inter-sectoral, child-centred strategies are needed (Philip, et al., 2012, pg576). Recognizing the major benefits that the Internet and associated technologies can bring, the huge potential to transform lives and the way they have become integral to modern society and are now an intrinsic part of young people’s social landscape (UNICEF 2011).

In recent years, Uganda has experienced a rapid evolution in the social media industry/field, increase in the use of smart phones and other forms of information and communications technology (ICT). Currently, the country has over 19.5 million people, out of a population of 35 million, who are subscribers to one or two telecom companies and over 4.4 million people with access to the Internet. Moreover, the number of subscribers is growing at a very fast rate each year (Uganda Communications Commission, 2014). See figures below.

Figure 1 Uganda Telecom Subscribers & Penetration Data, June 2014



Source: Uganda Communication Commission, 2014

The influx of mobile phones and Internet connections is not limited to urban areas but has greatly penetrated the rural areas, where most of the children live. Increasingly, many children of school-going age have access to telephone handsets and Internet by either subscribing directly or through their parents and/or other caregivers and all these possess potential risks to the children. These risks arise because there are no restrictions regarding access and utilization of these devices by the children. Amidst this, most stakeholders including children, parents, schools, local government duty bearers and law enforcement units have little or no knowledge at all in preventing and responding to ICT-enabled child sexual abuse, exploitation and other forms of violence. Although Uganda has established a toll-free Call Centre (SAUTI) to report cases of violence against children, ICT-enabled sexual abuse and exploitation is complex to detect and report.

ICT-enabled child sexual violence and exploitation has gone beyond family and school borders and become a larger concern that must not only be dealt with by schools and families but also by parents, policy makers and professionals working in the media arena and the community at large. Sadly, though, there is not much research in Uganda about the effects of ICT-enabled sexual abuse, exploitation and other forms of violence on school performance, retention and overall child wellbeing or on how ICT is being utilized to achieve more in preventing violence against children in schools.

It was necessary, therefore, to understand (1) children's awareness of ICT-enabled child sexual violence and exploitation, (2) when and how ICT-enabled child sexual violence and exploitation starts (3) who employs ICT-enabled child sexual violence (4) how and from whom students get help when they face ICT-enabled violence (5) who are most exposed to ICT violence at school and (6) possible practical solutions for preventing ICT-enabled sexual VAC. The general research purpose was understanding the utilization of ICT in preventing violence against children in and around schools and developing a model that can be applied by agencies to prevent violence against children.

1.2 Objectives of the study

1.2.1. General Objective

The general research purpose was understanding the utilization of ICT in preventing violence against children in and around schools and developing a model that can be applied by agencies to prevent violence against children.

1.2.2. Specific Objectives:

- a) Establish the role of ICT in driving, sustaining and mitigating behaviour that contributes to violence against children in and around schools
- b) Examine the benefits of ICT use to prevent violence against children specifically for knowledge generation and transfer, capabilities enhancement and social enabler
- c) Establish when and how ICT-enabled child sexual violence and exploitation starts, is maintained and perpetuated in and around schools
- d) Examine the inter-related constraints to ICT utilization to prevent violence against specifically socio-cultural, infrastructural, economic and technological constraints.

- e) Find out how ICT (telephone, SMS, Whatsapp, etc.) is promoting and influencing values that can prevent violence against children
- f) Suggest strategies and actions that can be adopted by formal (law enforcement, teachers, and social workers) and non-formal (children, families, religious, traditional leaders) actors to better address ICT-enabled child sexual abuse and exploitation.

1.3 Research Questions

- a) What is the role of ICT in driving, sustaining and mitigating behaviour that contributes to violence against children in and around schools?
- b) What are the benefits of ICT use in preventing violence against children specifically for knowledge generation and transfer, capabilities enhancement and social enabler?
- c) What are the risk factors that promote and perpetuate ICT-enabled violence against children in and around schools?
- d) What are the inter-related constraints to ICT utilization to prevent violence against specifically socio-cultural, infrastructural, economic and technological?
- e) How is ICT promoting and influencing values and behaviours that can prevent violence against children?
- f) What are the possible strategies and actions that can be adopted by formal (law enforcement, teachers, and social-workers) and non-formal (children, families, religious, traditional leaders) actors to better address ICT-enabled child sexual abuse and exploitation?



CHAPTER TWO: METHODOLOGY

This research adapted a descriptive cross-sectional study design that involved quantitative and qualitative methods of data collection. Adapting qualitative and Quantitative data collection methodology allowed for diversity of views, triangulation, integration of knowledge and in-depth understanding of the ICT phenomenon in preventing and responding to violence against children in and around schools. Quantitative Data was collected using semi-structured questionnaires administered by qualified research assistants in both qualitative and quantitative research methodologies from 2,232 children aged 12 to 18 years. Qualitative data was collected using Key Informant Interviews (KIs) from 15 service providers and other stakeholder engaged in ICT related work. Focus Group Discussions (FGDs) were conducted among 80 parents /caregivers from communities around the selected schools. A total of 80 teachers from the selected schools participated in the study.

2.1. Study population and sampling of the participants

This study was undertaken in an urban or peri-urban setting covering Kampala, Wakiso, Mbale, Lira, Kayunga and Ibanda districts, where children and their families are exposed and have access to mobile phones and computers. A total of 2,232 children participated in the survey across the four regions of Uganda. The districts were selected to provide an in-depth understanding and analysis of the ICT problem. The study population included children drawn from 24 purposefully sampled schools: four in Wakiso district and four in Kampala Capital City Authority, where African Network for the Prevention and Protection Against Child Abuse and Neglect (ANPPCAN) is operational; and 16 from the four districts of Lira, Mbale, Kayunga and Ibanda. Another sample of participants included duty bearers and actors engaged in child protection work from both the formal and non-formal institutions. These included law enforcement officers, e.g. police, teachers, school management committees, parents, community workers, faith leaders, ICT service providers, representatives from non-government organizations and traditional leaders.

2.1.1. School selection

To select the schools, a predetermined set of criteria was generated, based on the founding bodies of the schools as indicated in the Education Management Information System (EMIS). These included Catholic, Anglican, Islamic, private (entrepreneur), military and government school-founding bodies. This was because founding bodies have different philosophies that guide practices in the respective schools. Therefore, representing the key different founding bodies provided an opportunity to learn from these differing perspectives and practices. All schools in the six districts were randomized based on EMIS number. Schools were then selected by going down the randomized list until the twenty schools were obtained. Through this process, twenty-four schools were selected for the study, from the six districts.

2.1.2. Sampling of pupils

The study population included male and female pupils ages 12 to 18 years. This age group

was selected because it is the age when most forms of abuse happen and most of the children in this age group often have access to ICT. The pupil sample was selected only from those permitted by parents to participate in the study and included an equal number of girls and boys. Participants were then divided into the following groups by age: 12–14 to be selected from P5–P7 and 15–18 to be selected from secondary schools.

An ANPPCAN officer together with the research team visited each of the sampled schools to brief the head teachers about the study, and also request them to invite all the parents/care givers for a briefing meeting on an agreed date, where all guardians were be asked to give permission for their children to participate in the study. To ensure that orphans and disabled children were included in the study, head teachers were encouraged to take special care in mobilizing the guardians of orphans and disabled children in the school to attend the briefing. Members of the research team were available to meet with parents individually to further answer questions one-to-one.

2.1.3. Sampling of teachers to participate in the FGD

During the briefing day (which was scheduled a day before data collection), the research team, with the assistance of the head teacher, generated a list of all male and female teachers (P5-P7 and S1-S6) and present for each of the eight schools. After ascertaining the number of teachers present, a sampling interval was computed by dividing the total number of teachers present with the number of participants required by gender. The sampling interval was rounded off to the nearest integer. A random start number was selected between one and the sampling interval using the table of random numbers. Using the list of teachers, the teacher whose name fell on the random start number was selected until the required number of teachers was reached. Overall, a total of 80 teachers, 10 from each of the eight schools, were randomly selected to participate in FGDs. A head teacher in each school was invited to participate in an individual interview. There was usually one head teacher per school, so this gave a total of eight head teachers to be interviewed.

2.2. Research methods

The study adapted a diversity of quantitative and qualitative participatory data collection methods for children and adults that included:

- Semi structured interviews for children between the ages of 12 and 18 years, to learn more about the inward and outward consciousness of children based on memory, image and meaning in utilizing ICT to prevent and responding to violence against children
- Key informant interviews to learn more from the stakeholders e.g. law enforcement officers, teachers and ICT service providers, to understand the existing ICT-related approaches being implemented by their agencies
- FGDs with children and adults to obtain diversity of perspectives to explore issues of risk and protection related to ICT, identify the key networks, agencies and individuals, where support can be obtained in addressing ICT-related violence; understand the root causes, effects and solutions to the problem, identify where children can get protection and support when confronted with ICT enabled sexual violence and exploitation.

2.3. Field testing of the instruments

Before fieldwork, the tools were field-tested in one school with a handful of pupils, parents

and other intended research participants. The consenting and assenting procedures were followed for the field testing. The field testing allowed the Principle Investigator (PI) and Co-Investigators to determine what efficiencies can be introduced and what improvements should be made to the protocol, assessment tools and consent and assent forms. Following the testing of these tools, the PI made necessary adjustments, which were tracked and highlighted in yellow. These were shared with IRB for the final check and approval. Only after this step, could the data collection commence.

2.4. Data Analysis

2.4.1. Quantitative data

Stata version 3 was used to produce frequency tables and run all the analysis essential to answering the study objectives. Cross tabulations by all the major socio-economic variables were made to make comparison. For questions that were elicit open-ended responses, a coding frame was developed to code the responses prior to entry.

2.4.2. Qualitative data

Data from the interviews and qualitative was transcribed to start to identify the emerging themes. The NVivo- Computer-Assisted Qualitative Data Analysis Software (CAQDAS) was utilized to analyse the data besides manual analysis, to help manage, organize and develop coherence across the research data. Data cleaning and verification were conducted to allow for accuracy and reliability. To determine the natural “meaning units” as expressed by the respondents, the researcher read and re-read the transcripts and then identified areas of the interviews and other tools that highlight the participant experience in relation to the phenomenon of ICT influence and VAC. Central themes that emerged were created based on each of the research questions. Data was put against each of the questions in a systematic manner and essential descriptive statements made to create meaning. The data was thematically coded based on the differences and similarities within and across the various categories of respondents, based on gender, age, location and the lived experiences. Thereafter, a report of the study was drafted.

2.5. Procedures for enhancing assessment study validity and quality assurance

The lead consultant was accountable for the organization and co-ordination of the study ensuring the delivery of emerging findings, conclusions and recommendations, as well as a comprehensive final report which meets the study standards, within the contracted timeframe/ specifications. AfriChild was accountable for management responsibilities related to contract management, cost control, cash flow and invoice management and further level of internal quality assurance. A research advisory technical team to support the lead consultant throughout the entire study process was constituted.

2.6. Debriefing with the schools and community

A debriefing meeting with the community was essential to validate or correct the findings and increase ownership over the process and its results. The debriefing process included a presentation of the results and discussion on the future steps for each of the communities where the study was conducted. At this point in the process, the detailed plan of action could not be expected, but rather initial recommendations for action have been included in the report.

2.7. Ethical considerations

It was critical that ethical principles were applied throughout the research analysis process. The research was conducted in a “manner designed to ensure that the benefits to participants outweighed any costs or unintended harm, and that the research process embedded the ethical principles of humanity, impartiality, neutrality, beneficence, non-maleficence, and the best interests of the child” (Ennew, 2009). Ensuring **the best interest of every child** was paramount and an overarching principle for all engagement with children. The best interests of children were respected and protected as the top priority throughout the entire process, from beginning to end.

All participation had to be voluntary: Voluntary participation meant that every participant (child and adult) had to give “informed consent”. For child participants, I obtain both the caregiver’s and the child’s consent. Informed consent normally included signing an agreement to participate in the study. Unless it was culturally inappropriate, not safe, or not possible in that case, a verbal consent was required before we proceeded with the study.

Respected cultural traditions, knowledge and customs: The research team respected and adhered to local culture, codes of dress and behaviour, greeting, use the local language and age-appropriate techniques.

Established as much equality as possible: The research team was careful not to act or sound like teachers. Facilitators always strove to sit, to speak and to act in ways which minimised power inequalities with participants as much as possible.

Avoided raising unrealistic expectations: The research team did not make any promises that they could not keep, and followed through on all commitments made to participants.

Reciprocity: Any compensation to participants (such as refreshments) was agreed upon in advance. I avoided giving money because it could result in raised expectations, tensions in the community and biased participants’ responses.

Respected privacy: Research team members did not probe for information if it was clear that a participant did not want to answer. Also, the analysis team could always ask for permission to use stories, pictures or other information in the final report.

Ensured confidentiality: The research team protected the identity of all participants by changing their names or not collecting names at all. Participants were not named in reports or traceable by anyone without explicit permission. Data was stored in a safe place where it could not be accessed by unauthorized people.

Developed and agreed on behaviour protocols: The research team members agreed on behaviour protocols that covered both appropriate and inappropriate behaviour.



CHAPTER THREE: RESULTS

This chapter discusses and analyses the findings of the study that are presented as both quantitative and qualitative results. The segments are laid out by social demographic characteristics of the study participants and by each objective of the study.

3.1. Social demographic characteristics by rural or urban setting

A total of 2,232 children participated in the survey across the four regions of Uganda in the districts mentioned in Chapter Two of methodology. Forty-six percent (1,034) were from urban settings while fifty-four percent (1,198) were from rural locations. Fifty-one percent (51%) were female with a slight variation between those from urban and those rural areas. Most of the children (41%) were aged 13-15 years, with no significant overall variation by urban or rural location. Slightly more children in rural locations (53%) had attained primary level education, compared to 49% for those from urban areas, even though there were more children above 15 years of age in the urban setting. Sixty one percent (61%) were living with both parents, with slight variation between those from rural locations and those from urban locations (63% rural and 59% urban). Regarding religion, the Anglican faith had the largest portion of the respondents (32%), especially in the rural areas that were dominated by 42% of Anglicans. These characteristics are tabulated below:

Table 1: Demographic characteristics by urban or rural location

	Urban		Rural		Total	
	No	%	No	%	No	%
Gender						
Male	478	46	617	52	1095	49
Female	556	54	581	48	1137	51
Age group						
<13 years	227	22	196	16	423	19
13-15	419	41	494	41	913	41
16-18	330	32	448	38	778	35
19+	49	5	54	5	103	5
Highest level of education						
Primary	501	49	633	53	1134	51
Secondary	527	51	557	47	1084	49
Whom do you stay with						
Father and mother	612	59	758	63	1370	61
Single parent	238	23	230	19	468	21
Guardian / other relative	156	15	180	15	336	15
Alone	13	1	16	1	29	1
Others specify	15	2	17	1	32	1
Religion						
Roman Catholic	267	26	312	26	579	26
Protestant/Anglican	327	32	505	42	832	37

Table 2: Children's ownership and access to ICT devices

	Urban		Rural		Total	
	No	%	No	%	No	%
Do you own any of the following ICT devices						
Phone	469	45.4	362	33.8	831	39.5
Television set	67	6.5	107	10.1	174	8.3
Laptop	108	10.5	40	3.8	148	7.1
Video games	82	7.9	25	2.4	107	5.1
Camera	56	5.4	14	1.3	70	3.4
Ipad/Tablet	41	4.0	30	2.9	71	3.4
Desktop	23	2.2	16	1.5	39	1.9
Do you have access to any of the following ICT devices?						
Phone	820	79.3	925	77.4	1745	78.3
Radio	734	71.0	928	78.0	1662	74.8
Television set	785	75.9	732	61.7	1517	68.3
Laptop	450	43.5	192	16.3	642	29.0
Video games	317	30.7	178	15.1	495	22.4
Camera	294	28.4	138	11.7	432	19.5
iPad/Tablet	227	22.0	84	7.1	311	14.1
Desktop	212	20.5	72	6.1	284	12.8

Although school administrations were not aware, children reported carrying mobile phones to school but kept them in hiding to avoid confiscation. The voices below attest to the findings concerning children's ownership of ICT devices:

"Some students own phones and other devices like radios and televisions, but have access to them during holidays. Those children from well-to-do families have access to almost all the ICT devices". (FGD-Stakeholder)

"Students own phones because they are cheap to buy and some of our parents buy for us these phones just to communicate with us when we are at school but the schools do not allow phones but still some of us come with them and hide them in our shoes and pants so that when they check us at the gate during the opening of the term, they don't see them. We use these phones in the nights when teachers are sleeping". (FGD-Children)

"It is a dot.com generation; failing to own any ICT gadget, especially the phone, means one is still in the analog world. We own phones and use them daily but in privacy, because school rules don't allow students to have phones at school. We access other ICT devices while at home in the evening". (FGD-Children)

Majority of the children (79%) were found to access ICT devices owned by their parents, with no variation across rural or urban locations. As seen in table 2 above, more children from urban areas have access to ICT devices owned by friends, school institutions, siblings and cafes; compared to children from rural areas.

Among the households in which the children who participated in the survey live, phones were the most commonly owned or accessed ICT devices reported at 83%, followed by radio at 80% and television set at 70%. Devices such as computers, cameras video games, iPads/tablets and desktops were minimally owned or accessed, especially for households in rural areas. Refer to table 3 below.

Table 3: Ownership of ICT devices accessed by children and household ownership

	Urban		Rural		Total	
	No	%	No	%	No	%
Who owns the ICT device you access?						
Parent/guardian	793	80	906	79	1699	79
Self	405	41	305	26	710	33
Friend	249	25	217	19	466	22
Neighbour	195	20	226	20	421	20
Teacher	161	16	170	15	331	15
School Institution	220	22	92	8	312	15
Sibling	153	15	91	8	244	11
Cinema	68	7	61	5	129	6
Café	92	9	29	3	121	6
Does your household own or have access to any of the following ICT devices?						
Phone	902	87	946	80	1848	83
Radio	833	81	949	80	1782	80
Television set	837	81	712	60	1549	70
Laptop	454	44	205	17	659	30
Camera	317	31	119	10	436	20
Video games	260	25	154	13	414	19
iPad/Tablet	247	24	86	7	333	15
Desktop	165	16	50	4	215	10

3.2.2. Commonly Used ICT device

From the study, it was evident that indeed children have access to ICT devices. Among the devices that were mostly used daily was television, reported at 52% and 36% for children in urban and rural settings respectively, followed by radio, which was more commonly used daily by children in rural setting (47%) as compared to those in urban setting (40%). Computer and iPads/tablets were used much less regularly; and more than half of the children in both rural and urban settings reported non-use of these devices. Refer to table 4a below.

Table 4a: Frequency of using selected ICT devices

	Daily		Weekly		Monthly		None	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Frequency of using an ICT device								
Watch television	52	36	22	27	7	12	20	25
Listen to radio	40	47	18	18	10	13	32	22
Use a phone	45	32	17	24	14	19	24	26
Internet use	19	12	13	9	8	7	60	72
Computer	16	10	31	16	10	7	43	67
Ipad/Tablet	8	5	10	5	8	6	75	83

By gender, the use of ICT devices varied for different devices among boys and girls. More

	Urban		Rural		Total	
	No	%	No	%	No	%
Moslem	145	14	180	15	325	15
Catholic charismatic	40	4	43	4	83	4
Born again Christian/Pentecostal	207	20	137	11	344	15
Adventist (SDA)	30	3	15	1	45	2
Others (specify)	14	1	7	1	21	1

3.2. The role of ICT in driving, sustaining and mitigating behaviour that contributes to VAC in and around Schools

To understand the role of ICT in driving, sustaining or mitigating behaviour that contributes to VAC in and around schools, the study explored several dimensions, including access, usage, information shared by children using ICT devices, access to ICT platforms as well as the people whom the children communicate with using ICT.

3.2.1. Need, Ownership and access to ICT Devices

Enquiry over whether children needed ICT devices saw almost three quarters (74%) of the respondents affirming the need; with urban children having a higher percentage (77%) compared to children in rural setting (70%).

	Urban		Rural		Total	
	No	%	No	%	No	%
Do you think children need to access ICT devices?						
Yes	800	77	835	70	1635	74
No	188	18	349	29	537	24
Don't know	46	4	7	1	53	2

"Yes, I think children need ICT devices, especially for educative purposes. ICT makes learning real and less abstract. When it comes to learning, it is okay for them to use computers; but for phones to watch films and music, no". (FGD-Stakeholder)

Results further showed that ownership of ICT devices among children was low. Only 39.5% were found to own mobile phones, 8% owned television sets and 7% laptop computers. More children in the urban setting were found to own mobile phones and laptop computers while more children from the rural setting owned television sets.

Although less than half of the children owned ICT devices, over 75% had access to at least one ICT device. The commonly accessed ICT device was the phone, accessed by 78%, followed by radio (74%), television (68%) and laptop computers (29%). Other owned or accessed devices included computers, cameras, tablets/iPads and video game sets. Refer to table 2 below.

boys (47%) used radio daily than girls(40%) while more girls (44%) used television daily than boys (42%); as seen in table 4b below.

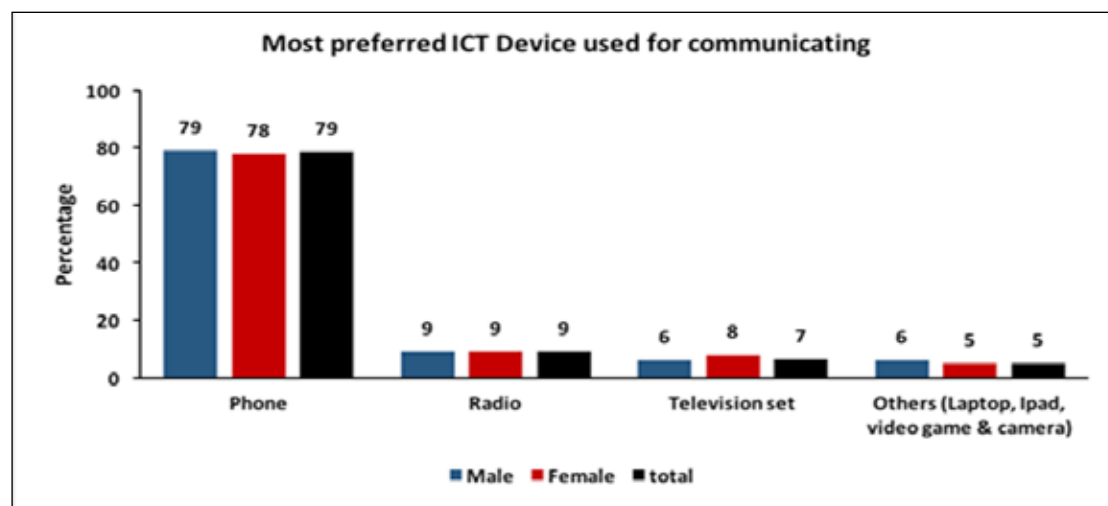
Table 4b: Frequency of using selected ICT devices

	Daily		Weekly		Monthly		None	
	Male	Female	Male	Female	Male	Female	Male	Female
Frequency of using an ICT device								
Radio	47	40	18	19	10	13	25	28
Television	42	44	25	24	10	10	23	22
Phone	41	34	19	22	17	17	23	27
Internet	18	13	12	10	8	6	62	71
Computer	15	10	23	23	9	8	53	59
iPad/Tablet	7	6	6	9	8	6	79	79

3.2.3 Preferred ICT Device

Among all the ICT devices accessed by the children, the phone was indicated as the most preferred. The figure below shows that overall, 78% of the children preferred using a phone, followed by radio (9%) and television (7%). The figure further shows a notable variation by setting, where the percentage of children preferring the use of phones was significantly higher for urban children than for children in rural settings. On the other hand, the percentage of children using radios as the preferred ICT device was higher in rural settings (14%) as compared to urban settings (4%). There was almost no variation for preference between male and female children as seen in figure 2 below:

figure 2: Most Preferred ICT Device used for Communicating



Children cited the mobile phone to be the most preferred device because of its handiness, user-friendliness and ability to provide access to a variety of facilities, including video games and the Internet that connects them to social media platforms.

“Phones are the most preferred ICT device because they are portable, easy to carry and they can easily be hidden when the teachers come in class. Phones also have Facebook and Whatsapp that enable us to communicate through chatting with friends and a lot of entertainment like the games that help us to kill boredom, especially during weekends and holidays”. (FGD-Children)

3.2.4. ICT devices used by other family members

Among the mentioned ICT devices used by family members, the phone was the most used (86%), followed by radio 64% and television sets (56%). Use of other devices (cameras, iPad/tablets, video games and desktop PCs) was less than 20% of households. Refer to table 5 below:

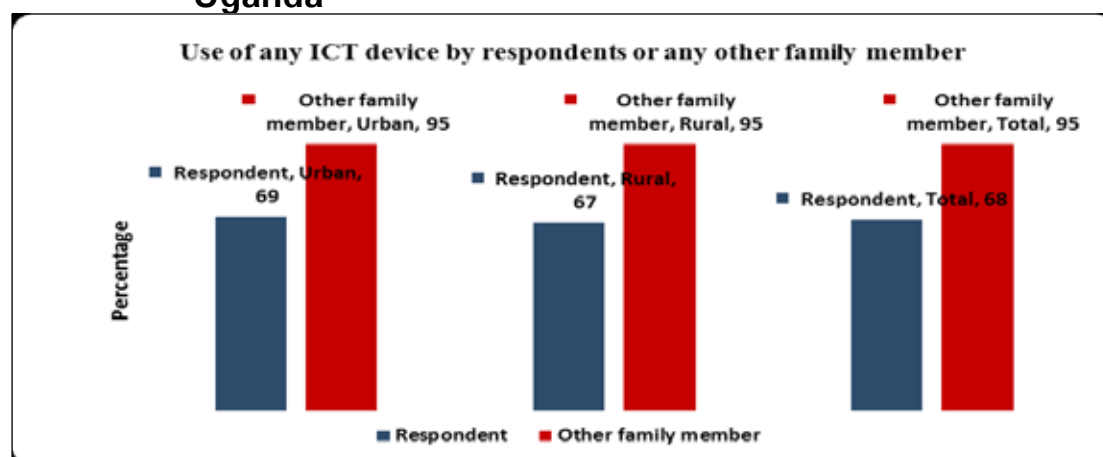
Table 5: Type of ICT devices family members are currently using by gender

	Male		Female		Total	
	No	%	No	%	No	%
Please tell me if you know the ICT device that your family member is using currently						
Phone	897	86	924	86	1822	86
Radio	668	64	679	63	1349	64
Television set	553	53	628	58	1183	56
Laptop	254	25	280	26	534	25
Cameras	115	11	135	13	250	12
iPad/Tablet	114	11	132	12	246	12
Video games	105	10	116	11	222	11
Desktop PC	77	7	71	7	148	7

3.2.5. Use of ICT devices by children in comparison to other household members

The use of ICT devices by children was found to be generally low as compared to use by any other members in a family. Moreover, there was no significant variation in the use between urban and rural households. Refer to figure 3 below:

Figure 3: Use of any ICT device by child participants and other family members Uganda



3.2.6 ICT Usage Habits

The study explored the correct use of ICT devices by children's demographic characteristics, type of information shared and platforms accessed by children.

3.2.6.1 Correct use of ICT devices by children's demographic characteristics

Correct use of an ICT device accessed was noted in 90% of the children. A slightly higher percentage of children in urban settings mentioned at least one correct use of an ICT device as compared to children in a rural setting (91% versus 90%; $p=0.200$). By gender, there was no difference in the percentage of male children and female children reporting correct use of an ICT device (90% in both gender categories). Across age, the percentage of children reporting correct use of an ICT device was higher among those aged 13 to 18 years compared to those below 13 years or above 19 years (88% and 91%) but the difference was not significant ($p=0.132$). Refer to table 6 below:

Table 6: Relationship between correct use of ICT devices and demographic characteristics

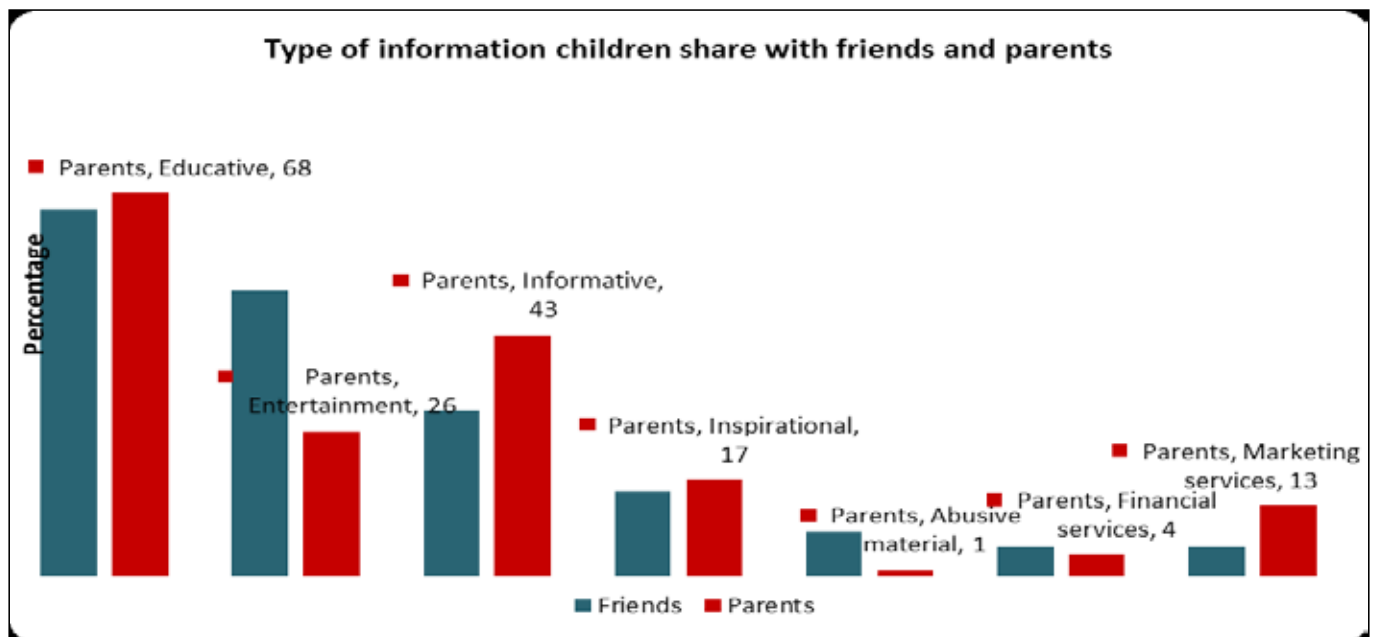
	Did not report correct use		Reported correct use		Total		Chi-square p-value
	No	%	No	%	No	%	
Total	216	10	2019	90	2235	100	
Setting							
Urban	91	9	943	91	1034	100	0.200
Rural	125	10	1076	90	1201	100	
Gender							
Male	105	10	994	90	1099	100	0.846
Female	111	10	1022	90	1133	100	
Age group							
< 13 years	51	12	371	88	422	100	0.132
13-15	81	9	833	91	914	100	
16-18	66	9	710	91	776	100	
19+	13	12	92	88	105	100	
Highest level of education							
Primary	117	10	1018	90	1135	100	0.284
Secondary	97	9	985	91	1082	100	
Whom do you stay with							
Father and mother	135	10	1237	91	1372	100	0.268
Single parent	38	8	430	92	468	100	
Guardian / other relative	33	10	300	91	333	100	
Alone	4	13	26	87	30	100	
Others (specify)	6	19	26	81	32	100	

3.2.6.2. Type of information shared by children

Asked which type of information children share with their friends and parents, the respondents mentioned a variety, including educative, informative, inspirational, marketing and entertainment, and abusive information. The percentage of children reporting sharing educative, informative, inspirational and marketing information with parents was higher than that of those sharing the same information with friends. Children were more likely to share entertainment and abusive materials with their friends (7%) than with their

parents (1%) as shown in the same graph. Although existing, the use of ICT for sharing abusive material was much lower than for constructive content (educative, informative, inspirational, etc.). See figure 4 below:

Figure 4 : Type of information that children share with parents and friends



3.2.6.3. ICT Platform and Access

Overall, apart from making calls, ICT devices that could access the Internet were found to be used mostly to access social platforms. Facebook, as a social platform, registered the highest percentage (42%) for access, followed by online games (27%) and Whatsapp (21%). Other platforms accessed included YouTube, Twitter, Instagram and Skype. However, ICT devices were also used for text messaging or SMS, as reported by 31% of respondents and for and e-mail (11%). Except for text messaging which is used by more children in rural settings, more urban children were found to access the various platforms which are all accessed via Internet. The findings are illustrated in table 7 below:

Table 7: Social Platforms Accessed

	Urban		Rural		Total	
	No	%	No	%	No	%
Social platform often accessed						
Facebook	471	46	441	38	912	42
SMS	299	29	383	33	682	31
Games	313	30	279	24	592	27
Whatsapp	282	27	175	15	457	21
Internet (email)	170	16	67	6	237	11
Calls	70	7	131	12	201	9
YouTube	96	9	39	3	135	6
Twitter	69	7	39	3	108	5
Instagram	69	7	20	2	89	4
Skype	35	3	14	1	49	2
Periscope	16	2	2	0	18	1
Other (Specify)	2	0	12	1	14	1

When asked why Facebook was the most preferred platform, one student responded:

“I use Facebook as often as possible during holidays and weekends to chat with my friends at school about the latest trends and developments in their lives, families and among friends.” (FGD-Children)

It is also important to note that Facebook is mostly accessed using phones and less on laptop or desktop computers as pointed out by children in a focus group discussion:

“Phones give access to Facebook and Whatsapp that enable us to chat with friends and enjoy a lot of entertainment like games that help us to kill boredom, especially during weekends and holidays.” (FGD-Children)

3.2.6.4. People whom children commonly share messages with

Children use ICT devices to share messages with various individuals in and around schools. The respondents reported sharing messages with parents mostly (67%), friends (65%), relatives (44%), siblings (23%) and teachers (7%). Only 7% reported communicating with unknown people whom they meet online. Others included religious leaders, social groups, police and community workers. These findings are relayed in table 8 below:

Table 8: People whom children commonly share messages with

	Male		Female		Total	
	No	%	No	%	No	%
Which kinds of people do you commonly share your message through any ICT device?						
Parents	718	66	767	68	1488	67
Friends	701	64	738	65	1441	65
Relatives	444	41	532	47	977	44
Siblings	236	22	266	24	502	23
Teachers	243	22	228	20	471	21
Religious leaders	82	8	96	9	178	8
Church leaders	81	8	83	7	164	7
Unknown people online	82	8	79	7	161	7
Members of a social network (Group)	89	8	70	6	159	7
The Police	79	7	61	5	140	6
Community workers	45	4	29	3	74	3

By gender, slightly more female children (68%) were found to share messages through communication devices with their parents than the male children (66%). Similarly, female children were slightly more likely to share messages with friends, relatives and siblings as compared to male children. However, table 8 shows that slightly more male children tend to share messages with their teachers or members of a social network as compared to female children. Some of the responses obtained during the FGDs on the kind of people children like sharing messages with include:

“Children like to speak to parents about how they are progressing in their academics and how their teachers, matrons and friends are treating them. In short, both positive and negative news concerning their educational progress.” (FGD-Stakeholder)

“When they call us, they want to just say hullo and feel happy that they have greeted their parents on phone and we also feel happy, while others want their parents to sing for them happy birthday on the phones and that is just enough for them.” (FGD-Parent)

“Mostly it is the parents whom children like communicating with because they are the providers of the basic needs like school fees and other necessities that keep us going throughout the term at school. So children share with them messages requesting for such provisions and sometimes to find out how they are doing at home.” (FGD-Children)

“Sometimes, children share with the teachers for academic support and coaching. For instance, a student can ask a teacher about any questions through sending a message and/or making a voice call. Through the calls, the student gets appropriate information without spending much time and money moving physically to look for the teacher; a message saves time. (FGD-Teacher)

3.2.6.5. Ways of Sharing Information

The results showed that voice calls, Facebook, Whatsapp and SMS were the commonest ways by which children who participated in the study share information. Slightly over a half of the children in both rural and urban settings prefer to share information using voice calls, followed by using Facebook, where a higher percentage of children in urban settings using these modes of communication was slightly higher than that of children in rural setting. Similarly, the use of Whatsapp was significantly higher among children staying in urban settings as compared to children in rural settings (28% and 15% respectively). The

use of SMS reported by 29% of children overall was, on the other hand, more common among children in rural settings (33%) as compared to those in urban settings (25%). Refer to table 9 below:

Table 9: Ways of sharing Information by setting

	Urban		Rural		Total	
	No	%	No	%	No	%
Common way you prefer sharing information						
Calls	564	55	630	53	1194	54
Facebook	403	39	403	34	806	36
SMS	256	25	391	33	647	29
Whatsapp	287	28	179	15	466	21
Games	174	17	203	17	377	17
Internet (email)	84	8	66	6	150	7
Twitter	76	7	63	5	139	6
YouTube	58	6	42	4	100	5
Instagram	60	6	31	3	91	4
Skype	22	2	19	2	41	2
Periscope	10	1	8	1	18	1
Other (Specify)	1	0	6	1	7	0

Captured below are some of the responses to support these findings:

“Calling is better because of its privacy, it is reliable and gives quick and immediate response and expression is felt when the person is talking.” (FGD-Stakeholder)

“Facebook is the commonest way of sharing messages with other people because it is easy, cheap, takes little time and money to communicate to a wide range of people. One can share a lot of information including videos and photos within a short time with very many people. With zero Facebook which is almost free of charge, it enables one to communicate easily and conveniently with both local and international people at the same time.” (FGD-Children)

“SMS is another common way children prefer for sharing their information with others. SMS is very cheap in terms of costs and one can activate SMS bundle as low as 200UGX and gets 100 messages to communicate to over a hundred people without spending much.” (FGD-Teacher)

3.3. Benefits of ICT Utilization

The study investigated the benefits that children had derived or were deriving from the use of ICT in relation to knowledge transfer, capabilities enhancement and as a social enabler to prevent and respond to VAC. Results show that indeed ICT was being utilised to benefit children, as 81% of the respondents reported that the devices they use met various needs. The benefits were quite plenty, including communication with other people, which registered the highest response (72%), increasing education opportunities (50%), information exchange (38%), entertainment (36%), processing and storing information (17%); increasing innovations and opportunities (12%), linking up for emergency services (11%), financial services (9%) and marketing services (4%). Table 10 below illustrates these findings:

Table 10: Type of needs addressed by ICT [by gender and level of education]

Does the ICT device you use meet any of your needs?										
Yes	1786	81								
No	431	19								
Total	2217	100								
	Male		Female		Primary		Secondary		Total	
	No	%	No	%	No	%	No	%	No	%
Type of needs addressed by preferred ICT device										
Communication with others	734	72	760	72	721	69	767	76	1497	72
Exchange of Information	388	38	402	38	337	32	449	45	791	38
Entertainment	338	33	399	38	309	30	422	42	737	36
Processing and storing Information	181	18	165	16	106	10	236	24	346	17
Increasing innovations and opportunities	151	15	104	10	92	9	161	16	256	12
Linking up for emergency services	116	12	118	11	84	8	149	15	234	11
Financial services	95	9	94	9	34	3	154	15	189	9
Marketing services	50	5	40	4	33	3	55	6	90	4

Generally, there was no major difference between male and female children regarding the benefits; yet there were variations by setting (urban or rural) and school level (primary or secondary).

By school level, in all aspects, significantly more secondary school children reported benefiting from using ICT devices than those in primary school. For instance, 76% of secondary school respondents reported benefiting from communication with others in contrast with 69% of primary school respondents. Forty-five percent (45%) of secondary school respondents reported exchanging information, compared to 32% of primary school respondents.

By rural or urban setting, the percentage of children in rural settings who reported that the devices they use met their needs was significantly higher than that of children in urban settings (91% and 68% respectively). However, many of the children in urban areas (61%) mentioned that ICT met their needs of increasing opportunities in education, whereas in the rural areas 50% of children stated that the ICT devices meet their needs of communicating with others. This is shown in table 11 below:

Table 11: Benefits of ICT use by urban or rural location

	Urban		Rural		Total	
	No	%	No	%	No	%
Type of needs do they addressed						
Increasing opportunities in education	426	61	471	44	897	50
Exchange of Information	274	39	425	40	699	39
Communication with others	319	45	538	50	857	48
Linking up for emergency services	137	20	53	5	190	11
Processing and storing information	118	17	81	8	199	11
Marketing services	95	14	110	10	205	12
Financial services	92	13	74	7	166	9
Entertainment	250	36	363	34	613	35
Others (Specify)	2	0	2	0	4	0
Total	703	100	1063	100	1766	100

Children reported an enhanced learning process through obtaining educational material from the Internet and acquiring other skills such as typing/taking notes using ICT. They also reported receiving inspiration through television and Internet from their role models, to develop their talents and careers; getting to know about what happens around the world, enjoying entertainment and accessing financial services for school tuition and generating income. The voices below substantiate the benefits of ICT use by children:

“Yes, as children, we need to access these devices for educative purposes like getting notes on the Internet and refreshing one’s mind when we are tired from books during daytime or the entire week. And if we watch TV, it helps us to know what is happening around the whole world, for example wars, famine and natural disasters.” (FGD-Children)

“The phone meets most of our needs because it helps us to communicate with friends and family through making voice calls, Facebooking, Whatsapp chatting and sending messages.” (FGD-Children)

“Talent and career development. Through watching television and searching about children’s role models or celebrities who inspire children. Children can develop their careers or talents by seeing or watching what their role models do like if a child wants to become a footballer, he can watch international sports and see how his player does it and also learns from that.” (FGD-Children)

“Entertainment. Through the phones one gets entertained with music, playing java games and watching Facebook videos that friends send. It helps one to be active. We also listen to music which is educative and inspirational, thus killing boredom.” (FGD-Children)

“Accessing financial services like school fees and pocket money through mobile money, which helps us to concentrate at school without going back home to ask for the money from the parents. This saves time and allows us to be in class without missing a single lesson and save money at the same time.” (FGD-Children)

“Education services through research by using Google to search for educational information, especially Geography notes, to enhance learning and sharing information with others and reading ahead of the teacher.” (FGD-Teacher)

“ICT has helped people improve their standards of living. Students learn reading, writing and typing skills. For example, a teacher who teaches students from Musoto village in Mbale district now finds it less strenuous to teach because of integration of ICT in teaching. Students learn to type, which makes it easy for the teacher to teach students who have some ICT knowledge and skills.” (FGD-Teacher)

3.4.2 Downside/Negative Impact of ICT

Whereas there were multiple benefits of ICT to children, there were mixed feelings, especially from adults, about the influence of these technologies upon children's behaviour as they felt that the negative influence was equally substantial. The adults cited children accessing harmful information and other material through these facilities. Taking on practices such as disrespecting parents, evading household chores and school work, laziness, stealing, watching and trying out pornographic acts, seeking wrong fame, dropping out of school and physical violence were mentioned as some of the harmful influences that arose out of using ICT.

"ICT has influenced children both positively and negatively, but mostly negatively because of the way they behave. Children behave badly and have learnt bad things like stealing, dropping out of school, disrespecting parents, becoming lazy, failing to work and engaging in dubious things like pornography, which has affected them." (FGD-Parent)

"My friend took his photos when he was naked and posted them on Facebook. He ashamed us; as friends and the school. When we asked him why he did that, he said he wanted fame and to be known. I hated him and forgot him as my friend. All the Facebook friends abused him for his action because it was embarrassing." (FGD-Children)

"Last year, some girls were expelled from our school. The school administration hadn't known that they had phones. One day, one of the girls forgot and came with her phone in class and it had nude pictures. The teacher found it and the owner was expelled; and the friends were suspended for some time because they were using it to watch bad things." (FGD-Children)

"Children learn bad manners and become disobedient to their parents. For instance, a child watched a Nigerian movie titled American Boys and started disrespecting his parents and dropped out of school because of what he had watched." (FGD-Teacher)

3.5 ICT-Enabled Violence against Children

As illustrated in section 4.4.2, children face the risk of and experience ICT-enabled violence. This section discusses the findings of when and how ICT-enabled VAC starts, is maintained and perpetuated in and around schools in the districts under study. Specifically, issues assessed include risks of using ICT, awareness by children of such abuse, means of abuse, categories of children exposed to ICT-enabled VAC, children's exposure to ICT-enabled sexual VAC and perpetrators of ICT-enabled VAC in and around schools.

3.5.1. Risks of using ICT devices

Among the risks reported to be faced by children while accessing and consuming ICT, the most listed ones consisted of exposure to online child pornography (66%), talking to and meeting strangers (45%), watching/listening to violent content (25%), betting (22%), trafficking (14%), coordinating theft or robbery (14%), cyber bullying (12%) and exposure to extremist content (10%). The percentage of children in urban settings who reported watching and listening to violent or abusive material as risky was more than twice (35%) that of children in the rural settings (16%). Children in urban areas were, therefore, more exposed to the risks associated with ICT use.

Table 14: Risks of using ICT

	Urban		Rural		Total	
	No	%	No	%	No	%
What are the primary risks faced by young people while accessing and consuming ICT						
Exposure to online child pornography	668	65	803	67	1471	66
Talking to and meeting strangers	534	52	459	39	993	45
Watching and listening to violent/abusive material	359	35	183	16	542	25
Betting	278	27	205	18	483	22
Trafficking	212	21	98	8	310	14
Coordinating theft or robbery (crime)	164	16	134	11	298	14
Cyber bullying	201	19	57	5	258	12
Exposure to extremist content	155	15	66	6	221	10
Defrauding	56	5	40	3	96	4
Don't know	32	3	17	2	49	2

3.5.2 Awareness and means of ICT abuse

Findings show that 74% of the child respondents were aware that ICT-enabled child abuse exists and thought that children could be abused through ICT. Further, 60% knew of a child who had been abused through ICT. The responses did not vary by gender but there indicated a 5% difference between primary school respondents (63%) and secondary school respondents (58%). The forms of abuse that were mentioned consisted of sexual harassment, exposure to images of physical violence and pornography, verbal abuse, threats to kill and actual killing.

As for the means of abuse through ICT, Facebook messages ranked the highest (54%) followed by Whatsapp messages (42%), voice calls (32%), SMS (19%), YouTube (14%) and games (11%). More female children reported abuse through Facebook and Whatsapp (58% and 43% respectively) than male children (51% and 41% respectively). In contrast, more male children reported abuse through SMS and YouTube (21% and 16% respectively) than female children (16% and 13% respectively).

By school level, the reporting of abuse through Facebook and Whatsapp was higher for secondary school respondents (65% and 49% respectively) than for primary school respondents (45% and 36% respectively). Although the statistics were different, the variation was the same for even YouTube and SMS. Table 15 depicts these findings:

Table 15: Knowledge of children abused through ICT devices

	Male		Female		Primary		Secondary		Total	
	No	%	No	%	No	%	No	%	No	%
Do you think children can be abused through an ICT device?										
Yes	789	72	853	75	825	73	808	75	1645	74
No	289	26	220	19	274	24	232	22	509	23
Don't know	20	2	57	5	37	3	39	4	77	3
Total	1098	100	1130	100	1136	100	1079	100	2231	100
Do you know of any child who has been abused through any ICT device?										
Yes	665	61	675	60	710	63	623	58	1342	60
No	348	32	349	31	315	28	376	35	697	31
Don't know	85	8	95	8	98	9	79	7	180	8
Total	1098	100	1119	100	1123	100	1078	100	2219	100
In what ways are children abused through ICT devices?										
Facebook messages	333	51	387	58	315	45	400	65	721	54
WhatsApp messages	271	41	291	43	252	36	305	49	562	42
Calls	216	33	215	32	256	36	173	28	432	32
SMS	137	21	110	16	94	13	151	24	247	19
YouTube messages	103	16	85	13	78	11	108	18	188	14
Games	74	11	71	11	95	13	51	8	146	11
Don't know	15	2	29	4	35	5	10	2	45	3

Home television and videos in local cinema halls were also mentioned as channels through which children had been abused via music and film. Child abuse through different ICT means is corroborated with conversations collected from various FGDs as shown below:

“Facebook: ICT-related child abuse is mainly from Facebook, where many people post a lot of bad stuff like pictures and videos and it is cheap; and there’s ZERO Facebook which is very user-friendly to students. We don’t spend much money on Facebook because of ZERO Facebook. We can access a lot of information, videos and pictures which cannot be got through SMS. Through Facebook, one can easily get to know the face of the person he/she is chatting with.” (FGD-Children).

“Use of SMS: Our neighbour’s child, who was crippled and in Senior Three of school, was given a phone as a gift by her mother and a relative sent her a text message telling her that she could never succeed in life because of her disability and this traumatized the girl.” (FGD-Stakeholder)

“SMS: SMS is also used so much to abuse children. Someone can send a love message conning a girl and even organize the meeting points through an SMS just to harass or even kill. Some use SMS to send abusive messages to others because it is very cheap to send a message and one can buy a message bundle of only two hundred shillings and gets 100 messages, which is affordable by any student.” (FGD-Children).

Video: “If we are talking of bad images, then it looks like every child has been abused because some music videos on TV or in these funny video halls really contain a lot of pornography in them and yet some of our children escape and watch them or even in homes when we are away when the maids put on the screens.” (FGD-Teacher)

3.5.3. Categories of children exposed to abuse through ICT

Asked which category of children are most exposed to ICT-enabled violence, girls were the most mentioned at 49% followed by boys (22%), children from very poor families (12%), orphans (9%) and children with disabilities (4%). Girls were listed by 53% of the female respondents as compared to 44% of the male respondents. This could be probably because, being the more vulnerable, girls understand the experience better than the boys. The case was the same for primary and secondary school mentions; with more secondary school respondents (53%) citing girls being the more vulnerable category than boys (45%). Refer to table 16 below:

Table 16: Categories of children vulnerable to abuse through ICT

	Male		Female		Primary		Secondary		Total	
	No	%	No	%	No	%	No	%	No	%
What categories of children are exposed to ICT violence/abuse the most										
Girls	351	44	449	53	372	45	424	53	801	49
Boys	196	25	163	19	191	23	166	21	361	22
Children from very poor families	109	14	85	10	110	13	84	10	194	12
Orphans	72	9	70	8	98	12	42	5	142	9
Don't know	30	4	53	6	33	4	49	6	83	5
Children with disabilities	31	4	28	3	20	2	39	5	59	4

The FGDs of different stakeholders about ICT-enabled violence yielded the conversations below that collaborate the information in the above table. Children were said to be exposed to such violence in many ways, including watching age-inappropriate videos on public television and in video halls, pornographic and other violent materials in the absence of parents and tending to try out what they watch. They attributed much of the happenings to inadequate restriction of what flows into the country, via online channels and in other ways.

"Children can be abused because I can give an example of YouTube through which pornography goes so viral that in a space of minutes, people watch it and share it multiple times." (FGD-Parent)

"Yes, children can be abused when some grown up people send bad movies and pictures which are indicated to be for only people above 18 years and, therefore, not good for children. And some Americans like using inappropriate words and we end up copying and using them in our daily talk." (FGD-Children)

"Pornography: Children are abused sometimes by watching pornographic materials like X-rated movies which are not appropriate for their age. When they watch such movies, they are prompted to try out what they have watched in the movies, which leads them into gaining bad behaviours or getting spoilt. For instance, all youths watch pornographic videos and practice like all children in the country watched Desire Luzinda's nude pictures that were not good to be seen by children. (FGD-Stakeholder)

Sample conversations that identified girls as the most exposed children to ICT sexual abuse or violence:

How specific devices meet children's needs by gender and education level

Considering the role of specific devices, however, there were notable variations by gender and by level of education, except for phone users. Of the female children who reported using radio, 97% cited that it met their needs, compared to 90% of male children. Similarly, radio met the needs of more secondary school children (98%) than primary school children (92%). The use of a television set was reported to meet the needs of more primary school children (89%) than secondary school children (75%) although the difference for gender was not sharp as it benefited 85% of male respondents and 88% of female respondents. Reference is made to table 12 below:

Table 12: Used ICT device meeting communication needs by gender and level of education

	Male	Female	Primary	Secondary	Total
	%	%	%	%	%
ICT Device used					
Phone	94	94	94	95	94
Radio	90	97	92	98	94
Other devices	94	88	92	91	91
Television set	85	88	89	75	87

3.4. Impact of ICT on Children's Behaviour

Enquiry over how ICT devices had influenced the way boys and girls behave saw a third of the children (66%) reporting that ICT devices had influenced children's behaviour in both negative and positive ways; again with more urban children (69%) attesting to that influence than rural children (63%). Much fewer children reported exclusively positive influence (15%) or exclusively negative influence (17%) of ICT upon the way boys and girls behave. Table 13 below elaborates the statistics:

Table 13: Need for ICT devices and their Influence upon Children's Behaviour

	Urban		Rural		Total	
	No	%	No	%	No	%
How has ICT influenced the way boys and girls behave?						
Positive way	136	13	187	16	323	15
Negative way	142	14	225	19	367	17
Both positively and negatively	717	69	748	63	1465	66
Don't know	21	2	27	2	48	2
Other (specify)	17	2	7	1	24	1
Total	1033	100	1194	100	2227	100

3.4.1 Positive Impact of ICT

Positively, children were observed to grow in their learning and development capacity as they could use ICT for learning, facilitating talent and career development and quickening their communication and linkage with emergency services. They also reported using ICT for generating income.

"It is girls from rich families because their parents give them phones and they use them without supervision, making them more exposed to strangers on WhatsApp and Facebook when they are sent bad pictures." (FGD-Children)

"It is girls because they meet up with lovers and can get pregnant easily when men convince them to give them sex in exchange for phones, money, chips and chicken." (FGD-Children)

"Girls because they like chatting on social media and forget to do productive work at school and at home." (FGD-Teacher)

"Mostly girls because they are a weaker sex and they want good things, for example they want to eat well, good phones and only expensive clothes which they cannot afford by themselves, so they are easily convinced by men through Facebook and WhatsApp and they are easily lied to." (FGD-Stakeholder)

"My cousin got a friend on Facebook who connected her to a man on Facebook. They started chatting and the man seduced her with money during holidays. On her way back to school, she changed her mind and instead went to the man's place. After the man used her, he dumped her and the girl was stuck and she had got pregnant, yet the man had disappeared". (FGD-Stakeholder)

3.5.4. Children's exposure to sexual violence while using ICT devices by demographic characteristics

The study made a specific investigation on the extent to which children were exposed to sexual violence while using ICT devices. From the results, this risk was reported by a total of 81% of the children interviewed. A slightly higher percentage of children in rural settings (82%) reported being exposed to sexual abuse or violence while using ICT devices, compared to children in urban settings (80%). A gender-based analysis showed a similar difference whereby the percentage of females who reported sexual abuse or violence was only slightly higher (81%) compared to that of males (80%). This indicates that children from both rural and urban areas as well both boys and girls acknowledge risk of abuse while using ICT. Across age groups, the percentage of children who reported exposure to sexual abuse or violence was significantly higher in the higher age groups, compared to the lower age groups ($p < 0.001$). In the youngest age group (<13 years), the percentage of children who reported ICT-enabled sexual abuse or violence was 74% and increased by about 5% at each age group to 92% among the oldest age group of 19 and above. By level of education, a significantly higher proportion of children in secondary school acknowledged exposure to sexual abuse or violence while using ICT devices, compared to children with primary level education (86% versus 76%; $p < 0.001$). Moreover, the percentage of children reporting exposure to the same violence was higher among those who stayed with parents (both mother and father or a single parent at 82%) and least among children who were living with other categories of guardians, including friends and non-relatives (75%) though not significant ($p = 0.174$). This is shown in table 17 below:

Table 17: Relationship between risks experienced by children using ICT devices and demographic characteristics

	Did not report risk of sexual abuse or violence		Reported risk of sexual abuse or violence		Total		Chi-square p-value
	No	%	No	%	No	%	
Total	417	19	1818	81	2235	100	
Setting							
Urban	207	20	827	80	1034	100	0.125
Rural	210	17	991	82	1201	100	
Gender							
Male	211	19	888	81	1099	100	0.502
Female	205	19	928	82	1133	100	
Age group							
<13 years	111	26	311	74	422	100	<0.001
13-15	180	20	734	80	914	100	
16-18	115	15	661	85	776	100	
19+	8	8	97	92	105	100	
Highest level of education							
Primary	267	24	868	76	1135	100	<0.001
Secondary	147	14	935	86	1082	100	
Whom do you stay with							
Father and mother	242	18	1130	82	1372	100	0.174
Single parent	84	18	384	82	468	100	
Guardian / other relative	77	23	256	77	333	100	
Alone	6	20	24	80	30	100	
Others (specify)	8	25	24	75	32	100	

3.5.5 Perpetrators of ICT-enabled Violence Against Children

Among the people who normally abuse children via ICT, were unknown people whom children meet online. They were reported by the highest percentage of children (60%), with those in the urban setting having a significantly higher percentage (68%) than children in rural settings (53%). Forty percent (40%) of the children reported friends abusing children through ICT. Other perpetrators comprised members of social networks or groups (19%), community workers (14%), relatives (11%), parents (9%), teachers (8%), the police (7%), siblings (6%) and religious leaders (3%). Three percent of the respondents reported not knowing ICT-based perpetrators. In rural settings, the percentages of children reporting relatives, parents and teachers as child abusers were higher than those of children in urban settings, as seen in table 18 below:

Table 18: Perpetrators of ICT-enabled Violence

	Urban		Rural		Total	
	No	%	No	%	No	%
Which types of people abuse children online through SMS, Whatsapp, etc.?						
Unknown people online	425	68	356	53	781	60
Friends	255	41	263	39	518	40
Members of a social network (Group)	163	26	78	12	241	19
Community workers	98	16	78	12	176	14
Relatives	57	9	82	12	139	11
Parents	41	7	78	12	119	9
Teachers	33	5	66	10	99	8
The Police	28	5	58	9	86	7
Siblings	31	5	50	8	81	6
Religious leaders	19	3	15	2	34	3
Don't know	8	1	30	5	38	3

The information in table 18 is validated by discussions from various participants as seen in the box below:

“Mostly strangers or unknown people online abuse children. They take advantage of them, especially girls, to link up with them and abuse them in many ways (sexually and physically) because they are unknown to them. Children tend to believe them because they think they are right and genuine people who are harmless.” (FGD-Children)

“Terrorists abuse children by enticing them with big sums of money. This happens, especially, to Muslim children who are taught in their religion since childhood and when they get invites on Facebook or Whatsapp, they easily accept, thinking the invitation is religious. They are lured or forced to join terrorist groups and end up killing people, which psychologically tortures them.” (FGD-Children)

“Religious leaders (extremists) abuse children through prepared violence against other religions; for instance, the BOKO HARAM in Nigeria have abused children and engaged them in killings against others. They use ICT to communicate what they do, which is traumatizing to the children. They have also killed children and kidnapped others, purposely to haunt them and others.” (FGD-Children)

“Teachers abuse children by enticing them with small gifts and giving them free marks at school. They always say, ‘A farmer eats from his garden.’ They send love messages to girls, praising how beautiful they are and get into relationships with students. Sometimes students start the relationships by sending their photos to teachers on Whatsapp or Facebook. Some of the photos are nude and the teachers pick interest.” (FGD-Stakeholders)

“Celebrities have a lot of influence on the children and sometimes they [children] want to become like some of them. They see them as their role models. They post pictures of what they are doing and what makes them happy, which is sometimes dangerous to view, especially by children. For example, a celebrity can post pictures on Instagram taking drugs. A child can feel it is the best way to lead life and an easy way to become a celebrity and they emulate them by taking drugs.” (FGD- Parents)

3.5.6. People approached by children when wrong messages are received on ICT devices

Results from the survey showed that most of the children (62%) confided in their parents if they received inappropriate messages through ICT devices, followed by the police (49%), friends (30%), teachers (25%), ICT technicians (14%), neighbours (13) and CBO/NGO/

religious leaders (8%), among others. The percentage of children in urban settings confiding in parents and the police was lower (59% and 45% respectively) than that of children in rural settings (64% and 53% respectively). The case was the same for approaching teachers but the opposite for peers and ICT technicians, as more children in urban settings (32% and 19% respectively) reported approaching peers and ICT technicians than children in rural settings. See table 19 below:

Table 19: People approached by children when wrong messages are received by setting

	Urban		Rural		Total	
	No	%	No	%	No	%
Which people could you confide in if something went wrong when you receive messages through an ICT device?						
Parent	613	59	755	64	1368	62
The Police	463	45	626	53	1089	49
Friends/peers	335	32	337	29	672	30
Teacher	226	22	336	29	562	25
ICT technicians	192	19	118	10	310	14
Neighbours	129	13	148	13	277	13
NGO/CBO/Religious leader	93	9	77	7	170	8
Sibling	103	10	59	5	162	7
Community workers	72	7	86	7	158	7
None	25	2	13	1	38	2
Don't know	11	1	11	1	22	1
Others (specify)	1	0	4	0	5	0

"I would tell my parents and maybe the senior woman teacher, because these ones can counsel me and I know they wish me well." (FGD-Children)

"As for me it is parents and guardians because I trust their judgment." (FGD- Children)

"Parents and teachers for me because they are all approachable." (FGD- Children)

"Parents and grandparents because they all give me audience to open myself up." (FGD- Children)

"For me I would talk to police when my parents are not at home and religious leaders." (FGD- Children)

3.5.7. Awareness of laws governing ICT

Awareness by children of any policy or law governing ICT in Uganda was found to be generally low. Overall, only 40% of those who participated in the study were aware of such policies; with 38% of respondents in rural areas being aware, in contrast with 42% of respondents in urban areas as shown in figure 5 below:

Figure 5: Percentage of respondents with awareness of any policy that governs ICT in Uganda



3.6 Inter-Related Constraints to ICT Utilization to Prevent Violence against Children

The research sought to explore any constraints that could be encountered in utilising ICT to prevent VAC. The results showed that nearly 90% of the children who participated in the study reported experiencing challenges. Lack of steady and reliable access to electric power was reported as the major challenge faced by 54% of children in rural areas compared to 46% of children in urban areas. This was followed by lack of adult support as reported by 44% of the children; scoring higher for children in urban areas (52%) compared to 37% of children in rural areas. The other challenges included high cost of Internet (48% for urban and 33% for rural), lack of reliable access to Internet (42% for urban and 26% for rural) and cost of repair/replacement of ICT devices (36% for urban and 29% for rural).

By setting, the challenges experienced by children while utilizing ICT devices varied. In the rural settings, the main challenge experienced by children was lack of steady and reliable access to electricity, whereas in the urban settings, lack of adult support was cited by slightly over 50% of children using ICT devices. Table 20 below further shows that the percentage of children in urban setting citing high cost of internet and reliable access to internet was significantly higher than that of children in rural setting.

Table 20: Challenges experienced in utilizing ICT devices by setting

	Urban		Rural		Total	
	No	%	No	%	No	%
Do you think children experience challenges in utilizing ICT?						
Yes	912	88	1058	89	1970	88
No	82	8	116	10	198	9
Don't know	39	4	22	2	61	3
Total	1033	100	1196	100	2229	100
Challenges experienced utilizing ICT						
Lack of steady, reliable access to electricity	420	46	565	54	985	51
Lack of adult support	469	52	380	37	849	44
High cost of accessing Internet	437	48	341	33	778	40
Lack of reliable access to Internet	385	42	267	26	652	34
High cost of phone replacement /repairs	328	36	294	29	622	32
Don't know	26	3	19	2	45	2

3.6.1 Children's experience of constraints while using ICT devices by their demographic characteristics

The results in table 21 below show that female children (93%) were more likely to experience challenges constraining the utilisation an ICT device compared to males (89%; $p=0.001$). Similarly, the percentage of children who had attained secondary level education (93%) had a significantly higher percentage experiencing challenges using an ICT device compared to children with primary level education (89%; $p=0.035$). However, the age group and people with whom the interviewed children lived were not related to experiencing challenges using an ICT device.

Table 21: Relationship between facing a constraint while using an ICT device and demographic characteristics

	Did not report constraint		Reported a constraint		Total		Chi-square p-value
	No	%	No	%	No	%	
Total	197	9	1971	91	2169	100	
Setting							
Urban	82	8	913	92	996	100	0.207
Rural	115	9	1058	90	1173	100	
Gender							
Male	118	11	949	89	1067	100	0.001
Female	78	7	1020	93	1098	100	
Age group							
<13 years	48	12	354	88	402	100	0.134
13-15	79	8	820	91	899	100	
16-18	59	8	691	92	750	100	
19+	8	8	92	92	100	100	
Highest level of education							
Primary	120	11	977	89	1097	100	0.003
Secondary	77	7	978	93	1055	100	
Whom do you stay with							
Father and mother	121	9	1218	91	1339	100	0.095
Single parent	35	8	415	92	450	100	
Guardian / other relative	39	12	282	88	321	100	
Alone	2	7	25	93	27	100	
Others specify	0	0	31	100	31	100	

3.7 Participants' proposed strategies and actions that can be adopted to address ICT-enabled Child Sexual Abuse and Exploitation

This section is a collection of thoughts from children and adults about mechanisms and actions to be taken, to protect children from and respond to child abuse that arises out of ICT usage. The findings herein focused on how actors within homes and schools could make the mentioned environments safer for children as they get exposed to and use ICT.

3.7.1 Home

As seen in the findings, children are exposed to various forms of ICT within homes, including what they own and what other household members own.

a. Regulate ICT access and use

Parents and other elders in the family should regulate access to and use of ICT gadgets, while creating a friendly atmosphere for children to confide in them about any developments with the devices.

"Parents need to control and supervise how to use the ICT devices. Parents should engage their children by keeping them busy with some work at home to help children to think about work and not only Internet." (FGD-Stakeholder)

"An adult that is friendly to a child will be able to learn what is happening around that child and the child will be able to reveal what they are consuming from the device that they are accessing." (FGD-Stakeholder)

b. Guidance and counselling to children

Parents should guide their children about using ICT meaningfully to enhance their lives and discourage them from engaging in its inappropriate use.

c. Role modelling for children

Parents should keep away information that is inappropriate for children but rather share with them educative information to teach their children good life principles. By modelling good practices, parents teach children good behaviour.

3.7.2 Schools

Schools are increasingly integrating ICT in the learning process. Utilizing such technologies in a way that increases the protection, development and participation of school-going children is a pertinent concern.

a. Guidance and regulation ICT access and use

Schools should guide children about the use of school-based ICT and regulate its use. This will help children to benefit from it and later join the working world with valuable skills. Respondents suggested that this could be achieved through existing structures such as school clubs or associations that could deliver target messages.

"These clubs in schools properly occupy the children and that is where their emotional and physical energy is profitably used; so if we have ICT clubs in schools, they can be utilized to train and morally build the young ones and they will also instruct others." (FGD-Teacher)

3.8 Respondents' views on messages that could be shared to promote positive values and behaviours

As cited by the respondents, the messages that could be shared through ICT to encourage positive values and behaviour among children included moral and cultural; religious, educational, financial, health, inspirational and safety. This was reflected in the various FGDs below:

a. Moral and cultural messages

"Messages with moral and cultural values should be shared as these can help enhance moral uprightness, especially among the youths." (FGD-Stakeholder)

"Sex and sexuality messages can be shared to help young people learn what to do in marriage because children these days are not trained by their aunties and they end up marrying without knowing what to do in marriage. These messages can help children to become assertive and decide between what is right and wrong. (FGD-Stakeholders)

b. Religious messages

"Gospel teachings on television and radio that can inspire our children to live a God-fearing life and keep them buffered from a spoilt society." (FGD-Parent)

"Religious messages should be shared because they will help change the children's behaviours, like people who have been wrong doers can change to the truth. This will help to shape the behaviours of the children and the people who abuse children through ICT devices, thus having a peaceful society free from ICT abuses." (FGD-Teacher)

"Through ICT, religious leaders should share religious messages with children and other people on social media, preaching the word of God and sharing gospel music, which motivates them to become good people and do good things." (FGD-Stakeholder)

"Religious messages like John 3:16 (Holy Bible) can be preached to young people to have a feel that God exists. This can help to instil some morals in young people. Even when using ICT devices, one can also share such a good message to others." (FGD-Students)

c. Financial messages

"Financial messages can be shared through the Internet and social media. For instance, the Junior Achievement programme can teach youths how to create simple businesses to enable them to earn money rather than being idle and using ICT devices for bad things which make them spend rather than earning." (FGD-Parent)

"Financial messages to train young people on how to do business and be entrepreneurs. Children can learn to make and save money both online and offline. For instance, there are online businesses that one can do to make money. This can help children to become creative instead of using ICT devices to waste time and engage in dubious ways." (FGD-Stakeholder)

d. Educational messages

"PIASCY messages should be shared because these teach children to be self-controlled and to behave well. Through these messages, children learn how to avoid contracting HIV/AIDS and can talk to others about HIV/AIDS. Health messages need to be shared because children learn to live healthy, which promotes long life." (FGD-Teachers)

"Health messages will help to create awareness among students of some deadly diseases, how to prevent them and how to live with them; and take serious precautions on the diseases. (FGD-Student)

e. Health messages

“Career guidance messages are of great significance in the lives of children if shared. Messages guiding on different professions help children to choose careers in line with their abilities.” (FGD-Parent)

“Educative messages in school subjects can be shared on the Internet, SMS, WhatsApp, and Facebook and on TV and radio programs. These can help children to learn and improve in poor subjects.” (FGD-Stakeholder)

“Educative programs like teaching lessons on television, on radio and on laptops/ desktops that give opportunities to pupils to access learning content like notes, tutorials and research materials by different authors.” (FGD-Teacher)

“Parents and teachers can use ICT to share educative information with children, e.g. science and technology, disease prevention, mathematics, etc. This is better than using ICT to molest students by teachers.” (FGD-Student)

f. Inspirational messages

“Inspirational messages can be shared through ICT devices, especially through the phones, television and radios, to comfort children who may have been affected by diseases like HIV/AIDS because most of them are lonely and need company and comfort. Such messages can help them catch up with their daily lives.” (FGD-Children)

“Messages and clips about famous sports personalities, writers and business personalities should be shared so that our children can be inspired to work hard and attain the levels that those individuals have reached.” (FGD-Parent)

g. Safety messages

“Safety should be given priority to sensitize children and other people about things like how to prevent fire breaks in the homes and at the work place and also how to prevent crimes, especially by those people who meet after online networking.” (FGD-Parent)

“Sensitization messages on the use and how to report bad people can help promote positive behaviours. Such messages should be pinned everywhere and shared on social media platforms, informing people on the proper use of ICT and reporting those posting pornographic material and using social media to rob people. This helps to reduce cyber robbery and theft. Children should also be advised to use gadgets in public, not in private, to enable them be aware that there is someone watching what they are doing with their gadgets.” (FGD- Stakeholder)

3.7.3. Respondents’ views on messages that should not be shared through ICT devices

The messages listed as unfit to be shared through ICT devices included those that have the following features or characteristics:

- i. verbally and emotionally abusive
- ii. pornographic and immoral
- iii. have bad language
- iv. Promote physical violence (wrestling, action-packed movies, etc.)
- v. promote culturally immodest dressing

"Abusive messages like those that attack someone on any social platform should not be shared. These promote bad or abusive behaviours among children and other people who use ICT devices." (FGD-Children)

"Pornographic messages should not be shared because they influence children and young people negatively that when they watch nude pictures and sexual videos, they are sometime forced to practice what they have watched." (FGD-Teacher)

"Immoral messages; like some programs of 'Ssengas' and 'Kojjas'on Bukedde Television contain immoral messages that lure young people into immorality and early marriages." (FGD-Stakeholder)

"Action-packed movies and wrestling which tend to incite violence among the children against their friends. For example, a young man watched wrestling and he began jumping over stools and holding his young brother to a count of three. This is not good at all and is very risky." (FGD-Stakeholder)

"Messages that promote a deviant behaviour in society; for example, messages on bad language, bad dressing like the ripped trousers that people call damaged trousers. They wear them thinking it is fashion, this one we don't want it." (FGD-Parent)



CHAPTER FOUR:

CONCLUSION AND RECOMMENDATIONS

4.1 Conclusions

Conducted in six districts of Uganda, the research's general purpose was to understand the utilisation of ICT in preventing violence against children (VAC) in and around schools and developing a model that can be applied by agencies to prevent VAC.

Several dimensions of the research concern were explored to facilitate the investigation. These included understanding children's access to and usage of ICT, benefits, challenges and constraints of using ICT, abuse of children via ICT, perpetrators of ICT-enabled violence; impact and influence of ICT upon children. Moreover, the role of ICT in driving, sustaining and mitigating VAC in and around schools was explored, too.

From the findings, indeed, children own and/or have access to ICT devices, although at varying extents for each device or technology; and for urban or rural children. Although fewer children (highest, 39% for mobile phone) owned ICT devices, many more (highest, 74% for mobile phone) had access to them. Children from urban settings had higher ownership of and/or access to devices including mobile phones, television sets and computers, among others. Television sets, radio and the mobile phone emerged as the most accessed and used ICT devices; with television and radio being the most used daily, while the mobile phone was the most preferred device.

Children use ICT for different purposes, including communication, enhancing learning, accessing finance and entertainment. The mobile phone and other devices that could access the Internet were found to be used mostly to access social platforms, especially Facebook, WhatsApp and YouTube.

Indeed, ICT has had a role in driving and mitigating behaviour that contributes to VAC, as there have been both positive and negative influences and risks associated with using the technologies. The identified benefits of utilising ICT could contribute to preventing VAC, specifically for knowledge generation and transfer, capabilities enhancement and as a social enabler. They included reporting violence, communication with other people, increasing education opportunities, information exchange, processing and storing information, increasing innovations and opportunities, linking up for emergency services and entertainment.

ICT was used to report VAC. Children were said to report to various individuals through voice calls and SMS. The first go-to persons were the parents, followed by the police and several others, including friends, teachers, ICT technicians, neighbours and CBO/NGO/religious leaders. Children from rural settings were more likely to report receiving inappropriate messages through ICT than children from urban settings.

Utilising ICT had risks associated with it. These consisted of exposure to online child pornography, talking to and meeting strangers, watching/listening to violent content, betting, trafficking, coordinating theft or robbery, cyber bullying and exposure to extremist content. The means of abuse through ICT included social media platforms [Facebook and WhatsApp], voice calls, SMS, YouTube, home television and games.

Girls are the most vulnerable to violence via ICT, as they were found to be the most exposed to ICT-enabled violence. Moreover, children from urban settings and children in secondary school were also vulnerable to the violence. Other vulnerable categories comprised boys, children from very poor families, orphans and children with disabilities.

Children participate both in driving and mitigating behaviour that contributes to VAC via ICT. They were reported among ICT VAC perpetrators, who also included unknown people/strangers, peers, members of online social networks or groups, community workers, relatives, parents, teachers, the police, siblings and religious leaders.

Awareness by children of any policy or law governing ICT in Uganda was found to be generally low, as only 40% of those who participated in the study were aware of such policies; with 38% of respondents in rural areas being aware, in contrast to 42% of respondents in urban areas.

A look into the impact and influence of ICT upon the behaviour of children who have access to and use the technologies indicates both positive and negative influences. More urban children (69%) attested to the influence than rural children (63%). Positively, children were observed to grow in their learning and development capacity as they could use ICT for learning, facilitating talent and career development and generating income. The negative influence was equally substantial, as children were said to spend much time using ICT devices and evade home and school responsibilities; copy inappropriate practices through ICT, which translated into disrespecting parents, stealing, trying out pornographic acts, seeking wrong fame, dropping out of school and physical violence.

Constraints to ICT utilisation to prevent VAC existed. Those mentioned were financial and infrastructural, consisting of lack of steady and reliable access to electric power, which affected more children from rural locations; lack of adult support, reported by more children in urban areas; high cost of accessing Internet, lack of reliable access to Internet and cost of repair/replacement of devices.

With the research findings, information and communication technologies can be utilised positively to encourage positive values and behaviour among children and to prevent violence towards children in and around schools. The recommendations to achieve this are provided in section 5.2. Both formal and non-formal actors along with the ICT industry can collectively work to protect children from ICT-enabled violence.

4.2 Recommendations

Based on the findings, a coordinated multi-sectoral response that bridges the efforts of various formal and non-formal actors, players and stakeholders is required. These may primarily include Government bodies, civil society, development partners, the ICT industry, educationalists, parents/other caregivers and children. The recommendations are presented at both policy and programmatic levels.

Policy-level recommendations

a) Undertake nationwide dissemination of policies on ICT

Popularize the ICT policy and Computer Use and Anti-Pornography Act in both schools and communities: In this study, most respondents did not know about the ICT policies. This calls for the Government to create awareness on the ICT policy and the Computer Use and Anti-Pornography Act and ICT utilization in schools, communities and child-focused organisations. This will bring awareness, among the population, of both the good and the potential dangers of ICT utilisation and how to act in accordance. Engage civil society/ NGOs/CBOs/FBOs in the sensitization and education programs, given that they operate at grass root levels and have much influence over communities.

b) Policy implementation and law enforcement

Guide players/actors in the ICT industry to regulate content: The Uganda Communications Commission should enforce guidelines on content channelled and transmitted by the various factors, including telecommunications companies, radio and television agencies, and Internet cafes, among others.

The Government should liaise with the online industry to create a safer and age-appropriate online environment (appropriate content, contact and conduct): Online safety is a community challenge and an opportunity for industry, government and civil society to work together to establish safety principles and practices. Industry can offer an array of technical approaches, tools and services for parents and children. These can include offering tools to develop new age-verification systems or to place restrictions on children's consumption of content and services, or to restrict the people with whom children might have contact or the times at which they may go online.

Build capacities of child protection actors in Government: Equip formal (e.g. law enforcement, teachers, social workers, community development departments etc) and non formal (families, religious, traditional leaders) actors with skills and competencies to better address ICT enabled child sexual abuse and exploitation. Government should provide leadership and commitment in building capacities of child protection actors and law enforcement officers in various ministries, departments and agencies to aid in preventing and responding to ICT-enabled VAC.

Programming recommendations

a) Recognising and involving children as own agency in preventing and responding to ict-enabled child abuse and exploitation

An effective child protection system strengthens the protective environment around children and, as well, strengthens the children themselves, to ensure their wellbeing and to fulfill their rights to protection from abuse, neglect, exploitation and other forms of violence. In the case of ICT, this calls for having children participate in both preventing and responding to ICT-related VAC.

Intentionally and systematically guide children regarding the benefits and dangers of ICT: Parents and teachers can guide children about both the advantages and potential dangers of ICT, while creating a friendly environment for children to confide in them about their

experiences of utilizing the devices. Within schools, children could be provided with opportunities to hold open discussions concerning ICT. This could be achieved through school debates, clubs and fellowships that would aid in raising awareness and alerting the children on ICT-related abuse and how to respond to it.

Establish peer support ICT groups for children who are especially vulnerable to ICT-enabled sexual abuse: Although all children were found to be exposed to risks related to ICT utilisation, girls were the most vulnerable. For such categories, it is necessary to establish peer support ICT groups, which will not only create mutual accountability among the children regarding their use of ICT, but also quicken the reporting of abuse encountered while using these technologies.

Conduct value-based life skills building among children to strengthen their resilience against ICT-enabled violence against them. This could be carried out in existing structures within schools such as faith fellowships, clubs and debates.

b) Strengthen reporting and referral mechanisms on ict-enabled sexual abuse exploitation and other forms of violence

Children need to be trained and encouraged to actively participate in identification and reporting of all forms of child abuse and exploitation, including ICT-enabled abuse. This will help them to respond to such abuse and contribute to its reduction and/or elimination.

Popularize and expand the national child helpline (SAUTI) in all schools and communities in the country: The child helpline has been a breather in helping to address VAC. However, its popularity in schools and communities (both urban and rural) is still low. Government should, thus, popularize and expand the help line to respond to all forms of abuse, including ICT-related VAC in homes, schools and communities.

Support and connect vulnerable children to protective mechanisms and services that prevent and address ICT enabled child sexual abuse , exploitation and other forms of violence.

c) Address poverty and unemployment among young people

Create employment opportunities for out-of-school young people, to help them to meaningfully focus their energies on productive engagements that fetch income. It will also promote use of ICT in income generation and utilize ICT for positive economic benefits.

d) Recovery for the offended children

Facilitate rehabilitation of abused children: The Government should liaise with other relevant actors to provide recovery and rehabilitation for children who get abused through ICT.

e) Strengthen parent, caregiver and school capacity

Educate parents about ICT and its benefits and risks: Parents hold the primary responsibility for their children's welfare. As such, they are in a better position to decide what is appropriate for their children and should be aware of all risks to better protect their children and empower them to take action. However, as is with other developing countries, Ugandan parents sometimes have less understanding and knowledge of the Internet and mobile devices than children. In this case, they could be trained in ICT basics (e.g. for phone, Internet and television), how to avoid spam and manage privacy settings, about actions to take if a child is experiencing online bullying or grooming, and how to guide children of

different age groups towards safer, more responsible and appropriate online and mobile phone experiences.

Parental supervision and control of ICT gadgets: Parents should regulated use and access to ICT devices while creating a friendly atmosphere and environment for children to confide in them about utilization of their phones. They should set passwords and parental control keys on ICT devices (phones, television sets, computers and others) to block off inappropriate content when no adult is around to supervise what children watch and listen to.

Modeling a positive image for the children: Similarly, parents need to be role models to the children by strengthening privacy and, thus, avoid being seen consuming material that is inappropriate for children. This will help children to emulate good practices from the adults that they look to.

Equip children with value based assets and positive social norms: Parents should equip children with value based assets and positive social norms so as to enable children to make positive decisions on ICT use. Children will therefore utilize ICT devices for sharing and transmitting values based and positive social norm messages

Support teachers with skills to understand and curb ICT-enabled sexual abuse and exploitation: Most teachers indicated inadequate knowledge of how they could help a child who has been abused or is being abused through ICT. Equipping them with appropriate skills for both preventing and responding to all forms of abuse, including ICT-enabled violence, could be useful.

Build evidence, research and learning on ICT enabled violence

Systematically conducting evidence based research and learning to measure the effectiveness of interventions designed to prevent and protect children from ICT sexual abuse and exploitation in communities and schools to guide programme design and policy efforts



APPENDIX I:

RESEARCH TOOLS

Questions and Filters				
	QUESTIONS	RESPONSE	CODE	SKIP
100	Sex [Please interviewer observe]	Male Female	1 2	
101	In what month and year were you born?	Month. Don't know month YEAR Don't know year	 97 97	
102	How old are you?	Age in completed years Don't know	 97	
103	Which level of education have you attained?	Primary Secondary	1 2	
104	What is your religion?	Roman Catholic Protestant/Anglican Moslem Catholic Charismatic Born again Christian/ Pentecostal Adventist (SDA) Orthodox Pentecostal Lutheran Hindu Bahai Traditional African Not religious Other (specify): _____	1 2 3 4 5 6 7 8 9 10 11 12 13 97	
105	Whom do you live/stay with while at home?	Father and mother Single parent Guardian/ other relative Alone Friend Not related Orphanage Others Specify	1 2 3 4 5 6 7 97	
SECTION 1 : OWNERSHIP AND ACCESS				
106	Do you own any of the following ICT devices?	Radio Television set Desktop PC Laptop Cameras Video games Phone Ipad/Tablet	Yes 1 1 1 1 1 1 1 1	No 0 0 0 0 0 0 0 0

Questions and Filters						
	QUESTIONS	RESPONSE	CODE	SKIP		
107	Do you have access to any of the following ICT devices?		Radio Television set Desktop PC Laptop Cameras Video games Phone Ipad/Tablet	Yes 1 1 1 1 1 1 1 1	No 0 0 0 0 0 0 0 0	
108	Who owns this ICT device?		Self Parent/guardian Friend Teacher Sibling Cinema Neighbour School Institution Cafe	Yes 1 1 1 1 1 1 1 1 1	No 0 0 0 0 0 0 0 0 0	
109	Does your household own or have access to the following?		Radio Television set Desktop PC Laptop Cameras Video games Phone iPad/Tablet	Yes 1 1 1 1 1 1 1 1	No 0 0 0 0 0 0 0 0	
110	How often do you use a computer?		Daily Weekly Monthly None	1 2 3 4		
111	How often do you use a phone?		Daily Weekly Monthly None	1 2 3 4		
112	How often do you use an iPad/Tablet?		Daily Weekly Monthly None	1 2 3 4		
113	How often do you watch television?		Daily Weekly Monthly None	1 2 3 4		
114	How often do you listen to a radio?		Daily Weekly Monthly None	1 2 3 4		
115	How often do you use the Internet		Daily Weekly Monthly None	1 2 3 4		

Questions and Filters				
	QUESTIONS	RESPONSE	CODE	SKIP
SECTION 2: ICT USAGE HABITS				
200	Which is your most preferred ICT device that you use for communicating with others? (circle appropriate response)		Radio 1 Television set 2 Desktop PC 3 Laptop 4 Cameras 5 Video games 6 Phone 7 iPad/Tablet 8	
201	Does this device meet any of your needs? (circle appropriate response)	Yes No Don't know	1 2 99	
202	If so what type of needs do they address?	Increasing innovations and opportunities Exchange of Information Communication with others Linking for emergency services Processing and storing Information Marketing services Financial services Entertainment Don't know Others (specify) _____ _____	1 2 3 4 5 6 7 8 99 97	
203	Which kinds of people do you commonly share your message through any ICT device with?		Parents 1 Friends 2 Siblings 3 Relatives 4 Community workers 5 Religious leaders 6 Teachers 7 Police 8 Church leader 7 Community workers 8 Unknown people online 9 Members of a social network (Group) 10	
204	Please share with me the most common way you prefer sharing information with other people		SMS 1 Facebook 2 Whatsapp 3 Twitter 4 Instagram 5 Games 6 Internet (email) 7 Skype 8 YouTube 9 Periscope 10 Calls 11 Others (specify) 97 _____	

SECTION 3 : ICT AWARENESS, ATTITUDES AND PRACTICE																														
301	What type of social platform do you often have access to?	<table> <tr><td>SMS</td><td>1</td></tr> <tr><td>Facebook</td><td>2</td></tr> <tr><td>Whatsapp</td><td>3</td></tr> <tr><td>Twitter</td><td>4</td></tr> <tr><td>Instagram</td><td>5</td></tr> <tr><td>Games</td><td>6</td></tr> <tr><td>Internet</td><td>7</td></tr> <tr><td>Skype</td><td>8</td></tr> <tr><td>YouTube</td><td>9</td></tr> <tr><td>Others Specify</td><td>97</td></tr> <tr><td>_____</td><td></td></tr> </table>	SMS	1	Facebook	2	Whatsapp	3	Twitter	4	Instagram	5	Games	6	Internet	7	Skype	8	YouTube	9	Others Specify	97	_____							
SMS	1																													
Facebook	2																													
Whatsapp	3																													
Twitter	4																													
Instagram	5																													
Games	6																													
Internet	7																													
Skype	8																													
YouTube	9																													
Others Specify	97																													

302	Mention the benefits of ICT that you know of? (Do not read out options but probe for any other response)	<table> <tr><td>Exchange of Information</td><td>1</td></tr> <tr><td>Communication with friends and loved ones.</td><td>2</td></tr> <tr><td>Linking up for emergency services</td><td>3</td></tr> <tr><td>Coordinating programmes</td><td>4</td></tr> <tr><td>Processing and storing information</td><td>5</td></tr> <tr><td>Marketing services</td><td>6</td></tr> <tr><td>Financial services</td><td>7</td></tr> <tr><td>Taking pictures and recording video clips</td><td>8</td></tr> <tr><td>Playing music and games</td><td>9</td></tr> <tr><td>Having access to GPS locators or an alarm clock</td><td>10</td></tr> <tr><td>Entertainment</td><td>99</td></tr> <tr><td>Don't Know</td><td>97</td></tr> <tr><td>Other (specify) _____</td><td></td></tr> <tr><td>_____</td><td></td></tr> </table>	Exchange of Information	1	Communication with friends and loved ones.	2	Linking up for emergency services	3	Coordinating programmes	4	Processing and storing information	5	Marketing services	6	Financial services	7	Taking pictures and recording video clips	8	Playing music and games	9	Having access to GPS locators or an alarm clock	10	Entertainment	99	Don't Know	97	Other (specify) _____		_____	
Exchange of Information	1																													
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Having access to GPS locators or an alarm clock	10																													
Entertainment	99																													
Don't Know	97																													
Other (specify) _____																														

303	Are you currently using any ICT device?	<table> <tr><td>Yes</td><td>1</td></tr> <tr><td>No</td><td>0</td></tr> </table>	Yes	1	No	0																								
Yes	1																													
No	0																													
304	Do you know whether any of your family members is/are using an ICT device?	<table> <tr><td>Yes</td><td>1</td></tr> <tr><td>No</td><td>2</td></tr> <tr><td>Don't know</td><td>99</td></tr> </table>	Yes	1	No	2	Don't know	99																						
Yes	1																													
No	2																													
Don't know	99																													
305	Please tell me if you know the ICT device that your family member is using currently (Tick as mentioned but don't read the responses)	<table> <tr><td>Radio</td><td>1</td></tr> <tr><td>Television set</td><td>2</td></tr> <tr><td>Desktop PC</td><td>3</td></tr> <tr><td>Laptop</td><td>4</td></tr> <tr><td>Cameras</td><td>5</td></tr> <tr><td>Video games</td><td>6</td></tr> <tr><td>Phone</td><td>7</td></tr> <tr><td>iPad/Tablet</td><td>8</td></tr> <tr><td>Do not know</td><td>99</td></tr> <tr><td>(Specify) _____</td><td>97</td></tr> </table>	Radio	1	Television set	2	Desktop PC	3	Laptop	4	Cameras	5	Video games	6	Phone	7	iPad/Tablet	8	Do not know	99	(Specify) _____	97								
Radio	1																													
Television set	2																													
Desktop PC	3																													
Laptop	4																													
Cameras	5																													
Video games	6																													
Phone	7																													
iPad/Tablet	8																													
Do not know	99																													
(Specify) _____	97																													
306A	Do you think children can be abused through an ICT device?	<table> <tr><td>Yes</td><td>1</td></tr> <tr><td>No</td><td>2</td></tr> <tr><td>Don't Know</td><td>99</td></tr> </table>	Yes	1	No	2	Don't Know	99																						
Yes	1																													
No	2																													
Don't Know	99																													

SECTION 3 : ICT AWARENESS, ATTITUDES AND PRACTICE														
306B	What categories of children are exposed to ICT violence/abuse the most at school, home and community?	<table> <tr> <td>Boys</td> <td>1</td> </tr> <tr> <td>Girls</td> <td>2</td> </tr> <tr> <td>Orphaned children</td> <td>3</td> </tr> <tr> <td>Children with disabilities</td> <td>4</td> </tr> <tr> <td>Children from very poor families</td> <td>5</td> </tr> <tr> <td>Don't know</td> <td>99</td> </tr> </table>	Boys	1	Girls	2	Orphaned children	3	Children with disabilities	4	Children from very poor families	5	Don't know	99
Boys	1													
Girls	2													
Orphaned children	3													
Children with disabilities	4													
Children from very poor families	5													
Don't know	99													
307	Please tell me why you say so													

SECTION 4: EXPOSURE TO ICT AND IMPACT				
	Questions and Filters	Response	Codes	Skips
400	In what ways are children abused through ICT devices?	SMS Whatsapp messages Calls Facebook messages Games YouTube messages Don't know	1 2 3 4 5 6 99	
401	Do you know of any child who has been abused through any ICT device?	Yes No Don't know	1 2 99	
402	What type of information do children like to share with friends through an ICT device?	Informative Educative Inspirational Entertainment Marketing services Financial services Abusive material Don't know Others (Specify) _____ _____	1 2 3 4 5 6 7 99 97	
403	Have you heard of anyone in your school or community who has ever received any dangerous, exploitative, abusive messages through a phone from any one?	Yes No Don't know	1 2 99	
404	What type of information do children like to share with parents through an ICT device?	Informative Educative Inspirational Entertainment Financial and marketing services Abusive material Don't know Others (Specify) _____ _____	1 2 3 4 5 6 7 99 97	

SECTION 4: EXPOSURE TO ICT AND IMPACT				
	Questions and Filters	Response	Codes	Skips
405	Do you think children need to access ICT devices?	Yes No Don't know	1 2 99	
406	How has ICT influenced the way boys and girls behave?	Positive way Negative way Both positively and Negatively Don't know	1 2 3 4 99	
407	What do you consider to be a good way of using ICT devices by the children?	Exchange of Information Communication with others Linking for emergency services Processing and storing Information Entertainment Financial and marketing services Sharing innovations and opportunities Don't know Other (specify) _____ _____	1 2 3 4 5 6 99 97	
408	What are the primary risks faced by young people while accessing and consuming ICT?	Exposure to Online child pornography Talking to and meeting strangers Trafficking Exposure to extremist content Cyber bullying Gambling/Betting Defrauding Coordinating theft/ robbery Watching and listening to violent/abusive material Don't know	1 2 3 4 5 6 7 8 9 99	
409	Which types of people abuse children online, sms, whatsapp etc?	Parents Friends Siblings Relatives Community workers Religious leaders Teachers Police Church leader Community workers Unknown people online (strangers) Members of a social network (group) Don't know	1 2 3 4 5 6 7 8 7 8 9 10 99	
410	Please suggest what kind of messages can be shared to promote positive values and behaviour.			
411	Please share with us messages that should not be shared through ICT devices			
SECTION 5: ICT UTILISATION				

SECTION 4: EXPOSURE TO ICT AND IMPACT				
	Questions and Filters	Response	Codes	Skips
501	If so what type of needs do they address?	Increasing opportunities in education Exchange of Information Communication with others Linking for emergency services Processing and storing Information Marketing services Financial services Entertainment Others (Specify)	1 2 3 4 5 6 7 8 97	
502	Do you think children experience challenges in utilizing ICT?	Yes No Don't know	1 2 99	
503	Please mention them. (Do not read out options but probe for responses)	Lack of steady, reliable access to electricity Lack of reliable access to internet High Cost of Internet/high cost of Internet bundles High cost of replacing /repairs Lack of adult support Don't know	1 2 3 4 5 99	
504	Do you know of any policy or law that governs ICT in Uganda?	Yes No Don't know	1 2 99	
505	Which people could you confide in if something went wrong when you receive messages through an ICT device (phone or computer)?	Parent Friends/Peers Community workers Police Teacher Siblings NGOs/CBO /Religious worker Neighbours ICT technician None Don't know Others specify _____	1 2 3 4 5 6 7 8 9 10 11 12 99	

SECTION 6: PROBABLE STRATEGIES/ RECOMMENDATIONS TO ADOPT		
	Questions and Filters	Responses
600	Have you ever warned someone about the dangers of some ICT messages? Yes No Don't know	1 2 99
601	Do you feel equipped to help someone who has received a dangerous message through an ICT device? Yes No Don't know	1 2 99
602	How can boys and girls avoid dangers of ICT I abuse, exploitation and violence? (write in the space)	
603	How can homes and schools be made safer places for children to safely use ICT devices? (write in the space)	
604	Please can you suggest what can be done by each of the following to promote ICT positive behaviour and use?	
A	Children	
B	Parents/Families	
C	Teachers/Schools/Institutions	
D	Local government authorities	
E	Religious leaders	
F	Traditional leaders/ institutions	
G	Non-governmental organizations	

APPENDIX II:

LITERATURE REVIEW

Introduction

Approaches to protecting children are insufficient to meet the complex issues they now face, and inter-sectoral, child-centered strategies are needed. Over the last decade, politicians, policy makers, academics and many others have discussed the potential role of Information and Communication Technology (ICT) in influencing the trends among the different sections of society. ICT is revolutionizing our life, our ways to interact with each other, and day-to-day life and work. ICTs have enabled information to be effectively managed and enhanced; they have helped catapult the status of information to a resource that needs to be managed and that can lead to efficiencies and competitive advantage (Gomatos H. Moahi, 2009).

The explosion of ICT has created unprecedented opportunities for children and young people to communicate, connect, share, learn, access information and express their opinions on matters that affect their lives and their communities. But wider and more easily available access to the Internet and mobile technology also poses significant challenges to children's safety – both online and offline. Although there are a number of initiatives being carried out in the application of ICT to counter VAC, there is still a lot more to be done (Kgomotso, H., 2009).

The Convention on the Rights of the Child (CRC, 1989) guarantees the right to express views and to be heard (Art.12), freedom of expression, including the freedom to seek, receive and impart information (Art.13), the freedom of association and peaceful assembly, and the right to information, (Art.17) amongst others. Although drafted before the Internet became ubiquitous, the CRC is highly pertinent when it comes to adolescents and youth accessing, posting and sharing content online. As such adolescents and other young people are educated about their rights. Moreover, they are protected from ICT risks through the concept of Digital Citizenship using diverse communication channels (Gerrit et al., 2012).

ICT Defined

Information and Communications Technology or technologies (ICTs) entails all the technology used to handle information and aid communication. It is an umbrella term that includes any communication device or application, encompassing radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications. The phrase was coined by Dennis Stevenson in his 1997 report to the UK government, and promoted by the new National Curriculum documents for the UK in 2000 (FOLDDOC, 2008).

On the other hand, the UN Study on Violence Against Children (2006) definition of violence draws on Article 19 of the CRC: "All forms of physical or mental violence, injury and abuse, neglect or negligent treatment, maltreatment or exploitation, including sexual abuse" as well as the definition used by WHO in the World Report on Violence and Health (2002): "The intentional use of physical force or power, threatened or actual, against a child, by an

individual or group, that either results in or has a high likelihood of resulting in actual or potential harm to the child's health, survival, development or dignity."

Role of ICT in Preventing and Responding to VAC

The benefits of ICT usage include broader access to information about social services, educational resources and health information. As children and families use the Internet and mobile phones to seek information and assistance, and to report incidents of abuse, these technologies can help protect children from violence and exploitation. ICTs are also used to gather and transmit data by child protection service providers, facilitating, for example, birth registration, case management, family tracing data collection and mapping of violence. Moreover, the Internet has increased access to information in all corners of the globe, offering children and young people the ability to research almost any subject of interest, access worldwide media, pursue vocational prospects and harness ideas for the future. ICT usage empowers children to assert their rights and express their opinions, and it provides multiple ways to connect and communicate with their families and friends. In addition, information and communication technologies serve as a major mode of cultural exchange and a source of entertainment (UNICEF, 2016).

Although there is an increase in the number of schools with ICT equipped laboratories, most of them have few guidelines on how children can utilise them without exposure to ICT enabled VAC either on line or downloaded on the device. Yet still, conceptualizing cyberspace as an ecological system of influence on the child helps to explain how the environment, including the online environment, can perpetuate and escalate the harms done to children made subjects of sexual abuse images online. Integrating an awareness of cyberspace in investigations and assessments increases the likelihood that the involvement of technology, specifically the Internet, will be probed (Alaggia, 2004).

On the other hand, however, when it comes to online safety risks, important considerations should be taken into account. First, there is no evidence of new types of safety risks being posed by the Internet. Rather, the Internet has only magnified certain risks and offences such as child sexual abuse, trafficking and piracy and providing new channels through which they can occur. Second, the Internet is not inherently dangerous. Rather, it is the offline human behaviour that is reflected online. As evidenced by a study conducted in the UK, children's online communication activities can be predicted by their offline characteristics, particularly their levels of life satisfaction and risk-taking (Livingstone, S. and Helsper, E.,2007). Similarly, as argued by Danah Boyd (2010) "people may have a tendency to blame the technology that forces them to confront disturbing behaviours—not realizing that technology is only the messenger" (Gerrit Beger, et al,2012).

The worldwide web can offer learning opportunities for people of all ages. It is a rich and rewarding source of knowledge and a medium that empowers creativity and imagination. A central dilemma that institutions must address in a consideration of e-safety is how they can support children to engage in productive and creative social learning through web technologies, while protecting them from undue harm. There is no simple or mechanistic solution to this dilemma, since creativity and social interaction necessarily involve an element of risk, in exposing oneself and one's ideas to criticism and possible abuse (Mike Sharples, Rebecca Graber, Colin Harrison, Kit Logan, 2009).

In Indonesia, ICT development has flourished in mobile access and use (Internet, texting),

while lagging in computer and stationary Internet ownership and use. The ICT landscape in Indonesia provides a range of technological platforms to a population that exchanges overwhelmingly on Western-based websites by Indonesian adolescents and youth. Urban dwellers and males lead in Internet access, use and social networking. However, as a whole, the nation leads in the world with the second highest number of users on Facebook and third highest on Twitter. These staggering statistics point to the high engagement of adolescents and youth in content creation and consumption. Different types of safety risks faced online have also been identified as a result of exposure, including child pornography, talking to and meeting strangers, trafficking, software piracy, exposure to extremist content and cyber-bullying (Gerrit Beger et al,2012).

In a search for a philosophical and political framework of ICT-enabled VAC, we could turn to the United Nations Convention on the Rights of the Child (United Nations, 1990). Article 13 declares that “The child shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of the child’s choice.” It then indicates that the exercise of these rights may be subject to certain restrictions, “but these shall only be such as are provided by law and are necessary: (a) For respect of the rights or reputations of others; or b) For the protection of national security or of public order, or of public health or morals”. So, we again face the problem of how to allow children the right to freedom of expression in the media of their choice, while ensuring appropriate protection of their health and morals (United Nations, 1990).

The introduction of ICTs such as mobile phones to basic health service providers in rural areas can help bridge gaps in their work environment, resulting from under-capacitated resources, constrained access to information and delayed interventions. A clear example of this is the Midwife Mobile Phone project which was implemented in 15 health centres in Aceh Besar, Indonesia, involving 223 midwives. The study group (121 participants) used project cell phones to transmit health statistics to a central database, contact coordinators and peers for health advice and information, and communicate with doctors and patients. A subsequent study of the project found that the midwives were able to serve more clients, had increased income, had better relationships with members of the community and had an increased knowledge base. Not only does the Midwives Mobile-Phone project highlight the life-saving potential of ICTs but it also demonstrates the applicability and importance of the United Nations Convention on the Rights of the Child (UNCRC 1989) which, ratified by Indonesia in 1990, ensures that all children “have access to information and material from a diversity of national and international sources, especially those aimed at the promotion of physical and mental health” (UNCRC 1989, Art.17).

The ICT for healthcare development model (Author, Lwin, Ang, Lin, &Santoso, 2008) was used as a heuristic to determine project effectiveness. Findings from the project indicate that the mobile phone has proven to be an effective and efficient device for facilitating smoother communication and allowing speedier emergency response. The Technology-Community-Management model was used as a conceptual framework for probing the design of ICT for development projects (Zhao, et al, 2009; Lee, et al 2008).

Similarly, the introduction of ICTs to rural community health workers (CHWs) has been shown to bridge lacunae in their work environment, resulting from under-capacitated facilities, constrained access to information and delayed responses to emergencies (Ganapathy & Ravindra, 2008; Kanter, Mechael, Lesh, Dhadialla, & Kramers, 2008). In particular, the use

of mobile phones has been noted in the monitoring of pregnancies, for treatment and for post-natal healthcare support (Maniam, Chin, & Chenapiah, 2007; Mirza & Norris, 2007). In that regard, it is clearly agreed that the use of mobile phones in healthcare settings can potentially deliver important benefits, because of their ability to provide and improve access to communication and information resources ((Arul, pg 501 and 503).

For example, the discipline of mHealth has been gaining ground as mobile device penetration rates grow rapidly, increasingly prompted by plunging hardware and usage costs, as developing world consumers adopt this accessible communication technology (Donner, 2004; Iluyemi, 2007; International Telecommunication Union, 2007; Kinkade & Verclas, 2008; McConnell, Chathoth, Pardy, Boostrom, Louw, et al., 2008; Mishra & Singh, 2008; United Nations, 2007). Case studies have recorded the use of Short Message Service (SMS) for HIV/AIDS prevention and control, and for treatment of tuberculosis in South Africa (Atun, 2005); consultation services and dissemination of critical health information in rural communities in India (Bali & Singh, 2007; Bhavnani, Chiu, Janakiram, & Silarszky, 2008); and the use of Personal Digital Assistants (PDAs) to collect data and teach medical students in Ghana and Uganda respectively (Chetley, 2006).

The application of ICT to healthcare delivery and the use of telemedicine have raised hopes in Ethiopia, where eighty-five per cent of the population live in remote areas, without access to modern health services, coupled with the limited healthcare budget, chronic shortage of healthcare workers and lack of incentives to retain staff in remote areas and, thus, rendering the national healthcare delivery system in jeopardy. ICT is indeed revolutionizing the life and ways to interact with each other, and day-to-day life and work. Its application in health is described broadly as e-Health, which includes telemedicine, electronic medical records and health information systems with decision support, mobile health and eLearning tools. E-Health has shown considerable potential in facilitating a better healthcare delivery system, leading to better health and universal health coverage. It creates access, enhances quality, improves primary healthcare interventions and can act as a solution for situations where human resources for health are scarce (Fassil et al., 2012).

ICTs also have far-reaching implications for national civic participation. In 2005, the Special Staff Office of President Susilo Bambang Yudhoyono of Indonesia opened a direct mail and SMS line that the community at large used to make their views directly known to the President's staff. By May 2011, over three million text messages had reportedly been received. The community, in turn, has used the opportunity to raise concerns about the late delivery of civil service pension payments, selection of official holiday dates, a collapsed bridge, or to express general well-wishes on the President's birthday, for example (Situs Web, 2011). While the minimum voting age in Indonesia is 17, this SMS project provides children the unique opportunity to openly participate in national dialogue and civic society. Projects like these are examples of successful implementations of Articles 13 and 15 of the UNCRC, which ensure children's rights to "freedom of expression", including the "freedom to seek, receive and impart information and ideas of all kinds" and children's "freedom of association and to freedom of peaceful assembly" respectively (Pasandaran, 2011).

The ICT4H model (Arul et al., 2008), based on the **value-of-ICTs-to-education** model (United Nations Development Programme, 2005), suggests that an ICT, such as mobile phones, can act as a **producer of opportunity**, improving productivity for health professionals; **enhancer of capabilities**, increasing their capacity and potential; **enabler of social ties** by strengthening communication links within the medical hierarchy and with

the patient community, and **generate knowledge** that would allow critical information to be shared and used effectively. In this, developing capacity for women, both technological and occupation-related, has the advantage of increasing motivation and ability to engage in ICT projects, and increase chances of programmatic success (Mijumbi, 2002).

Other benefits of using mobile technologies include access to accurate medical information in a timely manner (Angelidis, 2008), pre-treatment of primary healthcare problems (Bali & Singh, 2007), improving internal communication within the complex healthcare system (Malkary, 2006), and with the external patient community (Harper, 2006), integrating data into a central database in the form of electronic medical records for efficient tracking (Anantraman, Mikkelsen, Khilnani, Kumar, Machiraju, Pentland, et al., 2002; Chetley, 2006), and improving the administrative efficiency of healthcare providers (Baker, 2006).

Understanding the different programs and interventions that agencies can use to prevent VAC

A number of global changes, including the growth of ICT and shifting demographics (aging populations in the Global North and youthful demographics in the Global South) have implications on children and childhood in multiple and important ways (Lynch, 2010). Responding to these global changes presents both challenges and opportunities to child protection—a relatively youthful social service sector compared with say health or education. The challenge of devising effective protection services is especially acute where new kinds of problems for children and youth arise as a result of evolving ICT. Traditional approaches to protecting children are insufficient to meet the complex issues they now face, and inter-sectoral, child-centred strategies are needed (Philip, et al., 2012, pg576). Recognizing the major benefits that the Internet and associated technologies can bring, the huge potential to transform lives and the way they have become integral to modern society and are now an intrinsic part of young people’s social landscape, Child Safety Online (UNICEF 2011) proposes a strategic framework for protection that addresses four key objectives namely:

1. Empowering children and enhancing resilience to harm by;

Providing information to children that enables them to make informed choices, avoid risks and find and offer help when needed;

Introducing effective reporting mechanisms such as hotlines, report abuse functions and online supports to pre-empt abusive situations;

Strengthening parental capacities to protect children through programmes that inform parents about the benefits and risks associated with ICT, strategies that children and young people can adopt to keep safe, potential sources of help, and the importance of dialogue and engagement with their children;

Building capacity among professionals who work with children to alert them to the risks children face and teach them how to recognize warning signs and symptoms;

Involving children as campaigners and advocates and utilizing their unique insights and experiences to inform the development of more effective protection. In Benin, the Gambia, Kenya, Mozambique, Nigeria, South Africa and Togo, with ECPAT support, young people have created public awareness campaigns on the risks associated with the online environment and the responsibilities of governments and ICT providers to ensure better protection of children online;

Tackling cyber bullying through the development of initiatives that promote a commitment to zero tolerance of violence and abuse in schools, including cyberspace, and that create educational measures based on principles of acceptance, respect and decency among students. In Croatia, for example, a national campaign to confront cyber bullying led to significant changes in schools, including the reduction of violence.

2. Removing impunity for abusers:

As long as abusers are confident that they can get away with exploiting or abusing of children without the risk of prosecution or social condemnation, they will continue with the vices. It is therefore essential to remove impunity for those who continue to do so in the merged online/ offline environment. This can be strengthened by:

Introduction of effective national legislation, including clear definitions of a child, sexual consent and what constitutes child pornography or child abuse images; the criminalization of the sexual exploitation of children by adults, including possessing, downloading or creating child abuse images, grooming, sexual abuse without contact and attempt crimes; effective sanctions and penalties; and measures to address the challenges of jurisdiction and extradition

Adoption of a broad range of law enforcement strategies, including close collaboration with social welfare and child protection agencies, covert operations and victim identification

Cooperation with ISPs, the online payments industry and other private sector stakeholders to track child sex abusers and to close down channels to this type of crime

Consideration of mandatory reporting by professionals who work with children on suspected abuse, bearing in mind that effective reporting is dependent on the quality of services available to respond to reports

Collaboration among law enforcement agencies at the international level and the development of tools that help gather evidence in criminal cases and facilitate data exchange among police forces across countries like INTERPOL, and

Assurance that children involved in online sexual offences will not be held criminally liable. Children should be acknowledged as victims, regardless of whether they are a compliant victim or a non-cooperative witness.

3. Reducing availability and access to harm:

To stem the availability of abuse images and reduce harm, close collaboration is required by governments with private sector actors, including ISPs, social networking sites, Internet cafe owners and site-hosting services. Joint efforts should include:

Developing codes of conduct and systems of self-regulation to offer a mechanism through which businesses can express and meet human rights standards, by adopting voluntary, non-binding best practices as a guide for management and employees

At the local level, promoting codes of conduct in Internet cafes to encourage owners to introduce measures that will prevent children who use their establishments from being exposed to inappropriate sites, materials or abusive behaviours

Blocking websites that contain child abuse images in order to deny access by potential abusers. Blocking, however, is controversial as it raises fears about wider censorship

Taking down sites in order to remove abusive images from the Internet altogether, commonly known as 'notice and takedown' filters and other types of parental control software enable parents to manage and support their child's access.

4. Promoting the recovery of children exposed to harm:

While the path to abuse may be particular, good practice would entail integrating the Internet dimension into recovery systems that deal with abuse more generally, rather than setting up specialist services. This will require:

Treatment interventions for abused children that address building trust and that support and help children to make sense of their experience

Child-sensitive approaches to discovery during criminal investigations that take into account the profound difficulties often experienced by children and young people in disclosing online abuse

Preparation for court to ensure that children understand the process, their role in the proceedings, what support will be available to them, and how to protect their confidentiality, as well as offering debriefing and counselling when court experiences have been difficult and

Treatment for young people who display sexually abusive behaviours online. Such treatment should be rooted.

Over the period 2013-15, World Vision International (WVI) Child Protection Standards (Child-safe Digital Engagement, 2016) created a set of Child-safe Digital Engagement guidelines to help World Vision stakeholders, mostly fundraising office marketers and communicators, correctly interpret, understand and apply them in relation to 'Communications, Social Media and Digital Technology'. The driver for their creation was to enable compliance to the standards through the marketing and communications functions, ensuring that campaigns and supporter experiences are designed with them in mind, rather than be reliant on reactive checking or policing after the event. Some of these guidelines, and they have worked, pertinent to child protection, included reflecting children and their fellow community members as individuals, equals and agents of change, not as victims; disabling right-click capabilities to make electronic copying harder; and restricting the type of children's information included in public documents – the child's last name, home or school address and medical condition, among others (Child-Safe Digital Engagement, 2016).

ISPs like Microsoft, Google and Mozilla must agree to work together to look at how they can block illegal images at browser level. Once developed, Internet Explorer, Google Chrome and Mozilla Firefox would have built-in restrictions to block access to known child abuse (#WePROTECT Children Online summit at the Lancaster House in London, 2014).

According to ECPAT (2008), an international network of organisations and individuals that brings together research and advocacy bodies to eliminate the commercial sexual exploitation of children, one of the fastest growth areas in ICT use is online pornography, including the phenomena of online paedophilia and the sexual abuse of children. Another current agent of great change and a fast growth area of ICT use is social networking amongst young people. Many new ICT technologies are being developed by adolescents and youth, and young people are themselves transforming the ways in which ICT is defining the social, commercial, and political facets of human connectivity. To further address these issues and

develop innovative systems of social support, the International Institute for Child Rights and Development (IICRD), through the Child Protection Partnership (CPP) and a child-centred methodology Circle of Rights (COR), furthered the foundations of children's human rights and community engagement with children as an integral part (Philip, et al., 2012, pg576).

This global research initiative attempts to understand the unique and emerging threats posed by ICT sexual exploitation. It also examines how young people are involved in finding solutions to these risks and in applying the results of this research to strengthen social protection systems. The goal of CPP is to reduce and, where possible, eliminate ICT-enabled child sexual exploitation by building on good practices and technology across public and private sectors. CPP has three entry points to address the issue:

1. Equip law enforcement, government and other supporting bodies or organisations better to address ICT-enabled child sexual exploitation;
2. Connect vulnerable children (male and female) to protective mechanisms and services that prevent and address ICT-enabled child sexual exploitation; and
3. Foster a coordinated systems approach amongst stakeholders, supported by CPP to prevent and address ICT-enabled child sexual exploitation.

For CPP to succeed in strengthening child protection systems, interventions at all these entry points depend on adequate consultation and cooperation with the young persons involved. CPP encourages children to protect themselves and to contribute to peer prevention and protection through working with bodies such as governments, policymakers, the police, owners of Internet cafés, and non-governmental organisations. To do this, CPP partners work with young people to build on their strengths and expertise in ICT child protection (Philip et al., 2012 pg576).

The COR on the other hand takes shape as a child-centred, participatory, action-oriented research process that begins with children's perspectives and helps communities to build from local wisdom and community strengths to develop innovative and contextualised strategies to support positive social change for children, reflecting the principles of the UNCRC. The metaphor of a young fern growing is used to describe the COR research process and represent the strength-based, iterative learning-action process embedded within the four distinct phases of COR: Map; Engage; Plan; and Create.

The COR methodology has been adapted and applied around the globe to tackle a variety of complex challenges in relation to child rights and protection, including HIV/AIDS, natural disasters, extreme poverty, the rights of indigenous children and their communities, violence and conflict, and the development of contextualised child protection and governance systems. While the principles of COR have remained constant, the practice of COR has reflexively evolved to integrate lessons learnt through application (Philip, et al., 2012 pg577).

Conclusion

Multiple studies have been conducted about ICT-based VAC and its effects; and models of intervention developed to guide actors in tackling the complex challenges. However, many of these have been undertaken in countries beyond Africa. Context-specific models are necessary to ensure effective protection of children from ICT-based exploitation. There is not much research in Uganda about the effects of ICT-enabled sexual abuse exploitation and other forms of violence on school performance, retention and overall child wellbeing

or on how ICT is being utilized to achieve more in preventing VAC in schools. Children, parents, schools, local government duty bearers and law enforcement units such as the police have limited or no knowledge at all in preventing and responding to ICT-enabled sexual abuse, exploitation and other forms of violence.

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