Help Children Be Childre

Child online safety Juba, South Sudan report

Written and submitted by

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1. INTRODUCTION

1.1. Background

Internet access among young people in Africa has been steadily increasing, leading to positive outcomes such as job creation and poverty reduction. This is particularly important due to Africa's rapidly growing population. However, as African countries transition from low to high connectivity, addressing potential risks and harm from increased online exposure is crucial. The United Nations Committee on the Rights of the Child emphasises the importance of high-quality research to guide legislation and policies for safeguarding children in the digital realm (United Nations Convention on the Rights of Children, 2021). However, there is a significant lack of empirical research and data on this subject across most African countries, making it difficult to develop informed strategies and responses. MTN conducted an online child safety survey in Juba, South Sudan, to address this gap. The survey focused on understanding the level of risk associated with internet use among children aged 8 to 17.

Juba was chosen as the study location due to its urban nature and the significant number of children and adolescents there with access to the internet and mobile devices. This survey aimed to gather comprehensive data to inform efforts in protecting and supporting children in the digital world. While internet usage among young people in Africa is increasing, the lack of empirical research and information poses a significant challenge in addressing the potential risks associated with increased online connectivity. The survey conducted in Juba, South Sudan, is a step towards bridging this gap and providing valuable insights to guide policies and practices for child safety in the digital realm.

1.2. Objectives

The study focused on the following objectives and sub-objectives:

1.2.1. Main objective

The study aimed to investigate how children between the ages of 8 and 17 in Juba, South Sudan, utilise the internet. The primary goal was to enhance online child safety within the country. The findings from this study will serve as a basis for improving online child safety nationwide and give direction for future research in other provinces and major cities to identify any regional differences.

1.2.2. Sub-objectives

- Understand how access to the internet on digital devices facilitates the exploitation and abuse of children online.
- Identify which categories of children are at risk and how these risks materialise.
- Understand how technologies impact child online safety to develop an evidence-based approach to mitigating these risks.

1.2.3. Ethical considerations

Considering that the participants in the study were minors needing protection from any potential harm, an application for ethical clearance was submitted to the Republic of South Sudan National Communication Authority. Multiple revisions were requested and incorporated into the data collection instrument to safeguard the wellbeing of the children involved, potentially mitigating any distressing experiences. Subsequently, the study received approval, resulting in the issuance of an ethical clearance certificate bearing the reference number **NHREC/01/01/2007**.

2. METHODOLOGY

The research employed a cross-sectional survey methodology to gather information. A purposive sampling approach was utilised to select participants who satisfied the study's criteria (refer to Table 1). This technique was deemed suitable since it did not necessitate a sampling frame for participant selection and proved to be efficient in terms of time management.

Table 1: Inclusion and exclusion chieria			
Inclusion Criteria	Exclusion Criteria		
Must be a resident of South Sudan (Juba).	Not a resident of South Sudan (Juba).		
Children aged 8 - 17 years old.	Children below the age of 8 years and adults aged 18 years and older.		
Parent/guardian willing to provide informed consent.	Parent or guardian not willing to provide consent.		
The child willing to provide informed assent.	The child not willing to provide informed assent.		

Table 1: Inclusion and exclusion criteria

As illustrated by Table 2 below, a total of 528 children completed interviews that were approximately 20 minutes long.

Table 2: Sample size and length of interview

Sample Size	Length of Interview
528	20 minutes

2.1. Study variables

2.1.1. Outcome/dependent variable

The study aimed to examine the outcome variable of risky online behaviour among children aged 8-17 years. This variable was determined based on the responses to five specific questions. The first question sought to ascertain whether the children had added strangers to their instant messenger contact lists and was posed as follows: Have you ever added a stranger to your instant messenger contact list? The second question sought to ascertain whether the children had engaged in conversations with online acquaintances and was asked as follows: Have you ever spoken to someone you met online?

The third question sought to ascertain whether the children had met someone in person who they had previously met online and was asked as follows: Have you ever met someone in person that you had previously met online? The fourth question sought to ascertain whether the children had engaged in conversations about sex with online acquaintances and was asked as follows: Have you ever talked (via chat or phone) about sex with someone you met online? The fifth question sought to ascertain whether the children had shared personal information such as age, mobile number, and addresses with online acquaintances and was asked as follows: Have you ever shared personal information such as your age, mobile number, address, etc.?

The responses were categorised with "yes" and "no" binary responses from participants. Herein, the yes refers to children who have engaged in one or more of the risk behaviours described above and presented in Table 3 below.

Table 3: Dependent variable

Variable	Definition	Categorisation
	Dependent (outcome) variable	
Risky online	Children and adolescents who have engaged in one or more of the following: i. Added strangers to their instant messenger contact lists ii. Engaged in conversations with online acquaintances.	1. Yes
behaviour	 iii. Met someone in person who they had previously met online. iv. Engaged in conversation about sex with online acquaintances. v. Shared personal information such as age, mobile number, and address with online acquaintances. 	0. No

2.1.2. Independent variables for bivariate and multivariate analysis

The study included several independent variables for the purpose of bivariate and multivariate analysis. These variables encompassed:

- Age,
- Gender,
- Level of education,
- Frequency of online usage,
- Daily duration of online activities,
- Parental and guardian rules regarding internet use,
- Frequency of speaking with parents and guardians about Internet safety,
- Speaking to parents and guardians about internet safety more,
- Experience of online harassment,
- Experience of online bullying and abuse,
- Inclination to seek support when facing online threats.

Table 4 below provides more details on above-mentioned variables.

Table 4: Independent variables

Independent variables	Original question in the survey	Definition	Categorisation
Age	Which of the following age groups do you fall into?	Age of study participants.	1. 8 - 12 years 2. 13 - 17 years
		The sex of	1. Male
Gender	What is your gender?	study participants.	2. Female
Level of education (currently learning)	What school level are you in?	The current education level that study participants are pursuing.	1. Pre-school & Primary school 2. Secondary, high school & college
		The frequency with which	1. Daily
Frequency of online usage	How often do you go online?	children access the	2. Weekly
		internet online.	3. Monthly
Daily duration of online	How much time do you spend	The duration of internet use	1. Less than 1 hour and do not have regular internet access
activities	online each day?	per day by children.	2. 1 - 5 hours
			3. More than 5 hours
Parental and guardian regulations regarding internet use	Do your parents or guardians have rules about your internet use?	The presence of parental and guardian rules and regulations	1. Yes
internet use	internet use !	within the household.	2. No
			1. We talk openly and regularly about what I do online
Frequency of speaking with parents and	How do you and your parents/guardians talk about	Frequency of children speaking to their parents and guardians about internet safety.	2. We sometimes talk about what I do online
guardians about internet safety	internet safety?		3. We rarely talk about what I do online
			4. We never talk about what I do online
Willing to speak with parents and guardians	Would you like to talk about internet safety more with your	Children willingness to speak with parents and	1. Yes
about internet safety more	parents/guardians?	guardians more about internet safety	2. No
Experience of online	Have you ever experienced	The experience of	
harassment	any form of harassment online?	online harassment by	1. Yes
		children. The	2. No
Experience of online bullying and abuse	Have you ever been bullied and abused online?	experience of online bullying by children.	1. Yes
Inclination to seek support when facing online threats	If you felt threatened, would you turn to anyone for help?	The inclination of children to seek support if they feel	1. Yes
onine uncats		threatened online.	2. No

2.2. Data collection tool

All data collection was undertaken using tablets and bespoke computer-assisted personal interviews. The data collection instrument was designed by Ipsos under the Public Affairs Department led by Marcus Hollington in consultation with MTN, led by Ncumisa Willie, a Senior Manager in Digital Human Rights. This data collection tool incorporated a combination of open-ended questions and specific inquiries, allowing for the collection of participant perspectives and facilitating a comprehensive understanding of the issues surrounding online safety and risky online behaviour.

2.3. Data analysis

The data analysis in the study was performed in three stages: univariate, bivariate and multivariate. The univariate analysis focused on presenting key findings from the survey as frequencies and percentages of respondents.

The purpose of the bivariate analysis was to investigate the association of online harassment, which was the dependent or outcome variable of the study and selected independent/predictor variables generated through chi-square tests and cross-tabulations.

The formula for Chi-square tests is presented below:

$$X^2 = \sum \frac{(O - E)^2}{E}$$

where O – the frequencies observed where E – the frequencies expected where Σ – the 'sum of '

In the study, a multivariate analysis was conducted to examine the relationship between the independent variables and risky online behaviour. The analysis used a binary logistic regression (BLR) model, with the study outcome categorised into binary responses of yes and no. The results were reported as odds ratios, with values above 1.00 indicating a higher likelihood of the outcome (online harassment) and values below 1.00 indicating a lower likelihood. Statistical significance was determined using a p-value threshold of p < 0.05, indicating results considered statistically significant at a 95% confidence level.

The equation for the BLR model is presented below:

Logit (Y) =
$$In\left(\frac{n}{1-n}\right) = a + \beta_1 X_1 + \beta_2 X_2 \dots \dots$$

Therefore,

$$\pi$$
 = Probability (Y = outcome of interest |X₁ = X₁, X₂ = x₂)

$$=\frac{e^{a+\beta_1 X_1+\beta_2 X_2}}{1+e^{a+\beta_1 X_1+\beta_2 X_2}}$$

Where π is the success probability that an observation is in a specified category of the binary \bm{Y} variable (Risky Online Behaviour)

 α = intercept

 β = regression coefficients

 $X_1, X_2....$ = the study's predictors/independent variables

3. Findings

3.1. Demographic profiles of respondents

The MTN online child safety (Let Children be Children) survey conducted interviews with a total of 528 children in Juba, South Sudan. The gender distribution of the participants showed that males accounted for 53% (n = 280) of the sample while females constituted 47% (n = 248). When considering age, the highest proportion of participants, 54% (n = 285), fell within the 13 –17 age range while the lower proportion, 46% (n = 243), belonged to the 8-12 year age range. In terms of area of residence, 59% (n = 313) of respondents resided in urban areas, 33% (n = 174) in peri-urban areas, and 8% (n = 41) in rural areas. Regarding educational status, 97% (n = 510) of the participants reported being currently enrolled in school, while 3% (n = 18) reported not being enrolled. Among those enrolled, the majority, 69% (n = 354), attended primary school, followed by 29% (n = 148) in secondary school/high school, 1% (n = 6) in preschool and the smallest proportion, 0% (n = 267) of the respondents reported having access to electricity at home while 49% (n = 261) reported not having access at home.

Table 4: Demographics

Demographic variables	Frequency	Percentage		
Gender				
Male	280	53%		
Female	248	47%		
	528	100%		
	Age group			
8 - 12 years	243	46%		
13 - 17 years	285	54%		
	528	100%		
	Area of residence			
Urban	313	59%		
Peri-urban	174	33%		
Rural	41	8%		
	528	100%		
	In school			
Yes	510	97%		
No	18	3%		
	528	100%		
	Current level of schooling			
Pre-school	6	1%		
Primary school	354	69%		
Secondary school / High School	148	29%		
College	1	0%		
University	1	0%		
	510	100%		
	Access to electricity at home			
Yes	267	51%		

No	261	49%
	528	100%

3.2. Online activity

This section presents the results of the online activity segments of the survey. When asked about where they accessed the internet, most respondents reported accessing the internet through mobile data bundles (n = 321). Herein, 56% of the respondents that reported making use of this mode of internet connectivity (n = 179) were male while 44% of the respondents (n = 142) were female. The second most common mode/location of internet access was parents' phones (n = 151). Herein, 52% of the respondents that reported making use of their parents' phones for internet connectivity were female (n = 79) while 48% were males (n = 72). The third most used location/mode of internet access was at school (n = 42). Herein, 50% of the respondents were female and 50% male. Respondents also mentioned making use of home Wi-Fi to access the internet (n = 29), accessing the internet at a friend's house (n = 24), community centres (n = 11), public free Wi-Fi (n = 5), internet café (n = 4), while 3 respondents reported accessing the internet at local libraries.

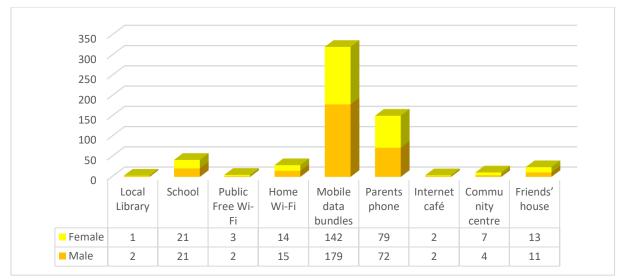
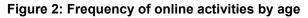


Figure 1: Location of Internet access by gender

Additionally, 528 respondents were surveyed regarding their frequency of online activity. Among these participants, 253 individuals (48%) reported going online on a daily basis. Within the daily users, 107 participants (42%) were between the ages of 8 and 12, while 146 participants (58%) were between the ages of 13 and 17. The second highest proportion of participants (41%) reported using the internet weekly, with a total of 216 participants. Among these daily users, 112 participants (52%) were between the ages of 13 and 17 while only 104 participants (48%) were between the ages of 8 and 12. Participants who reported going online monthly constituted the smallest proportion at 11% (59 participants). Among the monthly users of the internet, 32 participants (54%) were between the ages of 8 – 12 years while 27 participants (46%) were between the ages of 13 and 17.





Respondents were asked a question on how much time they spent online each day. Herein, 260 participants reported using the internet less than 1 hour each. Most participants, specifically older children aged 13-17 (55%), reported spending less than 1 hour online each day, with a total of 142 responses. On the other hand, children aged 8-12 had the lowest proportion of participants in this category, with 118 responses (45%). The second most common time spent online each day was between 1 and 5 hours, with 199 responses. Within this category, older children aged 13-17 accounted for the highest proportion of participants, with 112 responses (56%), while younger children aged 8-12 had the lowest proportion, with 87 responses (44%). The third most common time spent online each day consisted of children who did not have regular access to the internet, with a total of 52 responses. Among these participants, children aged 8-12 had the highest proportion, with 29 responses (56%), while older children aged 13-17 had the lowest proportion, with 23 responses (46%). Additionally, 17 participants aged 8-17 reported spending more than 5 hours a day on the internet. Within this category, children aged 8-12 accounted for the highest proportion of participants aged 8-17 reported spending more than 5 hours a day on the internet. Within this category, children aged 13-17 years had the lowest proportion, with 8 responses (45%).

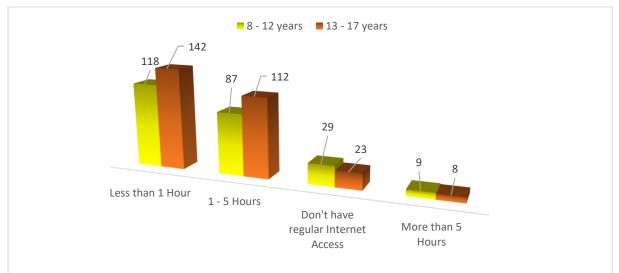


Figure 3: Time spent online each day by age

3.2.1. Parental rules on internet use among children and adolescents and child safety

A total of 528 children responded to a question pertaining to whether or not their parents had rules for internet use. Among the participants, 60% (n = 347) reported that their parents indeed had rules about internet use. Within this group, 31% (n = 161) were female, representing the largest portion of respondents while males comprised the smallest portion at 30% (n = 156). On the other hand, 211 children aged between 8 and 17 indicated that their parents did not enforce rules on internet use at home. In this category, 23% (n = 124) were male, constituting the highest proportion of respondents, whereas females accounted for the lowest proportion at 16% (n = 87). These findings suggest that gender stereotypes within households may have influenced the prevalence of internet use rules as more girls than boys reported that their parents implemented such regulations. This variation may be attributed to the notion that girls are often more vulnerable to online harm and exploitation (Meredith, 2023).

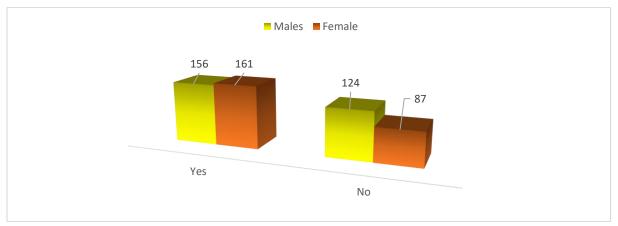


Figure 4: Parental rules on internet use for children and adolescents aged 8 - 17

However, among respondents who acknowledged the presence of parental regulations regarding internet usage, 68% revealed that their parents implemented time constraints while 32% disclosed that their parents restricted their access to the internet.

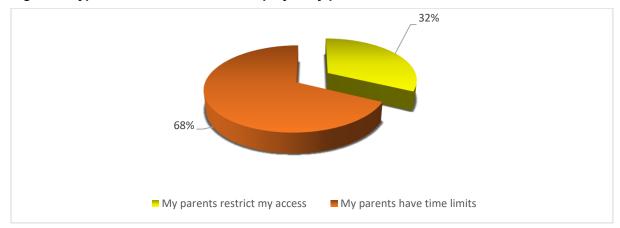


Figure 5: Types of internet use rules employed by parents

Additionally, when asked whether their parents went through their phones, 57% (n = 181) acknowledged that their parents did indeed go through their phones. On the other hand, 34% (n = 107) of participants stated that their parents did not engage in this behaviour. A small percentage, 9% (n = 29), indicated uncertainty regarding whether or not their parents monitored their phones.





When the children were asked about how they felt about these rules, the overall sentiment was positive with 78% (n = 246) reporting that they were generally okay with the rules as they were for their benefit and protection while 9% (n = 27) reported that the rules employed by their parents were okay as they still got plenty of time online; 8% (n = 25) of respondents indicated that they were annoyed by the rules as they made them feel as though their parents did not trust them, 5% (n = 16) indicated that they felt annoyed by the rules as they wanted to spend more time online. A small proportion of participants reported that they did not know how to feel about these rules 0% (n = 1), felt good about the rules 0% (n = 1), while 0% (n = 1) indicated that they still communicated freely with the rules in place.

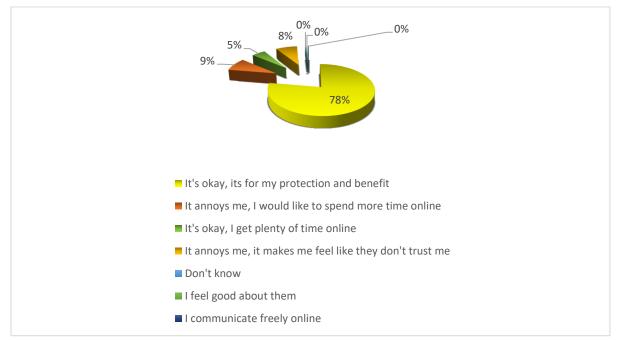


Figure 7: Sentiment about parent rules on internet use by children and adolescents

Furthermore, when the children were asked about how they spoke about internet safety with their parents and guardians 36% (n = 190) reported that they never talked about what they did on the internet. When examining the age groups, it was revealed that the highest proportion of participants who never talked about their online activities with their parents were younger children aged 8 to 12 at 19% (n = 98) while the lowest proportion was observed among older children aged 13 to 17 at 17% (n = 92). On the other hand, 25% (n = 133) of children reported talking openly and regularly about what they did online. Children aged 13 to 17 constituted the highest proportion of participants who openly and regularly spoke about what they did online at 13% (n = 67) while younger between the ages of 8 – 12 years constituted the lowest at 13% (n = 66). In contrast, 24% (n = 127) of children and adolescents reported sometimes talking about what they did online

Among this group, older children aged 13 to 17 constituted the highest proportion at 14% (n = 76), whereas younger children 8 – 12 years accounted for the lowest proportion at 10% (n = 51). Lastly, 15% (n = 78) of children and adolescents reported rarely discussing their online activities with their parents or guardians. Notably, adolescents aged 13 to 17 years made up the largest proportion of participants who rarely talked about their online activities at 10% (n = 50), while younger children aged 8 to 12 years constituted the lowest proportion at 5% (n = 28).

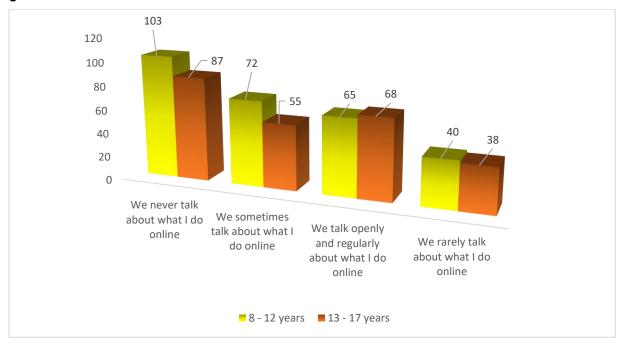


Figure 8: How children and adolescents talk about internet safety with their parents and guardians

Encouraging was the fact that when asked about whether the children wanted to talk about internet safety with their parents and guardians, 66% (n = 347) reported "yes" while 34% (n = 181) reported "no".

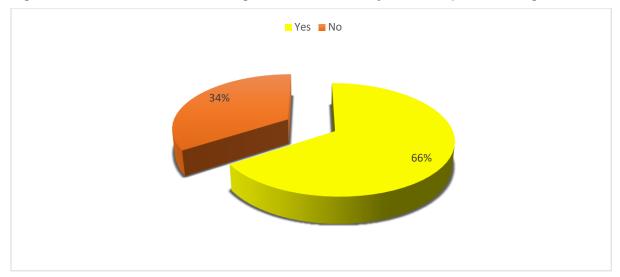


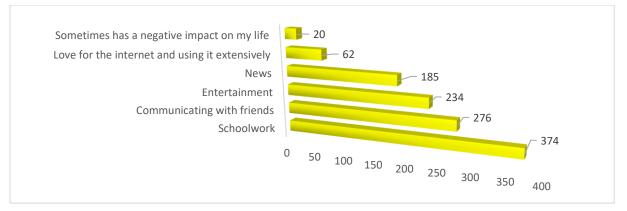
Figure 9: Children's interest in talking about internet safety with their parents and guardians

When queried about the reasoning behind their answers, the children presented a diverse range of justifications (*refer to Appendix A for an exhaustive compilation*). Nonetheless, the three most frequently cited rationales proffered encompassed (i) safeguarding their personal wellbeing and security in the digital realm, (ii) learn more about the internet as parents and guardians have more knowledge/experience than them, and (iii) seeking guidance to avert potential errors and missteps.

Table 5: Top 3 reasons for wanting to talk about internet safety with parents/guardians (In the words of the children)		
1	To safeguard their personal well-being and security in the digital realm	
2	To learn more about the internet as parents and guardians have more knowledge/experience than them	
3	To seek guidance to avert potential errors and missteps.	

Furthermore, the children were provided with a set of six statements related to internet usage, from which they selected the ones they agreed with. These statements included using the internet for schoolwork, communication with friends, entertainment, obtaining news, loving the internet, and using it extensively, and acknowledging the negative impact of the internet on their lives. Among the respondents, the most frequently mentioned purpose of internet use was for school, which was reported by 71% (n = 374) of participants. Communicating with friends was the second most mentioned purpose, with 52% (n = 276) of respondents selecting it. Entertainment ranked third, with 44% (n = 234) of participants mentioning it. Additionally, a significant proportion of respondents, 35% (n = 185), reported using the internet to obtain news, while 12% (n = 62) mentioned using the internet because they loved it. Finally, a smaller percentage of respondents, 4% (n = 20), acknowledged that the internet sometimes had a negative impact on their lives, despite their usage.





Additionally, the children were provided with several products and services that they regularly used online, in descending order: Facebook, which was mentioned by 68% of respondents (n = 357); TikTok, which was mentioned by 41% (n = 214); Google, which was mentioned by 32% (n = 170); WhatsApp, which was mentioned by 32% (n = 167); YouTube which was mentioned by 31% (n = 164); "Others", mentioned by 10% (n = 55); online games, mentioned by 10% (n = 54); Instagram, which was mentioned by 9% (n = 46); Gmail, which was mentioned by 4% (n = 23); X, which was mentioned by 3% (n = 15); Chat sites, which were mentioned by 1% (n = 3) of respondents, iTunes, which was mentioned by 0% (n = 2) and Hotmail, which was mentioned by 0% (n = 1).

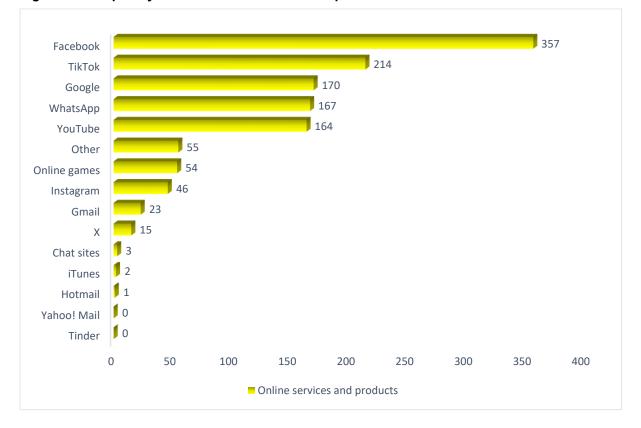


Figure 11: Frequently mentioned and used online products and services

3.3. Online safety and abuse-related factors

This section discusses the results of the online safety and abuse-related factors of the survey. It will discuss the perceptions of children on their safety online, experience of harassment online, psychosocial assistance for the harassment, online abuse and bullying among others.

3.3.1. Feelings of safety online, experience of online harassment, bullying, and abuse

When the children were asked about their feelings regarding online safety, a significant majority of 63% (n = 333) reported feeling safe online and claimed to have never encountered any threats or nuisances. Among the respondents, the older participants aged 13 to 17 constituted the largest proportion at 38% (n = 203) while the younger participants formed the smallest proportion at 25% (n = 130). On the contrary, 15% (n = 77) of the participants mentioned that they never felt safe online and were constantly concerned about the dangers associated with online activities. In this case, the younger participants aged 13 to 17 constituted the older participants aged 13 to 17 constituted the smallest proportion at 5% (n = 53), while the older participants may have been more aware of the dangers of online activities and thus more concerned about their online safety.

Moreover, 11% (n = 56) of the study participants aged 8 to 17 indicated that they felt safe online because they believed they could handle any threats or nuisances that may arise. Among this group, the younger children aged 8 to 12 years constituted the largest proportion of respondents at 6% (n = 31), while the older children aged 13 to 17 years constituted the smallest proportion at 5% (n = 25). Conversely, 8% (n = 41) of the participants aged 8 to 17 years mentioned that they sometimes felt safe online, despite being aware of the dangers due to hearing about others' bad experiences. Among this group, the older participants aged 13 to 17 constituted the largest proportion at 4% (n = 21), while the younger participants aged 8 to 12 constituted the smallest proportion at 4% (n = 20). Finally, 4% (n = 21) of the participants mentioned that they felt safe online sometimes because they had personally experienced bad incidents in the past, which made them more aware of the dangers of online activity.

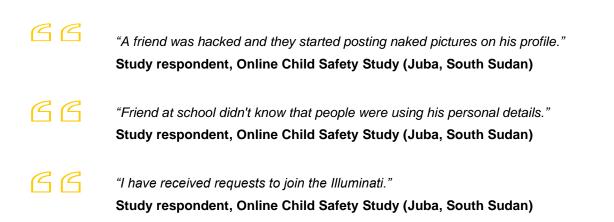




Among this group, the older participants aged 13 to 17 constituted the largest proportion at 2% (n = 12), while younger participants aged 8 to 12 years constituted the smallest proportion at 2% (n = 9).

Participants who indicated that they felt safe online sometimes, although they had heard of people having bad experiences that made them more aware of the dangers, mentioned that the people who had had these experiences were their friends, mothers, and strangers.

Below are some of the quotations received from participants pertaining to the stories they had heard about the dangers of online safety from other people:



When further questioned about personal experiences of online harassment, 13% (n = 71) acknowledged having experienced such harassment, while the remaining 87% (n = 457) reported never having encountered any form of online harassment.

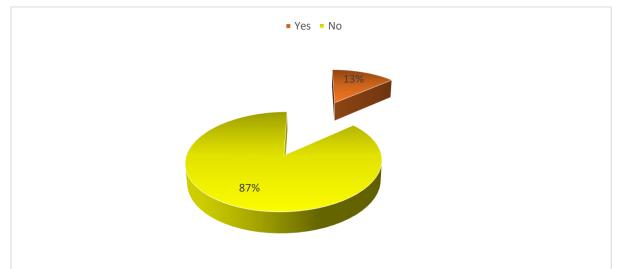


Figure 13: Experience of harassment online

Among the individuals who reported encountering online harassment, 54% (n = 38) acknowledged receiving psychosocial support while 46% (n = 33) disclosed not receiving such assistance. This finding

is worrisome as it highlights the vulnerability of children who experience online harassment to potential psychological trauma.

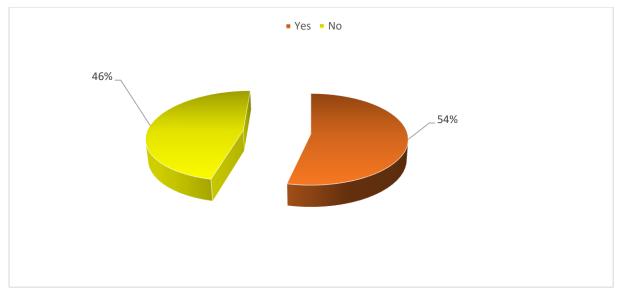
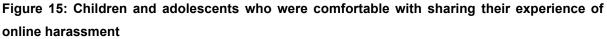
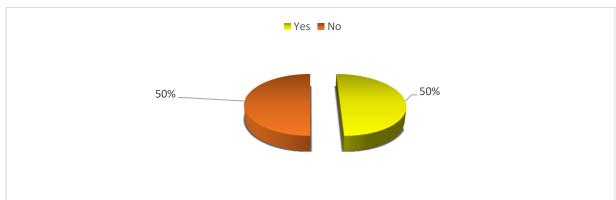


Figure 14: Received psychosocial assistance for possible trauma experienced

Among participants who received psychosocial assistance, a total of 19 participants, constituting 50% of the sample, expressed their willingness to disclose the specific types of online harassment they encountered. Conversely, the remaining 50% (n = 19) of participants did not feel comfortable divulging such information.





Below are some of the experiences that the children shared:



"I felt bad because they were making bad comments about my pictures on Facebook because of how I looked."

Female respondent, Victim of online harassment (Juba, South Sudan)

GG

"Received a message saying, ". . .if not, you will die"." Male respondent, Victim of online harassment (Juba, South Sudan)

The children also highlighted being "sextorted" and receiving sexual content from people online:



"Scammers ask for nude pictures." Female respondent, Victim of online harassment (Juba, South Sudan)



"Threatening to expose a photo that I had sent to my ex-boyfriend." Female respondent, Victim of online harassment (Juba, South Sudan)



C C

"Someone sent me a naked photo of herself." Male respondent, Victim of online harassment (Juba, South Sudan)

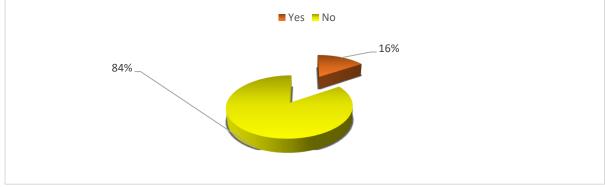
Among those respondents who were harassed online, 9 were able to identify the perpetrators. However, only 33% (n = 3), mostly male (n = 2), reported the perpetrators while 67% (n = 6) mostly male (n = 4) did not report them.

Table 6: Respondents that identified and reported their online harassers

Action Taken	Male	Female
Reported	2	1
Did not report	4	2

When asked if they had ever been bullied or abused online, 16% (n = 82) reported experiencing the afore while 84% (n = 446) reported never been bullied or abuse online.

Figure 16: Ever been bullied or abused online?



Some of the forms of bulling and abuse that were mentioned by victims are presented below:

"I was bullied and harassed by both friends and acquaintances online."

Female (n = 27) and Male (n = 23) respondents, Victims of online harassment (Juba, South Sudan)

"Someone using my photos in an inappropriate way."

Female (n = 7) and Male (n = 9) respondents, Victims of online harassment (Juba, South Sudan)

"Someone taking unwanted photos of me and circulating them."

Female (n = 4) and Male (n = 7) respondents, Victims of online harassment (Juba, South Sudan)

In response to inquiries about seeking assistance from people, if the participants felt threatened, a considerable majority of 74% (n = 392) among the surveyed population of children expressed their inclination to do so. Conversely, a minority of 26% (n = 136) conveyed their disinclination towards seeking support in such circumstances.

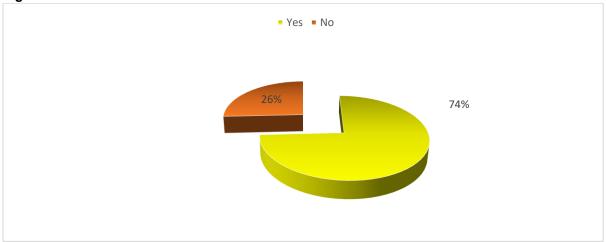


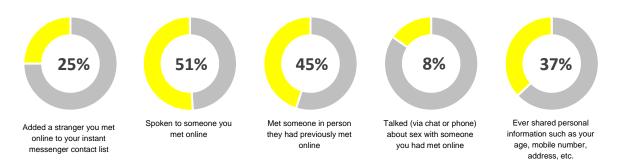
Figure 17: Seek assistance if felt threatened online

Several individuals or entities were mentioned as platforms respondents would seek help from if they were to experience online threats. The majority of participants, specifically 39% (n = 153), mentioned parents and guardians as their primary source of support. Additionally, 33% (n = 128) stated that they would turn to a friend while 11% (n = 43) mentioned that they would turn to family members. A smaller percentage, 8% (n = 32), indicated that they would reach out to the police, 7% (n = 26) indicated that they would reach out to their teachers, 2% (n = 7) indicated that they would report them on online apps, 1 (0%) respondent indicated that they would address the situation themselves; 1 (0%) indicated that they would reach out to their neighbour, and 1 (0%) indicated that they would reach out to anyone willing to help.

3.3.2. Risky online behaviour

The children in the study were asked 5 online risk behaviour questions to gauge how susceptible they were to harm caused by their online activities.

These are presented in Figure 18 below:



According to Figure 18, 25% of the children (n = 130) reported adding strangers they met online to their instant messenger contact lists. On the other hand, 75% (n = 398) stated that they had never added a stranger to their instant messenger contact list. When asked about speaking to someone they had met online, 51% (n = 269) of the participants indicated that they had while 49% (n = 259) reported that they had never engaged in such conversations. In terms of meeting someone in person whom they had previously met online, 45% (n = 239) mentioned that they had, while 55% (n = 289) indicated otherwise. Furthermore, when asked about engaging in conversations about sex with someone they had met online, only 8% (n = 43) of participants admitted to having done so while the majority, 92% (n = 485), stated that they had not. Lastly, when it came to sharing personal information such as age, mobile number, and address, 37% (n = 196) of the participants mentioned that they had done so, while 63% (n = 332) indicated that they had never shared such information.

3.4. Online protection measures

This section of the survey sought to gain insight into the perspectives of older children, aged 13 to 17, regarding online protection measures. The section commenced by inquiring whether these adolescents believed that their internet service provider should offer them the ability to report instances of cyberbullying and any form of abuse. Out of the total number of participants, (209 individuals), 73% answered affirmatively, indicating their support for such a feature. Conversely, 76 participants, constituting 27% of the total, responded negatively to this question.

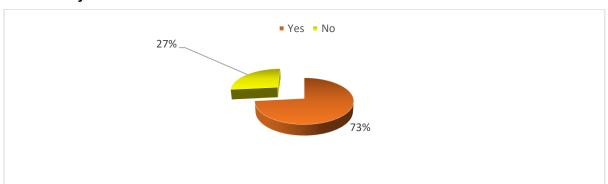


Figure 19: Sentiment on internet service providers enabling users to report cyberbullying and abuse of any nature to them

In the surveyed population it was found that out of those who answered affirmatively, a mere 22% (n = 47) possessed knowledge of the online child protection portal available in South Sudan which served as a platform for reporting various forms of online abuse. Conversely, the vast majority, constituting 78% (n = 162) of the respondents, indicated their lack of awareness regarding the existence of such a portal.

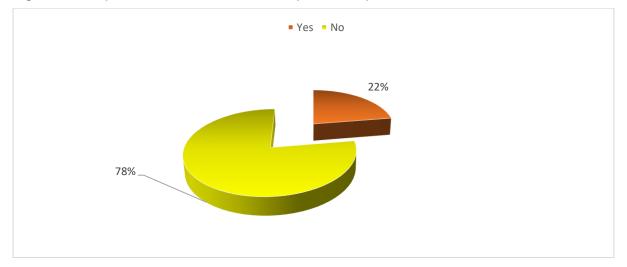


Figure 20: Respondent aware of online child protection portal in South Sudan

Inquiries were additionally made regarding participants' perspectives on "report abuse buttons," and subsequently, their responses were collected. As illustrated by Table 7 below, 36% (n = 102) of participants reported that they did not know as they were not aware of any protection measures in place, 35% (n = 99) indicated that report abuse buttons were good and played a big part in making them feel safer, 16% (n = 46) reported that report abuse buttons were okay although more protection would make them feel safer, and 13% (n = 38) mentioned that they did not think most of the report abuse buttons were effective in protecting young people (see Table 7 below).

Sentiment	Frequency	Percentage
I don't know - I'm not aware of any protection measures in place	102	36%
They are good and play a big part in making me feel safer online	99	35%
They are okay but more protection would make me feel safer	46	16%
I don't think most of them are that effective in protecting young people	38	13%

In addition, participants were asked about their perspectives on the privacy settings of social networking sites. Table 8 presents the data, revealing that 40% (n = 114) of respondents expressed satisfaction with the social networking privacy settings, attributing to them a significant role in ensuring their online safety. Meanwhile, 30% (n = 85) indicated that they were unaware of any protective measures in place. Furthermore, 20% (n = 57) deemed the social networking privacy settings satisfactory but believed that additional protection measures would enhance their sense of security. Lastly, 10% (n = 29) expressed

scepticism regarding the effectiveness of most social networking privacy settings in safeguarding young individuals (see Table 8 below).

Sentiment	Frequency	Percentage
They are good and play a big part in making me feel safer online	114	40%
I don't know - I'm not aware of any protection measures in place	85	30%
They are okay but more protection would make me feel safer	57	20%
I don't think most of them are that effective in protecting young people	29	10%

Table 8: Sentiments on social networking privacy settings

Moreover, the study participants were interrogated about their perspectives concerning the extent to which the South Sudan government and organisations were attentive to the concerns of young individuals regarding online safety. According to the data displayed in Table 9, it is evident that 71% (n = 203) of the participants expressed the belief that young people did not have sufficient influence on the matters that affect them online. In contrast, 29% (n = 82) of the respondents believed that young people in the country had a strong voice on major issues.

Table 9: Perceptions of the government and organisations listening to young people about safety issues they face online

Sentiment	Frequency	Percentage
No, I don't feel young people get enough of a say about the issues that affect them online	203	71%
Yes, I feel young people have a strong voice on the main issues	82	29%

In response to the question of what actions the South Sudan government should take to enhance internet safety; the respondents provided a variety of suggestions. Specifically, 61% of participants (n = 164) recommended that the government develop and enforce laws to prosecute individuals who exploit and abuse children online. Additionally, 49% (n = 130) of the respondents suggested implementing education programmes for children to educate them about the consequences of their internet usage. Furthermore, 58% (n = 165) believed that the South Sudan government should regulate access to specific internet sites and establish monitoring mechanisms to prevent misuse and abuse. Additionally, 57% (n = 162) of respondents indicated that the government should implement education programmes for children on the consequences of their internet use. Moreover, 45% (n = 128) suggested the implementation of programmes to educate parents, guardians, teachers, and school staff about the functioning of social networking sites. 38% (n = 108) of respondents indicated that the government should misuse and abuse. Lastly, in terms of emergency and non-emergency situations, 37% (n = 105) of the participants proposed the establishment of call centres to receive reports.

Table 10: Recommendations on steps that the South Sudan government should take to make the internet safer

Sentiment	Frequency	Percentage
Develop and implement laws to sentence those who exploit/ abuse children online	165	58%
Education programmes for children on the consequences of their internet use	162	57%
Training programmes for parents/guardians, teachers and school staff on how social networking sites operate	128	45%
Restrict access to certain internet sites and control and monitor them to avoid misuse and abuse	108	38%
Establish call centres to receive reports in both emergency and non-emergency situations	105	37%

4. Drivers of risky online behaviour among children and adolescents aged 8 to 17 in Juba, South Sudan

This section seeks to identify the drivers or determinants of risky online behaviour defined as adding unknown individuals to one's instant messenger contact list, participating in conversations with online acquaintances, meeting individuals in person whom one has only encountered online, engaging in discussions about sexual topics with online acquaintances and disclosing personal information like ages, phone numbers and addresses to online acquaintances. To determine these factors, two regression models were developed: an unadjusted model and an adjusted BLR model. The independent variables were tested against the outcome variable to see if any of them were associated with risky online behaviour. The independent variables included parental and guardian rules on internet use, gender, age group, the current level of learning, frequency of online usage, daily duration of online activities, frequency of speaking with parents and guardians about internet safety more, the experience of online harassment, the experience of online bullying and abuse, and inclination to seek support when facing online threats.

	Model 1		Model 2			
Risky online behaviour	UOR	P-Value	95% confidence interval	AOR	P-Value	95% confidence interval
			Independent variables			
Parental and guardian rules on internet us	se					
Yes (R.C)						
No	0.75	0.68	0.18-3.02	0.45	0.33	0.09-2.24
Gender						
Male (R.C)						
Female	0.58	0.44	0.14-2.33	0.89	0.89	0.19-4.19
Age Group						
8 - 12 years (R.C)						
13 - 17 years	3.14	0.16	0.65-15.27	4.25	0.15	0.60-30.22
Current level of learning						
Pre-school & primary school (R.C)						
High school, college and university	1.95	0.99	0.52-7.35	0.69	0.66	0.13-3.54
Frequency of online usage						
Daily (R.C)						
Weekly	1.93	0.37	0.46-8.20	2.99	0.17	0.63-14.23
Monthly	1.37	0.79	0.14-13.39	5.35	0.21	0.40-71.78
Daily duration of online activities						
Less than 1 hours & no regular access (R.C)						
1 or more hours	12.55	0.02***	1.56-101.15	16.87	0.01***	1.84-154.75
Frequency of speaking with parents and guardians about Internet safety We talk openly and regularly about what I do online (R.C)						
We sometimes talk about what do online	2.17	0.53	0.19-24.22	1.32	0.83	0.11-16.55
We rarely talk about what I do online	1.74	0.70	0.11-28.28	1.85	0.68	0.10-34.90
We never talk about what I do online	3.60	0.25	0.42-31.21	7.01	0.11	0.65-76.15

Table 11: Bivariate and multivariate analysis

Willing to speak with parents and guardians about internet safety more						
Yes (R.C)						
No	0.24	0.18	0.03-1.91	0.14	0.11	0.01-1.51
Experience of online harassment						
Yes (R.C)						
No	0.30	0.10	0.07-1.24	0.80	0.80	0.14-4.48
Experience of online bullying and abuse						
Yes (R.C)						
No	0.36	0.16	0.09-1.48	0.31	0.18	0.06-1.68
Inclination to seek support when facing online threats.						
Yes (R.C)						
No	0.85	0.84	0.17-4.15	0.73	0.69	0.12-4.62

UOR: Unadjusted odds ratio and AOR: adjusted odds ratio

***Significance level p<0.05

As illustrated in Table 11 above, only the daily duration of online activities was found to be significantly associated with risky online behaviour. Specifically, children who reported spending 1 or more hours online every day are more likely to engage in risky online behaviour compared to those who spend less than 1 hour or do not have regular internet access in model 1 (UOR: 12.55; p<0.05; CI: 1.56 - 101.15). Conversely, in model 2, daily duration of online activities was also found to be significantly associated with risky online behaviour (AOR: 16.87; p<0.05; CI: 1.84 – 154.75).

5. Recommendations and conclusion

This section seeks to provide recommendations to improve internet safety in South Sudan using the data and insights collected from the Juba Online Child Safety study. Most of the recommendations will be informed by inferential statistics as these gauged associations of the selected independent variables and risky online behaviour from observing the univariate responses provided in the survey. Additionally, they were also selected due to their theoretical propensity to inform risky online behaviour. Moreover, the independent variables were strategically selected to keep the sample size for inferential statistics (bivariate and multivariate) as robust as possible as some of the questions had routing instructions. After, dropping respondents who reported not currently enrolled in school, the effective sample for analysis was 510 children and adolescents. Upon providing recommendations, the study report will conclude.

5.1. Recommendations

It was observed that children who utilise the internet daily for 1 or more hours were more inclined to take part in risky online behaviour when compared to those who spend less than an hour a day online or those who report not having regular access. This underscores the significance of parental supervision in relation to children's online activities. While the implementation of parental controls can be advantageous in safeguarding children from inappropriate content, it should be acknowledged that these controls do not provide a comprehensive solution for ensuring online safety. It is therefore imperative for parents to engage in ongoing conversations with their children to foster comprehension and mitigate resistance against online rules. Moreover, it is important that the awareness of children be increased to facilitate the reporting of cases among children. Parents and guardians should encourage their children to avoid adding strangers they meet online to their instant messenger contact lists.

Moreover, it is recommended that parents and guardians promote and advocate for children and adolescents to exercise caution when engaging with individuals they have met online. It is crucial to instil in them a sense of constant vigilance regarding their online interactions for their safety. Furthermore, it is important to educate children and adolescents on the significance of reporting individuals who engage in online harassment, sextortion and bullying, as well as providing them with guidance on how to handle such situations by walking away, resisting the urge to retaliate or respond. It is worth noting that it is beneficial to instruct them on the value of preserving evidence of any bullying or sensitive content they encounter as this can aid in substantiating their claims. Additionally, it is imperative to educate parents and guardians about the potential risks their children may face online and how to approach these scenarios in a manner that fosters an environment in which children feel comfortable sharing any online threats they encounter. This approach will facilitate open discussions on internet safety between children, adolescents, and their parents or guardians.

Additionally, it is recommended that parents and caregivers be encouraged to oversee the mobile devices of individuals aged between 8 and 12 in order to mitigate potential risks to their children.

Furthermore, it is crucial to educate children on the significance of such supervision in order to enhance online safety for minors. Parents and guardians should also implement time limitations for internet usage among children and adolescents as a means of providing further protection against online dangers. This approach will foster a culture of transparency between parents or guardians and their children, facilitating open communication regarding any discomfort experienced while engaging online – which should persist as the children grow older. Equally important, children should be taught how to report instances of bullying as social media platforms take such matters seriously, including instances of individuals posting malicious or hurtful content or creating fake accounts.

If individuals report instances of abuse, the site administrator has the authority to prevent the perpetrator from accessing the site in the future. If an individual receives offensive texts or emails, it is recommended reporting the incident to the respective phone service or email providers, such as Comcast, Google, and Verizon. Moreover, it is crucial to educate children and adolescents who face any form of online harassment and abuse about the availability of psychosocial assistance. This education aims to reduce the potential occurrence of trauma and provide support for those who have already experienced trauma. Lastly, despite children and adolescents generally feeling secure online, the aforementioned measures must be implemented to provide additional layers of protection against online threats. To effectively reach the target audience, these measures should be promoted and marketed on popular platforms like Facebook, TikTok, Google, WhatsApp and YouTube, which are commonly used by children aged between 8 and 17, among other products and services.

5.2. Conclusion

This study aimed to improve online child safety in the country by examining how access to the internet through digital devices contributes to the exploitation and abuse of children online. The study also aimed to identify which groups of children are most vulnerable and how these risks manifest, as well as to understand how technology affects child online safety to develop an evidence-based approach to addressing these risks. To achieve these goals, the study created a data collection tool with various indicators that demonstrated how digital devices enable the exploitation and abuse of children online. These indicators were presented throughout the report as part of the study's findings. The findings included information on the online activities, safety, and abuse-related factors that impact children, such as the location of internet access, types of devices used, frequency of online use, average time spent online and the existence or absence of parental rules on internet access.

This information provided insight into how the internet and digital devices can make children vulnerable to exploitation and abuse online. Additionally, the study included verbatim accounts from some children who reported encountering inappropriate messages and sexual harassment from acquaintances or receiving harmful videos from strangers. Through inferential analysis, the study was able to identify children at risk of engaging in risky online behaviour and illustrate how these risks manifest. Based on these profiles and the factors driving such behaviour, the study provided recommendations on how to mitigate these risks and protect children from online harm. By implementing these recommendations

and utilising the data and insights provided in the report, stakeholders can collaborate to create a safer online environment for children in South Sudan.

6. References

Meredith, R. (2023). More girls than boys exposed to harmful content online. BBC News. https://www.bbc.com/news/uk-northern-ireland-66868409

United Nations Committee on the Rights of the Child , General comment No. 25 (2021) on children's rights in relation to the digital environment (2021). UHCHR.

Appendix A: Reasons for wanting or not wanting to talk about internet safety more with parents and guardians

Verbatim	Frequency
For my protection/safety from online dangers	86
For my parents to be made aware of the things I do online	20
For guidance and to avoid making mistakes online	40
I trust my parents and my guardians	1
They know what is best for me	5
To learn more about the internet	71
Fear of being scammed online	2
They do not need to know about what I do online (privacy)	20
I'm old enough to protect myself online	6
Parents are mostly not available/not at home/no time to discuss the matter/not interested	3
They might refuse to let me to go online/stop me from using the phone	2
To avoid seeing things that are not suitable for my age/things I am not supposed to watch/to avoid seeing bad things	1
We do not talk about it/I would not like to talk to them/talking to them is not necessary	5
They will shout at me/I am scared of what she will say/parents are too judgemental	7
I just want to talk to them/I love to talk to them/it is important to talk to them	5
Not enough time	7
Limited access on the internet/restriction on access to the internet	12
Cyberbullying	4
Using the internet for schoolwork	19
They know what is good for me	4
I do not feel comfortable talking to parents about internet safety	5
Teach me how to use the internet wisely	1
Freedom of use/they do not mind my internet use	3
	2
Internet destroys children/a lot of people are being destroyed through internet	2
I do not use the internet much	11
To ask for permission	4
It helps them to be updated	2
My mother does not like me using the internet/going online	3
Internet awareness	29
Parents are less educated and do not know about the internet	24
People can use the internet to do bad things	2
That is what I have to do as a child	1
I have already been told what I need to do on the internet	5
Helping to solve the problems I face on the internet	5
To inform them of problems/unexpected issues on the internet	2
I do not want to talk about big-people things that I do not know about	3
Increase my awareness of doing my things online	3
How much time I should be spent online	4
They ask too many questions	1
They do not ask/nobody asks me	5
Reliability of internet	1
They are not illiterate	1
To obtain network settings	1

	1
My parents/guardians always ask me to tell them about what I do online	6
To let them know the goodness of the internet	17
Not to misuse social media	2
They can help me stay positive on the internet	
Research/can access information from the internet to learn	e e e e e e e e e e e e e e e e e e e
There is a smartphone in the house	
Sharing information	
It degrades morals	
Internet is interesting or addictive	
None/nothing/no comment	10
I don't know	
Total	51