



Stakeholder's Monitoring Interventions and Online Child Abuse among Primary School Children in Langata Sub-county, Kenya

¹Wilkins Ndege Muhingi ²Johnson Nzau Mavole & ³Mumo Nzau

¹ & ². The Catholic University of Eastern Africa

³ University of Nairobi

Corresponding Author: wilkndege@gmail.com

Received August 18, 2020; Revised August 25, 2020; Accepted August 26, 2020

Abstract: Children spend time online yet this is associated with risks and opportunities. The objective of this study was to examine monitoring interventions applied to online child abuse among children in primary schools in Langata sub-county, adopting a cross-sectional descriptive research design that adopted a concurrent mixed methods approach. This study targeted 423 children, 9-17 years from private and public primary schools, teachers, parents, and policymakers within the DCS and DCI. KIIs were also carried out targeting 9 parents, 9 Key informant teacher respondents, 2 Key informant Child protection officer respondents. Simple random, stratified purposive, stratified, convenience and purposive sampling designs were utilised. The study employed interview guides, questionnaires, and FGD (5) schedules to collect data. Quantitative data were analysed using descriptive and inferential statistics with the help of SPSS version 22. Bivariate statistics were applied to examine relationships between the independent and dependent variables and findings presented using graphs, frequencies and tables. Qualitative data were analyzed using content analysis utilising Nvivo version 12, presented in narratives. The study revealed stakeholders intervened through monitoring using filters and other ways. Hypotheses resulting in a .258 alpha .05 chi-square test p-value showed no significant relationship between a child's gender and online abuse exposure. A t-testing at .000 p-value alpha .05 showed an association between school type and online child exposure. Researchers concluded online child protection was each stakeholder's responsibility to be addressed using a multi-level approach. The study recommended stakeholders to work in collaboration, draft guidelines, and policies on online child protection issues.

Keywords: monitoring, interventions, online child abuse, Langata, Kenya

How to reference this article (APA):

Muhingi, W. N., Mavole, J. N. & Nzau, M. (2020). Stakeholder's Monitoring Interventions and Online Child Abuse among Primary School Children in Langata Sub-county, Kenya. *Journal of Research Innovation and Implications in Education* 4(3), 156 - 167.

1. Introduction

Many children spend time online yet internet use is associated with risks and opportunities (Samahel, et al., 2020). Internet use has revolutionized how people interact and have become a seedbed for deviant and criminal activities, including cyber abuse, cyberstalking, cyberbullying, child pornography, cyber dating, and cyber

grooming. Increasing mediatisation is underway in children and family life (Siibak, 2019; Hepp & Krotz, 2014). One of the many features that make cyber grooming dangerous is that a child who is safe at home can be targeted from anywhere in the world. For example, an adult offender made friends via Facebook with an 11-year-old after gaining multiple friends with the victim in common and portraying himself as a peer (Hannah, 2017).

Most online abuse consists of chatting in a sexual sense, sharing pictures or videos containing sex, virtual sex, webcam, and even the live streaming of child abuse that is self-inflicting. Victims experience severe psychological effects, often culminating in suicide (Murumaa-Mengel, 2015). Most of the parental media monitoring research literature has concentrated on middle childhood or adolescence, but children are exposed to media from a very young age (Levine, Waite, Bowman, & Kachinsky, 2019). Little is known especially in Africa, more so in Kenya about child online abuse and their protection. The previous literature is also silent on empirically addressing the monitoring interventions by stakeholders in place to protect children as they use the internet at home at school or other spaces.

2. Literature Review

Increasing mediatisation is underway in children and family life (Siibak, 2019; Krotz & Hepp 2013). It is argued that the contemporary child is conceived and brought up in a world 'increasingly monitored, analysed, and manipulated by technological processes' (Wilson 2019, 1). A specific risk for young children is that they use apps that are not geared towards their age range (Marsh, Plowman, Yamada- Rice, Bishop, Lahmar & Scott, 2018); therefore, parents and caregivers should monitor the digital activities of children to ensure that the materials are appropriate for age. Traditional applications for parental control designed to protect children and teens from online risks did so through parental restrictions and privacy-invasive surveillance. The focus is changing whereby, for example, new approaches to online security are being adopted which seek to strike a balance between the privacy of a teen and their online security through active communication and promoting trust between parents and children (Ghosh, Hughes & Wisniewski, 2020). Different countries have different expectations about whether the primary responsibility of monitoring children online lies with the government, or with schools or parents. The safety and well-being of children online are of paramount importance to parents and educators although about the internet, parents seem to have been wrong-footed (Boyd & Hargittai, 2013; Livingstone & Haddon, 2012). Parents, Livingstone et al. (2011, p. 34) argues that 'play a vital role in keeping children safe on the internet and they can also empower their child to gain digital skills.'

A review of the literature revealed that internet safety in schools with teachers as protectors, had often emphasized content control through filtering, blocking, or monitoring software (Shin & Lwin, 2017; Smith & Mader, 2014; Smith, 2007; Thornburgh & Lin, 2002). Teachers and school personnel have an extensive opportunity to interact with students during the instructional day. They, therefore, have an important opportunity to observe children, establish a reasonable level of suspicion, and intervene for the protection of children and the support of families

(Treacy & Nohilly, 2020; Shin & Lwin, 2017; Smith & Mader, 2014; Smith, 2007). Communication research scholars have for long been interested in parental efforts to mitigate negative media effects on children (Benedetto & Ingrassia, 2020; Collier, Coyne, Rasmussen, Hawkins, Padilla-Walker Erickson & Memmott-Elison, 2016; Clark, 2011).

Parents were the most influential people in the development and socialization of children since they took an active or restrictive approach to mediation and tracking what their child does online, and/or use regulatory technology resources (Sonck, Nikken, & de Haan, 2013). A study found that only 45 percent of parents (from 13-16 years of age) reviewed their child's website and 25 percent searched through the text messages on their child's messaging account (Duerager & Livingstone, 2012). These figures were much higher among parents in the United States, 60 percent and 48 percent respectively (Pew Research Center, 2012). The most common form of technological intervention used by parents (75 percent) was to install software to avoid spam, junk mail, or viruses, although Wisniewski, Ghosh, Xu, Rosson & Carroll (2017) revealed parents used restriction apps and have had opportunities to discuss with their children concerning internet content (Wisniewski, Xu, Rosson, Perkins & Carroll, 2016). Other technical tools, for instance, to limit Internet time, to keep track of websites visited, or to filter particular websites were significantly less common (Duerager & Livingstone, 2012; Pew Research Center, 2016).

Some parents use censorware to monitor their children's use of the internet. However, studies showed that censorware was not effective because it instilled fear in children and denied them an opportunity to use the internet exhaustively. Scholars argued that censorware proved even more harmful to children's socio-emotional wellbeing and development than any other form of monitoring (Nolan, Raynes-Goldie & McBride, 2011; Marx & Steeves, 2010; Kranich, 2004). They also noted the use of censorware as structures: inhibit online and offline social interactions among children, their ability to fully develop as social actors, and their experience of being empowered to make informed and sensitive decisions about their lives, including privacy choices. This was a surveillance-based approach which led to a decrease in opportunities for children to have experiences that would help them develop autonomy and independence. According to Callister and Burbules, 2004, censorware also gets in the way of teaching and learning.

Other researchers, Symons, Ponnet, Emmerly, Walrave, and Heirman (2017) conducted a factorial validation analysis on parental mediation approaches for internet usage among adolescents. They established six distinct techniques by parents were interaction restrictions, monitoring, access restrictions, supervision and co-use, technical mediation, and interpretative mediation.

Monitoring refers to practices to gather knowledge about the child's behaviour on the social network (Symons, Ponnet, Emmery, Walrave, and Heirman, 2017) Livingstone and colleagues (2017) proposed two separate clusters of internet-related mediation strategies: facilitating mediation, which responds to the need for the agency for children and contributes to more online opportunities but also more risks, and restrictive mediation, which is correlated with lower risks but also fewer opportunities.

According to Benrazavi, Teimouri, and Griffiths (2015) citing Fujioka and Austin (2003), active mediation was likely to cultivate critical thinking skills in children since it was based on parent-child conversation and discussion and was more engaging, unlike the other two forms. Active mediation according to Davidov and Grusec (2007), would make children more responsive to parents' initiatives. Other scholars, for example Kirwil, Garmendia, Garitaonandia, Martínez Fernández, 2009 citing Lwin et al., (2008) opine that too much restriction could cause unintended consequences for example a boomerang effect or what Nathanson (2002) refers to the forbidden fruit syndrome. This would happen when the restriction is imposed on older children who pursue more autonomy from parents (Shin & Lwin, 2017; Lwin et al., 2008). Co-use particularly concerning television viewing is not the best choice since it can be viewed by children as a parental endorsement to the media content and not deliberate monitoring efforts (Austin et al., 1999; Nathanson, 2002).

Active parental mediation of Internet use involves taking steps such as talking to children about the Internet, sitting with them while using the Internet, encouraging them to explore the Internet, sharing online activities with them (Duerager & Livingstone, 2012), and browsing the Internet together (Eastin et al., 2006). For the role of parents, researchers have suggested that active monitoring of children's online activities by parents can help guard children from the threats of the Internet (Mathiesen, 2013; Machill 2002), although the relative effectiveness of different mediation methods is yet unknown for children's activities online.

According to Padilla-Walker, Stockdale, Son, Coyne, & Stinnett (2020) controlling active and restrictive monitoring was associated with higher levels of media secrecy. Parents reduced their restrictive mediation as children get older. However, they were likely to advise on safety for children of any age. Children's exposure to online risks was found to decrease with parental use of restrictive mediation. Children's exposure to online risks also tended to be less the more parents actively mediate their children's use (Duerager & Livingstone, 2012)

Self-regulation has been adopted also as a strategy to monitor and deal with children's internet safety matters. At the international level, the Internet industry has, until now, managed on a European level to agree on four alternative

regulatory initiatives that, among their other provisions, substantially deal with the protection of the online privacy of children (A29 WP (Article 29 Data Protection Working Party, 2010). These initiatives include an arrangement among social networking service providers – the Safer Social Networking Principles for the EU; two documents adopted by broad industry Coalitions – ICT and CEO Coalitions; and a sectorial code of conduct adopted by direct marketing companies to regulate the use of personal data in their activities. Although different, these four initiatives all have amongst their other objectives the aim to mitigate online privacy risks, such as personal data misuse, commercial data exploitation, conduct, and contact risks (Macenaite, 2016).

3. Methodology

3.1 Design

This study was a concurrent mixed-methods (Teddle & Tashakkori, 2009) study in approach, utilising the descriptive cross-sectional design. The mixed research approach includes both quantitative and qualitative data collection and interpretation, which in this study data was collected and analysed together (Creswell & Creswell, 2017). Using both methods provided more detailed equipment for the researchers' comprehension of the study problem than any method alone (Somekh & Lewin, 2011). The approach to qualitative research was used as it allowed the researchers to gain insight into the research question on stakeholders' monitoring interventions, by conducting one on one interview with the respondents (Hennink, Hutter & Bailey, 2020; Silverman, 2016).

3.2 Study site and target population

It was carried out in Lang'ata Sub-county in Nairobi among primary school children. This study area was chosen because of its connectivity on the internet and the available Information Communication Technology centres in the sampled schools and the diversity of the population that was reached that made it possible to collect data from children from low, middle and upper socioeconomic statuses. The study was carried out in three of the eight wards within the Sub-county. The research was conducted in 12 primary schools within Lang'ata Sub-county. Two private schools and two public schools were selected per ward in selected three wards out of the eight within Lang'ata Sub-county in Nairobi.

3.3 Target population

The study population comprised of public and private primary school children, teachers, parents, and child protection experts in the Department of Children's

Services and Directorate of Criminal investigation which has a child protection unit in one of the wards in Lang'ata Sub-county, "South C". A sample of 423 children employing Godden (2004) formula was selected from the target population.

$$SS = \frac{Z^2 \times p(1-p)}{M^2}$$

Where:

SS= Sample Size for infinite population (more than 50,000)

Z = Z value (e.g. 1.96 for 95% confidence level)

P = population proportion (expressed as a decimal) (assumed to be 0.5 (50%) since this would provide the maximum sample size).

M = Margin of Error at 5% (0.05)

Multistage, simple random, stratified random sampling designs for the respondents and purposive sampling design for KII were adopted.

3.4 Research instruments and data collection

Data were collected using questionnaires, interview guides, and focused group discussion schedules. Permission was sought from education authorities within the Sub-county to conduct the research after a permit from the National Commission of Science, Technology, and Innovation was obtained. The research permit and a letter from NACOSTI enabled researchers to get permission from the sub-county education office and the selected schools' headteachers. Appointments were sought agreeing on specific research time for administering the questionnaires. With the help of research assistants, consent was sought from teachers to allow children to undertake research. Children were guided by the researchers on how to fill in the questionnaires. For FGDs and data was collected at a later time after questionnaires were filled.

3.5 Data analysis

Table 1: Distribution by kind of online abuse control measure (n=370)

| | Frequency | Percent |
|------------------------------|-----------|---------|
| Punishment | 52 | 14.1 |
| Denying access to the gadget | 84 | 22.7 |
| Caution | 104 | 28.1 |
| Advice on how to use | 20 | 5.4 |
| Other | 110 | 29.7 |
| Total | 370 | 100.0 |

Source: Field data, 2019

Respondents further reported that they had experienced caution 28.1% (104), while others were denied access to the internet installed gadgets for protection reasons. Only 5.4% agreed to have received advice on matters regarding

Quantitative data were analysed using descriptive and inferential statistics with the help of Statistical Package for Social Sciences version 22, while content analysis was run with the aid of Nvivo version 12 to help come out with themes and categories as advised by the Bryman (2016).

4. Results and Discussion

The study sampled 423 pupils aged 9 to 17 years to whom questionnaires were administered with the help of two research assistants. The researchers and the research assistants administered research instruments following appointed time schedules. This was done in all the three selected wards in both public and private schools. Out of those questionnaires 423 questionnaires, 370 (87%) were successfully filled and returned. Only 53 (13%) of the children either refused to or did not return their questionnaires. A significant number of 370 (87%) filled the questionnaires successfully and returned.

4.1 Stakeholders control as monitoring intervention

Children were asked whether they experienced control over their use of the internet. They were to respond by choosing either yes or no. More than half 52.1% (193) of the respondents had not experienced control in their use of online sites. Slightly less than half 47.8% (177) had experienced control in their online sites.

4.2 Kind of control measure

Another question that sought to establish the kind of abuse control measure used to protect children while they used the internet was guided by whether children were punished for accessing the internet, children being denied access to gadgets that would allow them access the internet, caution, advice on how to use the internet and others which included restriction to access specific sites considered harmful.

the use of the internet. That meant most parents had concerns about children accessing the internet and exposing themselves to harm online.

Parent respondents revealed also that they monitored what their children do online and disclosed that they checked what kind of engagement children had on the internet. A parent said:

"I check whether my child is using the internet when I am out. I also check computer history to monitor websites my child visited although some of these children are very clever they visit some websites and immediately delete to make sure there is no evidence or some traces of what they were accessing online. I am also always keen to know well what my child is doing online."
(Respondent 1, 20, March 2019)

These study findings concurred with a study that revealed that monitoring children's online behaviour was less popular among parents in Europe as compared to other strategies (e.g. imposing rules or talking to the child), most likely as it implied less trust. Only 45% of parents (of 13-16-year-olds) had checked which website their child visited and 25% had looked through the text messages on their child's messaging account (Duerager & Livingstone, 2012). Among parents, in the United States these numbers were much higher (60% and 48% respectively) (Pew Research Center, 2012).

The least effective is a laissez-faire style. This is partly in line with the findings of Valcke et al. (2008). They found that active and restrictive mediation predicted a lower level of unsafe Internet behaviour. In contrast, Livingstone and Helsper (2008) indicate that neither active nor restrictive mediation was helpful to reduce unsafe Internet behaviour. Gender, age, and Internet experience were better predictors for unsafe Internet behaviour. This implies that mediation might not directly influence Internet behaviour.

Respondents who were parents reported that they applied some control measures to safeguard children in their online activities like limiting time for internet access:

"I limit the amount of time my child spends online, I also know how to set restrictions on my child's phone so that the child is not able to access abusive content or content that could corrupt their minds. Through this restriction, I am sure the child cannot download materials that may be harmful. I always advise on or download the appropriate programmes by myself because children are children they are curious to go online into places they are not supposed to." (Respondent 2 18, March 2019)

The findings are in line with a study that showed that filters and other types of parental control software enable parents to manage and support their child's access. Evidence shows, however, that despite this availability,

just over half of parents activate the filtering software on their computers (Ofcom, 2007, citing Ofcom's Submission to Safer Children in A Digital World). Some think it is activated automatically, while others believe that their children can bypass the controls. Another study showed that parenting styles were also linked to the level of parent Internet usage, Internet attitude, and Internet experience. Parenting styles also significantly affect child Internet usage. The highest child usage level is perceived when parents adopt a permissive parenting style; the lowest level is observed when parents adopt an authoritarian Internet parenting style (Valcke, Bonte, De Wever, & Rots, 2010).

4.3 Parent's intervention on online safety

The study sought to find out whether parents intervened in their children's internet use. Twelve items were given in statement on which the child was requested to mark SD-strongly Disagree, D-disagree, N-neutral, A-agree and SA- strongly agree.

The study revealed that parents intervened in protecting their children whereby 273 (73 %) agreed to have received help from parents in online protection. Findings showed that parents monitored their children's use of media. Slightly more than half 199 (53%) agreed that parents viewed with them videos and other materials online. It was evident that parents restricted their children online activity with 71 % agreeing their parents block some sites they don't want them to access. Many students 61 % of the children reported parents not allowing them to view any internet site of their choice. Children were taught by their parents about online risks as 103 (27.8%) had experienced this assistance from parents.

These findings support findings in a study that reported that besides seeking help from parents and teachers, children turn to each other when they need support, yet the effectiveness of peer mediation remains little researched (Livingstone et al., 2011). Previous scholars had revealed parents have numerous opportunities to discuss the often inappropriate content teens may consume online (Wisniewski, Xu, Rosson, Perkins & Carroll, 2016). In a survey in Europe, 44 percent of 9 to 16-year-olds reported receiving Internet safety advice from peers (compared to 63 percent receiving advice from parents and 58 percent from teachers) and 35 percent reported receiving such advice from friends. Practical peer support is even more common: 64% were supported when they had difficulty doing stuff or finding something online (Livingstone et al., 2011). This confirms the argument that the responsibility of online safety in for all the stakeholders and not just a preserve of only caregivers.

The tracing mechanisms in a bid to protect children online according to one of the child protection officers were by

using tools to monitor. The respondent agreed that the available tools were inadequate at the moment they were relying on call logs and messages on gadgets that had abusive materials. This helped arrest offenders.

“There are ways and mechanisms of tracing incidences although tools are inadequate which would help us in being more effective in this. Whatever is available so far can help us tell for example what machines or gadgets have been used to send which kind of information and even the location where the gadget is and of course the person sending. All these help us arrest the offenders and help us be able to rescue the children in a good time. We also rely very much on call logs and we

can track offenders.” (Respondent 3, 7th, March 2019)

In an interview with a child protection officer, the study revealed that the reference documents and guidelines that were used were limited in intervening on online child abuse matters since they were not particular on that kind of abuse. They were generalistic. This is what the respondent had to say:

“We are guided by the Children’s Act 2001 which is under review. We also refer and are guided a lot by the Constitution of Kenya 2010. One that would guide us too is the Cybersecurity Act. These are the ones that are a bit specific to online child abuse.” (Respondent 4, 7th, March 2019)

Table 2: Distribution by how pupils protected themselves while using the internet (n=370)

| | Frequency | Percent |
|---------------------|-----------|---------|
| Block abusers | 20 | 5.4 |
| Unfriend abusers | 6 | 1.6 |
| Report | 93 | 25.1 |
| Keep quiet about it | 80 | 21.6 |
| Other | 171 | 46.2 |
| Total | 370 | 100.0 |

Source: Field data, 2019

After asking all children who were internet users about a set of instrumental, critical, safety, and communicative skills, the skills related to navigation online, the study revealed varying results. Table 20 shows the distribution of safety skills among children on protecting themselves from online harm. Very few respondents could block online abusers 5.4% (20) or unfriending them 1.6% (6)

while using social media. The resorted to reporting to either their parents, teachers or authorities. This presents a situation of vulnerability on the part of the pupil who was also responsible for protecting themselves online. It was also a demonstration that children did not have requisite digital skills to protect themselves.

Table 3: Distribution T-Test Group Statistics

| | Type of school | N | Mean | Std. Deviation | Std. Error Mean |
|----------|----------------|-----|--------|----------------|-----------------|
| Exposure | Public | 176 | 3.0518 | .75255 | .05673 |
| | Private | 194 | 3.3906 | .47857 | .03436 |

Source: Field data, 2019

Independent Sample t test

Independent samples t-test was conducted to examine differences in online activities of children between the two types of schools. This was to test the hypothesis that there is no statistically significant relationship between the type of school and exposure to online child abuse. The t-test that was run gave scores as shown in table 4.

Table 4: Distribution by Independent Samples Test

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | 95% Confidence Interval of the Difference | |
|-----------------------------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|---------|
| | F | Sig. | T | Df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| Exposure | | | | | | | | | |
| Equal variances assumed | 42.589 | .000 | -5.216 | 368 | .000 | -.33884 | .06496 | | -.21110 |
| Equal variances not assumed | | | -5.109 | 291.401 | .000 | -.33884 | .06632 | -.46937 | -.20831 |

Source: Field data, 2019

Since the p-value (0.000) is less than alpha (0.05), then we reject the null hypothesis in favour of the alternative hypothesis and conclude that there is a statistically significant relationship between the type of school and exposure to online child abuse. This meant that it mattered whether a child was in a private school or public school. Children in private schools were more likely to engage in online activities and to be abused online compared to those

enrolled in public primary schools. This is because they have accessibility to the internet and private schools have installed internet which they use even for assignments. This would inform monitoring interventions differently depending on the type of school the child attended. To test the null hypothesis, a chi-square test was done and the results obtained were as shown in the table 5.

Table 5: Test for Type of school against Exposure to Online abuse
Type of school * Exposure Crosstabulation

| | | Exposure | | | | | | |
|----------------|----------------|----------------|------|-------|-------|-----|-------|-------|
| | | A | D | N | SA | SD | Total | |
| Type of school | Public | Count | 53 | 40 | 79 | 0 | 4 | 176 |
| | | Expected Count | 59.5 | 22.8 | 90.9 | 1.0 | 1.9 | 176.0 |
| | Private | Count | 72 | 8 | 112 | 2 | 0 | 194 |
| | | Expected Count | 65.5 | 25.2 | 100.1 | 1.0 | 2.1 | 194.0 |
| Total | Count | 125 | 48 | 191 | 2 | 4 | 370 | |
| | Expected Count | 125.0 | 48.0 | 191.0 | 2.0 | 4.0 | 370.0 | |

Source: Field data, 2019**Chi-Square Test**

Ho There is no significant relationship between school type and exposure to online child abuse.

The study tested the hypothesis that there is no statistically significant relationship between school type and exposure to online abuse among primary school children. A Chi-Square was carried out using the crosstab function in SPSS. The results were as shown in table 6.

Table 6: School type against exposure to online child abuse

| Chi-Square Tests | | | |
|--------------------|---------------------|----|-----------------------|
| | Value | Df | Asymp. Sig. (2-sided) |
| Pearson Chi-Square | 35.130 ^a | 4 | .000 |
| Likelihood Ratio | 39.360 | 4 | .000 |
| N of Valid Cases | 370 | | |

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is .95.

Source: Field data, 2019

Since the p-value (0.000) is less than alpha (0.05), then we reject the null hypothesis in favour of the alternative hypothesis and conclude that there is a significant relationship between the type of school and exposure to online child abuse. This means that children enrolled in

private school and those enrolled in public school are exposed differently to online child abuse because of the various factors like installed internet, the type of curriculum that children are exposed to for example in certain types of schools the children were assigned

homework or work to do using the internet while in some cases in some schools students digital literacy was higher compared to others.

Protecting children would as well require being particular on such factors. This study revealed that parents can set rules regarding the amount of time that the children can spend online and the types of websites that they can visit. It was observed that it is not always possible for parents to know what exactly their children do online when they access the internet. This is because some online activities occurred outside their home or children would take advantage of when parents are not around to access the internet in their neighbourhood or at school. On inquiring whether parents experience challenges in enhancing online safety for their child, one parent had this to say:

“I will say that it is not so much at home where children can be hurt online, but while the child is in school, usually because the parent is not with their child. The child is released to school where they spend the whole day till around 3.30 pm or 4 pm and therefore we as parents do not know what he does online (Mother, age 39, with a 10-year-old child)

All the findings support the application of the parental mediation theory in explaining parental intervention in their children’s use of the internet and the role the parent may play in protecting their children from the risks associated with accessing or exposure to the internet. Further, Vygotsky’s sociocultural theory also applies to our understanding of the child’s taking advantage to learn from their parents to advance their digital skills.

4.4 Gender and exposure to online abuse

The study sought to find out if there was a significant relationship between the gender of the child and their exposure to online abuse. A chi-square was run using IBM SPSS Statistics to test the hypothesis **H₀ There is no significant relationship between gender and exposure to online child abuse.**

A chi-square was run using IBM SPSS Statistics to test the hypothesis **H₀ There is no significant relationship between gender and exposure to online child abuse.** The inferential statistics results were as shown in table 7.

Table 7: Chi-Square Tests distribution by gender of the child against exposure to online child abuse

| | Value | Df | Asymp. Sig. (2-sided) |
|--------------------|--------------------|----|-----------------------|
| Pearson Chi-Square | 5.296 ^a | 4 | .258 |
| Likelihood Ratio | 5.375 | 4 | .251 |
| N of Valid Cases | 370 | | |

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is .98.

Source: Field data, 2019

Since the p-value (0.258) is greater than alpha (0.05), then we fail to reject the null hypothesis and conclude that there is no significant relationship between gender and exposure to online child abuse. This means that both genders are at risk of online child abuse and that a child of either gender is likely to experience online child abuse. Therefore interventions to protect children online should be balanced not to favour any child based on gender. In previous studies boys were found to be more skilled than girls. For example, when a girl was able to send an instant message, a boy would be able to download music, also that internet skills increased with age (Özsoy, Akbulut, Atılgan & Muschert, 2020; Van Deursen & Van Dijk, 2011; Livingstone, Bober, & Helsper, 2005). The findings of this

study contradict the aspect of gender showing either gender could be internet literate considering various factors. On the other hand, the study concurs with a recent study that showed that there was little gender difference in levels of internet usage among children (Bujala, 2012; Twenge & Martin, 2020).

4.5 Class and Parental Intervention

The researcher ran an ANOVA to compare the means between classes for parental intervention as an online risk intervention strategy. The findings were as presented in table 8.

Table 8: Distribution by Class against Parental Intervention

| ANOVA | | | | | |
|----------------|----------------|-----|-------------|-------|------|
| | Sum of Squares | Df | Mean Square | F | Sig. |
| Between Groups | 1.516 | 4 | .379 | 1.200 | .310 |
| Within Groups | 115.293 | 365 | .316 | | |
| Total | 116.809 | 369 | | | |

Source: Field data, 2019

Analysis of variance (ANOVA) revealed no significant class differences in responses to the posed question. The significance value was 0.310 (i.e., $p = .310$), which was above 0.05 showed there was no statistically significant difference in the parental intervention strategies between classes.

There was no statistically significant difference between groups was determined by One-way ANOVA ($F(4,365) = 1.200, p = 0.310$). A Bonferroni test revealed that the parent interventions were not statically significant for class four to eight.

Table 9: Distribution by Class against Pupil Intervention

| ANOVA | | | | | |
|----------------|----------------|-----|-------------|-------|------|
| | Sum of Squares | Df | Mean Square | F | Sig. |
| Between Groups | 3.139 | 4 | .785 | 1.603 | .173 |
| Within Groups | 178.693 | 365 | .490 | | |
| Total | 181.832 | 369 | | | |

Source: Field data, 2019

The significance value was 0.173 (i.e., $p = .173$), which was above 0.05. Therefore, there was no statistically significant difference in the pupil intervention strategies between classes.

There was no statistically significant difference between groups was determined by One-way ANOVA ($F(4,365) = 1.603, p = 0.173$). A Bonferroni test revealed that pupil

interventions were not statically significant for class four to eight.

Distribution by Class against teacher Intervention

The results for the test of the hypothesis on the relationship between the class the child was in against the intervention by the teacher on online child abuse showed the significance value was 0.577 (i.e., $p = .577$), which was above 0.05.

Table 10: Distribution by class against teacher intervention

| ANOVA | | | | | |
|----------------|----------------|-----|-------------|------|------|
| | Sum of Squares | Df | Mean Square | F | Sig. |
| Between Groups | 2.911 | 4 | .728 | .723 | .577 |
| Within Groups | 367.441 | 365 | 1.007 | | |
| Total | 370.352 | 369 | | | |

Source: Field data, 2019

The findings showed that there was no statistically significant difference in teacher intervention strategies between classes. This meant that it did not matter the class the child was in. Teacher intervention was necessary whether the child was in class four or class eight. While intervening in online child abuse matters, the teacher can

start at any level and should not wait until a child gets to a higher level in classes. The earlier the teacher starts the intervention the better.

There was no statistically significant difference between groups was determined by One-way ANOVA ($F(4,365) = 0.723, p = 0.577$). A Bonferroni test revealed that the

teacher interventions were not statically significant for class four to eight.

5. Conclusion and Recommendations

5.1 Conclusion

Based on the results of this study, we then conclude that online child protection obligations involved system thought and very formal. The study concludes that each stakeholder including the state, parents, teachers, residents, *netizens*, and children themselves, has the responsibility of ensuring internet safety. The study findings also led to the conclusion that online child safety training and awareness-creation were critical elements to consider while enhancing monitoring interventions. This study also concluded that internet access was a right yet society was restricting children from accessing it or the society is overprotecting children instead of helping them navigate it since we cannot avoid it in contemporary society. However, this study concluded that the internet is a danger to children.

5.2 Recommendations

The study recommended that all stakeholders work together to improve collaboration between ministries and industries, train child protection officers, and draft guidelines on how to address online child protection issues. Additionally, governments need to streamline their effort to combat offensive online abuse and related issues. The study recommends that all stakeholders need to improve their awareness on matters internet. This could be through deliberate or strategic training and engaging in awareness programmes. It also recommends parents should be careful not to intrude children's privacy in the name of monitoring online activities. Guided by the findings of this study, researchers recommend further studies to examine the effectiveness of monitoring interventions that are employed by stakeholders in protecting children online.

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