

Perceptions of cyber bullying at primary and secondary school level amongst student teachers in the Eastern Cape province of South Africa

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ABSTRACT

Cyber bullying has become a topical issue in South Africa. However, there is very little guidance or training for teachers on how to deal with cyber bullying in the classroom. This study investigated the perceptions of cyber bullying amongst student teachers in the Eastern Cape. The study made use of a quantitative survey approach to collect data from 150 student teachers at a university in the Eastern Cape. The student teachers were representative of all three school phases. The results indicated that almost half of the student teachers had been victims of cyber bullying. Overall, cyber bullying was considered a serious issue for the student teachers but awareness of the prevalence of the issue decreased outside the classroom. The topic has not been incorporated into policy or the school curriculum in South Africa. The study recommends that the Department of Basic Education must provide a standardised policy and curriculum that schools can use to implement and enforce cyber safety behaviour in the schools.

Keywords: cyber bullying, student teachers, curriculum, policy, Eastern Cape

Categories: • Social and professional topics ~ Human and societal aspects of security and privacy • Social and professional topics ~ Informal education • Social and professional topics ~ Computing literacy

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1 INTRODUCTION

School children are exposed to technology in both the classroom and outside of school from an early age (Chandrashekar et al., 2016; Rigby, 2017; Srivastava, 2017). Technology has many benefits for learners as they can find information and interact with friends outside of

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school. However, learners are often too young to understand the dangers of technology such as inappropriate material (pornography), personal information being compromised (identity theft) and emotion-related threats (cyber-bullying) (Atkinson et al., 2009; Chandrashekhar et al., 2016; Huda et al., 2017; Sezer et al., 2015; Von Solms & Solms, 2014). In this regard, teachers play an important role in educating learners on how to protect themselves from these threats. Teachers that use technology in their classroom must supervise the learners when they use the internet and promote cyber safety behaviour (Popović-Čitić et al., 2011). Therefore, the perceptions of teachers about cyberbullying should be investigated as they are the first line of defence for many learners in the cyber world (Macaulay et al., 2018).

Cyber bullying is defined as:

any behaviour performed through electronic or digital media by individuals or groups that repeatedly communicates hostile or aggressive messages intended to inflict harm or discomfort on others. (Tokunaga, 2010, p. 2)

Cyber bullying is characterised by the repetition of the act, a power imbalance between the bully and victim and intent to inflict harm on the victim. Furthermore, what sets cyber bullying apart from traditional bullying is that the bully has anonymity due to the technology they use, can reach an unrestricted audience and can distribute harmful content in real-time to victims (Cross et al., 2015; Kowalski et al., 2014).

The prevalence of cyber bullying in South Africa among school learners is increasing at an alarming rate. Burton and Mutongwizo (2009) conducted the first cyber bullying study in 2009 in South Africa and found that 18.3% of learners reported bullying via voice calls and 16.9% via text messages. In 2011, Unisa's Bureau of Market Research reported that 36% of learners in primary and secondary schools had experienced some sort of cyber bullying. The International Mathematics and Science Study (TIMSS) found that 17% of grade nine students in South Africa reported being exposed to some form of bullying every week (Mullis et al., 2016). While these statistics are alarming, the prevalence of cyber bullying may be much higher as learners often do not report the problem to parents or teachers. Juvonen and Gross (2008) reported that 90% of learners who had experienced cyber bullying failed to report it to an adult as they feared that the bullying might escalate or that they would lose access to the technology (Rachoene & Oyedemi, 2015).

Learners will adopt one of two strategies when they are the victims of cyber bullying. They either seek help from a peer or ignore the situation. Both of these strategies exclude seeking the help of an adult such as a parent. Teachers are often the first to detect that there is a problem when the behaviour of the learner changes. As such, the management of cyber bullying by the teacher must be understood to develop new strategies to encourage learners to pro-actively seek help when they are the victims of cyber bullies (Staksrud & Livingstone, 2009).

There are some efforts to address the issue of cyber bullying amongst learners in South Africa. The Department of Basic Education has issued a pamphlet on the issue, but no policy exists that can guide schools on how to manage cyber bullying (Kritzinger, 2017). Some research on how schools deal with cyber bullying has been conducted in South Africa in the

past years. However, the research did not address all the cyber safety initiatives that are available for schools (Kritzinger, 2015; Reid & Niekerk, 2014). Very few of the studies focused on the perceptions of teachers regarding cyber bullying (Elçi & Seçkin, 2019; Macaulay et al., 2018). This study attempts to fill this gap in the literature by investigating the awareness of cyber bullying, at both the primary and secondary school level, amongst student teachers at a university in the Eastern Cape.

The rest of the paper will discuss the literature that supports cyber bullying in South African schools, followed by the research method that was used to collect data, the analysis and discussion of these results, followed by the conclusion.

2 LITERATURE REVIEW

Teachers are encouraged to incorporate technology into their teaching pedagogy so as to expose students to relevant and interesting curriculum content (Ertmer & Ottenbreit-Leftwich, 2010; Govender & Skea, 2015). Davis (2018) found that teachers placed more focus on the ability of technology in the classroom than on how to protect data or deter threats that are associated with cyber security. Teachers must be aware of and understand these risks in order to deal with them in a positive manner (RSA Department of Basic Education, 2010). The theoretical foundation that supports this notion is the Routine Activity Theory (RAT) which provides a framework against which a person can understand why crime, in this study cyber-bullying, is likely to occur. Cohen and Felson (1979) proposed the RAT as a means to explain why there was an increase in crime after World War 2. They theorised that the increase was due to the fact that more activities, for example, learning activities, occurred outside the home, in this case the classroom, which made students more vulnerable to motivated offenders. The RAT suggests that three factors are necessary for victimisation in this situation: a motivated offender (bully), a suitable target (student) and lack of capable guardianship (knowledge or awareness of teacher to safeguard against cyber bullying (Felson, 2002). Teachers can play a key role in anti-cyber bullying initiatives, but their own experience and knowledge of cyber bullying may impact how they deal with the issue [28-29]. Macaulay, et al. (Macaulay et al., 2018) found that teachers' beliefs about bullying will predict how they intervene when faced with cyber bullying. Teachers with normative views towards bullying were less likely to intervene compared to those that identified with assertive or avoidant beliefs (Kochenderfer-Ladd & Pelletier, 2008). There are only a few studies available in the literature that have been conducted on the awareness of cyber bullying among teachers [31- 33].

In line with RAT, learners are exposed to online risks in the classroom and outside the school environment. There are different types of cyber bullying that teachers must be cognisant of when dealing with this issue. Table 1 below provides an overview of the different types of cyber bullying.

The consequences of cyber bullying for a learner may include low self-esteem, family problems, academic problems, school violence, delinquent behaviour and suicidal thoughts (Goodno, 2011). The National Society for the Prevention of Cruelty to Children (NSPCC) in

Table 1: Description of different types of cyber bullying (Li, 2010; Mark & Ratliffe, 2011; Rachoene & Oyedemi, 2015; Tokunaga, 2010)

Types of cyber bullying	Definition
Harassment	Rude, insulting or threatening messages which attack the victim's physical or social attributes
Flaming	Offensive, rude and vulgar language to insult and threaten someone
Denigration	Messages that are untrue, harmful or even cruel, often with 'evidence' of a digitally altered picture as to present a false image of the victim
Identity theft / masquerade	Pretending to be someone else to send abusive messages
Outing	Involves posting personal communications/images containing intimate and potentially embarrassing personal information
Trickery	The victim is tricked into thinking that communication is private to share intimate details, after which the bully will threaten to distribute the information
Exclusion	Bully decides who is allowed to be a member of an online group by 'unfriending' those not deemed worthy
Cyberstalking	Sending repeated messages that threaten to harm, intimidate or be extremely offensive to the victim

the United Kingdom reported that 25% of children younger than 11 years had received counselling due to cyber bullying, while there was an increase of 12% in these sessions for young people during 2016/2017 compared to the previous year (National Society for the Prevention of Cruelty to Children (NSPCC), 2015). Farhangpour, Maluleke and Mutshaeni (Farhangpour et al., 2019) investigated the emotional and academic effects of cyber bullying on students in a rural high school in Limpopo, South Africa. The study found that 55% of the learners had experienced some form of cyber bullying in the past. The study reported that students were negatively affected both emotionally and academically to the extent that some considered suicide when dealing with the cyber bullying.

There is also a disturbing new trend that has emerged in recent years where students cyber bully their teachers [39 - 42]. In the United Kingdom, 45% of teachers reported receiving emails that were upsetting, 38% reported receiving unwelcome text messages, while 42% reported that they had been victims of insulting comments on social media about their performance at school (Reddy et al., 2013). The consequences of these actions were that teachers felt unsafe at schools, chose to retire early or leave the teaching profession (Reddy et al., 2013).

Kritzinger (Kritzinger, 2017) advocated for a national security awareness culture in South Africa where learners and teachers can be trained at school and university how to prevent cyber bullying. Part of this culture would be to enable teachers to disseminate the information to their learners. Li (Li, 2008) and Ryan and Kariuki (Ryan & Kariuki, 2011) reported that more than half of student teachers in Canada did not feel confident that they were prepared to identify or manage cyber bullying in the classroom. More than 80% of the student teachers

indicated that they did not feel that the university where they were studying was preparing them adequately to manage cyber bullying. This lack of preparation to handle cyber bullying resulted in a reluctance among student teachers to act when they suspected incidents of cyber bullying (Ryan & Kariuki, 2011). Eden, Heiman and Olenik-Shemesh (Eden et al., 2013) reported that 72% of teachers in Israel agreed that cyber bullying was a problem in their schools, while there was a low level of confidence (38%) that they could identify and manage the issue amongst learners. Continued education and training for prospective and current teachers would provide a valuable platform to promote school culture and attitudes, in the hope of reducing cyber bullying situations (Macaulay et al., 2018).

Kritzinger (Kritzinger, 2017) has identified five role players that are necessary to create a safe technological environment for learners. These role players and how they interact with each other are depicted in Figure 1.

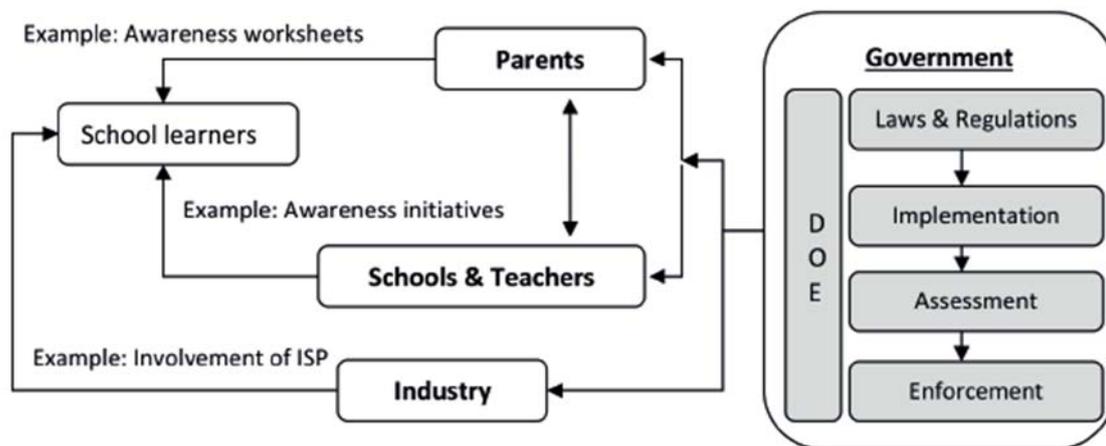


Figure 1: Role players in creating a safe technological environment (Kritzinger, 2017)

The learners are the first group as they are the online users (Byron, 2008; Von Solms & Solms, 2014). However, younger learners may not be aware of the dangers of the internet and need to be educated and supervised by their parents and teachers when they are online. The second group of role-players is the parents. Mason (Mason, 2008) suggested that the chances of cyber bullying can be reduced by as much as 50% if a parent takes an active role in monitoring the technology that their children use at home. De Lange and Von Solms (De Lange & Von Solms, 2012) reported that children are not taught at home how to protect themselves online as parents are not knowledgeable about cyber safety. Kritzinger (Kritzinger, 2015) reported that 61% of parents and teachers do not monitor learners' internet usage and that 62% of learners reported that no parental guidance software was installed at home to regulate their internet access. This leaves the responsibility of teaching learners how to protect themselves online to the school (Macaulay et al., 2018).

The third group of role-players is the schools and teachers. Many teachers do not know how to deal with learners that report cyber bullying as there is a lack of awareness about the issue (Kritzinger, 2015; Yilmaz, 2010). Kritzinger and Padayachee (Kritzinger & Padayachee, 2013) and Kritzinger (Kritzinger, 2015) reported that there are no cyber-related topics included in the South African school curriculum. The absence of the topic means that learners are not taught this important life skill, which means that they can easily become cyber victims. Also, teachers are not adequately trained for cyber safety issues which means that they have limited knowledge and skill in this area and cannot assist learners with cyber-related incidents (Von Solms & Solms, 2014). In order to successfully address cyber bullying, teachers must be provided with adequate resources to develop awareness and preventative strategies towards cyber bullying amongst learners. These resources can include training, workshops, brochures, lesson plans and class activities. The schools also need a guiding policy on how to deal with cyber bullying, enhancing awareness of the school about cyber bullying and coping strategies for parents ((Eden et al., 2013). There is a general lack of guidance for schools on how to deal with cyber bullying. In the United Kingdom, only a small proportion of schools have included cyber bullying in the school policy that addresses bullying (Englander, 2013). The school needs to have a cyber-safety policy which includes an action plan for reporting and handling cyber-safety incidents (Kritzinger, 2015).

The fourth role player is the government, specifically the Department of Basic Education. In South Africa, the National Safe Schools Framework was published in 2015 to help schools understand and respond to general security threats. The Framework defines cyber bullying, but falls short of a comprehensive approach to cyber bullying in schools (Juan et al., 2018). Also, the Department of Basic Education published a pamphlet on how to deal with cyber bullying for learners, parents and the school. The pamphlet does not provide schools with enough guidance on how to deal with cyber safety issues, which means that schools have either ignored the issue or have created a policy in isolation from the Department of Basic Education (Kritzinger, 2017). There is also limited research that has been conducted on the prevalence and effects of cyber bullying on school children in South Africa (Badenhorst, 2011; Eddie et al., 2016; Kowalski et al., 2012). Many developed countries, such as the United Kingdom, Australia, the United States of America, New Zealand and Canada, have included cyber safety in their school curriculum (Kritzinger, 2016). In Africa, Tunisia, Rwanda, and Mauritius have started the process of educating learners about cyber safety, but the majority of African countries lack any initiative in the area (Macaulay et al., 2018).

The last role player is industry which includes internet service providers (ISPs) that can assist with online monitoring, funding for cyber safety initiatives, assist with the teacher and parent training and awareness campaigns (Kritzinger, 2017). Academia is also providing resources to promote cyber safety. The South African Cyber-Security Academic Alliance (SAC-SAA) is a collaboration between Nelson Mandela Metropolitan University (NMMU), the University of Johannesburg (UJ) and the University of South Africa (UNISA) to launch a national cyber-security awareness campaign. Some of the activities of this group include the National Cyber-Security Awareness week, poster competitions, workshops, seminars and banners to

raise awareness of cyber-security in schools (Kortjan & Von Solms, 2014).

3 METHODOLOGY

This research study employed a positivistic paradigm with a quantitative approach. The study made use of a survey to collect data from university students that were registered for a Bachelor of Education degree. There were a total of 952 students registered for the degree and, by making use of a Raosoft calculator, it was determined that a sample size of 261 students would be representative of the population (5% margin of error and 95% confidence level). A convenience sampling method was used to distribute the 261 questionnaires to the students. A total of 150 questionnaires were returned, representing a return rate of 57.4%. The survey was based on the published work from Molluzzo and Lawler (2014) **FIXME no citation** which compared the perceptions of faculty staff and students regarding cyber bullying. The instrument was adopted for this study and consisted of 5 sections and 28 items overall. Section A (7 questions) solicited demographic information from respondents, while Section B (9 questions) measured the perceptions about the severity of cyber bullying of the respondents. Section C included 6 questions about cyber bullying curriculum and policy issues. Section D (4 questions) investigated the awareness of the respondents about cyber bullying. Section E tested the personal experience of the respondents with cyber bullying (2 questions). Sections B to E made use of a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) to test the perceptions of students regarding cyber bullying. The statistical analyses were done with SPSS v24. The Cronbach alpha coefficient (α) was used to test for internal consistency of the instrument and found to be 0.754, which is deemed acceptable (Pallant, 2013).

The study population consisted of university students that were registered for a Bachelor of Education degree across the various phases (foundation, intermediate, senior and FET) at two campuses of a traditional university. Ethical clearance was obtained to conduct the study before the data collection. Table 2 provides a summary of the descriptive statistics of the respondents who took part in the study.

The results in Table 2 show that the majority of the respondents were black females in their third year of study for a Bachelor of Education degree for the senior phase. The placement for teaching practical's was evenly spread out between urban and semi-urban while 28% of the respondents attended a rural school for their practical placements. The majority of the respondents used social media daily, with Facebook being the most popular social media site. The respondents indicated that they were comfortable with social media and had a 'good' knowledge of the technology.

Table 2: Descriptive statistics of respondents ($n = 150$)

Gender	Male 64 (42.7%)	Female 86 (57.3%)		
Current year of study	1st year 11 (7.3%)	2nd year 6 (4.0%)	3rd year 73 (48.7%)	4th year 60 (40.0%)
Teaching phase	Foundation 12 (8.0%)	Intermediate 49 (32.7%)	Senior 76 (50.7%)	FET 13 (8.7%)
Teaching practical placement	Urban 52 (34.7%)	Semi-urban 55 (36.7%)	Rural 43 (28.7%)	
How often do you use social media?	Several times a day 74 (49.3%)	Once a day 14 (9.3%)	Several times a week 44 (29.3%)	Once a week 18 (12.0%)
Level of experience with social media	Excellent 46 (30.7%)	Good 65 (43.3%)	Average 25 (16.7%)	Poor 14 (9.3%)
Social media sites used	Facebook 74 (49.3%)	Twitter 24 (16.0%)	IMS 32 (21.3%)	Other 20 (13.3%)

4 RESULTS

The first category of the questionnaire tested the perception of the respondents about how serious cyber bullying is perceived at school and at individual levels (Table 3). A total of six questions were included in this section. More than 80% of respondents indicated that they were aware of cyber bullying on the Internet and considered it a serious issue at an individual and school level. Seventy-eight percent of respondents were aware of cyber bullying at the school where they had completed their practical training, while fewer respondents (67.3%) indicated that they were aware of cyber bullying at a national level and even less (21.3%) at the university where they studied. However, 36.7% of the respondents admitted that they had been perpetrators of cyber bullying previously, while 45.5% were victims of cyber bullying in the past.

Cyber bullying was discussed at school level (82%) but only two thirds (66%) of the respondents indicated that the topic had been discussed at the university. The majority (90%) of respondents felt that the topic should be included in the curriculum at both school and university levels.

The majority of the respondent (68%) were not aware of a cyber bullying policy within the university, while 80% of the respondents indicated that they were aware of such a policy at the school level. This is interesting as no such policy exists within either space. More than 90% of the respondents indicated that more should be done to promote such a policy around cyber bullying in general, at school and university level, making use of seminars or workshops. The technology was also identified as being useful to prevent cyber bullying in making the internet safer for children.

Table 3: Descriptive results for respondents' awareness of cyber bullying

	Mean	Std. Dev.	Agree, Strongly Agree (%)	Disagree, Strongly Disagree (%)
Perception of the seriousness of cyber bullying				
I am aware of cyber bullying as an activity on the internet	3.17	.801	84.6	15.4
Cyber bullying is a serious issue for me	3.17	.937	83.3	16.7
Cyber bullying is a serious issue for my learners.	3.35	.752	90.0	10.0
I am aware of instances of cyber bullying at the university	3.10	.857	21.3	78.7
I am aware of instances of cyber bullying at the school where I conducted my practical teaching	3.07	.868	78.0	22.0
I am aware of cyber bullying activities at other schools (for example, the Western Cape learner who committed suicide as a result of cyber bullying)	2.75	.991	67.3	32.7
Experience of cyber bullying				
Cyber bullying, pure and simple, is wrong	3.53	.937	92.0	8.0
I have consciously or unconsciously been a perpetrator of cyber bullying	2.05	.868	36.7	63.3
I have been a victim of cyber bullying previously	2.25	.819	45.4	54.6
Preparation to manage cyber bullying				
Issues of cyber-bullying have been discussed in your classes at the University	2.73	.910	66.0	34.0
Issues of cyber-bullying have been discussed at the school where you conducted your practical	3.16	.828	82.0	18.0
I think that cyber-bullying should be included in the curriculum at university	3.33	.748	90.0	10.0
I think that cyber-bullying should be included in the curriculum at primary or secondary schools	3.41	.769	90.7	9.3
Resources to deal with cyber bullying				
I am aware of the cyber-bullying policy of the university	2.91	.944	32.0	68.0
I am aware of the cyber-bullying policy of the Department of Basic Education	3.11	.843	80.5	19.5
The Department of Basic Education should do more to promote the cyber-bullying policy	3.41	.734	92.0	8.0
The University should do more to promote the cyber-bullying policy	3.48	.632	96.6	3.4
The Department of Basic Education should do more to promote awareness about cyber-bullying	3.47	.652	94.0	6.0
The University should do more to promote the cyber-bullying awareness among students in the Faculty of Education in particular.	3.49	.663	94.7	5.3
The Department of Basic Education should sponsor seminars or training for staff and students on the problems of cyber-bullying as an activity harmful to learners.	3.41	.637	94.7	5.3
The University should sponsor seminars or training for staff and students on the problems of cyber-bullying as an activity harmful to learners.	3.38	.672	93.4	6.6
Efficient technologies can help to make the use of the Internet and mobile phones safer for children to use	3.25	.723	90.0	10.0

5 DISCUSSION

This study investigated the awareness of cyber bullying amongst student teachers at a university in the Eastern Cape. Almost half of the respondents (45.5%) indicated that they had previously been victims of cyber bullying themselves. This is in line with the results from the study conducted by Farhangpour et al. (2019) where 55% of the learners indicated they were victims of cyber bullying, which was a slightly higher figure than previous studies conducted by Oosterwyk and Parker (2010) and De Lange and Von Solms (2012) which reported a prevalence of 36% of cyber bullying amongst school learners. Of more concern was that 36.7% of the respondents indicated that they had previously been perpetrators of cyber bullying themselves which shows a level of normality around this issue. Both cases will influence how a teacher responds to cyber bullying in their classroom (Sakellariou et al., 2012; Stewart & Fritsch, 2011). Macaulay et al. (2018) found that the prior experience of cyber bullying would influence what role teachers played in anti-bullying activities. Teachers with normative views towards bullying were less likely to intervene when they detected cyber bullying in the classroom (Kochenderfer-Ladd & Pelletier, 2008).

Macaulay et al. (2018) found that teachers' beliefs about bullying would predict how they intervened when faced with cyber bullying. In this study, the vast majority of the respondents indicated that cyber bullying was a serious issue. However, their awareness of the prevalence of the issue decreased outside the classroom. This is similar to the results reported by Li (2010) which indicated the covert nature of cyber bullying, meaning that many are not aware of the prevalence of the problem. This could indicate that they perceive cyber bullying to only be a problem at school level because the learners had reported the problem to the teachers who are supposed to deal with the problem, while the respondents did not believe that it is a national problem or could happen at university as well as they not having experienced it at that level. This lack of awareness of the topic in the South African context shows that they need to be educated on the topic as citizens and future teachers (Kritzinger, 2017).

The perception that cyber bullying is only a problem at school level could be explained by the topic receiving more attention at school level with 82% of respondents indicating it was discussed, while only two thirds (66%) of the respondents indicated that the topic was discussed at university level. This is similar to the results that Li (2010) reported where 50–60% of pre-service teachers believed their program did not prepare them to manage cyber bullying in the school environment. However, as indicated by the respondents, cyber bullying is considered a serious issue because the majority of respondents did want the topic to be included in the curriculum in the future, which has also been suggested by Kritzinger (2016) and Styron et al. (2016). Teachers that have been trained are more likely to take a pro-active approach to manage cyber bullying. Purdy and Mc Guckin (2015) suggested that the teachers' attitude would impact the frequency of bullying in their classroom.

Macaulay et al. (2018) suggested that a comprehensive cyber bullying policy would be an effective strategy to manage cyber bullying in the school. Kritzinger et al. (2017) went further to suggest that there is a standardised cyber bullying policy implemented for all schools that are

monitored regularly. Also, schools should have an incident-handling protocol that guides their management of the problem. However, as indicated by Kritzinger (2017), there is currently no commitment from the National government to enhance cyber-safety awareness among school learners or to provide a comprehensive policy available to schools to deal with cyber bullying. The Department of Basic Education and academia have made some information available, but lack an overall strategy to deal with cyber bullying in the South African school system. This problem extends to the tertiary education level as no cyber bullying policy is available at the university level either. The respondents confused the network policy of the university with a standardised cyber bullying policy; this arose as a consequence of them having agreed to 'proper behaviour' when using the computers and other equipment as in the ICT resources of the institution.

In conclusion, the respondents felt that awareness around cyber bullying needs to be increased by both the school and university in order to address the issue. Kritzinger (2017) suggested a nationwide awareness campaign to cybersecurity making use of social media, traditional media, workshops, open days, posters, and brochures.

6 CONCLUSION

This study investigated the awareness of cyber bullying amongst student teachers at a university in the Eastern Cape. Almost half of the student teachers were previously victims of cyber bullying while a third had been perpetrators of cyber bullying. The study found that cyber bullying is considered a serious issue among student teachers, but that the awareness of the issue decreases as the locus of attention moves away from the classroom. Cyber bullying was discussed at school level, but not at university level, which shows a lack of preparation for student teachers about this issue during their training. Cyber bullying should be included in the curriculum at the university level to prepare student teachers, but also at school level to equip the learners with this life skill. No policy is in place at either school or university level to deal with cyber bullying, but the student teachers did indicate that it is important to create more awareness about cyber bullying to equip teachers to deal with the issue in their classroom.

The limitations of the study are that the findings from populations at one university may not be generalised without caution. Cyber bullying is a sensitive issue that needs to be addressed with caution, but more insight regarding the topic could be collected making use of interviews. This study only collected data through a survey that may not be enough to address the in-depth knowledge that is required about the topic. Future opportunities for research in this area are very necessary due to the limited knowledge about cyber bullying in the university setting.

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