

# Emotional and academic effects of cyberbullying on students in a rural high school in the Limpopo province, South Africa


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**Background:** The overwhelming use of Internet and social media among the youth in South Africa causes both negative and positive effects on the users. Cyberbullying is one manifestation of such negative effects. Rural high school students are not immune to this modern age social problem. To protect them against the possible hazards, it is important to study this phenomenon among this group of young people.

**Objectives:** This study explored the extent of the use of Internet and social media, the forms and frequency of cyberbullying and their effects on the emotional well-being and academic performance of grades 8–10 students in a rural high school in Limpopo, South Africa.

**Method:** This study used a mixed research approach. Eighty participants consisting of 50 females and 30 males from grades 8 to 10 in a rural high school participated in this survey and 6 purposefully selected victims of cyberbullying completed an interview schedule.

**Results:** The majority of participants had access to cyber technology and used Facebook frequently. More than half of the participants experienced a wide variety of cyberbullying, sexual offence being the highest. They were negatively affected both emotionally and academically to the extent that some thought of suicide.

**Conclusion:** Even though students in this rural high school have access to the latest cyber technology, they are not equipped to prevent or cope with its negative effects; hence, they suffer in solitude. The study recommends an anti-cyberbullying policy being established, as well as counselling at school, and advises stakeholders who intend to expand e-learning at schools to include cyber safety and supportive mechanisms in their programmes for successful implementation.

## Introduction

It was not long ago that the world was introduced to the Internet and cyber technology, yet these have crept into the lives of people in every corner of the world, surpassing any other form of technology in speed of expansion and popularity. The most common device that makes this technology accessible to ordinary men and women is the mobile phone. According to Statista (2016), in 2014 about 60% of the world's population already owned a mobile phone and it predicted that in 2017 this number would reach 4.77 billion. In another report, Skiba (2014) estimates that 79% of young adults aged 18–24 years have smartphones that allow them to connect to the Internet. South Africa ranks 28th in the world, with 80 million active cell phones in comparison to its 52.98 million population, which is equal to 1.5 cell phone SIM cards per individual (News24 2015). The overwhelming penetration of mobile technology and increasing access to cyber space presents the users with many advantages, as well as challenges as its side effect. One of the challenges is the abuse of this technology for bullying. 'Cyberbullying' refers to the intentional act of using any cyber medium such as mobile phones, chat rooms, emails, instant messaging and social networking sites to hurt someone or a group of people (Belsey 2004; Goodno 2011). The growing increase in the use of laptop computers, tablets and smartphones has made cyberbullying a global problem (Campbell 2005). In a study on 18 000 people from 24 countries, including Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Great Britain, Hungary, India, Indonesia, Italy, Japan, Mexico, Poland, Russia, Saudi Arabia, South Africa, South Korea, Spain, Sweden, Turkey and the USA, 80% of the participants found cyberbullying a serious problem (Reuters 2012). NoBully.com (2016) reported that over 1.1 million people visited their site in just 1 month in March 2016 to seek help to deal with cyberbullying. The Cyberbullying Research Center (2016) warned that of the over 80% of teenagers who use a cell

phone regularly, about 50% have experienced some form of cyberbullying, while 20% of them experienced it regularly.

In South Africa, cyberbullying is reported to be as high as 52% among Grade 8 students of Cape Town (Townsend et al. 2008), 36.3% of grades 8 and 11 students in Durban (Liang, Flisher & Lombard 2007), 24.3% of Grade 9 students in Port Elizabeth (Flisher & Lombard 2006), 16.49% among rural high school students in the Eastern Cape (Mlisa et al. 2008) and 11.8% in rural high schools in Mpumalanga (Taiwo & Goldstein 2006).

Research has shown that cyberbullying can have extensive negative impacts on the victims and leave them with devastating scars. For example, Gordon (2016) found that teenage victims of cyberbullying experience anxiety, fear, depression, low self-esteem, resulting in feeling overwhelmed, vulnerable, powerless, revengeful, exposed, humiliated, isolated and losing interest in schooling and life. In some extreme cases it has even caused mental problems, social isolation and suicidal thoughts (Deschamps & McNutt 2016). In view of the severity of the side effects of cyberbullying, its speedy expansion and evolving nature, as well as shortage of studies on cyberbullying in rural schools in the Limpopo province, South Africa, this study was carried out. The study was conducted in a rural high school in a village in the north of the Limpopo province in 2015. The objectives of the study were to investigate: (1) students' access and use of cyber technology, (2) choice of social media sites, (3) forms and frequency of cyberbullying, (4) effect of bullying on emotional well-being and academic performance, and (5) students' views on how to deal with the problem of cyberbullying. With the plan of government and some universities to expand the use of Internet in rural schools, it is important to understand how cyber technology is used by rural students and the possible cyberbullying challenges that they face, to come up with preventative measures to address the concerns of this under-privileged sector of South African society.

## Cyberbullying in context

With the advent of the Internet, the nature and form of socialisation among youth has been transformed. Physical socialisation in the form of attending parties and group get-togethers has been replaced with conversations in chat rooms, text messages and other forms of cyber communication. Young people go online, using social networking sites to connect to peers, to exchange views, to socialise and feel socially accepted and a part of the group (Farhangpour & Matendawafa 2014). It is not surprising that the old act of school bullying or 'offline' bullying has been transferred to the cyber platforms. Cyberbullying is a modern form of traditional or offline bullying and similar motives that instigated traditional bullying are now manifested online through text messages or social networking sites. Faucher, Jackson and Cassidy (2014) define cyberbullying as online exchanges with the intention to harm the recipient. Cyberbullying appears in various forms. The National Crime Prevention Council (2011) has provided the following list:

sending threatening messages, spreading rumours, attacking someone verbally, intentionally excluding someone from the group, pretending to be someone else, publicising unflattering pictures of a person, circulating sexually suggestive pictures and sharing confidential information online.

Cyberbullying is especially frequent in schools. Taking the example of USA, the number of cyberbullying incidents between 2004 and 2013 seems to have steadily increased. Ybarra and Mitchell's (2004) survey of Internet use among 1501 youths aged 10–17 years in USA showed that 4% were bullied during the previous year. In a survey of 770 youth between the ages of 11 and 19 in 2005 by National Children's Home (2005), 20% of respondents said that they had been bullied through electronic devices. In another study, Raskauskas and Stoltz (2007) surveyed 84 students aged 13–18 years from two high schools; 49% reported being victims of cyberbullying over the last school year. Juvonen and Gross (2008) surveyed 1454 students from across the USA; they found that about 72% of the students had encountered cyberbullying at least once during the previous year. Similarly, an online survey of 1378 youth under the age of 18 by Hinduja and Patchin (2008) showed that over 32% of boys and over 36% of girls had been victims of cyberbullying. More recently, Muhlhauser (2013) found that 50% of students in the USA had experienced cyberbullying, where 61% were females and 39% males. The increase in the number of cyberbullying incidents over the years in the USA could be linked to the increased number of hours of online activity (Hinduja & Patchin 2008; Juvonen & Gross 2008), a phenomenon that is common in most countries around the world.

## Cyberbullying in relation to traditional bullying

It is argued that students who were victims of traditional bullying or 'offline bullying' in schools are now exposed to similar threats through their mobile phones or computers (Ybarra & Mitchell 2004). However, cyberbullying differs from traditional bullying in several ways that potentially make it more harmful to the victims. Usually the victims of traditional bullying find relief from the bully once they get home (Slonje & Smith 2008) away from school where bullying usually takes place. This is not the case with cyberbullying as the attackers can continue to bully 24 h a day, 7 days a week, using social media or other Internet mediums. In traditional forms of bullying, often the physical removal of the victim from the scene puts a stop to bullying; this does not apply to cyberbullying because cyberbullying does not happen through physical contact but electronic messages. Moreover, the audience witnessing the act of bullying in a traditional setting was usually limited to classmates and students at school, whereas in the case of cyberbullying the audience is not known and can extend beyond the circle of classmates and the school community. The fact that a message can go viral on the Net – 'liked' or 'unliked', commented on and shared by an unlimited number of viewers – passing from

one group to the other – creates an unknown or ‘ghost audience’ that makes the act of cyberbullying so much more uncomfortable and even dangerous to the victims. This factor can cause high levels of stress and feelings of embarrassment for the victim, as the victim can’t determine the scope of exposure and the type of people who witnessed the case. Another difference is that the bully can stay anonymous, making it difficult to be stopped – especially when the victim is unaware of remedial actions and software applications that can block the perpetrator. Moreover, the act of cyberbullying can become contagious; when one member of group starts to bully, others may follow suit. Being invisible to others, as in the case of cyberbullying, can encourage some viewers to start to bully others, as they feel safe in the virtual space, whereas in an ordinary classroom they would not have gotten involved for fear of being named and shamed. Lack of supervision by adults during cyberbullying is another difference that make cyberbullying more ‘doable’ for the opportunists.

## **Effect of cyberbullying on psychological health of the victim**

Bullying can seriously affect the health and well-being of the victims, especially their psychological health. Often, victims feel disconnected from school and communities and experience traumatic stress (Hong et al. 2014). According to Raskauskas and Stoltz (2007), victims of cyberbullying may develop poor general psychosocial conditions. In their research they found that 31% of victimised students reported being very or extremely upset, 19% were very or extremely scared and 18% were very or extremely embarrassed by online harassment. They also found that repeated acts of cyberbullying threatened healthy development of self-esteem and contributed to school failure, dropout and increased psychological symptoms such as depression and anxiety (Raskauskas & Stoltz 2007). Moreover, victims of repeated bullying are likely to accept and internalise the bullies’ treatment of them and feel that they have no control over their lives (Parson 2005). As a result, they may further develop a negative outlook on the world with long-term consequences that go beyond psychological harm into a dysfunctional lifestyle. Sheridan (2012) found that 15% of adults who were victims of bullying during high school had psychological problems and failed to get decent jobs because they were not psychologically suitable. Wolke and Lereya (2015) added that bullying is a major risk factor for adaptation to adult roles such as forming lasting relationships and integrating into the workplace.

If victims of bullying do not get adequate help to deal with the negative effects, the damage can increase, and in extreme cases victims might feel so desperate that they resort to self-harm or commit suicide (Fisher et al. 2012). In 2007, a survey of 1963 middle-school students in the USA showed that both the bullies and the victims had suicidal thoughts but the victims had more suicidal thoughts than others and were more likely to attempt suicide.

## **Effect of cyberbullying on academic performance**

Learners need to concentrate during lessons to perform at their best in school, but being bullied makes it hard for them to concentrate and pay attention in class. In a study conducted by Hureva (2012), 62% of learners who were victims of bullying did not pay attention to schoolwork, and 5% said they were always thinking of the bullies. Hong et al. (2014) confirm that cyberbullied students commonly obtain lower grades and are at risk of poor academic performance. Shariff (2008), Myburgh and Poggenpoel (2009) and Hixon (2009) maintain that bullying often leaves victims with mental anguish and destroys their self-esteem, which leads to a drop in academic performance.

Absenteeism from school is another consequence of being bullied by learners at schools globally (Olweus 1993; Rigby 1997). Smith and Sharp (1994) report that some victims of bullying stay absent from school to avoid being bullied. In a study conducted in South Africa by Myburgh and Poggenpoel (2009), it was confirmed that victims of school bullying hate schooling because of their fear of being bullied.

Furthermore, victims of bullying have few or no friends (Olweus 1993; Rigby 1997). Rigby (1997) found that learners who have not been bullied, do not like to be friends with victims of bullying. Smith and Sharp (1994) also found that some victims of bullying intentionally isolate themselves by choosing subjects that many learners are not interested in to avoid the bully. Isolation causes victims to be sad and this may affect their concentration and ability to learn.

## **Research methodology**

### **Research design and approach**

The research design was a case study where the effect of cyberbullying among students in one school was studied. In case studies a contemporary phenomenon is empirically investigated within its natural context using various sources of evidence (Yin 2003). The primary advantage of a case study is that it provides rich and comprehensive information about the phenomenon under study (Maree 2009). It provides a holistic understanding of how different elements within a case interact and affect each other. The study adopted a mixed-method approach. In a mixed-method approach, researchers utilise various methods of collecting and analysing data from quantitative and qualitative research approaches in a single research study (Creswell 2009). A quantitative survey questionnaire and a qualitative interview schedule were utilised in this study.

### **Sampling process and data collection instrument**

The researched school had four Grade 8 classes, five Grade 9 classes and six Grade 10 classes. The researcher used a lucky draw to select one class from each grade and stratified

probability sampling to select the study sample from each grade.

The sample represented male and female learners in each of the three grades. Based on the proportion of learners in the chosen grades, 20 Grade 8, 30 Grade 9 and 30 Grade 10 learners were randomly selected. The total sample for the study consisted of 80 learners (30 males and 50 females) aged 12–18 years old. The participants completed a cyberbullying survey questionnaire, which consisted of 37 questions. The questionnaire was first piloted among a few students in the same school and was improved accordingly. For the qualitative research, purposeful snowball sampling was used. The first cyberbullying victim was identified by the teacher, who in turn introduced the other five respondents to the researcher, who completed a qualitative interview schedule in writing. There were five female victims and one male victim. The data from the quantitative survey provided answers for research questions on the access, use, popular sites, and frequency and forms of cyberbullying, and the qualitative data provided answers for the nature and effect of cyberbullying on the victims. The quantitative data was analysed using descriptive statistics methods including percentages and frequency and the qualitative data was analysed thematically.

## Study location and ethical considerations

The location of study was a rural high school in Thulamela Municipality in the Limpopo province (see Figure 1). The municipal area is characterised by a tribal lifestyle and high levels of poverty, resulting in low income per household in settlements. In this municipality, females are in the majority

(100 females vs. 82 males) and 54.4% are heads of households. Approximately 17.4% of residents do not have any education, over 43.8% are unemployed and youth unemployment is at 58.3% (StatsSA 2016). This description points to the fact that the school under study is located in a very poverty-stricken area where most people have low income, the majority of youth are without jobs and there are more females in the community than men.

## Ethical consideration

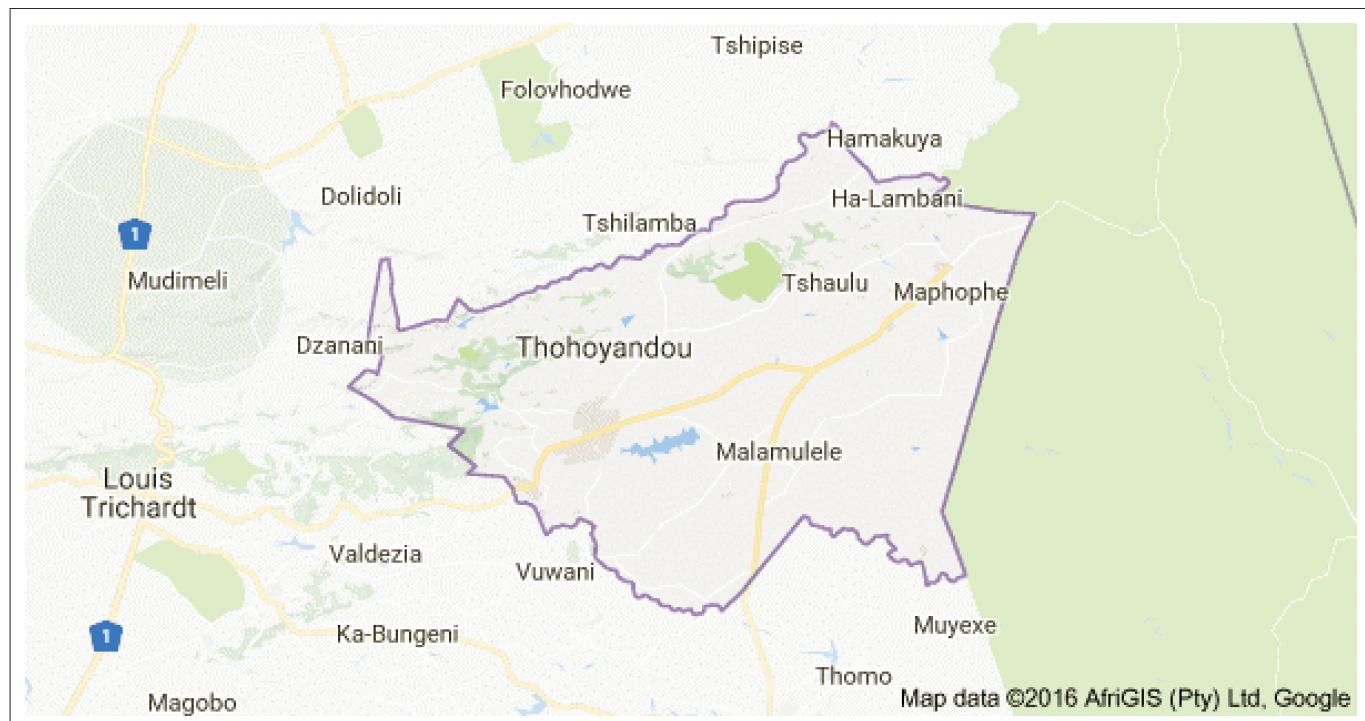
Ethical procedures were followed and permission from the school principal, the school governing body and written permission from the parents of the participants were obtained. The participants were verbally and in writing informed of their rights before participating in the survey. The principle of confidentiality was fully observed as the questionnaire was anonymous and the qualitative interview schedule was filled in, in private.

## Results

### Access to cyber technology, popular sites and frequency of use

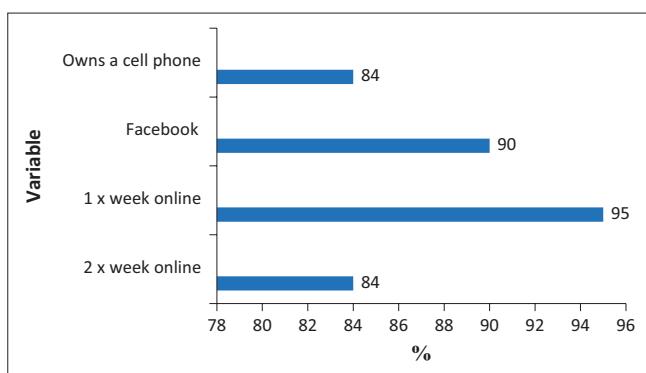
In total, 67 (84%) of the participants said that they had a cell phone and had access to the Internet; the rest accessed the Internet through their friends' phones.

The great majority of the study participants (90%) confirmed that their favourite social media site was Facebook and they used it regularly. Out of the 80 participants, a majority 67 (84%) used social media more than twice a week. Overall, 95% of participants used the Internet at least once a week.



Google Maps, 2016, Thulamela, viewed n.d., from <https://goo.gl/maps/Lv2tPUELXYm>

**FIGURE 1:** Map of Thulamela Municipality.

FIGURE 2: Use of social media and cell phones as a percentage ( $N = 80$ ).

### Forms of cyberbullying

The participants of this study experienced different forms of cyberbullying and on a frequent basis, as illustrated in Figure 2. Out of the 80 participants, 54 (68%) were victims of sexual harassment whereby the bully posted offensive sexual pictures or videos on social media, 53 (66%) experienced rumours being spread about them, 52 (65%) received aggressive text messages, 49 (61%) received harmful remarks because of their background, 48 (60%) received pictures of parts of their body, 48 (60%) were called harmful names, 47 (59%) were teased and 42 (55%) were deliberately ignored by their peers.

As for the nature of cyberbullying, the six cyberbullied victims who filled in the qualitative interview schedule, described their ordeal in the following words. The victims said:

'My ex-boyfriend took pictures when I was naked in [the] shower and I was not seeing that my ex-boyfriend is taking pictures and he took those pictures and posted it on social network.' (Victim 1, female, student)

'My ex-boyfriend take [took] a video after we agreed that we want to see how we perform when we are having sex and not to see video porn for movies but to see our own video of us, but when we separated he took this video and posted it on social media.' (Victim 2, female, student)

'My ex-boyfriend recorded sex video while we were busy having sex using a hidden cell phone while I was not aware that my ex-boyfriend is taking video and the next day he started a fight after the fight he posted the sex tape video on social media.' (Victim 3, female, student)

'My ex-girlfriend writes [wrote] wrong information about my sexual life.' (Victim 4, male, student)

'My ex-boyfriend shoot me pictures when in [I was] asleep and naked and posted it on Facebook after we separated.' (Victim 5, female, student)

'My ex-boyfriend posted a picture [of] myself and a baboon and compare it and write that it looks like me on social media.' (Victim 6, female, student)

### Frequency of being a victim according to gender

In this study, 45% of the sample experienced cyberbullying at least once a week and 19% of them twice or more than twice a week. Table 1 displays the frequency of experience of being a victim of cyberbullying according to gender.

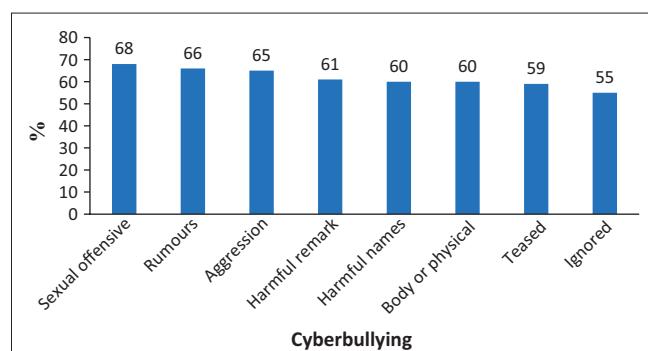


FIGURE 3: Forms of cyberbullying.

TABLE 1: Frequency of being bullied by gender and intervals.

Frequency	N	More than 2x per week		2x per week		1x per week		2x per month		1x per month	
		n	%	n	%	n	%	n	%	n	%
Females	50	5	10	6	12	24	48	4	8	11	22
Males	30	2	6.6	2	6.6	12	40	9	30	5	16.6
Total	80	7	9	8	10	36	45	13	16	16	20

Table 1 shows that all participants were subjected to cyberbullying at least once a month. Overall, 70% of the total participating females experienced cyberbullying at least once a week in comparison to 53.2% of the male participants. Females were also targeted more frequently than the males (22% were targeted twice or more than twice a week).

### Effects of cyberbullying on emotional well-being

Cyberbullying affected the emotional well-being of the victims negatively. Out of the 80 study participants, 21% confirmed that because of cyberbullying they lacked self-confidence, 35% were depressed, 6% were frustrated, 15% were self-conscious, while 23% had suicidal thoughts.

On the topic of suicidal thoughts, all six interviewed victims experienced suicidal thoughts:

'I thought committing suicide will be the best solution because I won't be ever bullied by any one because I will be dead.' (Victim 1, female, student)

'I wanted to kill myself because the person who is bullying me keeps on bullying me and people when they see them they laugh at me so that is why I decided that it is better to kill myself.' (Victim 2, female, student)

'I wanted to kill myself because the person who is bullying me on social media was getting worse on bullying me.' (Victim 3, female, student)

'I thought my life was no longer important.' (Victim 4, male, student)

'There is no one around me who is feeling pity and show support but the other learners continue to laugh at me when they see me.' (Victim 5, female, student)

'The community, teachers and everyone around me were not supportive even though they see me that this thing is killing me.' (Victim 6, female, student)

## Effect of cyberbullying on academic performance

Cyberbullying affected the academic performance of the victims of this study. More than half of the participants (53%) began to skip school and 11% completely changed their behaviour, that is, they did not pay attention to schoolwork and joined gang groups so they could be less bullied at school. About 32% of the victims did not like going to school anymore because of the victimisation, and 34% thought of quitting school. Being a victim of cyberbullying also affected students' grades. About 41% of the victims confirmed that they became less active in class, 24% confirmed that their school performance had dropped and 35% had repeated a grade since becoming victims of cyberbullying.

Cyberbullying also affected the relationship of the victims with their classmates. Five of the interviewed victims said the effect was negative. For example:

'Some of the learners started to isolate, laugh and reject me after seeing the wrong information that was posted about me on social media.' (Victim 1, female, student)

On the other hand, in the case of Victim 4, the experience was different:

'Many learners gave me support and said that tomorrow it can happen to them.' (Victim 4, male, student)

## Measures to deal with cyberbullying

Participants were asked to offer suggestions on how to deal with the problem. One hundred per cent of the participants suggested that the school should put into place a cyberbullying policy, 92% believed that there should be consequences for the bullies, 100% indicated that the teacher should be responsible for dealing with the bullies, 91% said victims should talk with an adult about bullying in school and 100% emphasised that the school should prevent bullying.

## Discussion

The study investigated the access and use of cyber technology, choice of social media sites, forms and frequency of cyberbullying, effects of cyberbullying on the emotional well-being and academic performance, and students' views on how to deal with the problem of cyberbullying among 50 female and 30 male students in a rural high school in Limpopo, South Africa, in 2015.

The findings showed that most of the participants (84%) owned a cell phone and up to 100% could access the Internet. This figure is comparable to the figures reported by Popovac and Leoschut (2012) that 9 out of 10 (92.9%) of 12- to 24-year-old youths in Cape Town, Durban and Johannesburg either owned or had access to a mobile phone. This finding is important as it shows that despite the financial constraints dominating this rural community almost all participants managed to access the Internet like their affluent counterparts

around the world. They were also aware of cyber technology and made use of it frequently; in this case, a large majority (84%) connected to social media sites more than twice a week. This result confirms the findings by Popovac and Leoschut (2012) that accessing social networking sites is youths' favourite online activity in South Africa and Shezi's (2016) findings that 26.8 million South African Internet users spend about 3 h a day on social media. As for popular social media sites, Facebook was chosen by the majority (90%) of the participants, which is comparable with the global trends of interest of youth in Facebook (Al-Badi et al. 2013; Cunliffe, Morris & Prys 2013).

The participants experienced a wide variety of forms of cyberbullying. In total, at least 55% of the participants experienced all forms of bullying, including sexual offences, rumours, aggressive comments, harmful remarks and name calling, teasing and neglect. These results are very high and compare with findings from a study by Statistic Brain Research Institute (2016) that 52% of the students were cyberbullied and another study by Fairbairn, Bivens and Dawson (2013) in which 56% of the youth surveyed had experienced cyberbullying. The most severe form of bullying was sexual offence and remarking on body parts, which was experienced by 68% of all participants, including males. In this regard, the qualitative questionnaire exposed a shocking picture of what some students had gone through. In four cases a very private and sexual picture or video of a girl was shared on social media by a boyfriend after the break-up, and the male victim complained about his ex-girlfriend posting wrong information about his sexual life. A study by Van Royen, Vandebosch and Poels (2015) showed that cyber sexual harassment is common among adolescents aged 13–18 years old and ranges from 4% to 38%. Hoff and Mitchell's (2009) study of the causes of cyberbullying demonstrated that many cyberbullying incidents stem from relationship break-ups, as quoted by the victims in this study.

The high incidence of online sexual offence is very worrisome; and it reflects a nationwide problem in South Africa. A survey by Popovac and Leoschut in 2012 found that 1 in 10 adolescents in South Africa had had embarrassing or damaging pictures taken of them without their permission.

Moreover, cyberbullying incidents were frequent. More than half the participants (64%) were cyberbullied at least once a week; a large majority of females (70%) and more than half of the males (53.2%) were bullied on a weekly basis. Studies by Hinduja and Patchin (2008), Muhlhauser (2013) and Duggan (2014) showed similar results indicating that more females than males were cyberbullied. The results of cyber victimisation of females in this study further confirms the findings from another study in South Africa (2015 Cyberbullying Data 2016) that adolescent girls were more likely to experience cyberbullying in their lifetimes (40.6% vs. 28.2%). This prevalence might be attributed to the dominant discriminative attitude of South African society towards women and the ongoing violence against women. The study

also found that the cyberbullying victims experienced high levels of emotional stress including depression, frustration and low self-esteem. The most severe impact was depression, experienced by 35% of the participants. Similar results to this study were found in a study by Patchin and Hinduja (2006) in the USA, where 27% of victims of cyberbullying reported feeling depressed, which is lower than the results in this study.

The most problematic effect, however, was suicidal thoughts, experienced by 23% of the sample. This result is very significant, as it shows that close to a quarter of the participants' contemplated suicide even though they did not act on it. This finding indicates that, as Fisher et al. (2012) found, the victims might feel so desperate that they resort to self-harm or commit suicide as reflected in the statement by one of the cyberbullied victims:

'I thought committing suicide will be the best solution because I won't be ever bullied by any one because I will be dead.' (Victim 1, female, student)

A study on 1963 students in the USA in 2007 showed similar results; those who experienced cyberbullying had more suicidal thoughts (Hinduja & Patchin 2010). This result points to the seriousness of cyberbullying and the victims' levels of desperation, feelings of powerlessness and suffering in isolation. Such feelings warrant immediate support from home and the school.

Cyberbullying also affected the academic performance of the victims in this study, as more than half of the participants began to skip school and about a third of them thought of quitting school. This finding confirms the statement by Townsend et al. (2008) that bullying is one factor that contributes to high rates of absenteeism and consequently school dropouts in South Africa. In another study conducted by Myburgh and Poggenpoel (2009) in South Africa, victims of school bullying hated schooling because of their fear of being bullied, and in another study Madeleine (2011) showed that 54% of school dropouts were victims of bullying. Being a victim of cyberbullying also affected students' grades. In this study about a quarter of the victims dropped in marks and more than one-third of them repeated a grade. Moreover, cyberbullying negatively affected the relationship of the victim with classmates; one of the victims said:

'Some of the learners started to isolate, laugh and reject me after seeing the wrong information that was posted about me on social media.' (Victim 1, female, student)

Unfortunately, many of the victims felt helpless in the face of cyberbullying when they did not receive support from the very people who were supposed to help them. We heard victims saying:

'There is no one around me who is feeling pity and show support.' (Victim 5, female, student)

'The community, teachers and everyone around me were not supportive even though they see that this thing is killing me.' (Victim 6, female, student)

This void was further highlighted by participants, who in response to the question, '*Suggest measures to deal with cyberbullying*', unanimously stated a need for establishing of an anti-cyberbullying policy in the school and the appointment of a counselling teacher, an indicator that they did not receive sufficient support at school. Additionally, students did not refer to software programs that are designed to block cyber perpetrators.

## Limitations of the study

This research was limited to the study of victims of cyberbullying and did not include the bullies. The other limitation was that the frequency of cyber sexual harassment was not measured according to gender. Moreover, the language of the survey questionnaire was English. The participants in this study were not English first-language speakers and even though the teacher assisted in translation of some of the questions in the questionnaires, it is possible that some of the younger respondents did not understand all questions fully as required.

## Conclusion and recommendations

The findings of the study clarified the significance of cyberbullying in the lives of students in this rural high school, which might be experienced by students in similar settings in South Africa. It showed that even though students in this school had access to the latest cyber technology, they were not equipped to prevent and cope with its negative effects and suffered in solitude. The findings are alarming. This study, therefore, recommends the appointment of a counselling teacher and the establishing of an anti-cyberbullying policy at schools. Adoption of such a policy, however, is not without complications and legal considerations (Smit 2015). The success of such a policy depends on continuous consultation and cooperation between parents, teachers, learners and other stakeholders (Hinduja & Patchin 2008). In view of the fact that government and some universities intend to expand e-learning and cyber technology in all schools in South Africa, including the rural schools, we further urge the inclusion of cyber safety and cyber protection strategies in all e-learning training and the school curriculum. Without preventative measures to address the cyberbullying problem, cyber technology meant to assist students might harm them. Further research on the cyberbullies, as well as studies on gender and sexual cyberbullying, is also recommended.

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### Competing interests

The authors declare that they had no financial or personal relationships that may have inappropriately influenced them in writing this article.

### Authors' contribution

P.F. was the project leader. C.M. was responsible for implementation and data collection. P.F. and H.N.M. were involved in the final write-up of the research report.

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