

# Behavioural and Psychosocial Factors Associated with Cyberbullying

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## **DECLARATION**

I, Ms Cecilia L Pillay, herewith declare that the work on, “Behavioural and psychosocial factors associated with Cyberbullying”, is my own work, both in conception and in execution and that the sources I have used or quoted have been indicated and acknowledged by means of complete reference.

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Cecilia L Pillay

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## **ABSTRACT**

Cyberbullying is a new form of bullying and harassment that is also referred to as electronic or online bullying. It may involve the following: sending mean, vulgar or threatening messages or images, posting sensitive or private information online, pretending to be someone else online in order to make a person look bad or intentionally exclude a person from an online group. Viewed as covert psychological bullying conveyed through electronic means it has been identified as the most problematic form of emerging cruelty among adolescents in schools.

Existing research studies on cyberbullying suggests that it is increasing at a phenomenal rate and it is not clear whether online perpetrators and victims possess the same characteristic behaviours and psychosocial profiles as their traditional bullying counterparts. However in South Africa there is a paucity of research.

The present study seeks to examine the behavioural and psychosocial factors associated with cyberbullying among Grade 8 to 10 learners, in a cross-section of schools, in KwaZulu-Natal. The purpose of the research was to determine: the prevalence of cyberbullying; the relationship between age, gender, rural and urban dichotomy and socio-economic status of victims and perpetrators of cyberbullying; school personnel's management of cyberbullying; and the relationship between psychosocial factors and behavioural characteristics and cyberbullying. Two questionnaires were used. The first was

a 3-part psychosocial questionnaire and the other a cyberbullying questionnaire (Riebel, Jager, & Fischer, 2008).

The data from this study confirms that cyberbullying is prevalent in various forms, in secondary schools, in KwaZulu-Natal. The total sample was N=450. Of which 199 (44.22%) reported that they were victims or perpetrators of cyberbullying. There were 127 (28.22%) who identified themselves as victims and 72 (16.0 %) admitted to be perpetrators. The most frequent form of cyberbullying experienced was rumours and slander using the internet or cellular phone.

The electronic communication preferences of participants were: instant messaging (50%); 47% used social networking; about 44% used chatrooms and 32% used email. Females spent more time in chatrooms and sent more instant messages than the males.

The results show that friends and fellow learners were responsible for the cyberbullying most frequently. The victims rarely choose to reveal that they were cyberbullied to their teachers. Participants chose their friends as the primary person to talk to about their victimisation while the secondary person was their parents. Teachers were the last person of choice to seek help.

Comparison of victims, non-victims, perpetrators and non-perpetrators of cyberbullying on the Life Satisfaction Scale (LSS), indicated that victims of cyberbullying were the most dissatisfied group (9.83%) while perpetrators reported high satisfaction. There was a significant difference between victims and non-victims on their performance on the psychological well-being scale and this was also the case for perpetrators and non-

perpetrators of cyberbullying. Victims did not like themselves; expressed a poor sense of self, low self-esteem and lack of self-confidence and had more negative self-perceptions which affected their psychological well-being. They expressed feeling of helplessness, loneliness, sadness, despair, anger, and self loathing. Perpetrators also had strong feelings of worthlessness, guilt, sadness and hopelessness. They were tearful and expressed a loss of interest in daily activities, experienced difficulty concentrating on school work and expressed a lack of enthusiasm and motivation.

The behavioural characteristics described by the groups showed considerable variations. Victims of cyberbullying rated themselves highest on being serious and they rated themselves lower on being friendly, emotional, stubborn and happy. Perpetrators of cyberbullying rated themselves highest on being aggressive, nervous, stubborn, happy, awkward and sad. Victims and perpetrators had experienced more difficulty learning to read and were in trouble more often in school than the non-victims and non-perpetrators.

Cyberbullying is prevalent in South African secondary schools, among Grade 8, Grade 9 and Grade 10 learners and occurs among males and females, from rich and poor backgrounds, rural and urban areas irrespective of racial and ethnic backgrounds. Implications of these results are discussed with special focus on intervention and management of cyberbullying.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1. Motivation for the study**

The phenomenon of bullying is considered to be insidious and an increasingly widespread problem in schools (Espelage & Swearer, 2003). In the early 1970's research was confined to Scandinavia but a growing interest spread to other countries in the 1980's and early 1990's (Smith, 2003). Since then bullying among school children has become a subject of systematic research and of national enquiry in many countries. According to Cornell (2006) there has been a dramatic escalation of research on bullying in the past thirty years. A PsycINFO search using the keywords "bully" or "bullying" elicited 300 published articles from 1975-2004. More than three-fourths of which were published in the past five years (Cornell, 2006). Further, there has been a growing interest in the research and understanding of the various aspects of bullying and bullying prevention. Despite the extensive investigations and national inquiries, Hamarus and Kaikkonen (2008) maintain that, bullying is not decreasing.

Very little research on bullying in schools has been conducted in South Africa when compared to many first world countries (Smith, 2003). The local studies indicate that the incidence of bullying is highly prevalent in both primary and secondary schools. In a study of 14 766 learners the South African Medical Research Council found that 41% of respondents indicated that they were bullied in school (Roussouw & Steward, 2008). Despite these statistics, South Africa does not have a national policy on bullying or bullying prevention programmes for schools to address this socially unacceptable behaviour. In contrast an equally extensive study of bullying among 15 686 American

Grade 6 to 10 children, by the National Institute of Child Health and Human Development (NICHD), which found that 29% of participants were involved in some aspect of bullying (NICHD, 2001), gave impetus to nationwide research and policies on bullying to be formulated in school districts and provided funding for further research to be conducted. It is hoped that further research in this field will encourage relevant stakeholders in South Africa to develop national policies and prevention programmes.

The NICHD study also indicated that bullies and their victims are at higher risk of engaging in more aggressive and violent behaviours during and after school hours. Several researchers in countries such as Europe, North America, the Pacific Rim and elsewhere corroborate that increased incidence of school violence have been linked to bullying behaviours (Reynolds, 2003). Notably, instances of bullying in South African schools have often lead to very violent behaviours as well (Saunders, 2008). The recently published National Schools Violence Study by the Centre for Justice and Crime Prevention, in South Africa, found that primary and secondary schools learners were significantly at risk of falling victim to some form of violence while at school. It is suggested that 15.3% of learners (i.e., 1.82 million) from Grades 3 to 12 had experienced some form of violence (excluding theft) during school hours (Shuttleworth Foundation, 2008a). One in 20 learners (i.e., 0.69 million) had reported physical assault, which included physical bullying. The study showed that the primary drivers of violence within schools are firmly rooted in the general violent environments in which children lived outside of school (Shuttleworth Foundation, 2008a). The Minister of National Education, Mrs Naledi Pandor, remarked that bullying, sexual abuse, and violence in schools point to a deep malaise that required determined and urgent action (Pandor, 2006).

The present study investigates and explores an emerging type of bullying behaviour in a sample of South African secondary schools. Schoolyard bullying in South Africa is evolving into a more serious and dangerous type of bullying which utilises cellular telephone and/or email thus becoming an increasing menace (Ord, 2007). This type of bullying involving that uses technology as a method to harass the victim is termed cyberbullying. Bill Belsey, the renowned creator of the multiple award winning Web site, [www.bullying.org](http://www.bullying.org), the President of Bullying.org Canada, was the first person to use the term cyberbullying (www.bullying.org, 2001). According to him cyberbullying includes the use of information and communication technologies such as email, cellular telephone, pager text messaging, instant messaging (IM), defamatory personal Web sites, and defamatory online personal polling Web sites. In this way, information and communication technologies, are used to support deliberate, repeated and hostile behaviour by an individual or group, intended to harm others (Belsey, 2004). Many researchers agree that the new technological tools used in cyberbullying have made it easier for bullies to gain access to their victims and provides an extension of the face-to-face bullying experienced in traditional bullying (Belsey, 2004; Li, 2007a; Shariff, 2006; Slonje & Smith, 2008).

Since cyberbullying is a relatively new phenomenon, there is a dearth of research information and a lack of conceptual clarity on the nature and extent of cyberbullying in South Africa. Information on the experiences, views, and perceptions of young people, their parents and educators on cyberbullying is still to be investigated and reported. Since young children and youth from all sectors of the population experience extreme pressure to be “technologically hip and hooked-up” and spend long hours online or in cyberspace with the use of applications, such as, MXit, chatrooms, etc. bullies can extend their harassment from the school into their victim’s homes as well. This study will examine the behavioural



and psychosocial factors associated with cyberbullying and will look at learners from both urban and rural areas allowing for a wide demographical sample.

## **1.2. Statement of the problem**

Given that cyberbullying is a relative new phenomenon to emerge in South Africa there is a paucity of research information. Information that exists is reported in national, local and community newspapers, advertisements and blogs. In many countries abroad preliminary studies in cyberbullying have already been conducted and the prevalence and other significant findings have been reported. These studies provide important markers for further investigations and research as well as valuable information to help schools, parents and victims. As early as 2004, the American website I-Safe surveyed 1 500 students from Grade 4-8 and found that 42% of students claimed to have been bullied while online, and 21 % of them had received threatening e-mails or other messages. Fifty-three percent of the children admitted that they intentionally hurt and harassed other users online. In addition fifty-eight percent of the participant had not told their parents about being threatened online (I-SAFE, 2004). Scholars such as, Ybarra and Mitchell (2004) conducted telephonic surveys of 1 501 internet users between the ages of 10 and 17 and found that 79% of the respondents knew someone who had been harassed online; 15% harassed others online and seven percent were harassed online. Further, the study revealed some interesting characteristics and patterns of cyberbullying in relation to gender, race and familial income. The study found that:

- Males and females were equally likely to cyberbully others;
- Youth who lived in higher income households were more likely to engage in cyberbullying;

- Young people who self-identified themselves as members of the white race were 46% more likely than non-white students to cyberbully others (a finding not corroborated by other researchers).

(Ybarra & Mitchell, 2004)

Although cyberbullying is a relatively new problem, researchers have also investigated negative effects associated with it. According to Breguet (2007), victims of electronic bullying are left lonely, insecure, and humiliated. As a result of these negative feelings cyber victims may suffer from lowered self-esteem, depression, feelings of hopelessness, withdrawal, frustration and anger (Patchin & Hinduja, 2006b).

Given the high levels of violence in South African schools it would be interesting to see the behavioural and psychosocial factors associated and resulting from cyberbullying. A Nexus Database System search revealed that no other study on cyberbullying has been conducted in KwaZulu-Natal. Such a study would therefore give perspective to the prevalence, nature and emerging characteristics of cyberbullying among children and young people in KwaZulu-Natal. This study will contribute to the understanding of the phenomenon of cyberbullying, particularly to KwaZulu-Natal and in general to the South African population of children and young people. The data from this research will serve to guide future research in cyberbullying and help the key role-players in education, health and justice to work toward reducing the incidence of cyberbullying and provide the necessary intervention programmes and support for victims. Most importantly the study will attempt to answer the following questions in regard to cyberbullying:

- 1.2.1. How prevalent is cyberbullying in Grades 8-10 learners in a sample of KwaZulu-Natal secondary schools?
- 1.2.2. What is the relationship between the perpetrators and victims of cyberbullying in terms of age, gender, urban-rural dichotomy and socio-economic status?
- 1.2.3. What are the behavioural characteristics and psychosocial factors that are operational among perpetrators and victims of cyberbullying in KZN?
- 1.2.4. What role does the school play in the management of cyberbullying?

### **1.3. Aims of the study**

The following specific aims have been formulated:

- 1.3.1. To determine and understand the prevalence of cyberbullying among Grade 8-10 learners in KwaZulu-Natal a sample of secondary schools.
- 1.3.2. To establish the relationship between cyberbullying and age, gender, urban-rural dichotomy and socio-economic status of perpetrators and victims of cyberbullying.
- 1.3.3. To illicit learner self-report on psychosocial factors and behavioural characteristic in order to determine if there is a relationship between these factors and cyberbullying.
- 1.3.4. To evaluate the degree to which school personnel get involved in the management of cyberbullying.

### **1.4. Hypotheses**

The researcher has developed the following hypotheses in relation to the above mentioned aims.

1.4.1.  $H_0$  = There is a low prevalence of cyberbullying in KwaZulu-Natal secondary school among Grade 8-10 learners.

$H_1$  = There is a high prevalence of cyberbullying in KwaZulu-Natal secondary school among Grade 8-10 learners.

1.4.2.  $H_0$  = There is no relationship between age, gender, urban-rural dichotomy and socio-economic status of perpetrators and victims to cyberbullying.

$H_1$  = There is a relationship between age, gender, urban-rural dichotomy and socio-economic status of perpetrators and victims to cyberbullying.

1.4.3.  $H_0$  = Psychosocial factors and behavioural characteristics are not related to cyberbullying.

$H_1$  = Psychosocial factors and behavioural characteristics are related to cyberbullying.

1.4.4.  $H_0$  = School personnel do not get involved in the management of cyberbullying.

$H_1$  = School personnel do get involved in the management of cyberbullying.

## **1.5. Definition of key terms**

### **1.5.1. Bullying**

There are several kinds of bullying. Bullying can be carried out through physical contact (e.g., hitting, kicking, pushing or pinching). Bullying can be verbal (e.g., using mean words or threats, name calling, or saying mean things behind their back). Bullying can also occur without use of words or physical contact, such as making faces or dirty gestures or deliberately excluding someone from a group (Olweus, 1993).

### **1.5.2. Cyberbullying**

Cyberbullying is a form of bullying that occurs when a student, or several students, use information and communication technologies such as emails, cellular phones or pager text messages, instant messaging, personal websites, social networking sites (e.g., Bebo, Facebook and Nexopia), online personal polling websites, and online gaming, to support intentional, repeated and unfriendly behaviour that is intended to harm others (Belsey, 2004).

### **1.5.3. Psychosocial**

Psychosocial attributes refers to characteristics related to both the psychological and social nature of victimized learners (Kochenderfer-Ladd & Wardrop, 2001). The psychosocial factors will focus on feelings about school, peer relationships, individual characteristic and family background.

## **1.6. Value of the study**

As seen in other countries cyberbullying impacts negatively on the learning and teaching environment at schools; family life; individual rights and responsibilities, the mental and physical well-being of victims and perpetrators. The Constitution of South Africa, the Bill of Rights and the South African Schools Act 84 of 1996, are all infringed upon by the activities of cyberbullying. This research will provide the necessary government departments with important data for developing the relevant policies and management program to address this important area. In addition it will provide important empirical data to support and give impetus to future research.

## **1.7. Plan of Study**

### **1.7.1. Chapter One**

The first chapter provides a short introduction to the research study and includes a motivation for the research into the behavioural and psychosocial factors associated with cyberbullying. Since cyberbullying is a relatively new phenomenon, the chapter begins with a brief background, defines the concept and cites some of the relevant research in the area of study. This chapter goes on to state the research questions, aims and hypotheses for the current study.

### **1.7.2. Chapter Two**

Chapter two is a summary of the current literature on bullying and cyberbullying. It focuses on the theoretical background of traditional bullying and cyberbullying and explores some of the current definitions and forms of cyberbullying. In addition, the nature and prevalence, from a wide range of research studies, are reviewed. The differences between traditional and cyberbullying is discussed particularly with regards to the social, behavioural and psychological impact this phenomenon has on perpetrators and victims. Further, literature on traditional bullying and cyberbullying in South Africa is compared to studies conducted in other countries abroad.

### **1.7.3. Chapter Three**

This chapter gives a detailed description of the research design and methodology of the present study. Included in this chapter is a comprehensive discussion on the various instruments and test measures that were used to collect the data.

#### **1.7.4. Chapter Four**

The results of this study are present in chapter four. A comprehensive analysis and interpretation of the data is presented. The hypotheses of the study are tested and important conclusions are drawn and discussed from the results.

#### **1.7.5. Chapter Five**

Recommendations, limitations of the study and suggestions for further research are presented in this chapter.

### **1.8. CONCLUSION**

This chapter provided the basic outline for the study and presented the research questions, aims and hypotheses for the current study. The following chapter will review the current research that has been conducted in traditional and cyberbullying. It presents the various definitions of cyberbullying and discusses the nature, prevalence, methods and conventions used to cyberbully. The difference between traditional bullying and cyberbullying, in relation to the psychological and behavioural effects on perpetrators and victims, are also discussed.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

Bullying is a significant and widespread problem among school children (Espelage & Swearer, 2003; Olweus, 1993). Existing research studies on bullying have focused on the various aspects, such as, its forms, prevalence, intervention and prevention strategies (Chapell, et al., 2006; Jacobsen & Bauman, 2007; Naylor, Cowie, Cossin, de Bettencourt, & Lemme, 2006; Olweus, 1999; Smith, 2003). A much smaller cohort of studies have given attention to the social, behavioural and psychological impact of bullying on perpetrators, victims and bully-victims (Boulton & Hawker, 1997; Juvonen & Nishina, 2000; Rigby, 2003; Wolke, Woods, Bloomfield, & Karstadt, 2000). According to Hamarus and Kaikkonen (2008) a clear definition of bullying has not emerged and researchers contend that if the common definition of bullying is overly narrow, this can exclude certain critical questions from research. Most studies are based on the definition of Dr Daniel Olweus a pioneer in the field of bullying prevention. According to him: “A person is being bullied when she or he is exposed, repeatedly and over time, to negative actions on the part of one or more persons” (Olweus, 1993, p. 9). Although the definitions by other researchers differ semantically from each other, most label bullying as a subset of aggression (Espelage & Swearer, 2003; Olweus, 1993). According to Espelage and Swearer (2003) bullying includes both physical and verbal aggression which are systematic and on-going sets of behaviours instigated by an individual or group who are attempting to gain power, prestige or goods. Smith and Sharp (1994) concur that bullying is repetitive and involves an imbalance of power which may indicate that the bully is either physically,



intellectually or socially more powerful than the victim. They further describe bullying as a form of abuse that focuses on the systematic abuse of the perceived power.

## **2.2. Bullying behaviour**

### **2.2.1. Types of bullying behaviour**

Rigby (1997) identified several main types of bullying which include physical, verbal and relational bullying. For the purposes of this study more attention will be focused on the bullying behaviours of perpetrators and the behaviour patterns that emerge in the victims as a result of the different types of bullying. The underlying dynamics involved in bullying is varied and many researchers have published on the classification systems and/or categories of bullying as well as tried to explain the common characteristics identified. Naylor *et al.* (2006) purports that bullying is characterised by the difference in access to power that exists between the perpetrator and the victim. The perpetrator has a perception of being more powerful than the victim because of factors, such as, belonging to a particular social group or having a stronger or larger physique. Research cited by Espelage and Swearer (2003) among students suggests that the profiles of bullies and victims may be classified as bullies, aggressive bullies, victims, bully-victims, bystanders and normal controls. Bullying may be further categorised as physical bullying, verbal bullying and relational bullying. It is clear that bullying behaviour has shifted away from the stereotypical victim and bully mentality and has evolved to more sinister tactics and forms. Olweus and Limber (2007) have categorised and described some of the more dangerous tactics and forms of bullying such as, extortion of money, damage to personal property, threatening or forcing a person to do something they do not want to do, racial bullying, sexual bullying and cyberbullying.

### **2.2.2. Violence and Bullying Behaviour**

In the past researchers working on school bullying have made a distinction between bullying per se and the violence that sometimes accompanies it. The recent trend has been to include bullying as part of violence and new types of aggressive bullying behaviours have emerged. The ESPAD 1999 survey among 30 European countries and the USA among 95,000 Grade 10 pupils found that violence and aggression have been closely assimilated to the prevalence of children with behavioural difficulties in the school system. They found that 8% of the participants had hit a teacher; 25% had been involved in a fight at school; 11.4% had injured someone seriously enough for that person to get medical treatment; 12.3% had been part of a group persecuting and harassing other pupils; 12.7% had committed acts of vandalism and 10.8% claimed that they had been in trouble with the police (Debarbieux, 2003).

Debarbieux (2003) purports that violence in schools around the world is not always a mere question of fighting among learners or of bullying but clearly there is a link to social inequalities. Therefore this study is very important not only to answer the research questions but also to highlight aspects of the topic that may lend itself to further research. In order to address the specific question to be investigated in this study it is important to provide a broad overview on the types of aggressive behaviour patterns used in the bullying situation and the effects it has on the perpetrator and victim.

### **2.2.3. Proactive and reactive aggression**

According to Dodge (1991) there are two important categories of aggression in bullying behaviour, proactive and reactive aggression. Proactive aggressions are bullying behaviours directed at a victim where the perpetrator seeks to gain material possessions,

property, power, dominance or an association. In contrast, reactive aggression is directed at the victim as a result of an aversive event that triggers anger and frustration on the part of the perpetrator. In most instances very little provocation is involved therefore much of the bullying behaviour is manifested as a result of proactive aggression.

#### **2.2.4. Direct and Indirect Bullying**

Some researchers have described bullying in terms of direct and indirect aggression. Direct or overt aggression involves physical and verbal attacks (Espelage & Swearer, 2003; Marini, Dane, Basacki, & YLC-CURA, 2006). The behaviours in this category includes physical fighting such as pushing, hitting, kicking, shoving, punching or any form of overt violence towards another (Jacobsen & Bauman, 2007). Verbal attacks include verbally threatening bullying behaviour such as name calling, taunting and teasing. In these forms of traditional bullying the behaviour is observable and confrontational. Physical bullying is one of the forms of bullying which tends to receive more attention from school personal because of its overt nature. Some researchers have labelled physical bullying as direct or overt aggression and others use the term “direct bullying”.

The scope of bullying has been extended to include relational aggression (Crick, 1996). This has been described as a form of social isolation that is directed to damage a relationship. The behaviours included in this category of bullying are to spread unpleasant rumours, to intentionally leave a person out of a group or activities, and to use any other measures that seek to change peer groups (Olweus, 1993). The term “indirect bullying” may be used to describe this type of behaviour. It is a covert or an indirect form of aggression in which there is manipulation or a third person/s is used to attack and harm the target, without the perpetrator actually being identified or personally involved in the

harassment (Olweus, 1993). The behaviour in relational aggression is directed not only towards damaging someone's peer relationships but also affecting the self-esteem and social status of the victim (Slonje & Smith, 2008).

### **2.3. Behavioural characteristics of bullies and victims**

There is a large volume of research on the behavioural characteristics found in victims and perpetrators of traditional bullying. An analysis of the behavioural characteristics of bullies shows a collective likeness. Bullies are often aggressive, defiant, oppositional, impulsive, and have a low level of empathy (Besag, 1989). They target victims who are passive, reserved, unpopular or different to other children (Besag, 1989; Olweus, 1993, 1999). According to Frey (2005) bullies may attempt to coerce others, who may have been witnesses to a bullying arsenal, into keeping bullying secrets (Frey, 2005). Tattum (1997) pointed out that since bullies induce fear into the victim there is a need not only to consider the bully's behaviour but also the victims thoughts and feelings about the bullying behaviour. The study by Naylor *et al.* (2001) showed the effects that bullying behaviour had on the victim which was extremely important no matter what the intention of the bully was and this was an important consideration for the psychological well-being of the individual. Significantly teachers in this study were often only aware of a small amount of bullying behaviour that took place in schools when compared to the information and experiences shared by the learners (Naylor, *et al.*, 2006).

### **2.4. Psychological adjustment in Bullies, Victims and Bully-victims**

Not many studies have tracked the profiles of victims, bullies and bully-victims to establish the psychological adjustment and types of relationships they share (Besag, 1989; Sharp, 1995; Smith & Sharp, 1994). A study by Juvonen and Nishina (2000) cited by Smith,

Talamelli, Cowe, Naylor and Chauhan (2004) assessed victims on three measures of psychological adjustment. These were loneliness, self worth and depression and suggested concurrent timing effects of victimisation. On the other hand, a longitudinal study by Swearer, Song, Cary, Eagle and Mickelson (2001) among 11 to 13 year olds, which analysed data of the first two years of the study, showed that victims were more likely to experience anxiety rather than depression. The study found that bullies and bully-victims were more likely to be depressed and that the bully-victim experienced both depression and anxiety.

The researchers contend that an interesting pattern is emerging with respect to internalising psychopathology for victim and bully profiles. Sourander *et al.* (2009) found that it was the male bully-victim that was at the highest risk of a wide range of psychiatric disorders. The study conducted by Naylor *et al.* (2006) found that girls were more likely to consider the ‘internalised’ or unseen effects of bullying on the target as an important aspect whereas boys tended to focus on ‘external’ or visible bullying behaviour. The observable behavioural outcomes were also important to girls whereas boys denied any prosocial concern. This means that the behaviour that they manifested showed that they did not care about the welfare or rights of the victim, nor did they feel concern and empathy for the victim despite the internalised psychological distress that bullying induces.

## **2.5. Gender differences in bullying behaviour and implication of psychosocial risk factors**

There appears to be a significant gender difference towards prosocial factors and bullying behaviour. A study by Sourander *et al.* (2009) showed that boys and girls are different in respect to the prevalence and outcomes of the bullying arsenal. They found that boys who

habitually bullied were more likely than their peers to be diagnosed with antisocial personality disorder as young men. People with this disorder have a disregard for the law and the rights of other people, and are often aggressive or violent. On the other hand boys who were frequent victims of bullying had an elevated risk of anxiety disorders as young men. Boys who were both perpetrators and victims of bullying appeared to be worst off; they had elevated risks of both anxiety disorders and antisocial personality disorder as young adults. Perpetrators and victims were more at risk for emotional and behavioural problems and were at greater risk for psychiatric disorders. Espelage and Swearer (2003) in response to the controversy that boys exhibit higher levels of aggression than girls, have pointed out that the proponents of this view have failed to consider the more subtle, covert forms of relational aggression which girls are actively involved in and therefore it nullifies their claim that girls are less aggressive than boys. Crick (1996) found that relational aggression contributed uniquely to the prediction of future social maladjustment, beyond that predicted by overt aggression. This finding also has implications for gender issues in cyberbullying since there is no physical bullying but more relational and emotional bullying. It could mean that boys and girls are equally aggressive in cyberbullying. These studies do however confirm the concerns expressed by researchers that bullying behaviour and experiences lead to serious psychological and mental health problems (Sourander, *et al.*, 2009; Wolke, *et al.*, 2000). In a survey of a large sample of secondary school children Sharp (1995) found that 34% of the sample reported that being bullied was stressful and 11% reported that it was extremely stressful.

## **2.6. Understanding the nature and prevalence of bullying behaviour in South Africa**

Much of the literature already reviewed has been from studies conducted abroad. For the purposes of this research it is advisable to document available literature on traditional bullying in South Africa to establish the current trends. An attempt will also be made to cite a range of publications related to this topic and to compare them to studies that have been conducted abroad. Townsend, Flisher, Chikobvu, Lombard and King (2008) have cited few studies on traditional bullying behaviour amongst South African high school learners. The studies have indicated the pervasiveness of bullying, ranging from 41% in a nationally representative sample of high school learners (Reddy, Panday, & Swart D., 2003) ; 61% among a sample of high school learners in Tshwane (Neser, Ovens, van der Merwe, Morodi, & Ladikos, 2003); and 36.3 % among Grade 8 and 11 learners in Netherlands have shown a significantly lower rate of bullying behaviour when compared to South Africa. Whitney and Smith (1993) found that bullying took place among 4% of secondary school learners and 10% of primary school learners in England . Blaya (2001) found a prevalence of 8% of bullying amongst schools in deprived areas in England and France while Mooij (1994) cited in Debarbieux (2003) found that 23% of primary school learners and 6% of high school learners in Netherlands were bullied regularly.

South Africa appears to have a higher prevalence of bullying behaviour than some European countries. Local and national newspapers have periodically reported on the nature and extent of traditional bullying in different schools. Black learners, at a Johannesburg school, alleged that they were subjected to constant bullying, name calling and harassment from Coloured learners (Tau, 2008). According to Badat (2008) a high school victim of bullying retaliated by fatally stabbing the perpetrator. Pauw (2007) cited a

number of recent incidences that made the headlines on traditional bullying behaviour in South African schools. A fifteen-year-old Cape Town learner died after a fight in which he was savagely beaten. A further incident which demonstrated violent bullying behaviour involved two boys, aged seven and eleven, who allegedly killed their eight year old friend with a home-made axe for five rand and some raisins. In 2006, two teenage girls were arrested on charges of assault on a Grade 10 learner at school and a Grade 11 learner died after a fight with a friend. An alarming fact is that five high school learners were killed by schoolmates in Gauteng between May and September 2006 (Momborg, 2007). The manifestation of bullying in many of the incidence cited show high levels of aggressive and violent behaviour inherent in young school goers. A current trend that emerges seems to indicate a severe intent to physically harm or kill the victim. According to the former Gauteng Minister of Education and present National Minister of Education, Angie Motshekga most of the violence in schools have been learner against learner (Saunders, 2008). The National Institute for Crime Prevention and Reintegration of Offenders (NICRO) statistics showed a rise in crimes by girls, mainly between the ages of 13 and 18, which occurs mainly in school. Between April and December 2007 there were 397 cases of common assault compared to 328 committed in 2006 (Saunders, 2008). Assault with intent to do grievous body harm escalated from 311 cases in 2006 to 459 cases in 2007 (Saunders, 2008). Evidence from longitudinal studies indicated that the tendency to bully others at school significantly predicts subsequent antisocial and violent behaviour (Rigby, 2003). These findings are significant for the present study because bullying behaviour occurs increasingly in cyberspace and is most commonly referred to as cyberbullying. Research in cyberbullying is still at the early stages and researchers are still establishing a working definition of cyberbullying. The nature of the investigation in this study also seeks



to clarify whether cyberbullies and cybervictims share the same characteristics, behaviours and psychosocial profiles of traditional bullies and victims.

## **2.7. Cyberbullying**

### **2.7.1. Definition of cyberbullying**

Cyberbullying has recently emerged as a new form of bullying and harassment (Slonje & Smith, 2008). A number of definitions of cyberbullying have been developed but most researchers use the existing definition for traditional bullying and have simply extended it to incorporate the unique features and forms of cyberbullying. Therefore, according to Smith *et al.* (2008) cyberbullying is an aggressive, intentional act carried out by a group or an individual, using electronic forms of contact, repeated and over time against a victim who can not easily defend himself or herself. A more comprehensive definition is that:

“Cyberbullying involves the use of information and communication technologies such as email, cell phone and pager text messages, instant messaging, defamatory person Web sites, and defamatory online person polling Web sites, to support deliberate, repeated, and hostile behaviour by an individual or group that is intended to harm others” (Li, 2007b, p. 1779).

Although physical bullying cannot happen via the use of information and communication technology, both verbal and relational bullying can be accomplished using a variety of technological tools. Bauman (2007) therefore maintains that cyberbullying can be defined as verbal or relational bullying accomplished by using electronic or wireless media. Bamford (2004) purports that cyberbullying is the general term describing any communication activity using cyber technology that could be considered harmful to the individual's well-being. According to Bamford (2004) and Willard (2005) cyberbullying

may involve sending mean, vulgar, or threatening messages or images; posting sensitive or private information about another person; pretending to be someone else in order to make that person look bad or intentionally excluding someone from an online group. These researchers refer to cyberbullying as online social cruelty and electronic bullying. Researchers suggest that online social cruelty involved in cyberbullying may take the form of predation, hate group recruitment, invasion of personal privacy, harmful speech, stalking, inadvertent accession of harmful material and the dissemination of violent and abusive material (Bamford, 2004; Willard, 2005). Most often online insults refer to someone's physical appearance, friends, clothing, accent or sexuality. Shariff and Gouin (2005) refer to cyberbullying as covert psychological bullying conveyed through the electronic medium and have identified it as one of the most problematic forms of emerging cruelty among adolescence in schools.

### **2.7.2 Cyberbullying and access to technological devices**

Fegenbush (2009) cited the data from the Pew Internet and American Life Project Research Centre conducted in 2000 and 2006, which found that 71% of teenagers own cellular phones; 93% have access to online facilities and 62% are daily online users. Teenagers who have access to these technological devices are predisposed to online abuse, harassment and other means of cyberbullying. Cyberbullying can occur every time a learner logs into the internet or uses their cellular phone. In South Africa an increasing number of children of school going age are beginning to make use of electronic devices such as computers and cellular phones and cyberbullying may cultivate a new breed of learner and adolescent for schools and the Department of Education to manage within the learning and teaching environment. A study assessing cellular phone usage in a South

African Township school revealed that 85% of the sample had used a cellular phone and 75% actually owned a cellular phone (Kreuter, 2008).

### **2.7.3. Challenges and research concerns of Cyberbullying**

We have already established the definition of cyberbullying and some ways in which it can be inflicted on the victim. We are also aware of the increasing number of teenagers who have access to technological devices which predisposes them to cyberbullying. Researchers are beginning to investigate the different aspects involved in cyberbullying since this type of bullying behaviour is posing an incredible challenge to schools, parents, the judicial system and most importantly the victims. Research information on cyberbullying, however, remains scant. A body of research information is emerging on the nature, prevalence and severity of cyberbullying. A large portion of the published literature is directed at school principals, teachers and parents to inform and create awareness about the scourge of cyberbullying, safety in website use and on the legal implication of cyberbullying both for the school and the individuals who are allegedly implicated. Research on the physiological, psychological and prosocial effects on victims and perpetrators are concerns that are being presently addressed. Bauman (2007) emphasises that it is important for parents and educators to become familiar with the terminology and the unique ways in which communication takes place using cyber technology. The concern among researchers is that the problem of cyberbullying is growing at a far more rapid pace than the capacity of parents and educators to respond to and take action against it (Patchin & Hinduja, 2006a).

#### **2.7.4. The nature of cyberbullying conventions and the impact on victims**

We have already explored some of the forms of cyberbullying but researchers have also investigated the various methods used by perpetrators of cyberbullying to inflict harm on their victims (Bamford, 2004). There are numerous new terminology and unique conventions of communication used in cyberbullying, such as anonymity, pseudonyms, masquerading, flaming, harassment, denigration, outing and trickery, social exclusion, cyber threats and cyber stalking. Anonymity is when the perpetrator places comments in a chat forum or in any other location that cannot be directly linked to that specific person. The term pseudonym involves the use of an alternative name to mask the identity of the perpetrator. In masquerading the perpetrator usually has some advanced technical skills. The perpetrator masquerades as the victim or someone else. Masquerading is common on cellular phones where a friend's phone may be used to send a harassing message, making it appear as if that individual has sent it. Frequently, teenagers exchange their passwords with friends and a perpetrator may gain access to the victim's account on a system and may pose as the victim in his or her personal web page, profile, blog or through some other form of communication (Bamford, 2004).

Another convention of cyberbullying is 'outing' and 'trickery' and they often go together. The bully manipulates the victim into disclosing information or making statements that the bully then publicises to embarrass the victim. This is the tactic that former friends use when they share secrets or post embarrassing photos that they may have been provided in confidence. Social exclusion may occur online just as they do in acts of real life traditional bullying. Targeted persons are not allowed to enter a chat room, or they may not be included on various 'buddy' lists. A further common convention of cyberbullying is harassment, which involves repeatedly sending cruel or offensive messages to an

individual or group. It is usually done via email, text messages, bulletin board postings, and in chat rooms. Denigration may also be used as a form of harassment, especially where groups may publicly post a number of derogatory statements about the victim and disseminate them electronically. The statements are often lies that are made up to hurt the victim. The aim is to damage the victim's reputation or friendships. The practice of these conventions were apparent in the case study of Haligan (Halligan, 2008) and Knight (Webster, 2004) where 'friends' had cyberbullied the two teenagers through the use of several different conventions. In the case of Haligan the cyberbullying arsenal became so cruel and destructive that he felt helpless, embarrassed and ashamed which led him to commit suicide without seeking help from any source (Halligan, 2008). Evidently, the use of conventions, such as, pseudonym and masquerading provide the perpetrator with the anonymity which is a liberty only experienced in cyber space and raises the question whether these individuals are only perpetrators in cyberspace or would they have been involved in a face to face encounter as in traditional bullying.

#### **2.7.5. Cyberbullying conventions and anti-social behaviour**

The conventions of cyberbullying already discussed, all possess certain elements of anti-social tendencies. A further convention of cyberbullying which appears to have strong elements of anti-social behavioural characteristics, personality and conduct problems is referred to as 'flaming'. This convention involves heated arguments with angry confrontational messages, often using explicit and vulgar language. The 'flamer' may use capital letters and a range of images and symbols to add emotional intensity and anger to their messages. Flaming often occurs in cyber-fights, and can result in a 'flame war'. It is important to note that cyber bullies may use one or more of the conventions, which have been discussed, at any one time.

Another dangerous and frightening anti-social convention of cyberbullying is cyber threats and cyber stalking. The latter involves repeatedly sending messages that includes threats of future harm, while the former may be threats to others, threats to harm a third party or parties, or threats to harm the self. These types of messages are typically associated with emotional distress (Bamford, 2004; Bauman, 2007).

#### **2.7.6. Nature and prevalence of adolescent experiences of cyberbullying**

Li (2006) conducted an investigation among students in junior high school describing the nature and extent of adolescences' experiences of cyberbullying. This study showed that almost half the sample had been bully victims, one in four had been cyberbullied and over half indicated that they knew someone who was cyberbullied. The study further revealed that almost half of the cyberbullies used electronic means to harass others more than three times and that the majority of bystanders did not report the incident to an adult. Twenty-three percent of the respondents indicated that they were bullied by email, 35% in chat rooms, 41% by cellular phone text messaging, 32% by known school friends, 11% by people outside their school, and 16% by multiple sources including school friends.

Florell and Ang (2011) published two scenarios which explain proactive and reactive aggression using cyber technology.

#### **Example one**

“April is a middle school student who has a crush on a boy in school. Her best friend, Mandy, has told her recently that she has a crush on the boy and is thinking about asking him out on a date. April can’t believe that Mandy would like the same boy and decides something has to be done. April uses Mandy’s email account password and sends sexually suggestive email to all the male

students at school under Mandy's account. Everyone assumes Mandy sent the message and Mandy's reputation plunges. This allows April to eliminate the competition for the boy's affection" (Florell & Ang, 2011, p. 1).

The above example indicates the use of proactive aggression by a perpetrator to achieve a specific goal.

### **Example two**

"Mandy finds out that April was the one who broke into her email account and sent the email to the male students. Mandy decides to start sending anonymous threatening IMs and text messages to April. Mandy's goal is to get back at April so she will stop spreading rumours and to try to salvage her tarnished reputation" (Florell & Ang, 2011, p. 1).

The above example shows the use of reactive aggression as a form of self-defence by the victim.

Cyberbullies are aware that their identity may be protected in the anonymity of cyberspace. This encourages the cyberbully to behave and act in a sinister manner. Within this 'protected' environment cyberbullies experience little fear about being caught and they may say and do things that they may not say or do in a face-to-face encounter with the victim. They feel at liberty to use false screen names and assumed identities. As we have discussed earlier the conventions of anonymity, masquerading and using pseudonyms masks the fear and there appears to be no perceived accountability or punishment for their actions (Florell, 2011b). We have to agree that those who are not strong or big enough to engage in schoolyard bullying now can unleash their vengeance and bully online (Ybarra, Diener, & Leaf, 2007b). It is reasonable to assume that many victims of traditional

bullying may become perpetrators of cyberbullying largely because of the conventions of cyber technology which are absent in traditional bullying.

#### **2.7.7. Adolescence and high risk behaviour in cyberspace**

Erikson's developmental theory maintains that adolescence is a time of identity formation when the adolescent has time for experimentation and rejection of certain roles of selves (Harter, 1990). This is also when the adolescent first experiences identity diffusion which leads to experimentation and ultimately to identity formation (Harter, 1990). Erikson maintained that at this stage of development the adolescent comprehends the self in terms of what they are and what they may still become. There are three important aspects that are developed and shaped at this stage. Firstly, the adolescent begins to recognise the self as separate from others and as capable of making independent decisions; secondly, they begin to discriminate between numerous societal roles from the sense of self and experience and to find one that matches; and thirdly, to distinguish each step in any given task in order to work in incremental stages. If these objectives are not met, Erikson postulates that adolescents will expect satisfaction of immediate desires and may feel their sense of self depends on the external approval of others. When this happens the adolescents may become involved in high-risk behaviour. The adolescent years provide the ideal setting for the emergence of numerous high-risk behaviours. Since peer group approval is most important, this has major implications for bullying behaviour. The risk factor associated with being a bully and the external approval offered by peers and bystanders is sufficient to fuel the behaviour of the bully and the bully-victim. Cyberbullying offers the playground to engage in such adolescent idiosyncratic behaviour.



Berson and Berson (2005) have recorded their findings in a comparative study on challenging online behaviours amongst adolescent girls in the United States and New Zealand. A significant number of adolescent girls engaged in risky activities including disclosing personal information, sending personal photos to online acquaintances, and arranging face-to-face meetings with strangers they met online. Significantly many of the respondents, as a result of these online interactions, continued with potentially problematic and indiscreet offline practices.

Risky behaviour appears to be synonymous with the cyberspace phenomenon of 'You can't see me, and I can't see you'. This practice poses potential risk for social interactions and psychological well-being because it prevents the perpetrator from receiving crucial feedback about the personal and psychological effect their words and actions may have on the victim, as was discussed earlier. In line with the developmental milestones of the adolescent it is clear that the adolescent is self-focused and usually fails to see the other person's perspective. In cyberspace this inherent developmental potential may be compromised and exploited rather than nurtured. The practice of posting material without fear of identification, along with a diluted sense of responsibility that accompanies harassment or hateful activities in cyberspace, allows the perpetrator to avoid the natural consequences of their behaviour. Overtime, this behaviour becomes normalised on the Internet or cellular phone and eventually becomes a part of practice in real life interactions (Carney, 2007). Adolescents need to be encouraged to recognise that such cyber interactions may harm the other cyber users emotionally, psychologically or socially. Part of the process of developing responsibility for actions is to make the adolescent aware that the facelessness of virtual communication does not mean it is victimless (Bamford, 2004).

Victims, such as, Ryan Patrick Halligan (Halligan, 2008) and David Knight experienced the full sway of the faceless cruelty of virtual communication. The victims' encountered helplessness, betrayal and severe depression in the faceless virtual communication they received. Life had become untenable for David Knight when some of his school friends established a website called "Hate David Knight". They posted denigrating pictures and abuse on it and inadvertently invited the global online community of strangers to join them in their hate campaign against their friend. Such actions whether in jest or intentional, have severe repercussions for the social and psychological well-being of the victim. Individuals who become targets of peer aggressive behaviour can become severely depressed and experience a heightened sense of helplessness. While many researchers maintain that bullying in school is common and a part of the normal developmental experiences of children and adolescents, many teenagers struggle with bullying experiences because it triggers stress and anxiety for them and results in physical and emotional problems (Olweus, 1993; Rigby, 1997). Fundamental to the psychological well-being of an adolescent is their social standing amongst their peers. Belonging to a peer group in school provides the social support that shields the adolescent from teasing and social exclusion. Adolescents consider social rejection to be one of the most traumatic events of their life (Landreth, 2002). When children and adolescents have to constantly survey the landscape of cyberspace or real space to guard against problematic interpersonal encounters, their ability to focus on academics, family life and responsibilities; their prosocial choices are compromised to some extent and may act as a protagonist for negative social and psychological health outcomes (Hinduja & Patchin, 2005). Despite the pervasiveness of internet use, relatively little is known about the long term effects of internet activities on adolescent psychosocial adjustment (Blais, 2008). Many researchers are beginning to probe the long-term consequences and impact of cyberbullying.

### **2.7.8. Social validation and cyberbullying**

It is an inherent need for humans to establish and to belong to a social group for social validation. The development of positive prosocial and interpersonal skills is similarly an important behavioural mechanism for a healthy social self-concept. Schools represent the longest and most formative social experience in life, which provides daily opportunities to feel accepted, rejected or neglected. These experiences play an important role in shaping behaviour for adulthood, especially in relation to social interactions at the work place, recreational activities and even in intimate relationships. Positive social experiences nurture the development of empathy and compassion. When interactions are harmful and do not validate an individual, caring for others is restricted if not withdrawn, sometimes with tragic antisocial actions (Chen, 2007). We may assume that traditional or cyberbullying experiences while at school therefore may have a negative impact on the development of later personality traits.

It is well established that young people are constantly connected to their friends by multiple devices and through numerous communication and technological devices that has resulted in a drastic reduction in face-to-face social meetings with friends. According to Kraut, *et al.* (1998) these social disengagements are associated with a poor quality of life and diminished physical and psychological health. The formation of friendship seems to be evolving and there are many friendships that form via instant messaging, email, and other social networks. Chen (2007) explains the absurdity that these friendships become as valid as if they are real-life friends (Chen, 2007). “Circuits of Cool”, a research commissioned by MTV and Nickelodeon in association with Microsoft Digital Advertising Solutions found that 14-24 year olds have on average 53 people they consider to be online friends, but only 6 of the 53 are real-world, close friends, 27 form part of a wider circle of friendly

acquaintances, and the remaining 20 come from online relationships but are considered to be proper friends despite the fact they have never met them in person (Chen, 2007).

#### **2.7.9. Online relationships and consequences for psychological well-being and social adjustment**

Kraut *et al.* (1998) described new relationships that have developed online as weak relationships. Adolescence is a critical stage of development and some are in the process of forming their identity by exploring social relationships and trying to find a role in society. It may be that the pressure to have a large pool of friends is so strong that the adolescent does not consider the quality of the social support offered by these relationships. We know that popularity is often determined by the number of links or 'friends' a teenager has on his social network profile. In an effort to increase this number quickly, many young people often post questionable content, highlighting provocative unhealthy, or illegal behaviour, so that that can gain attention and status (Carney, 2007) which they use to lure 'friends'. Kraut *et al.* (1998) have suggested that there is a significant difference in relationships that have strong ties compared to those that have weak ties. Relationships that have strong ties are associated with frequent contact, deep feelings of affection and obligation, and are genuine and appropriate to a number of life situations. On the other hand relationships with weak ties are superficial and easily broken, have infrequent contact, and a narrow focus of relevance to experiences and life situations. Kraut *et al.* (1998) cited a number of studies that examined the positive and negative effects of these relationships on an individual. These studies assert that the relationships that have weak ties, including weak online ties, are useful to linking people to information and social resources. But they do not provide the buffer from life's stresses and do not lead to better social and psychological outcomes, as do relationships with strong ties.

A study by Reijntjes, Stegge and Terwogt (2006) investigated the anticipated emotional response to peer rejection, as well as the qualifying effects of gender, depressive symptoms, and perceived social competence among 10 to 13 year olds. The study found that participants who were higher in depressive symptoms reported a more negative anticipated mood impact and they were less inclined to endorse behavioural and cognitive coping strategies typically associated with mood improvement (e.g., behavioural distraction, positive reappraisal). Independent of depression, participants scoring higher on perceived social competence reported more active, problem-orientated coping behaviour responses to the stressors (Reijntjes, *et al.*, 2006). Results from a cross-sectional survey suggest that being victimised by peers is significantly related to comparatively low levels of psychological well-being and social adjustment and to high levels of psychological distress and adverse physical health symptoms (Rigby, 2003). Hawker and Boulton (2000) examined peer victimisation and found a significant correlation with a range of psychosocial adjustment indices. Relationships were found between depression and peer victimisation and between anxiety and peer victimization.

#### **2.7.10. Online behaviour and adolescence personal and developmental needs**

Ybarra and Mitchell (2004) have identified cyberbullying as a significant public health issue. They reported that communicating online could have negative and harmful consequences. Ybarra *et al.* (2007a) found that youth who reported deliberately trying to self-harm in the past six months were significantly more likely than other youth to frequent chat rooms and to have close relationships with someone they met online. They were also more likely to have a sexual screen name or to talk with people known only online about sex. These findings suggest that youth who engage in self-harm are more likely to engage

in online behaviours that have the potential to put them at risk. Carney (2007) submitted that even children who are without positive personal relationships became vulnerability and at increased risk. They were trying to search online for what was missing in their own lives, but they found that they did not have the judgment necessary to avoid unhealthy Internet relationships. They used the Internet to share their pain with the world but attracted like-minded individuals who encouraged them into extreme and dangerous behaviour. In some instances they encountered online predators who exploit their vulnerability to take advantage of them (Carney, 2007). Adolescence may seek various types of relationships online to satisfy different needs. The adolescent may establish social relationships to define their sexuality, intellectual development or an internal value system. In addition, considerable attention in literature and research have focused on the “crisis” that adolescents experience during this period and the impact this has on the psycho-social development (Serrano, Godas, Rodriguez, & Miron, 1997).

In terms of brain development in the adolescent it is understood that motor and sensory areas of the brain mature early but the frontal lobe is immature and not connected. The frontal lobe is responsible for executive functions, thought and anticipation and planning and goal directed behaviours. The access to the frontal brain in the adolescent is slower because the neural insulation is not completed until the mid- twenties. Adolescents have a more robust habit forming capability and like children the brain attends to the experiences that elicit more excitement from the environmental activities. The underdevelopment of the frontal lobe may account for the lack of foresight to determine the consequences of their behaviour.

Unlike schoolyard bullying, the virtual environment creates an aura of safety and anonymity, which allows children and adolescents to disclose huge amounts of information, oblivious to who might see it and how quickly it can be disseminated to large numbers of people. As a result of immature thinking processes and an underdeveloped sense of mortality, adolescents underestimate the danger involved. On the contrary, in our tell-all society, the sharing of private, even sexual information and images has become the norm (Carney, 2007). Bamford (2004) recommends that adolescents must be taught that when they encounter inappropriate content within virtual environments, their response must be intent to “hit the Back button and move on”. Further, they must be provided with instruction in effective search strategies and must learn how to quickly exit inappropriate sites, especially sites that have set “traps”.

## **2.8. Online communication and Life Satisfaction**

Kraut *et al.* (1998) asserted that online communication hindered adolescents’ well-being because it displaced valuable time that could have been spent on face to face meeting with friends and/or other activities that may better contribute to their self-development. Subrahmanyam, Greenfield, Kraut and Gross (2001), on the other hand, maintain that online communication may have enhanced the quality of adolescent existing friendships and therefore improved, their well-being. There is general agreement that the quality of friendships is an important predictor of well-being (Hartup & Stevens, 1997). An evaluation of well-being can also be determined by measures of life satisfaction (Valkenburg & Peter, 2007). Flouri and Buchanan (2002) and Karatzias, Power and Swanson (2001) found that there was a negative life satisfaction index in traditional bullying. Peter and Valkenburg (2006) found that adolescents who were less satisfied with their lives were more likely to be exposed to sexually explicit material online.

## **2.9. Cyberbullying and psychosocial factors**

According to Li (2007a) since culture is related to bullying and victimisation, it is logical to argue that culture should be considered as a predictor for cyberbullying and cyber victimisation (Li, 2007a). The perpetration and the victimisation behaviours are likely to be shaped by family values and traditions; socio-economic status and educational level; religion and prosocial factors. Although bullying has been identified around the world, previous research suggests that students from different countries and cultures behave differently with involvements in bullying. If cyberspace is the setting where young people are going to spend most of their day and night, they will have a large stake in what happens to them in that environment, hence their reactions and perceptions of the cyberspace environment and experiences are for their psychosocial well-being. Our understanding of the outcomes of this interaction is equally important especially in relation to what will happen to them as young adults and later as grown adults. Psychological well-being encompasses one's standard and quality of living, the economical and even political processes, the individual's family of origin and the socioeconomic circumstances of the individual.

Therefore psychosocial factors are related to many of the circumstances surrounding the individual and the way in which they impact on the behaviour of the individual. There are some individuals who already have a risk-indicator for the development of psychosocial problems such as those adolescents who have parents with psychiatric problems or other family problems. Marini *et al.* (2006) confirms that since bullying is a systematic and repeated form of aggression involving peers, there are a range of psychosocial problems including low self esteem, high acceptance of antisocial behaviour and delinquency. Furthermore the victims also report an array of internalising difficulties related to anxiety,



depression and self-esteem. Davis (2001) contended that psychosocial problems like depression and loneliness predisposes some internet users to maladaptive cognitions and behaviours that result in negative outcomes. Florell (2011a) found online victims were typically intense Internet users that created content, took more risks online, engaged many friends to feel popular but they found that these individuals had many psychosocial problems offline. Morahan-Martin and Schumacher (2003) found that problematic internet users were more likely than non-problematic users to use the internet to meet new people, to seek emotional support, and to play socially interactive games.

According to Fegenbush (2009) cyberspace may change the profile of an individual compared to the traditional bully. She proposes four profiles which were described as vengeful angel; power hungry/revenge of the nerds; mean girls and the inadvertent. She purports the issues concurrent with the victims of cyberbullying are depression, lack of friends, keeping to themselves, high absenteeism in school, low school performance and that 6% to 10% may sink into severe depression. There are many researchers who concur that victims and perpetrators of cyber bullying have difficulty in school with their academic performance, social competency, and life at home (David-Ferdon & Hertz, 2007). Bullies and victims do not perform as well in school because of lower self-esteem, personal insecurities, and a heightened sense of paranoia that prevents them from concentration in the classroom. Other researchers suggest that while some cyberbullies are negatively impacted by their experiences, many of the cyberbullies feel positive about their actions, thinking they were funny or that the victim somehow deserved the harassment (Kawalski, 2008; Patchin & Hinduja, 2006a). Given the critical developmental changes with which adolescence must cope, including cognitive developments in self-concept and identity, the transformation of parents-adolescent relationship and peer pressure it is

important to examine and test the overall behavioural and psychosocial risks that cyberbullying imposes on learners. Johnson (2009) suggested that research has demonstrated that there are specific effects of cyber bullying for both the victims and bullies, as well as individually.

#### **2.10. Psychological and behavioural effects of cyberbullying**

At a psychological level, perpetrators of cyberbullying experience less guilt and remorse for their actions compared to perpetrators of traditional bullying since they do not personally witness the pain and hurt on the victim's face while the act of aggression or violation is being metered out (Hancock, Jones, & Ryan, 2007). The nature of the virtual world is such that it does not allow interactants to be privy to one another's emotions. Kowalski and Limber (2008) have established that this not only increases the number of potential perpetrators of cyberbullying but also the magnitude of the treats, taunts, and so on, that perpetrators are willing to inflict on the victim. Kelner, Capps and Kring (2002) make the point that in traditional bullying perpetrators and victims come face-to-face with non-verbal cues and facial markers such as frowns, raised eyebrows, gritting teeth, winks, smiles, and other expressions which indicate the intent and emotion associated with the behaviour. Emotions such as, fiery, anger and aggression meet head-on with fear, meekness or other real emotional retaliations that facial markers, body language and stance cannot mask. The perpetrator and victim experience the full impact of the real emotional and psychological weight of the bullying event. In traditional bullying this may influence a perpetrator from retracting the severity of the bullying arsenal by witnessing the effect of the punishment. In the virtual world the perpetrator does not have face-to-face contact, a simple emoticons like the smiley face which is suppose to convey a positive effect (Kowalski & Limber, 2008) may be used in a sinister way or may not be a genuine

emotional sentiment. Carney (2007) makes a good point that emoticons are poor substitutes for non-verbal cues that accompany verbal communication. The explanation is that in most cases an accurate assessment of the intention and meaning behind the words becomes difficult and this may result in misunderstandings and incorrect assumptions being made and acted upon without verification. The warning is that that these situations in cyberspace can quickly escalate into online hostility.

Shariff (2006) posed an important question and made relevant comments about it:

“Is online harassment considered to be a violent expression? Online harassment impacts negatively on the physical, psychological or emotional well-being of a victim and constitutes a form of actual violence. Recipients may feel powerless, demeaned and threatened. Even though physical force cannot take place online, victims perceive the harm. Perceived harm amounts to actual harm”(Shariff, 2006, p. 5).

Williams (2007) used the case study of Ryan Patrick Halligan, the 13 year old teenage, who committed suicide after having his sexual orientation was questioned and rumoured about in cyberspace, to illustrate the type of severe depressive condition a victim can experience and pointed out effectively the devastating psychological consequences of cyberbullying.

## **2.11. Psychosocial characteristics and behavioural problems in cyberbullying**

Ybarra, Aspelage and Mitchel (2007a) study suggests a relationship between the frequency of cyberbullying and negative psychosocial characteristics and behavioural problems. Youth that reported being perpetrators or victims were more likely to have had more than five drinks in the previous month, to have used marijuana, inhalants, and to have at least one peer involvement in delinquent behaviour. They were also more likely to report poor

bonding with their caregivers and/or little monitoring by their caregivers. Overall, youth who were involved in online harassment were more likely to be involved in traditional bullying harassment as well. This implies that aggressive Internet behaviour implies troubled offline behaviour as well (Ybarra, *et al.*, 2007a). It is therefore suggested that schools place limitations on learner's use of cyber technology activity that may either infringe on the rights of others or are inconsistent with the school values. Further it has been established that cyberbullying materially and substantially disrupt learning (Shariff, 2006).

Psychosocial problems, such as behavioural, emotional, environmental, educational and psychological factors are highly prevalent among school children and adolescents. These psychosocial indices may severely interfere with everyday functioning of individuals (Reijneveld, *et al.*, 2003). Little information has been generated about cyberbullying and psychosocial indices but according to Dueck (2006) cyberbullying has similar, if not more detrimental effects on its victims as traditional bullying. Current data and research suggests that cyberbullying is increasing at a phenomenal rate and it is still not certain whether online perpetrators and victims possess the same characteristics, behaviours or psychosocial profiles as their traditional bullying counterparts. However, Hancock *et al.* (2007) pointed out that the concerns expressed, by parents and school officials about online behaviour, is the same as those given to other social and psychological problems such as under-age drinking, teenage pregnancy, violence and aggression. These concerns are not unfounded since adolescents tend to make online choices contrary to real-world behaviours (Berson & Berson, 2005). According to Carney (2007, p. 1) "teenagers often lack the maturity and social judgment necessary to act responsibly in the unsupervised anonymous free for all of the internet". Although adolescents are able to engage in abstract

thinking, the area of the prefrontal cortex that governs decision making is not yet fully developed (Bauman, 2007).

## **2.12. The differences in the relationship between traditional bullying and cyberbullying**

According to Dueck (2006) cyberbullying is different to traditional bullying in a number of ways (Dueck, 2006). Typically traditional bullies are physically larger and stronger than their victims. In cyberbullying the perpetrator can be smaller and weaker than the victim.

In traditional bullying most studies have shown that boys and girls report similar levels of victimisation (Crick, 1996). However, some studies report that more boys are bullied than girls (Rigby, 1997), since traditionally bullying has been dominated by acts of physical or verbal attacks and aggression. It has been reported that girls are more involved than boys in cyberbullying because they communicate more frequently by email and texting (Smith, Cowie, Olafsson, & Liefvoogte, 2002). This may also be because cyberbullying falls within the scope of relational bullying and girls commonly use relational aggression as a preferred convention of cyberbullying. It is important to note that the effects of relational aggression is as damaging as physical violence because it destroys a person's emotions and effects psychological well-being (Naylor, *et al.*, 2006).

A study by Raskauskas and Stoltz (2007) showed that being bullied or perpetrating bullying traditionally was significantly predictive of being bullied online or electronically. This is important results which seem to indicate that there are some similarities in the personality and behavioural characteristics of the victim and perpetrators that seem to predispose individuals to these behavioural roles.

Kawalski (2008) stated that there is little specific characteristics of people who are cyber bullies and those who are cyber bullied. Although it might be reasonable to assume that people who cyberbully have certain features in common with those who engaged in traditional bullying (e.g. more accepting of violence, little compassion) there are probably unique characteristic of those who are involved in cyberbullying. A research study cited by Kawalski (2008) showed that 25% more girls and only 11% boys reported being targets of cyberbullying, and 13% of girls and 9% of boys reported perpetrating whereas in traditional bullying the percentage of boys who are perpetrators was higher.

We have already discussed the nature and prevalence of bullying behaviour in South Africa and have noted that South Africa appears to have a higher prevalence of bullying behaviour than some European countries. Presently there is no data available to assess if there exists any other parallels between traditional bullying and cyberbullying in South Africa.

### **2.13. The Emergence of cyberbullying in South African schools**

Although South Africa is less technological than the Western countries there are sufficient reported incidence of cyberbullying to make it clear that the problem is endemic in this country too (Henderson, 2008). Internet users in South Africa numbered only 4. 187 000 in 2008 (World Bank, 2011) and cellular phone subscribers numbered 19.70 per 100 inhabitants (Tsebe & Ledwada, 2007). An electronic tabloid reported that internet access will double in the next five years in South Africa (The Good News Reporter, 2009). According to the Managing Director of Wide Worx, South Africa could have 6 million internet users by 2011 and a report released by BMI-TechKnowledge has projected that there will be 15 million mobile internet users by 2013 in South Africa (IT News South

Africa, 2008). This means that more young people will have access to this facility and this could result in more young people and children becoming vulnerable to cyberbullying. According to a Durban educational psychologist, Dr Anand Ramphal, cyberbullying is already “happening on a big scale” (Ord, 2007, p. 12). Linda Naidoo, director of Childline in KwaZulu-Natal reported that the organisation received calls from parents, schools and children about cellular phone bullying (Ord, 2007). While some principals from local Durban high schools reported in a newspaper survey that they have not come across cyberbullying at their schools (Ord, 2007), Grant (2006) found that Mxit was a big problem in schools in the Western Cape. Teachers complained that there was unsanctioned cellular phone use even during class time. A major problem was text messaging during class time, sending and receiving class test answers, bullying and harassment, as well as the taking and distributing of inappropriate digital photographs of learners. A mother from a school in the Cape reported that her ten year old son was beaten in the toilet by a Grade 12 learner and a cellular phone video clip was made of it (Limbada, 2007). In response to this the former MEC for Education in the Western Cape, Cameron Dugmore, praised schools that had made strides to curb this phenomenon. He emphasised the need for more research into this phenomenon because presently there exists no provincial or national policy to deal with these incidence (Grant, 2006). This phenomenon had not only surfaced at schools in the Western Cape but at schools in other provinces as well, where learners would beat- up each other and used their cellular phone to make video-clips of the incident and this video-clip was messaged and circulated to other learners in school (Limbada, 2007). Mr Dugmore further called on schools to regulate the use of technology more effectively and expressed his concern about the recording and distribution of obscene clips by learners, which involved scenes of sex and violence (Mohammed, 2007). In South African schools cellular phone technology has been exploited to increase this mode of

abuse. A recent survey by the Films and Publications Board's ministerial task team on child pornography which, was conducted among high school learners, aged from 13 to 17, at random schools in Johannesburg, Cape Town and Durban showed that 81% of learners had seen pornographic images on their friend's cellular phones. Further by the time they were eighteen years old, 64% had seen images of pornography on the Internet (Shuttleworth Foundation, 2008b).

Similarly, in other countries cyberbullying is no longer only limited to threats, taunts and insults in chatrooms and instant messaging, recently a new phenomenon of adding pictures and videos to the bullying arsenal and posting them on sites such as MySpace, Facebook and YouTube, where anyone can see them, has emerged (Kornblum, 2008). The perpetrators use the technology of cellular phones and the Internet to reach a larger audience and this behaviour may have to do with the individuals or groups attempts to gain power and prestige among their peers. The accessory of violence to cyberbullying is also becoming a common phenomenon and there are several implications for the behavioural and psychological well-being of the perpetrators and victims of these crimes. There is a paucity of research in cyberbullying concerning this area, but it may be interesting to examine studies in violence, aggression and related research on traditional bullying to note the outcomes and effects.

#### **2.14. Conclusion**

This chapter has focussed on the research conducted on the various forms and aspects of traditional and cyberbullying. Traditional bullying has plagued generations of children and young people of school going age. Research has demonstrated the affects and consequences it has had on the behavioural, social and psychological well-being in both



victims and perpetrators. Evidently there appears to be a strong connection between the behavioural patterns and psycho-social reactions of victims and perpetrators in traditional bullying and cyberbullying. Research on cyberbullying reflects many similarities to traditional bullying while at the same time there are fundamental differences. The relationship between traditional and cyberbullying therefore needs further clarification and understanding. The research evidence cited throughout this chapter gives impetus to the present study. It is clear that much of the research in cyberbullying relies on the findings of research in traditional bullying and this study has followed a similar protocol.

The methodology and research design will be presented in the following chapter.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 INTRODUCTION**

Chapter two explained the types of traditional bullying and cyberbullying encountered in current literature. The nature and prevalence was discussed in detail as well as the behavioural, psychological and social impact of traditional bullying and cyberbullying on the victims and perpetrators. Some of the psycho-social characteristics and behavioural problems associated with cyberbullying that emerged from previous studies were also discussed. The emergence of cyberbullying in South African schools was highlighted in terms of current literature. This chapter will explain the research design and methodology in determining the behavioural and psychosocial factors related to cyberbullying among Grade 8-10 learners in a cross section of schools in KwaZulu-Natal.

According to Welman, Kruger and Mitchell (2009) a research design is the plan according to which the researcher obtains research participants (subjects) and collects information from them. Durrheim (2002) suggests that in developing the research design the researcher must focus on four dimensions along which a series of decisions have to be made. These are in relation to the:

- Purpose of the research;
- Theoretical paradigm informing the research;
- Context or situation within which the research is carried out; and
- Research techniques employed to collect and analyse data.

The purpose of conducting research into theories and other research problems, is to define, explain and consequently, predict, modify or control, human behaviour, its organisation, products and/or events (Durrheim, 2002, pp. 22-23). Thus we can say that the research design is therefore a plan according to which data will be collected in order to investigate the hypothesis in the most precise and economical manner. An emergent design may also be used if the researcher has a need to adapt their data-collecting procedures during the study to benefit from data of which they only become aware of during the research process itself (Durrheim, 2002, p. 192).

### **3.2. RESEARCH DESIGN**

This study by nature of its stated objectives will use a mixed method research design. The merit of the design is that the researcher includes both quantitative and qualitative research methods to investigate the hypothesis in the most precise and economical manner. The quantitative aspect involves an anonymous paper and pencil questionnaire, compiled and adapted from survey questions administered in a previous German study (Riebel, et al., 2008). The questionnaire also included qualitative items, where participants were expected to expand their answers on certain questions. The research design is therefore a non-experimental, retrospective design in which the criterion variables, such as, psychosocial factors are examined between those who report cyberbullying and those who do not.

#### **3.2.1. Sample**

All available Grade 8 to 10 learners from four secondary schools in KwaZulu-Natal, representative of a cross section of socioeconomic groups, were enlisted. The total sample in this study (N=450) therefore consisted of Grade 8, 9 and 10 learners. Grade 8 learners were included because this is when they make the transition from primary into high school

and are more at risk of being bullied by stronger same age or older peers. According to Naylor *et al.* (2006) cited in Whitney & Smith (1993) the entry grade into the high school is the most suitable for the sample. The mean age of the sample was 14.84 (SD 1.19) with the youngest learner being 12 years and the oldest 19 years. The sample consisted of 249 (55.3%) males with a mean age of 14.83 (SD 1.24) and 201 (44.7%) females with a mean age of 14.85 (SD 1.14). The sample included learners from the different racial groups, African 146 (32.4%) with the mean age 15.91 (SD 1.28), Indian 207 (45.7%) with the mean age of 14.44 (SD 1.07), Coloured 15 (3.3%) with a mean age of 15 (SD 0.93) and White 82 (18.1%) with the mean age of 14.73 (SD 1.05). The schools selected to participate in the study were from both rural and urban areas. School One (n= 106; 23.40%); School Two (n= 129; 28.70%); School Three (n= 93; 20.70 %); and School Four (n= 122; 27.20%). Schools One and Two may be classified as urban. Schools Three and Four may be classified as rural and semi-rural. The total number of Grade 8 learners was 162 (36%); Grade 9 learners were 129 (28.7%) and Grade 10 learners were 159 (35.3%).

### **3.2.2. Review of sample used in the study**

It is important to review the sample used in this study to understand the dynamics about the actual population from which the results were generated. Grade 8-10 learners from four, schools located in urban, semi rural and rural areas, representing the main population groups were included in this study. Three of the schools were co-educational and one was a boy's only school. The total number of male participates to female participates was skewed in favour of males by almost 11%. The highest numbers of learners were between 14-15 year old and the lowest numbers were between 12-13 year olds, the outliers were the 18-19 year olds. There were almost 15% who were between 16-17 years old. In a bullying research, age is an important factor to consider because there is evidence to suggest that

there is a decline in the reporting of bullying with age (Smith, Madsen, & Moody, 1999). There were no White female and very few male and female Coloured participants were included which was representative of the schools sampled.

### **3.3. Instruments and test measures**

The choice of the research measures as well as the research design was driven by the theoretical consideration that cyberbullying is a relatively new phenomenon and in the early stages of investigation. There are not many test measures on cyberbullying. Further, there is little research that has addressed the associations between cyberbullying and psychosocial, behavioural and mental health issues. There is, however, evidence to suggest that many mental health practitioners have already recognised the presence of cyberbullying and its associated effects in the lives of victims (Sourander, *et al.*, 2009). The cyberbullying questionnaire that was used in the study was reported to have good reliability and validity according to the United Nations Children's Fund (UNICEF) report 10 June 2011 (UNICEF, 2011).

#### **3.3.1. Cyberbullying Questionnaire**

The Cyberbullying questionnaire (Riebel, Jager, & Fischer, 2008), which was used in a German study on cyberbullying was translated into English and used in this study. Certain additions and modifications were made so that the instrument was considered appropriate for use with the South African population. For instructional purposes, a short, concise and easy definition that learners could comprehend and apply with precision was chosen for cyberbullying. The definition of cyberbullying was as follows:

“By cyberbullying we mean bullying through a new technology (email, chats, or instant messages) by any communication system such as Internet sites and cellular phones.”

Participants were made aware that cyberbullying means repeated intimidation, ridiculing, or disturbing of a person's peace by frightening them repeatedly. It was also pointed out to them that spam does not count as cyberbullying.

The questionnaire consisted of a total of 113 questions. The instrument was modified for the South African context, for example, the word cellular phone was used instead of the word mobile phone. The questionnaire took approximately 25 minutes to complete. The questionnaire comprised the following parts:

**Part 1:** This section obtained socio-demographic information related to age, sex, school, grade and questions about the use of cyber information and communication technology. This section consisted of nine questions.

**Part 2:** In this section participants were required to respond to questions about how often they were bullied or cyberbullied and more specifically as to how often they were bullied and cyberbullied in the last two months. The answers were rated on a 5-point Likert Scale ranging from A = never; B = only once or twice; C = two or three times a month; D = approximately once a week and E = more than twice a week. This section comprised of six questions. Traditional bullying was included so that evidence and knowledge gain from previous research may serve as a guide to make comparison with the outcomes of cyberbullying.

**Part 3:** This section was developed specifically for the German study (Riebel, *et al.*, 2008). It is based on the taxonomy by Willard (2006) and contains one item each for harassment (“How often in the last two months has someone contacted you on the internet or by cellular phone and threatened you with violence, insults, or other unpleasant communications?”), denigration ([...] has someone spread slander (to say mean things) or other bad rumours about you?”), outing and trickery (“[...] has someone sent e-mail, chatroom messages or pictures to you that embarrassed and ridiculed (made fun of ) someone else (not you)?” and exclusion (“[...] that your classmates exclude you from chats or online games, so that you felt that they excluded you from the group?”). These items were also rated on a 5-point Likert Scale (Riebel, Reinhold, & Uwe, 2009). A total number of 15 questions made up this section. Two of the questions required open ended responses and were related to the participants’ reactions to incidents of cyberbullying. For example, participants were required to write a brief description of what happened when they were victims of cyberbullying and if the participant had cyberbullied someone else they were required to write a brief description of how they did it and what happened.

**Part 4:** In this section participants responded to items on, physical bullying, verbal bullying and cyberbullying to gauge reactions to coping strategies. The responses were rated on a 4-point Likert Scale ranging from A = Yes; B = Mostly yes; C = Mostly no and D = No. The last question was open ended for participants to write in any other reactions that they may have experienced. This section consisted of a total of 14 questions.

### **3.3.2. Self-report questionnaire on psychosocial factors**

**Part 1:** The first section included questions to obtain family history, race, culture and socio-economic status. Participants were also required to select descriptors that

characterized them as a child (0-12 years old). Items were selected from a list of personal qualities and character traits e.g., shy, emotional, aggressive, nervous, and friendly. Included were questions pertaining to friendships they had established, the neighbourhood in which the participant lived; attitude to teachers and school and school related difficulties, in particular learning to reading.

## **Part 2: Diener's Life Satisfaction Questionnaire**

This questionnaire was used to measure the participant's life satisfaction. Life satisfaction may be defined as a global evaluation of a person's life (Routledge, 2005b). Each person constructs a standard of what they perceive to be an acceptable life and they usually compare their life to this standard. Diener's Life Satisfaction questionnaire consists of five items. It has been established that the scale measures a single factor of global life satisfaction with high internal consistency and acknowledges that life satisfaction is a subjective value (Diener, Larsen, Levine, & Emmons, 1985). According to Pavot and Diener (1993) this scale assesses the cognitive component of a subjective experience of well-being. Diener used a 7- point Likert Scale but in this research a 3-point scale was used to simplify the questionnaire for learners from Grade 8-10 as suggested by Routledge (2005b) in the study of substance abuse and psychosocial well-being among South African adolescents.

## **Part 3: Psychological Well-Being Scale**

According to Ybarra and Mitchell (2004) psychosocial difficulties are associated with internet use among children and adolescents. The Bar-On's Emotional Quotient Inventory (EQ-I) was therefore used to measure the participants' psychological well-being. The EQ-I is based on the biopsychosocial model and incorporates all dimensions of an individual's



psychological well-being. The EQ-I represents a hierarchical model of social (interpersonal) and emotional (extra-personal) intelligence and is currently the most widely used measure of emotional-social intelligence. Bar-On's hypothesises that effective emotional and social functioning will eventually lead to a sense of psychological well-being (Bar-On, 2006). This instrument was used in this study to measure different aspects of psychological well-being and to gain a more holistic picture of the psychosocial measure of participants. The indicators of psychological well-being that were included in the instrument were questions pertaining to self-confidence; self regard and happiness.

The Psychological Well-Being Scale used was a shortened version consisting of 21 questions. The answers were captured on a 3-point Likert Scale ranging from Yes, agree; In between; No, disagree. This shortened version was used by Routledge (2005b) in the study of substance abuse and psychosocial well-being among South African adolescents of all race groups .

### **3.3.3. Data Analysis**

#### **3.3.3.1. Quantitative Analysis**

The data was analysed using the 19<sup>th</sup> edition of the IBM Statistical Package for the Social Sciences (SPSS 19). Each item on the survey instrument was coded. The data was entered onto an Excel spread sheet and imported into SPSS. The researcher ensured accuracy for all data entries.

Both descriptive and inferential statistics was used to answer the research questions. Descriptive statistics helped to make the survey data more understandable while inferential statistics helped to draw conclusions from the data. Due to the categorical nature of the

majority of the survey questions, descriptive analysis was used to determine the frequency distribution. Inferential data analysis with the non-parametric variables will include the Chi-Square Test for Independence, to determine whether differences between the expected frequencies are statistically significant between the groups. The t-test will be used to determine if there are significant relationships between variables of interest.

### **3.3.3.2. Qualitative Analysis**

Two questions on the cyberbullying questionnaire are open ended and form part of the qualitative data. The data will be analysed using the 19<sup>th</sup> edition of the IBM Statistical Package for the Social Sciences (SPSS 19). The researcher will look for the common factors in the responses. The information obtained would be summarised and thematically analysed (Anastasi & Urbina, 1997).

### **3.4. Reliability and validity of the instruments**

Face and content validity was established following the translation of the cyberbullying questionnaire. A panel of experienced psychologists in the fields of cognitive and educational psychology reviewed the items and made necessary adjustments to the questionnaire to ensure face and content validity. Face and content validity on the Life Satisfaction and the Psychological Well-being questionnaires were also reviewed by the panel. This questionnaire was previously used among South African adolescents (Routledge, 2005a, 2005b). The Cronbach Alpha Reliability Coefficient of the Psychological-wellbeing was 0.794 (Routledge, 2005b). The Life Satisfaction Scale measures similar constructs to the Psychological Well-being and has a correlation of 0.4 which is regarded as being a meaningful correlation (Antonioti, 2001 cited by Routledge, 2005b). In terms of the Life Satisfaction questionnaire, Diener *et al.* (1985) have concluded

that “the satisfaction of life scale is shown to be valid and reliable measure of life satisfaction” (p.149). Visser (2003) investigated the suitability of the measure by item analysis of the questionnaire and established that it was suitable for South African adolescence of the different race groups.

### **3.5. Procedure**

The study was approved by the research and ethics committee of the University of Zululand. The Department of Education, the sub-directorate of Resource Planning, was consulted for permission to conduct research in schools (Appendix 1). Four schools in four different areas and servicing communities with varying socio-economic population groups were enlisted. The names of the schools had to be submitted to the Resources Planning Directorate, Research Unit of the Department of Education, to obtain permission to conduct the research. The application was approved to conduct the study within a specific time period and under certain conditions. Permission was granted to conduct the research at the schools from the 13 May 2009 to 13 May 2010. The conditions were that the research was limited to only those schools that were identified by the researcher. Principals, educators, learners and schools were not to be identifiable in any way from the results of the investigation. All arrangements concerning the study were to be made by the researcher and the study was not to be conducted during examinations or when it may disrupt the educators’ programmes. Further a photocopy of the letter of approval from the Department of Education was to be submitted to the principals of the school where the intended research was to be conducted.

Permission was therefore sought from the school principals and the governing bodies of the participating schools (Appendix 2). Parental permission (Appendix 3) and learner

assent (Appendix 4) was sought through the school administration. Arrangements were made to conduct the study at a time convenient and suitable to the educators' and learners' program.

The researcher conducted the survey in classrooms. The researcher handed the questionnaires and read out the introduction and background information about the study. This was followed by an informal discussion to answer any questions that learners may have. All interested learners were invited to participate. Learners completed the questionnaires anonymously during the lesson time. Classroom teachers were present while the questionnaires were administered. All completed questionnaires were posted into sealed boxes by the participants.

The researcher observed that discipline, supervision and control of the school population in all four schools were of a high standard. In one of the co-education schools a particular Grade 10 group were not focussed or attentive initially but settled down well as the discussion proceeded and remained so right to the end of the research session. The co-operation from staff and participants in all the schools was very encouraging.

### **3.6. Conclusion**

This chapter focused on the research design and the methodology that was used to obtain the data for the current study. The instruments used to gather data was presented. The administration, reliability and validity of the test instruments was discussed. The approach to the analysis of the qualitative and quantitative data was explained.

The next chapter will deal with the results that were generated from an analysis of data collected. The results are further discussed in chapter four.

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSION**

#### **4.1. INTRODUCTION**

In the preceding chapter the research design, methodology and procedure, that was used to determine the behavioural and psychosocial factors, related to cyberbullying among Grade 8 to 10 learners across a section of schools in KwaZulu-Natal, was explained. In addition, a description of the sample population, a discussion of the test instruments and measures and its administration was presented. An analysis of both the qualitative data and quantitative data was proffered.

In this chapter, the salient findings of the study will be reviewed and discussed in terms of relevant current literature and research. We will begin by providing the demographical information. Thereafter an analysis of the types of technology that were accessible to the participants and those that they preferred to use will be considered. The results in terms of the relationship between age, gender, urban-rural dichotomy and socio-economic status of victims and perpetrators of cyberbullying are discussed. The degree to which school personal were involved in the management of cyberbullying will be looked at. Lastly we will examine the relationship between cyberbullying, life satisfaction, psychological well-being and other behavioural and social variables.

## 4.2. Characteristics of the sample

As already discussed the total sample (N=450) consisted of Grade 8, 9 and 10 learners. The total number of female's participant's was 201 (44.7%) and males were 249 (55.3%). There were (N=162) Grade 8; (N= 129) of Grade 9 and (N=159) of Grade 10.

**Table 1: Gender frequency distribution by grade, age and race**

Variables		Female	Male	Total
		n (%)	n (%)	n (%)
Grade	8	71 (35.3)	91 (36.5)	162 (36.0)
	9	66 (32.8)	63 (25.3)	129 (28.7)
	10	64 (31.8)	95 (38.2)	159 (35.3)
	Total	201 (100)	249 (100)	450 (100)
Age	12-13yrs	24 (11.9)	39 (15.7)	63 (14.0)
	14-15yrs	122 (60.7)	134 (53.8)	256 (56.9)
	16-17yrs	53 (26.4)	71 (28.5)	124 (27.6)
	18-19yrs	2 (1.0)	5 (2.0)	3 (1.5)
Race	African	100 (49.8)	46 (18.5%)	146 (32.44)
	Asian	91 (45.3)	116 (46.6)	207 (46.0)
	Coloured	10 (5.0)	5 (2.0)	15 (3.3)
	White	0	82 (32.9)	82 (18.22)

Table 1 shows the distribution of the sample by gender according to grade, age and race. There were 249 males (55.33%) and 201 female (44.77 %) indicating a slightly higher number of males in the sample. This difference was not significant. There were fewer females (35.3%) compared to males (38.2%) in Grade 10 whereas there were fewer males (25.3%) than females (32.8%) in Grade 9. The largest age cohort was the 14-15 year group for both males and females with more females (60.7%) than males (53.8%). The low number in 18-19 year olds is part of the attempt by the Department of Education to make education accessible to learners previously disadvantaged.

The largest population group that was represented in the sample was Asian with a total number of 207(46.0%) followed by 146 African (32.44%), 15 (3.33%) Coloured and 82 (18.22%) who were White<sup>1</sup>. There were no White female learners represented in this study.

Three hundred and forty-one (75.8%) of the sample indicated that they were raised by both parents, 71 (20.0%) by single parents, 17 (3.8%) reported that they were raised by an uncle, aunt, sibling or grandparent. Sixteen (3.6%) did not specify who raised them. With regards to occupation of their paternal caretaker, of those who responded, 131 (29.1%) were professional, 169 (37.6%) semi-professional, 18 (4.0%) were unskilled and 11 (2.4%) were unemployed. A hundred and twenty-one (26.9%) did not specify the occupation of their paternal caretaker. In term of maternal caretaker's occupation, 184 (40.9%) were housewives, 108 (24.0%) professional, 115 (25.6%) semi-professional, 29 (6.4%) unskilled and 11 (2.4%) were unemployed. The learners endorsed their economic status as: wealthy 27 (13.4%), upper-middle range 26 (12.9%), middle range 62 (30.8%), working range 45 (22.4%) and 15 (7.5%) reported receiving state grants. There were 26 (12.9%) who did not respond. Further, 155 (34.4%) of the sample were the oldest child in their family, 150 (33.3%) the youngest, 104 (23.1%) the middle child and 25 (5.6%) reported being the only child.

**Table 2: Access to technology**

	Male			Female		
	Cellular Phone n (%)	Personal Computer n (%)	Internet Connection n (%)	Cellular Phone n (%)	Personal Computer n (%)	Internet Connection n (%)
<b>Grade 8</b>	76 (83.5)	48 (52.7)	34 (37.4)	57 (80.3)	14 (19.7)	4 (5.6)
<b>Grade 9</b>	57(90.5)	35 (55.6)	25 (39.7)	58 (87.9)	17 (25.8)	8 (12.1)
<b>Grade 10</b>	92 (96.8)	47 (49.5)	40 (42.1)	54 (84.4)	16 (25)	6 (9.4)

<sup>1</sup> This classification is in keeping with the categories used in South Africa to monitor access and equity of previously disadvantaged groups to education.



In order to determine which technology the learners used it was important to establish different modes of technology that were accessible to them (see Table 2). The results indicated, cellular phones were the most frequently used technology among both males (90.36 %) and females (84.07 %). More males (52.20%) reported access to personal computers than females (23.38%) with 39.75 % of the males and 8.95% females reporting Internet access, respectively.

There were a total of 125 (62.18%) females and 165 (66.26%) males who reported that they did not switch off their cellular phones at night. Furthermore, there were 48 (23.88%) of females and 57 (22.89%) of males who did not even switch off their cellular phones during school hours.

**Table 3: Communication applications**

	Male				Female			
	email n (%)	IM n (%)	chat n (%)	SN n (%)	email n (%)	IM n (%)	chat n (%)	SN n (%)
<b>Grade 8</b>	48 (52.7)	45 (49.5)	36 (39.6)	53 (57.6)	5 (7.0)	42 (59.2)	20 (28.2)	22 (31.0)
<b>Grade 9</b>	32 (50.8)	30 (47.6)	28 (44.4)	39 (61.9)	10 (15.2)	33 (51.5)	29 (43.9)	19 (28.8)
<b>Grade 10</b>	41 (43.2)	65 (68.4)	57 (60.0)	64 (66.7)	10 (15.6)	33 (51.6)	26 (40.6)	15 (23.4)
<b>Total</b>	121 (48.5)	140 (56.2)	121 (48.5)	156 (62.2)	25 (12.4)	108 (53.7)	75 (37.3)	56 (27.9)

IM = instant messaging      SN = social network

Communication using email, instant messaging, chats, and social networking protocols were higher among the male learners than the female learners. Social networking (62.2%) was the most preferred form of electronic communication among the males which was followed by instant messaging (56.2). Among the females the most preferred mode of electronic communication was instant messaging (53.7%) – via cellular phone or internet, followed by chatrooms (37.3%). The least preferred form of electronic communication, common to both the male and female groups, was email. Since 90.60% of the participants indicated that they owned cellular phones this would explain why instant messaging was the most preferred mode of electronic communication among the learners.

### 4.3. Findings and discussions

#### 4.3.1. Quantitative findings

**Table 4: Reports by victims of cyberbullying**

		In the last 2 months n (%)	Threatened n (%)	Rumours & slander n (%)	Messages and pictures to embarrass n (%)	Excluded from online game/ chat n (%)	Total
Female	Grade 8	10 (4.97)	8 (3.97)	16 (7.96)	14 (6.96)	17 (8.46)	65
	Grade 9	9 (4.47)	14 (6.96)	30 (14.90)	18 (8.95)	21 (10.44)	92
	Grade 10	8 (3.98)	18 (8.95)	24 (11.94)	16 (7.96)	15 (7.46)	81
	Total	27 (13.43)	40 (19.90)	70 (34.82)	48 (23.88)	53 (26.37)	238 (26.24)
Male	Grade 8	12 (4.78)	6 (2.39)	18 (7.17)	22 (8.76)	20 (7.97)	78
	Grade 9	11 (4.38)	8 (3.19)	9 (3.59)	8 (3.19)	9 (3.59)	45
	Grade 10	13 (9.96)	13 (9.96)	25 (9.96)	27 (10.84)	15 (6.02)	93
	Total	36 (14.34)	27 (10.76)	52 (20.72)	57 (22.89)	44 (17.67)	216 (18.01)
Total Male+Female		63 (13.89)	67	122	105	97	454 (22.13)

A description of the various forms of cyberbullying is presented in Table 4. Twenty-seven female (13.43%) and 36 male (14.45%) reported being victims of cyberbullying. The total number of victims among the male and female groups in Grade 8 was 13.58%, in Grade 9 (15.50%) and Grade 10 (13.20%). When asked specifically about the forms of cyberbullying the learners endorsed these more frequently (see Table 4). The most prevalent form of cyberbullying among the female group was ‘rumours and slander spread via the internet or cellular phone’ (34.82%). Among the male group the most prevalent form of cyberbullying was ‘chatroom messages or pictures that embarrassed and ridiculed’ them (22.89%).

The female victims also reported on other forms of cyberbullying that were used. Twenty-three (11.4 %) reported that they had been harassed, teased and verbally abused. The other forms of cyberbullying that they described in detail included name-calling, slander, rumours and pornography.

**Table 5: Reports by perpetrators of cyberbullying**

		In the last 2 months n (%)	Threatened by someone n (%)	Rumours n (%)	Messages and pictures to embarrass n (%)	Excluded from online game chat n (%)
<b>Female</b>	<b>Grade 8</b>	12 (5.97)	11 (5.47)	11 (5.47)	11 (5.47)	16 (7.96)
	<b>Grade 9</b>	14 (6.96)	7 (3.48)	16 (7.96)	11 (5.47)	18 (8.95)
	<b>Grade 10</b>	9 (4.47)	10 (4.97)	10 (4.97)	8 (3.98)	14 (6.96)
	<b>Total</b>	35 (17.41)	28 (13.93)	37 (18.41)	30 (14.93)	48 (23.88)
<b>Male</b>	<b>Grade 8</b>	14 (5.57)	8 (3.19)	16 (6.37)	11 (4.42)	25 (9.96)
	<b>Grade 9</b>	13 (5.17)	9 (3.59)	9 (3.59)	9 (3.59)	14 (5.58)
	<b>Grade 10</b>	18 (7.22)	14 (5.57)	13 (9.96)	10 (4.02)	18 (7.23)
	<b>Total</b>	45 (18.07)	31 (12.35)	38 (15.14)	30 (12.05)	57 (22.89)

Table 5 presents the report of learners who perpetrated various forms of cyberbullying. It provides an insight into the total number of Grades 8-10, male (18.07) and female (17.41) learner perpetrators who cyberbullied their victims. The total number of perpetrators of cyberbullying among the male and female groups in Grade 8 was 16.05%, Grade 9 (20.93%) and in Grade 10 (16.98%). ‘Excluding classmates from online games and chats’ was the most common form of cyberbullying used by perpetrators among the grade 8-10 learners in both the males and females groups. There were no sex differences among perpetrators of cyberbullying. Further, perpetrators refused to provide additional information on how they cyberbullied their victims.

**Table 6: Relationship between victims/non-victims and perpetrators/non-perpetrators of cyberbullying and socio-economic status and grade**

Variables		Victim n%	NonVictim n%	Perpetrator n%	Non-perpetrator n%
<b>Fathers occupation</b>	<b>Professional</b>	12 (19.0)	117 (31.3)	21 (26.3)	106 (30.4)
	<b>Semi-professional</b>	17 (27.0)	147 (39.3)	26 (32.5)	135 (38.7)
	<b>Unskilled</b>	3 (4.8)	15 (4.0)	3 (3.8)	14 (4.0)
	<b>Unemployed</b>	2 (3.2)	8 (2.1)	2 (2.5)	8 (2.3)
<b>Mother's occupation</b>	<b>Professional</b>	17 (27.0)	90 (24.1)	20 (25.0)	85 (24.4)
	<b>Semi-professional</b>	10 (15.9)	101 (27.0)	16 (20.0)	94 (26.9)
	<b>Unskilled</b>	5 (7.9)	23 (6.1)	5 (6.3)	21 (6.0)
	<b>Unemployed</b>	31 (49.2)	157 (42.0)	39 (48.8)	146 (41.8)
<b>Socio-economic Status</b>	<b>Wealthy</b>	10 (15.9)	49 (13.1)	21 (14.9)	46 (13.2)
	<b>Upper Middle</b>	9 (14.3)	90 (24.1)	36 (25.5)	82 (23.5)
	<b>Middle</b>	17 (27.0)	132 (35.3)	46 (32.6)	127 (36.4)
	<b>Working</b>	11 (17.5)	64 (17.1)	18 (12.8)	54 (15.5)
	<b>Welfare</b>	9 (14.3)	18 (4.8)	10 (7.1)	18 (5.2)
<b>Grade</b>	<b>8</b>	22 (34.9)	135 (36.1)	26 (32.5)	129 (37.0)
	<b>9</b>	20 (31.7)	104 (27.8)	27 (33.8)	96 (27.5)
	<b>10</b>	21 (33.3)	135 (36.1)	27 (33.8)	124 (35.5)

Table 6 shows the occupation ranking of paternal and maternal caregivers of victims, non-victims, perpetrators and non-perpetrators. Also included are the ranking of their socio-economic status. Caregivers of perpetrators and victims were less professionally qualified than non-victims and non-perpetrators. Concerning the socio-economic status of the family, learners from wealthy and poorer families receiving social welfare were equally prone to becoming victims of cyberbullying. In terms of perpetrators of cyberbullying there are indications that a greater number of them are from families with a higher socio-economic status.

**Table 7: Mode to transmit Cyberbullying to victims**

	Male				Female			
	email n (%)	IM n (%)	chat n (%)	SN n (%)	email n (%)	IM n (%)	chat n (%)	SN n (%)
<b>Grade 8</b>	5 (5.4)	6 (6.6)	4 (4.4)	2 (2.2)	1 (1.4)	9 (12.7)	4 (5.6)	1 (1.4)
<b>Grade 9</b>	1(1.6)	5 (7.9)	1 (1.6)	1 (1.6)	2 (3.0)	4 (6.1)	5 (7.6)	1 (1.5)
<b>Grade 10</b>	1 (1.1)	7 (7.4)	9 (9.5)	1 (1.1)	2 (3.1)	6 (9.4)	7 (10.9)	0 (0.0)
<b>Total</b>	7 (2.8)	18 (0.4)	14 (5.6)	4 (1.6)	5 (2.5)	19 (9.5)	16 (8.0)	2 (1.0)

IM = instant messaging      SN = social network

Table 7 indicated that amongst the male group chatrooms were most frequently used to cyberbully and the least used method was instant messaging. Among the female learners the most frequently used method of cyberbullying was instant messaging and the least was social networking.

**Table 8: Persons who inflicts cyberbullying**

		Friend n (%)	Fellow Student n (%)	Internet acquaintance n (%)	Someone else n (%)
<b>Female</b>	<b>Grade 8</b>	12 (16.9)	8 (11.3)	2 (2.8)	3 (4.2)
	<b>Grade 9</b>	5 (7.6)	11 (16.7)	2(3.0)	6 (9.1)
	<b>Grade 10</b>	11(17.2)	9 (14.1)	4(6.3)	4 (6.3)
	<b>Total</b>	28 (13.9)	28 (13.9)	8 (4.0)	13(6.5)
<b>Male</b>	<b>Grade 8</b>	10 (11.0)	7 (7.7)	4 (4.4)	5 (5.5)
	<b>Grade 9</b>	8 (12.7)	5 (7.9)	3(4.8)	15 (23.8)
	<b>Grade 10</b>	14(14.7)	11 (11.6)	4(4.2)	7(7.4)
	<b>Total</b>	32 (12.9)	23 (9.2)	11(4.4)	27(10.8)

I.Aquaintance = internet acquaintance

According to Table 8 cyberbullying was generally inflicted by someone known to the victim i.e., a friend or fellow student. This was the case for both the male and female groups. Thirteen in the female group (6.5%) had been cyberbullied by a stranger, enemy, past friend, relative or the perpetrator was a random person. A high number of Grade 9 male learners (23.8%) reported being cyberbullied by an individual whom they described as ‘someone else’. ‘Internet acquaintance’ was the lowest reported for both male and females.

**Table 9: Disclosure of cyberbullying by victims**

	Male				Female			
	Friends n (%)	Parents n (%)	Teacher n (%)	None n (%)	Friends n (%)	Parents n (%)	Teacher n (%)	None n (%)
<b>Grade 8</b>	13 (13.5)	7 (7.6)	1 (1.1)	6 (6.5)	16 (22.5)	12 (16.9)	2 (2.8)	8 (11.3)
<b>Grade 9</b>	4 (6.3)	11 (17.5)	1 (1.6)	9 (14.3)	14 (21.2)	15 (22.7)	1 (1.5)	6 (9.1)
<b>Grade 10</b>	9 (9.4)	12 (12.5)	1 (1.0)	13 (13.5)	15 (23.4)	13 (20.3)	3 (4.7)	5 (7.8)
<b>Total</b>	27 (10.7)	30 (12.0)	3 (1.2)	28 (11.2)	45 (22.4)	40 (20.0)	6 (3.0)	19 (9.5)

The learners (both the males and female) preferred to disclose that they were victims of cyberbullying to their friends. Parents were the next preferred choice. Teachers and school personnel were the least chosen group to whom learners disclosed that they were cyberbullied. A substantial number of learners (37.01%) did not disclose to anybody that they were cyberbullied. The tendency not to disclose was higher amongst males (11.20%) than females (9.50%). See Table 9.

**Table 10: Support for victims of cyberbullying**

		Not at all n (%)	Somewhat no n (%)	Somewhat yes n (%)	Very Much Yes n (%)
<b>Female</b>	<b>Grade 8</b>	13 (18.3)	6 (8.5)	8 (11.3)	21 (29.6)
	<b>Grade 9</b>	14 (21.2)	0 (0.0)	10 (15.2)	18 (27.3)
	<b>Grade 10</b>	27(42.2)	1 (1.6)	5 (7.8)	13 (20.3)
	<b>Total</b>	54 (26.9)	7 (3.5)	23 (11.4)	52 (25.9)
<b>Male</b>	<b>Grade 8</b>	14 (15.4)	3 (3.3)	8 (8.8)	8 (8.8)
	<b>Grade 9</b>	13 (20.6)	0 (0.0)	6 (9.5)	10 (15.9)
	<b>Grade 10</b>	20 (21.1)	3 (3.2)	8 (8.4)	16 (16.8)
	<b>Total</b>	47 (18.9)	6 (2.4)	22 (8.8)	34 (13.7)

Table 10 shows that more females endorsed support (37.3%) when they were cyberbullied compared to those who did not (30.4%) whereas among the male group 22.5% received support and 21.3% did not receive support.

**Table 11: Help received for victims of cyberbullying**

		Not at all n (%)	Somewhat no n (%)	Somewhat yes n (%)	Very Much Yes n (%)
Female	Grade 8	12 (16.9)	3 (4.2)	16 (22.5)	17 (23.9)
	Grade 9	8 (12.1)	2 (3.0)	13 (19.7)	17 (25.8)
	Grade 10	14 (21.9)	4 (6.3)	11 (17.2)	20 (31.3)
	Total	34 (16.9)	9 (4.8)	40 (19.9)	54 (26.9)
Male	Grade 8	14 (5.97)	3 (5.47)	8 (5.47)	8 (5.47)
	Grade 9	13 (6.96)	0 (3.48)	6 (7.96)	10 (5.47)
	Grade 10	20 (4.47)	3 (4.97)	8 (4.97)	16 (3.98)
	Total	47 (18.9)	6 (2.4)	22 (8.8)	34 (13.7)

Table 11 shows that among the female group, 46.8% indicated that they received help when they were cyberbullied and 43% did not receive any help whereas among the male group 22.5% indicated that they received help and 21.3% did not. The results in Table 4 and Table 10 suggested that in spite of the high report of cyberbullying among the learners many participants do not receive or seek support and/or help.

**Table 12: Life Satisfaction between victims and perpetrators of bullying and cyberbullying**

Items for Life Satisfaction	Bully Victim		Bully Perpetrator		Cyberbully Victim		Cyberbully Perpetrator	
	$\chi^2$	Sig.	$\chi^2$	Sig.	$\chi^2$	Sig.	$\chi^2$	Sig.
1. In most cases my life is close to ideal	1.870	.392	2.404	.301	1.433	.488	.590	.745
2. The conditions of my life are excellent	1.393	.498	1.949	.377	.337	.845	.703	.704
3. I am satisfied with my life	2.559	.278	3.693	.158	4.328	.115	1.877	.391
4. So far, I got the important things I want in life	11.269	.004*	.731	.694	2.798	.247	1.521	.467
5. If I could live my life over I would change almost nothing	2.883	.237	6.213	.045*	1.930	.381	1.010	.604
Total score	10	.095	10	.363	10	.138	10	.297

\* p<0.05      df=2

In Table 12 the Pearson's Chi-Squared Test was used to compare the categorical data of victims and perpetrators of direct bullying and the victims and perpetrators of cyberbullying on the Diener's Life Satisfaction scale. The results showed that there was no overall significant difference in the responses of victims or perpetrators in both the bullying and cyberbullying groups. However there was significance on Item 4 "So far I got the important things in life" ( $\chi^2= 11.269$ , .004:  $p < 0.05$ ) for victims of bullying. This indicated that although they were victims of bullying they felt that they had "got the important things in life". There was also a significant difference on Item 5, "If I could live my life over I would change almost nothing" ( $\chi^2= 6.213$ , 0.45:  $p < 0.05$ ) for perpetrators of bullying, indicating that perpetrators did not see the need to change anything in their lives.

**Table 13: Relationship between victims and non-victims of cyberbullying on Life Satisfaction**

Items for life satisfaction	Victims		Non-Victims		F**	Sig P value
	Mean	SD	Mean	SD		
1. In most cases my life is close to ideal	2.32	.668	2.42	.652	0.033	.855
2. The conditions of my life are excellent	2.46	.643	2.51	.613	0.395	.530
3. I am satisfied with my life	2.47	.695	2.63	.582	8.019	.005*
4. So far, I got the important thing I want in life	2.50	.647	2.63	.580	4.018	.046
1. If I could live my life over I would change almost nothing	2.24	.734	2.11	.781	0.122	.727
<b>Total</b>	11.92	2.216	12.29	2.044	0.028	.868

\*  $p < 0.05$

\*\* Levene's Test

T-tests were used to compare life satisfaction between victims and non-victims of cyberbullying and Levene's Test was used to establish the significance. Table 13 presents the results of the Life Satisfaction Scale for each group, those who were cyberbullied (victims) and those who were not cyberbullied (non-victims). The mean for Item 1, "In most cases my life is close to ideal"; Item 2, "The conditions of my life are excellent."; Item 4, "So far, I got the important thing I want in life" and Item 5, "If I could live my life over I would change almost nothing", were similar. However on Item 3, "I am satisfied with my life" the mean score for victims was 2.47 (SD .695) and for non-victims

the mean score was 2.63 (SD .582) these means were significantly different between the groups ( $F=8.019$ ; sig .005:  $p < 0.05$ ), indicating that non-victims endorsed that they were satisfied with life.

**Table 14: Responses of victims & non-victims, perpetrators & non-perpetrators of cyberbullying on the Life Satisfaction Scale**

Life Satisfaction Range score	Victims		Non-Victims		Total		Perpetrators		Non-Perpetrators		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
<b>Dissatisfied (5-8)</b>	6	9.84	14	3.90	20	4.78	4	5.13	17	5.08	21	5.10
<b>Neutral (9-11)</b>	16	26.23	103	28.69	119	28.33	20	25.64	98	29.34	118	28.64
<b>Satisfied (12-15)</b>	39	63.93	242	67.40	281	66.90	54	69.23	219	65.57	273	66.26
<b>Total</b>	61	14.52	359	85.48	420	100	78	18.93	334	81.06	412	100

Table 14 indicated the total scores of victims and non-victims and perpetrators and non-perpetrators of cyberbullying for the Life Satisfaction Scale (LSS). The scores on LSS is classified into three levels: ‘satisfied’ (12-15), ‘neutral’ (9-11) and ‘dissatisfied’ (5-8). Of the total number of participants 66.58% were ‘satisfied’, 28.49% were ‘neutral’ and 4.94% were ‘dissatisfied’.

A comparison of those who were victims of cyberbullying on the Life Satisfaction Scale showed that victims of cyberbullying (14.52%) scored lower than those who were not (85.48%). Of those who were victims of cyberbullying, 9.84% were dissatisfied and among those who were not cyberbullied 3.90% were dissatisfied. A comparison of perpetrators of cyberbullying and those who were not, was a 3.66% margin of difference in favour of those who were satisfied. A comparison of victims and perpetrators indicated that the victims of cyberbullying were the most dissatisfied group (9.83%) and they also had the lowest ‘satisfied’ group score. Perpetrators of cyberbullying had the highest group score for ‘satisfied’ (69.23%) and the lowest group score for ‘dissatisfied’ (3.13%).



An analysis of the data also indicated that the total scores for the male and female groups from Grade 8-10 were similar on the LSS. The responses and the total scores for the LSS were also similar in all four schools and there was no statistical difference in responses of participants from urban, semi-rural and rural schools.

#### **4.3.2. Cyberbullying and Well-being**

##### **4.3.2.1. Victims of Cyberbullying**

There was a significant difference ( $p < 0.01$ ), between victims and non-victims, on their total score performance on the Psychological Well-being Scale. The victims (see Table 15) had a lower mean 48.38 (SD 8.329) than the non-victims (52.34, SD 8.151), indicating that victims endorsed lower psychological well-being than non-victims.

When considering the individual items, Item 3 “It is hard for me to enjoy my life”, was significant for victims (2.21: SD .845) and non-victims (2.55: SD .704) sig .003,  $p < 0.05$ . Item 5 “I really do not know what I am good at” was significantly different for victims (2.14: SD .913) and non-victims (2.37: SD .794) sig .041,  $p < 0.05$ . Item 10 “I feel lonely even when I am with people” was also significantly different for victims (2.30: SD .835) and non-victims (2.64: SD .680) sig .003,  $p < 0.05$ . Item 12 “It is hard for me to accept myself the way I am”, was found to be significantly different for victims (2.21: SD .845) and non-victims (2.60: SD .724) sig .001,  $p < 0.01$ . There was also a significant difference in the responses for Item 17 “I would like to change many things about myself to like myself more” by the victims (1.73: SD .787) and non-victims (2.16: SD .857) sig .000,  $p < 0.01$ . The responses to Item 18 “It feels impossible to deal with the problems I have”, was significantly different for victims (2.00: SD .861) and non-victims (2.41: SD .779) sig

.000,  $p < 0.01$ . There was also a significant difference in the responses for Item 19 “I cry every night” by the victims (2.52: SD.780) and non-victims (2.78: SD. 564) sig .000,  $p < 0.05$ . All of the items support the view that victims have a lower psychological well-being than non-victims.

#### **4.3.2.2. Perpetrators of Cyberbullying**

There was a significant difference (see Table15) between the means of those who perpetrated (48.92: SD 7.64) cyberbullying and those who had not (52.43: SD 8.32) on the psychological well-being scale ( $p < 0.01$ ), indicating that perpetrators have a lower psychological well-being than non-perpetrators.

Also in this group were also significant differences on the following item: Item 3 “It is hard for me to enjoy my life”; with a significant difference for perpetrators (2.21: SD .845) and non-perpetrators (2.55: SD .704) sig .003,  $p < 0.05$  and Item 5 “I really do not know what I am good at”, was also significantly different for perpetrators (2.14: SD .913) and non-perpetrators (2.37: SD .794) sig .041,  $p < 0.05$ . There was a significant difference between the responses of perpetrators (1.65: SD .797) and non-perpetrators (1.93, SD .801) on Item 6, “I worry about many things”, sig .005,  $p < 0.05$ . Item 8 “I do not feel good about myself”, was also significantly different for perpetrators (2.38: SD .862) and non-perpetrators (2.59: SD .692) sig .040,  $p < 0.05$ . There was also a significant difference in the response to Item 11 “I cannot concentrate when doing school work”, for perpetrators (2.16: SD .906) and non-perpetrators (2.49, SD .726) sig .003,  $p < 0.05$ . On Item 12 there was a significant difference in the response for perpetrators (2.19: SD .901) and non-perpetrators

**Table 15: Relationship between victims/non-victims and perpetrators/non-perpetrators of cyberbullying on Well-Being**

Items for psychological Well-Being	Victims		Non-victims		Sig	Perpetrators		Non-perpetrators		Sig
	Mean	SD	Mean	SD		Sig	SD	Mean	SD	
1. I feel sure of myself in most situations	2.56	.778	2.57	.633	.852	2.55	.745	2.59	.617	.639
2. People do not understand me	2.14	.692	2.23	.750	.404	2.09	.766	2.24	.732	.089
3. It is hard for me to enjoy my life	2.21	.845	2.55	.704	.003*	2.28	.831	2.54	.704	.010*
4. I know how to deal with upsetting problems	2.37	.829	2.41	.754	.692	2.35	.843	2.40	.751	.571
5. I really do not know what I am good at	2.14	.913	2.37	.794	.041*	2.17	.897	2.38	.784	.046*
6. I worry about many things	1.90	.777	1.87	.811	.782	1.65	.797	1.93	.801	.005*
7. My classmates like me the way I am	2.54	.737	2.55	.700	.930	2.48	.826	2.56	.674	.0385
8. I do not feel good about myself	2.41	.796	2.57	.720	.110	2.38	.862	2.59	.692	.040*
9. I have a feeling that something is wrong with me	2.27	.827	2.49	.805	0.44	2.31	.880	2.52	.779	.060
10. I feel lonely even when I am with people	2.30	.835	2.64	.680	.003*	2.46	.826	2.61	.684	.132
11. I cannot concentrate when doing school work	2.21	.883	2.48	.742	.010*	2.16	.906	2.49	.726	.003*
12. It is hard for me to accept myself the way I am	2.21	.845	2.60	.724	.001**	2.19	.901	2.63	.685	.000**
13. I think I am a good person	2.75	.507	2.72	.595	.711	2.68	.632	2.72	.582	.522
14. I trust myself with my own abilities	2.79	.600	2.70	.600	.255	2.73	.675	2.70	.596	.705
15. I do not believe people who say good things about me	2.14	.859	2.34	.755	0.55	2.06	.847	2.37	.745	.001**
16. I feel shy and unsure of myself when I am with other people	2.10	.893	2.24	.846	.203	2.15	.915	2.25	.833	.346
17. I would like to change many things about myself to like myself more	1.73	.787	2.16	.857	.000**	1.79	.822	2.17	.847	.000**
18. It feels impossible to deal with the problems I have	2.00	.861	2.41	.779	.000**	2.06	.817	2.42	.786	.000**
19. I cry every night	2.52	.780	2.78	.564	.015*	2.60	.739	2.78	.564	.048*
20. I enjoy the things I do	2.49	.759	2.69	.630	.054	2.53	.826	2.70	.584	.068
21. I have a good idea of what I want to do with my life	2.60	.708	2.70	.613	.242	2.69	.628	2.68	.633	.973
<b>Total</b>	<b>48.38</b>	<b>8.329</b>	<b>52.34</b>	<b>8.151</b>	<b>.000**</b>	<b>48.92</b>	<b>7.64</b>	<b>52.43</b>	<b>8.32</b>	<b>.001**</b>

\* p<0.05 \*\* p<0.01

(2.63, SD .685) sig .000, p<0.01. This item was also common for victims and non-victims of cyberbullying, both at the 99% level of confidence. On Item 15 “I do not believe people who say good things about me”, was a significant difference in the response for perpetrators (2.06: SD .847) and non-perpetrators (2.37, SD .745) sig .001, p<0.01. On

Item 17 “I would like to change many things about myself to like myself more”, there was a significant difference in the response for perpetrators (1.79: SD. 822 and non-perpetrators (2.17, SD. 847) sig .000,  $p < 0.01$ .

Similarly on Item 18 “It feels impossible to deal with the problems I have”, there was a significant difference in the response for perpetrators (2.06: SD. 817 and non-perpetrators (2.42: SD. 786) sig .000,  $p < 0.01$ . There was also a significant difference in the response to Item 19 “I cry every night”, for perpetrators (2.60: SD. 739) and non-perpetrators (2.78: SD. 564) sig .048,  $p < 0.05$ . An analysis of the individual items support the view that perpetrators have a lower well-being than non-perpetrators.

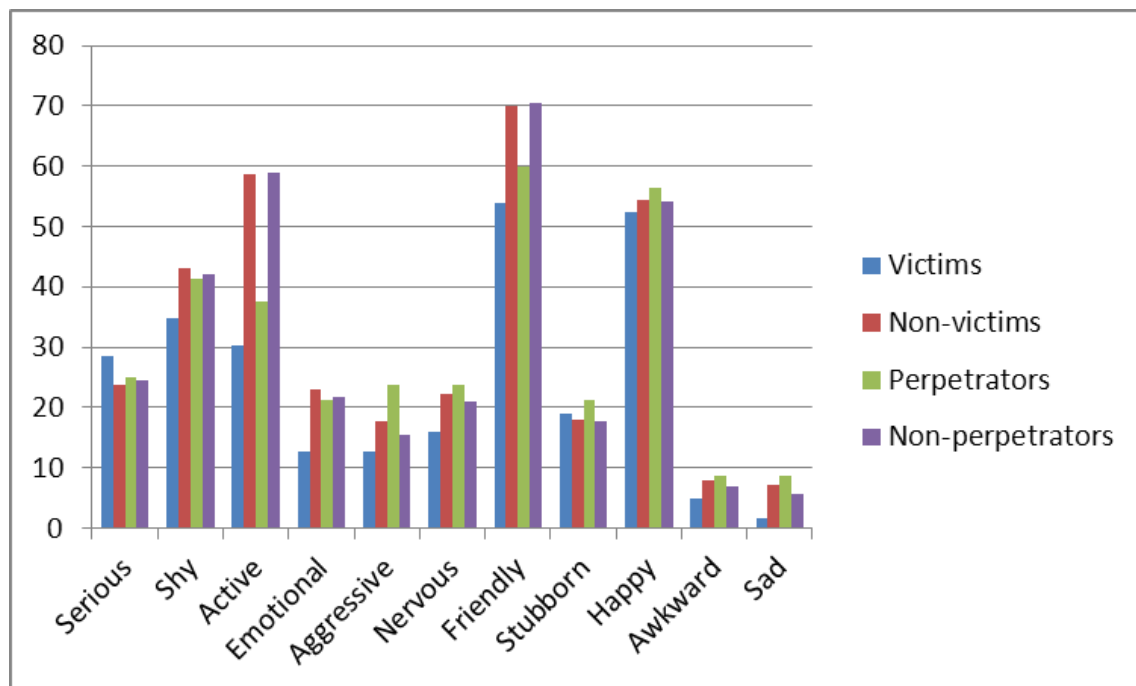
The total score for the psychological well-being scale for perpetrators and non-perpetrators was positively significant at the 99% level of confidence. There was no significant difference between the schools, whether they were urban, rural or semi-rural on the total score for psychological well-being.

Table 16 gives an indication of the way that victims and non-victims and perpetrators and non-perpetrators of cyberbullying described their behavioural characteristic. In comparison to the other groups victims of cyberbullying were highly rated for being serious and they were rated lower for being friendly, emotional, stubborn and happy.

Among the different groups, perpetrators of cyberbullying were rated among the highest for being aggressive, nervous, stubborn, happy, awkward and sad. Compared to the other groups perpetrators of cyberbullying did not obtain the lowest rating on any of the behavioural characteristic (See Figure 1).

**Table 16: Comparison of behavioural characteristic**

Behavioural description	Victims n (%)	Non-victims n (%)	Perpetrators n (%)	Non-perpetrators n (%)
Serious	18 (28.6)	89 (23.8)	20 (25.0)	86 (24.6)
Shy	22 (34.9)	161 (43.0)	33 (41.3)	147 (42.1)
Active	19 (30.2)	219 (58.6)	30 (37.5)	206 (59.0)
Emotional	08 (12.7)	86 (23.0)	17 (21.3)	76 (21.8)
Aggressive	08 (12.7)	66 (17.6)	19 (23.8)	54 (15.5)
Nervous	10 (15.9)	83 (22.2)	19 (23.8)	73 (20.9)
Friendly	43 (54.0)	262 (70.1)	48 (60.0)	246 (70.5)
Stubborn	12 (19.0)	67 (17.9)	17 (21.3)	62 (17.8)
Happy	33 (52.4)	204 (54.5)	45 (56.3)	189 (54.2)
Awkward	03 (4.8)	29 (7.8)	07 (8.8)	24 (6.9)
Sad	01 (1.6)	27 (7.2)	07 (8.8)	20 (5.7)

**Figure 1: Comparison of behavioural characteristics**

**Table 17: Report by victims/non-victims and perpetrators/non-perpetrators of cyberbullying on social and behavioural items**

	Victims		Non-victims		Perpetrators		Non-Perpetrators	
	Yes(%)	No(%)	Yes(%)	No(%)	Yes(%)	No(%)	Yes(%)	No(%)
Do you like school?	45 (71.4)	16 (25.4)	286 (76.5)	77 (20.6)	58 (72.5)	17 (21.3)	265 (75.9)	77 (22.1)
Do you like the teachers?	47 (74.6)	14 (22.2)	270 (72.2)	71 (19.0)	58 (72.5)	19 (23.8)	254 (72.8)	64 (18.3)
Do you have many friends?	49 (77.8)	14 (22.2)	327 (87.4)	41 (11.0)	67 (83.8)	11 (13.8)	303 (86.8)	42 (12.0)
Do you like neighbourhood you live in?	48 (76.2)	15 (23.8)	316 (84.5)	54 (14.4)	68 (85.0)	10 (12.5)	290 (83.1)	57 (16.3)
Did you ever get into trouble at school?	34 (54.0)	26 (41.3)	174 (46.5)	191 (51.1)	49 (61.3)	27 (33.8)	156 (44.7)	187 (53.6)
Did you have problems learning to read?	18 (28.6)	44 (69.8)	37 (9.9)	330 (88.2)	19 (23.8)	60 (75.0)	33 (9.5)	309 (88.5)

Table 17 presents the results for items which indicate social and behavioural experiences of victims and non-victims and perpetrators and non-perpetrators of cyberbullying. In Items 1 “Do you like school?” 340 (75.6%) of the participants liked school, 97 (21.6%) did not like school and 10 (2.2%) liked school sometimes. A total number of 3 (0.7%) did not respond to this item. In Item 2 “Do you like the teachers?” 329 (73.1%) of the participants indicated that they liked their teachers, 85 (18.9%) did not like their teachers, 32 (7.1%) liked their teachers sometimes and 1 (0, 2%) did not respond to this item. The “Yes” response for Item 1 and Item 2 was similar across the groups but the “No” response was higher for victims in Item 1 and Item 2 and for perpetrators of cyberbullying it was higher for item 2.

Considering Item 3, there was a total of 386% (85.8%) of all the participants who indicated that they did have friends, 58 (12.9%) indicated they did not have friends, 4 (.9%) indicated that they had friends sometimes and 2 (0.4%) did not respond to this question. The results of Item 3 “Do you have many friends?” showed that there was a difference in the responses of the groups. The victims of cyberbullying obtained the lowest percentage score for “Yes” and the highest percentage score for “No” compared to

the other group. This meant that victims had fewer friends than the other groups. Victims of cyberbullying scored similarly on Item 4 “Do you like the neighbourhood you live in?” A higher percentage of victims did not like the neighbourhood they lived in when compared to the other groups.

In terms of Item 5 “Did you ever get into trouble at school?” there were 259 (57.6%) who did not respond to this question, 191 (42.4%) indicated that they did get into trouble at school for poor discipline, violence, school work, vandalism, victimisation and bullying. Among the groups perpetrators of cyberbullying obtained the highest score for “Yes” and the lowest score for “No”. Perpetrators of cyberbullying were more in trouble at school (61.3%) compared to non-perpetrators (44.7%), victims (54.0%) and non-victims (46.5%).

In terms of Item 6, “Did you have problems learning to read?” there were a total of 385 (85.6%) of the participants who did not experience problems learning to read, 57 (12.7%) did experience problems learning to read and 8 (1.8%) did not respond to this item.

Victims of cyberbullying had the highest score (28.6%) for “Yes” to experiencing problem learning to read whereas the non-victims recorded 9.9% who had problems learning to read. Perpetrators of cyberbullying had the second highest score (23.8%) compared to the other groups in experiencing difficulty learning to read. Both victims and perpetrators of cyberbullying reported a difficulty learning to read. Figure 2 graphically represents these findings.

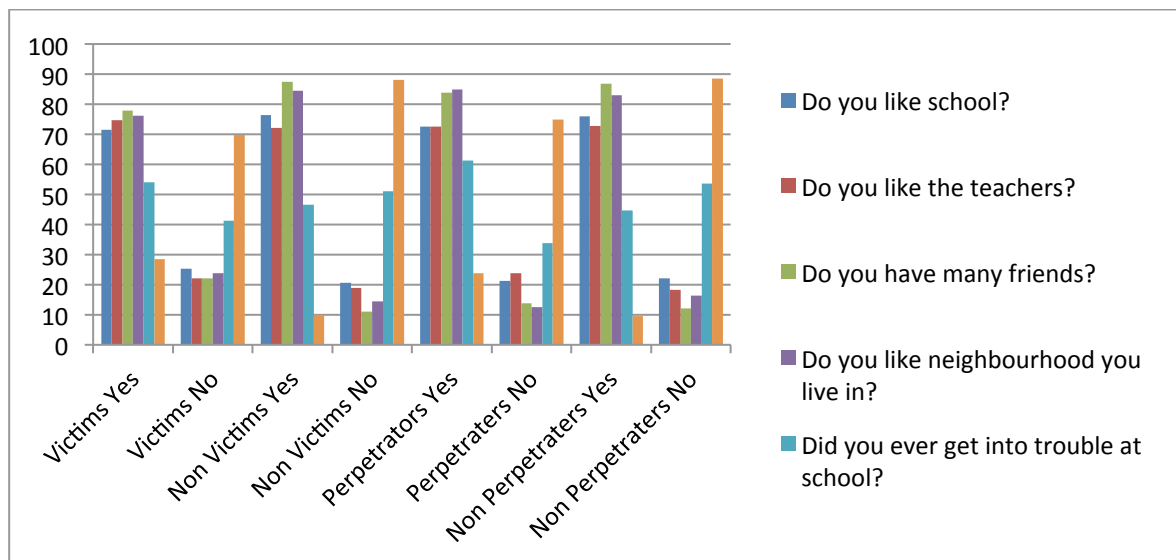


Figure 2: Social and behavioural factors and Cyberbullying

#### 4.4. Qualitative findings

##### 4.4.1. Victims' Descriptions

The cyberbullying questionnaire included two open ended questions. The first question was directed to participants who were victims of cyberbullying and they were asked:

*"If you were a victim of cyberbullying, in whatever form, please give a brief description of what happened:"*

Many of the participants did not answer this question. Among the female participants, 65 (91.5%) Grade 8, 51(77.3%) Grade 9 and 48 (75%) Grade 10 did not answer this question. Among the males participants the responses were as follows: 75 (82.4) Grade 8, 51 (81%) Grade 9 and 84 (88.4%) Grade 10 did not answer the question.

Of the 18.41% of female participants who responded to this question the forms of cyberbullying which they listed included: threats (4.47%); vulgar swearing and abuse (3.48%); slander and rumours (2.49%) and harassment (2.49%). Of the 12.45% male



participants their response included: harassment (3.21%); threats (2.41%), teasing (2.0%) and vulgar swearing and abuse (1.61%).

None of the victims rendered a brief description of what happened but simply answered monosyllabically using the form of cyberbullying inflicted on them. Therefore this open ended question did not yield as much information as was intended.

#### **4.4.2. Perpetrators' descriptions**

The second question was directed at the perpetrators of cyberbullying and they were asked:

*“If you cyberbullied someone else, in whatever form, please describe how you did it and what happened.”*

Again many of the participants did not answer this question. Among the female participants the results were as follows: 69 (97.2%) Grade 8 female learners, 60 (90.9%) Grade 9 and 56 (87.5%) Grade 10 did not answer this question. Among the males 80 (87.9%) Grade 8, 58 (92.1%) Grade 9 and 89 (93.7%) Grade 10 did not answer the question.

There were 5.97% of female participants who responded to this question. The forms of cyberbullying which they described that they inflicted on victims was included: vulgar swearing and abuse (2.49%); slander and rumours (0.47%) and harassment (0.99%). For male participants who responded to this question (5.62%) they indicated: threats, teasing and vulgar swearing and abuse.

None of the victims rendered a description of how they cyberbullied nor described the process of how it happened. Again the responses were monosyllabic and participants only indicated the form of cyberbullying they inflicted on the victim.

The open ended question again did not yield as much information as was intended. Therefore common factors could not be found in the responses. The information could not be summarised nor thematically analysed.

## **4.5. DISCUSSION**

### **4.5.1. Prevalence**

This study indicated that 199 (44.22%) of the total sample population reported that they were victims or perpetrators of cyberbullying. There were 127 (28.22%) who identified themselves as victims of various forms of cyberbullying and 72 (16.0 %) who admitted to be perpetrators, inflicting various forms of cyberbullying on others. The results in this study are much lower than the study done among rural and urban school in central Saskatchewan among Grade 7-9 students (Cochrane, 2008) which showed that half the participants reported that they were cyberbullied and one-third admitted that they had cyberbullied others. On the other hand it was much higher than a study by Smith, *et al.* (2008) which found that among the 92 students who were between the ages of 11 and 16 there were 22% who reported that they had been victims of cyberbullying. A later online study conducted across 2, 094 secondary schools in England by Beatbullying found that 30% of the 11-16 year olds surveyed experienced some form of cyberbullying (Paine, 2009). The prevalence rates in the current study support the hypothesis that there is a high prevalence of cyberbullying in secondary schools in KwaZulu-Natal among the Grade 8-10 learners.

### **4.5.2. Forms and conventions of Cyberbullying**

Another finding of this study included the regularity and occurrence of the different forms of cyberbullying that were used to inflict harm on victims. The most frequent form of

cyberbullying by victims was denigration which is to spread bad rumours and slander using the internet or cellular phone. This form of cyberbullying was experienced by a total of 27% of the victims. The results showed that denigration was used about 14% more frequently among the females than the males. Many studies have found similar results (Cochrane, 2008; Smith, et al., 2008). The hurtful messages used in this convention are most often untruths that are intended to damage the reputation and existing friendships of the victim. This type of social cruelty raises many emotional and psychological concerns for the victim and may cause the victim to feel hurt, ashamed and often leads to the loss of self-esteem and depression (Noble, 2009). In chapter two, the case study of Ryan Patrick Halligan was discussed, highlighting his plight where the cyberbullying arsenal became so cruel and destructive that he felt helpless, embarrassed and ashamed and this led to him committing suicide and not seeking help from anyone (Halligan, 2008). The detrimental effects for the individual and the family (Noble, 2009) are high in spite of these acts sometimes being carried out in jest or without malicious intent. An online survey conducted by Kids Help Phone found that the most frequent online bullying according to Line (2007) was having rumours spread about the victims (52%). This is almost twice as much as was experienced by learners in this study. The present study revealed that 16% of perpetrators of cyberbullying used the convention of denigration against their victims and there were no difference in the frequency of use by males and females.

The second most frequent convention of cyberbullying experienced by victims was outing and trickery. This is where emails, chatroom messages, or pictures are sent to embarrass and ridicule the victim. This was experienced by 23% of the perpetrators of cyberbullying. Lines (2007) reported that being called names and being made to feel bad was the most frequent form of online bullying indicated in the Kids Help Phone survey and that 76% of

the respondents in her study revealed that this form of online bullying was used against them. This figure is also more than twice that experienced by the participants in this research. The present study showed that 13% of perpetrators of cyberbullying used outing and trickery and that this was the second highest preferred form of cyberbullying. The frequency of use of outing and trickery was the same for male and female perpetrators.

The third most frequent cyberbullying experience by victims was being excluded from chats or online games and being made to feel excluded from the group. There were almost 22% of participants who reported being victim to this convention of cyberbullying. The study conducted by Smith, *et al.* (2008) found that exclusion from the group was the lowest reported form of online bullying in the British sample. According to the present study almost 23% of perpetrator of cyberbullying used exclusion and was most frequently used to exclude classmates from online games and chats.

This study found that almost 15% of the participants were victims of harassment and threats by someone. The females reported 10% more frequent use in this form of cyberbullying than the males. Research by Ybarra and Mitchell (2004) conducted through a telephonic survey, among 10 to 17 year olds, yielded a much lower percentage of victims of harassment compared to the present study. Ybarra and Mitchell found that 7% of the respondents who were harassed online which was much lower than the almost 15% reported in the present study. However, Ybarra and Mitchell (2004) found that there were 15% of their respondents who reported that they had harassed others online whereas our study yielded a result of about 13% of perpetrators who harassed their victims by spreading cruel and hurtful messages. The data from this study confirms that cyberbullying is

prevalent in the secondary school in KwaZulu-Natal and is perpetrated through the use of various forms.

#### **4.5.3. Age, Sex, Socio- Economic Status and Urban/Rural Dichotomy**

About a third of the sample were raised by both their parents, one fifth by single parents and the remainder of the sample was either raised by a family member or did not provide this information. More than half of the respondents rated their families as wealthy to upper-middle income group, a third of them rated their families in the middle income group and there were 15 (3.3%) respondents who indicated that they received a welfare grant. There were 26 (5.8%) participants who did not respond to this item. The responses of learners did not correspond to the overall population statistics of South Africa. There are 15 million South Africans who benefit from the social assistance programmes of the government. Expenditure on grants increased from 3.2% of the gross domestic product to 3.5%.(Burger, 2011). There were 25.2% who are unemployed in the third quarter of 2011 (Fedec & Sousa, 2011) and this figure will continue to increase in the face of the global economic crisis.

The data on the occupation of paternal and maternal caregivers indicated that more than quarter of the sample had parents who were professional, one-third were semi-professional and more than a fifth indicated their caregivers were unemployed. There were fewer than 5% who reported that their caregivers were unskilled and a little less than 14% did not give this information. In this study there was no other structure put in place to corroborate the information given by the participants. Greater detailed personal profiling may assist for future research in this area. There may be a tendency for adolescence to over rate socio-economic standing and this may be associated with portraying a positive social

image be included with their peers. According to Williams (2010) South Africa has a small wealthy population and medium sized middle income and poor populations.

The data suggest that much of the cyberbullying among the participants, in the present study, was via cellular phone technology and instant messaging. It seems that socio-economic status did not prohibit young people from owning this “new must have accessory”. A much earlier survey in 2004, conducted by the Australian Psychological Society, among 258 students from Grade 7 to 12 in Melbourne and Sydney, found that 83% of the sample had cellular phone (Bauman, 2007). Cellular phones have evolved to the preferred way of communicating and keeping in touch with friends, acquaintances and family. It is a much more economically viable means of communication for young people. There were minor age differences in the prevalence of cyberbullying among the Grade 8, Grade 9 and Grade 10 learners. There were differences between males and females and these are highlighted throughout the discussion. Some studies have found that generally, females inflict cyberbullying more than males through instant messaging, online conversations and emails (Keith & Martin, 2005). This study yielded similar results but male perpetrators of cyberbullying used emails more frequently than females.

Concerning the socio-economic status of the family, learners from wealthy and poorer families were equally prone to becoming victims of cyberbullying. In terms of perpetrators of cyberbullying there are indications that a greater number of them are from the higher socio-economic status group. There were no differences in terms of the urban-rural dichotomy and this will be further highlighted in the discussion.

#### 4.5.4. Mode/Method to transmit Cyberbullying

Across Grades 8 to 10 the highest mode of technology accessible was cellular phones. Close to 90% of learners owned cellular phones, almost 40% owned a personal computer and about 26% had access to the internet. More males than females reported that they owned a cellular phone. It was these three modes of communication that were used in varying frequencies by the learners. Another important statistic that emerged was that over 60% of males and females did not switch off their cellular phones at night and one fifth of them even had their cellular phones on during school hours.

Another important finding concerned the different modes of electronic communication that the learners used. In order of preference it was found that about 50% used instant messaging; 47% used social networking; about 44% used chatrooms and 32% used email.

According to the results of the present study the most frequently used mode of cyberbullying was instant messaging which was reported by more than half the number of perpetrators. This was followed by chatrooms which was used by almost 42% of perpetrators and email which were used by almost 17% of perpetrators. Social networking sites such as Facebook, Myspace, MXit was endorsed by 8% of perpetrators. The study by Line (2007) reported that the most frequent mode of online bullying was instant messages (77%), email (37%) and social networking (34%). Our study on the frequency of use of each method was substantially lower. In the study by Paine (2009) it was found that a much larger percentage of the respondents reported that they were witnesses to others being cyberbullied and the results showed that respondents reported their personal cyberbullying experiences at a much lower rate. In another study, a survey of girls between the ages of 12 to 18 found that 74% of these adolescent girls spent the majority of their

time online in chatrooms or sending instant messages and email (Keith & Martin, 2005). In the present study females also spent more time in chatrooms and sent more instant messages than the males.

When compared to other cyberbullying studies, the present study is far less sophisticated in terms of design and execution, for example, Paine (2009) reported statistics of the actual websites where cyberbullying took place such as MySpace, Facebook, Bebo, MSN, Hotmail, Yahoo, YouTube, Flickr, Live Journal Piczo, etc. but this was not undertaken in this study. The repertoires of websites used by learners in the present study were only a few such as, MySpace and Facebook. The study by Smith, *et al.* (2008) incorporated a score for impact factor for the various forms of cyberbullying and showed that chatroom bullying, instant messaging and email bullying were negatively scored by respondents who felt that they were less damaging to the victim. Picture/video clips and phone call bullying were rated as forms of bullying that were more harmful to the individual. The present study did not include a score for the impact factor in the various forms of cyberbullying.

#### **4.5.5. Person's who inflict Cyberbullying**

According to the results, friends and fellow students were identified as the person who inflicted cyberbullying most frequently. Almost half of the victims, both male and female, identified their friends and fellow students as the person responsible for the harassment, rumours, threats and other electronic bullying violations that they experienced. It would appear that in cyberbullying, as in crimes such as sexual abuse and rape, the offense is generally committed by someone known to the victim. According to Hinduja and Patchin (2005) although cyberbullying does not involve personal physical contact between the offender and victim it remains psychologically and emotionally damaging to young people.



An adolescent who is already in the midst of several life changing challenges has, in addition, to deal with the betrayal by a friend as well as cope with the hurt and pain caused by the cyberbullying experience. Hinduja and Patchin (2005) points out that adolescents desperately seek affirmation and approval from peers. Firstly, the victim may have to deal with the loss of a friendship, find and adjust to a new social group and also find acceptance and a place in the new group. All of these demands cannot be easy for an adolescent and may have an effect on anxiety and stress levels. This could have far reaching implications for the psychological, physiological, behavioural, emotional and scholastic well-being of the individual. Research by Ybarra and Mitchell (2004) provides evidence that cyberbullying is also a significant health risk.

A third of the victims reported that they were cyberbullied by 'someone else' who they identified as an enemy, past friend, stranger or a random person. Of these almost 3% were reported as by random persons and past friends; 2 % by strangers and 1 % by an enemy. Research evidence suggests that there are persons, strangers and random persons, who are lurking in chatrooms and waiting for innocent and naïve young people to target as their prey (Matter, 2006). According to Lenhart (2008) there are many factors that correlate with online stranger contact. These are posting photos online, having an online profile, being female and using the internet to flirt. Further, the study found that 32% of young people had been contacted by strangers online; 21% had engaged an online stranger to find out more information about that person and 23% who had been contacted by a stranger online reported that they felt scared or uncomfortable because of the online encounter. Our study showed very negligible figures for these encounters.

There are many reasons why past friends and enemies cyberbully. Sometimes the motivation may be anger, frustration, revenge, asserting social power or to 'feed' the ego of the perpetrator (Sutton, 2011). According to Willard (2005) there are frequent internet surveys that show that parents are not involved in their children's online activities. Parents have a false sense of security that by installing filtering software that their children are safe from cyber victimisation.

#### **4.5.6. Disclosure of Cyberbullying by Victims**

The results indicated that 57% of learners told their friends that they were cyberbullied. Friends were ranked by victims as the primary person to engage about their cyberbullying ordeal. This is an expected response from adolescents who are generally most comfortable to share their experiences with friends who form their support system at this stage in their development. This is the preferred group with whom they feel they can share their secret so that they do not carry the burden on their own.

The results further indicated that 55% of learners informed their parents that they were cyberbullied. This figure was higher for females than males. It was surprising that such a large number of victims confided in their parents because communication between parents and adolescence decline at this stage of development and they want to become less dependent on their parents, assert their identity and establish their personal autonomy. It is, however, encouraging because adults are better able to assist them than any persons in their social group. The data showed that victims of cyberbullying rarely choose to reveal that they were cyberbullied to their teachers. Teachers were the last option to share information and talk about being cyberbullied. Only 7% of victims chose to report cyberbullying to the teacher. This is similar to other studies which found that parents and

friend were told about cyberbullying much more often than teachers or other adults at school (Smith, et al., 2008). They also found that friends were also ranked as the preferred choice, followed by parents and lastly teachers and other school personnel. Li (2006) who conducted a survey among 264 Canadian, Grade 7 and 9 students found that 36% of them reported that adults in school did not help them or try to stop the cyberbullying even when they informed them about the incident.

From the results in this study we may concluded that school personal were not involved in the management of cyberbullying. Although a large number of learners reported that they needed support and help (Table 10 & 11), they did not identify their teachers or other members from the school management teams as individuals who could assist them. Of concern is that there were more than 25% of the victims who did not report that they were cyberbullied to anyone. These figures appear to be similar to general survey figures for traditional forms of bullying (Whitney & Smith, 1993). In the present study it was found that more males than females did not report the incident to anyone. This may be so because of traditional gender roles and socially constructed expectations that being masculine is having power and being in control in emotional situations. Boys are expected to avoid any characteristics associated with feminine emotions because it is regarded as a sign of weakness. A study conducted in Australia and Austria on cyber-victimisation also found that girls were more likely to seek help than boys (Dooley, Grading, Strohmeier, Cross, & Spiel, 2010). The study by Smith, *et al.* (2008) concurs that a substantial number of respondents had also not told anybody, and this was true of all types of cyberbullying.

#### **4.5.7. Support and Help for Victims**

Victims of cyberbullying were asked, “When you did tell someone, did you get the feeling that, that person took your problem seriously?” The results showed that more learners identified themselves as victims of cyberbullying in this item than in the previous items, “How often in the last two months were you the victim of cyberbullying” (See Table 4). The variation in this response may be that respondents misunderstood the question.

There appeared to be a substantial number who felt that they were taken seriously and received the help and support that they needed. There was an equally substantial number who also felt that they were not taken seriously and felt unsupported and did not get the help that they wanted.

Several recommendations have been made in Chapter Five that may be used to improve and help create a support network that will alleviate the plight of those who are victims of the different forms and conventions of cyberbullying in South Africa.

#### **4.5.8. Life Satisfaction and Cyberbullying**

Since cyberbullying is pervasive in nature there are many researchers who postulate that involvement in cyberbullying will have a more profound and harmful effect on life satisfaction than would involvement in direct bullying (Kawalski, 2008; Willard, 2006; Ybarra & Mitchell, 2004). This study found that when victims and perpetrators of direct bullying were compared to victims and perpetrators of cyberbullying there was a significant difference in the response to the statement “So far I got the important things I want in life”, for the victims of bullying. There was also a significant different in the response to the statement “If I could live my life over I would change almost nothing” for

bully perpetrators. Victims and perpetrators of direct bullying appear to struggle with these issues and victims' responses showed that they appeared dissatisfied that they had not attained what they wanted in life so far. Perpetrators of bullying on the other hand appeared complacent and would not want to change anything in their lives even if they had another chance. This may suggest that they are not remorseful about their behaviour and personally sanctioned it as an acceptable way to behave. There was no overall significant difference in the responses of victims or perpetrators of bullying and cyberbullying.

The results pertaining to the relationship between victims and non-victims of cyberbullying on life satisfaction showed that there was a significant difference in the response to the statement "I am satisfied with my life". The apparent displeasure with life may suggest a link to the torment of cyber-abuse. The term is used by Parry Aftab and embraces far more than cyberbullying, includes sexting and sexual harassment (Sutton, 2011). Sexting is the act of sending sexually explicit messages or photographs, primarily from one cellular phone to another. This is a new "craze" that young people have become involved in. Sexual harassment online involves constant emailing to actual stalking of the victim. This leads to substantial emotional distress. Perpetrators may sometimes physically assault the victim if they frustrate or irritate them.

The results of the comparison of victims, non-victims, perpetrators and non-perpetrators of cyberbullying on the total LSS score, indicated that the victims of cyberbullying scored lower than non-victims on the LSS. A comparison of victims and perpetrators indicated that the victims of cyberbullying were the most dissatisfied group (9.83%) and they also had the lowest 'satisfied' group score. Perpetrators of cyberbullying had the highest group score for 'satisfied' (69.23%) and the lowest group score for 'dissatisfied' (3.13%). A

pattern seems to emerge with regard to the way perpetrators of cyberbullying rated items on the LSS which may indicate the development of narcissistic tendencies or traits in this cohort. They also appear 'satisfied' and expressed that they were not unhappy with themselves although cyberbullying is an anti-social behaviour. A study by Sourander *et al.*(2010) showed that perpetrators of cyberbullying showed higher than average rates of self-perceived difficulties in life. This is not similar to the reports of the perpetrators in this study who scored the lowest of all the groups for dissatisfied in the LSS. Being a victim of cyberbullying was associated with living in a family with other than two biological parents; perceived difficulties in emotions, concentration, behaviour, or getting along with other people; headache; recurrent abdominal pain; sleeping difficulties and not feeling safe at school (Sourander, *et al.*, 2010). Victims of cyberbullying in this study appear to share a pessimistic view of life.

A study by Gilman *et al.* (2006) found that high life satisfaction has a significant positive correlation with physical well being, interpersonal functioning, intrapersonal functioning and academic achievement. On the other hand several researchers have found that life satisfaction is negatively correlated with intrapersonal stress, internalising behaviours, smoking, heavy drinking of alcohol, use of drugs and physical inactivity (Gilman & Huebner, 2006; Strine, Chapman, Bulluz, Moriarty, & Mokdad, 2008). The finding made in a study by Ubertini (2010) is that a high life satisfaction did not protect adolescents from the negative impact of cyberbullying.

#### **4.5.9. Psychological Well-Being and Cyberbullying**

According to this study there was a significant difference between victims and non-victims on their total performance on the psychological well-being scale and this was also the case for perpetrators and non-perpetrators of cyberbullying.

##### **4.5.9.1. Victims of Cyberbullying**

Victims and non-victims scored differently on individual items such as: “It is hard for me to enjoy my life”; “I really do not know what I am good at”; “I feel lonely even when I am with people”; “It is hard for me to accept myself the way I am”; “I would like to change many things about myself to like myself more”; “It feels impossible to deal with the problems I have”; “I cry every night”.

It may appear that victims and non-victims scored themselves differently in terms of their psychological well-being. It was evident that victims did not like themselves; expressed a poor sense of self, low self-esteem and lack of self-confidence. It would appear that victims had more negative self-perceptions, which seemed to affect their psychological well-being and there were indications that they wanted to withdraw from people. Many expressed feeling of helplessness, loneliness, sadness, despair, anger, and self loathing. These feelings may be associated with depressive symptoms. A study by Ubertini (2010) indicated that being a victim of cyberbullying predicted higher degrees of depression and lower degrees of self-esteem but did not predict higher levels of loneliness or social anxiety. They also found that being a victim of cyberbullying can negatively impact adolescent’s psychological well-being in terms of feeling of depression as well as lower self-esteem. Kawalski (2008) agrees that victims experienced depression, anxiety, social

isolation, nervousness after interfacing with technology, lowered self-esteem, deficit in school performance, and impaired health.

#### **4.5.9.2. Perpetrators of Cyberbullying**

According to this study there was a significant difference between perpetrators and non-perpetrators on their total performance on the psychological well-being scale. Perpetrators and non-perpetrators endorsed many items on the psychological well-being scale. Items such as ;“It is hard for me to enjoy my life”; “I really do not know what I am good at”; “I worry about many thing”; “I do not feel good about myself”; “I cannot concentrate when doing school work”; “It is hard for me to accept myself the way I am”; “I do not believe people who say good things about me”; “I would like to change many things about myself to like myself more; “It feels impossible to deal with the problems I have” and “I cry every night”. These statements which reflect the emotional and psychological state of the learners suggest that perpetrators and non-perpetrators were significantly different in terms of their overall emotional and psychological experiences and state of mind. The self-expressions seemed to suggest that perpetrators of cyberbullying had strong feelings of worthlessness, guilt, sadness and hopelessness. They also appeared to be tearful and engaged in frequent crying. They expressed a loss of interest in daily activities, experienced difficulty concentrating on school work and seemed to express an overall lack of enthusiasm and motivation. It is important to be aware that long-lasting changes in personality, mood, or behaviour may be indicators of a deeper psychological problem. Many of the items highlighted previously seemed to be symptomatic of mood disorders.

Many other studies concur that perpetrators of cyberbullying experience difficulty in behaviour, or getting along with other people; hyperactivity; conduct problems; infrequent



helping behaviours; frequently smoking or getting drunk; headache and not feeling safe at school (Sourander, *et al.*, 2010). According to Kawalski (2008) perpetrators of cyberbullying did not differ in their levels of depression, anxiety, or self-esteem from individuals who were not involved with cyberbullying. This study found that there were significant differences between the self reports of perpetrators and non-perpetrators. This may be indicative of the stress being experienced by perpetrators and the cyberbullying may be an expression of this. Learners in South African live in very violent and stressful communities. Youth anti-social behaviour in South Africa is generally viewed as a consequence of the interaction between a range of factors stemming from the youth as well as the different context where they live (Leoschut & Burton, 2009). Research indicates that between 12 to 21 are the peak years for both offending crimes and victimisation (Dodge, Cole, & Lynam, 2007; Leoschut & Burton, 2009).

There were several items that were commonly endorsed by victims and perpetrators. These were Item 3 “It is hard for me to enjoy my life”; Item 5 “I really do not know what I am good at”; Item 6, “I worry about many things”; Item 12, “It is hard for me to accept myself the way I am”; Item 17 “I would like to change many things about myself to like myself more”; Item 18 “It feels impossible to deal with the problems I have” and Item 19 “I cry every night”. These submissions indicate that the victims and perpetrators endure certain common emotional experiences.

The most common item endorsed by all the groups, i.e., victims and non-victims and perpetrators and non-perpetrators of cyberbullying was that it was hard for them to accept themselves the way they were. South African society has been socially fractured and wounded by political injustice and inequality and the hallmarks are evident in the self-

perceptions noted in the learners' individual responses. They vary considerably among victims, non-victims, perpetrators and non-perpetrators. It is difficult to explain why the perpetrators reacted by cyberbullying and inflicting harm on others whereas victims, non-victims and non-perpetrators, who also felt it was difficult to accept themselves the way they were, did not react with outward expressions of aggression but contained their emotions and dealt with them internally. The study also found that there was no significant difference between learners in the different schools, whether they were urban, rural or semi-rural on the total score for psychological well-being.

#### **4.5.10. Behavioural and Social Characteristics**

In this study the behavioural characteristics described by victims and non-victims and perpetrators and non-perpetrators of cyberbullying showed considerable variations among the groups. In comparison to the other groups, victims of cyberbullying rated themselves highest on being serious and they rated themselves lower on being friendly, emotional, stubborn and happy.

Among the different groups, perpetrators of cyberbullying rated themselves highest on being aggressive, nervous, stubborn, happy, awkward and sad. Compared to the other groups perpetrators of cyberbullying did not obtain a low rating on any of the behavioural characteristic.

The results of the social experiences of victims and non-victims and perpetrators and non-perpetrators of cyberbullying indicated that three quarter of the learners responded that they liked school and their teachers. A fifth indicated that they did not like school and their

teachers. More victims indicated that they did not like school and their teachers and among perpetrators more indicated that they did not like their teachers.

More than 80% of the participants indicated that they did have friends and a little more than 10% indicated that they did not have friends. The overall results showed that there was a difference in the responses of perpetrators, non-perpetrators, victims and non-victims. The victims of cyberbullying had fewer friends when compared to perpetrators, non-perpetrators, and non-victims. This study showed that a higher percentage of victims did not like the neighbourhood they lived in compared to non-victims, perpetrators and non-perpetrators.

More than 50% of the learners did not respond to the question, “Did you ever get into trouble at school?” There were more than 40% who indicated that they did get into trouble at school for poor discipline, violence, school work, vandalism, victimisation and bullying. Perpetrators of cyberbullying were more in trouble at school when compared to non-perpetrators, victims and non-victims. Among the groups perpetrators of cyberbullying obtained the highest score for “Yes” and the lowest score for “No”.

There were more than 85% of learners who indicated that they did not experience problems learning to read. Closer to 13% of the learners indicated that they did experience problems learning to read. The results indicated that victims of cyberbullying had the highest score for experiencing problem learning to read whereas the non-victims fewer learners experienced problems learning to read. Perpetrators of cyberbullying had the second highest score when compared to the other groups in experiencing difficulty learning to read. Both victims and perpetrators of cyberbullying reported a difficulty learning to read.

The overall results suggested that perpetrators disliked teachers the most, victims had the least amount of friends and disliked their neighbourhoods the most of all the groups. Victims and perpetrators had experienced more difficulty learning to read and were in trouble more often in school than the other groups.

We may assume that both victims and perpetrators struggle with social adjustment and seem to have inadequate social skills. The behavioural and learning problems in school have further implications in determining psychosocial adjustment problems and how they predict future behavioural patterns and choices.

According to Wood and Goldston (2000), reading impairment has been thought to be associated with numerous psychiatric comorbidities, including externalizing disorders such as conduct disorder and attention deficit hyperactivity disorder, as well as internalizing disorders such as depression and anxiety. Wood and Pillay (2005) reported that current or past history of reading disabilities was a major risk factor for depression and suicide. Several studies have associated experiences of peer harassment with increased depressive symptoms, social anxiety, and suicide risk (Boivin, Hymel, & Bukowski, 1995; Rigby, 2003; Rigby & Slee, 1999). The current study seems to suggest that it is both victims and perpetrators of cyberbullying that have a relatively high frequency of specific externalizing behaviours, including getting into trouble at school for poor discipline, violence, school work, vandalism, victimisation and bullying. Presently it is difficult to determine if the relationship between these psychosocial behaviours work in a reciprocal manner but it seems clear that there is a relationship between victims and perpetrators of

cyberbullying on social maturity, behavioural patterns and choices, psychological well-being and life satisfaction ratings.

#### **4.5.11. Conclusion**

The finding in this chapter shows that cyberbullying is prevalent in South African secondary schools, among Grade 8, Grade 9 and Grade 10 learners. It further, supports evidence of the prevalence of online bullying behaviour at schools among males and females between the ages of 12 to 18 years, both from rich and poor backgrounds, rural and urban areas and from different racial and ethnic backgrounds. Further, the learner self reports on behavioural, psychological well-being and social factors supports the view that there is a relationship between these factors and cyber-bullying. Lastly, it is evident that school personnel are generally not involved in cyberbullying activities of learners and that victims of cyberbullying do not feel supported by them. The study has enabled us to determine some of the behavioural, social and psychological impact cyberbullying has on the individual. This finding is consistent with existing research on traditional bullying (Marini, *et al.*, 2006).

Ultimately we need to better understand the behavioural and psychosocial factors associated with cyberbullying within the South African context. Not many studies have addressed psychosocial and behavioural health and it is a field of research where not many studies have been conducted in South Africa that is in comparison to other countries worldwide. Based on these results, in the chapter that follows, the researcher makes several recommendations. The limitations of this study and the avenue for future research are also outlined.

## **CHAPTER FIVE**

### **RECOMMENDATIONS, LIMITATIONS AND AVENUES FOR FURTHER RESEARCH**

#### **5.1. INTRODUCTION**

In chapter four the research results were analysed and interpreted with due consideration to both the qualitative as well as the quantitative findings. The overall results confirmed that there was a prevalence of cyberbullying among Grade 8-10 learners from secondary schools in KwaZulu-Natal; that there was a relationship between cyberbullying and age, gender, urban-rural dichotomy and socio-economic status of perpetrators and victims of cyberbullying; that the learners' self-report on psychosocial factors and behavioural characteristic indicated that there was a relationship to cyberbullying; and lastly that school personnel were not involved in the management of cyberbullying at schools.

Chapter five will focus on the recommendations and limitations of this study. Lastly, some suggestions for future research on cyberbullying is considered for the South African context. It is important that new and relevant research is undertaken in this field to generate a body of knowledge to help us understand the behavioural and psycho-social aspects of cyberbullying more comprehensively.

## **5.2. RECOMMENDATIONS**

Since, to the knowledge of the researcher, this was the first study that investigated the behavioural and psycho-social factors of cyberbullying in KwaZulu-Natal, South Africa and the only study conducted among Grade 8 to Grade 10 learners, the results are potentially of high interest to stakeholders involved in secondary school education as well as health professionals.

### **5.2.1. Adolescence help-seeking behaviour and referral to professionals**

The help-seeking behaviour patterns of adolescence are different to adults. Adults will seek help if they are depressed, but teenagers have to rely on adults, teachers, parents and other caregivers to recognise their suffering and get them the help they need. It is therefore strongly recommended that the identification of victims and perpetrators at risk of cyberbullying is detected early so that referrals are made to the relevant professionals. A recent study among 2215 Finnish adolescents found that victims and perpetrators of cyberbullying were at risk for psychiatric or psychosomatic problems (Sourander, *et al.*, 2010). Not only early detection and appropriate referrals are necessary but such referrals have to be made to professionals who are sufficiently skilled to handle such problems.

### **5.2.2. Link between Health and Education Departments**

Presently, the school districts in KwaZulu-Natal have an unprecedented low number of qualified psychologists. For example, in the Umlazi District, there are six hundred schools and three educational psychologists (one of whom is in full-time management and in charge of psychological services and various other aspects of social and support services of the EDSSE.). There are no clinical psychologists employed by the Umlazi District. The

district hospitals in KwaZulu-Natal each have a psychiatric unit but the clinical psychologist employed at these units do not deal with educational and school related referrals because of their own case loads and see it as the role and function of psychologists from the Department of Education. There appears to be no formal inter-sectorial working relationship between the Departments of Health and Education. In order to address effectively deals with the cyberbullying problem among school children a working formalised synergistic relationship between the Department of Education and the Department of Health has to exist.

#### **5.2.3. Creating a school environment conducive to helping victims**

According to this study and other researchers victim often are in a situation where it is difficult to disclose being cyberbullied because they fear being further victimised. “Telling a teacher may be an effective way to stop bullying but it may also bring costs which, to the victim, outweigh the benefits” (Hunter & Boyle, 2002, p. 332). Schools sometimes are perceived as being very judgemental and prescriptive when dealing with discipline and behaviour problems. For example, when a learner asks for help it sometimes leads to an investigation of the incident which may be to the detriment of the learner. In many cases victims are afraid of being implicated in school “enquiries and investigations” and may fear repercussions or becoming a target for further retaliation by the aggressor/perpetrator (Kawalski, 2008). It is therefore extremely important that proper procedural methods are adopted at schools to deal with these situations so that learners are not intimidated and/or further traumatised. In terms of disclosure of sensitive informative, it is emotionally demanding on the adolescent who may find that talking to personnel at school often involves sharing the information with several people because of the school hierarchy



system. This may also lead to secondary traumatisation. The confidentiality clause in school disciplinary procedures and codes do not generally adhere to or protect a learner in the school system. In most instances principals have to inform several key people including: parents of the perpetrator and victim, the school governing body, the School Education Manager and, in some instances, the District Director or the Provincial Minister for Education. Principals, in most cases want to safeguard themselves and readily make referrals to senior officials in the Department of Education. Therefore what was intended to be confidential and sensitive information that was to be contained within the immediate confines of school is disseminated more widely or becomes public knowledge. The factors that school managers are to consider is: the assessment and magnitude of the problem, the potential risk to the victim and a referral to a professional who may assist with emotional, psychological and/or physiological presentations. Hinduja and Patchin (2007) have made several recommendations for schools to follow. Firstly, schools should provide an empathetic and non-threatening environment where learners are comfortable to speak candidly to teachers and other available support staff. This is important so that learners are able to vent their feelings, obtain help, comfort, emotional support and understanding why their “specific instance of internet-based victimisation may have happened” (Hinduja & Patchin, p. 105). Secondly, such environments are effective in helping to create and maintain better communication between the learners and school administration and this in turn contributes to more awareness of other related and unrelated social conflict that plague the learners (Hinduja & Patchin, 2007). On the other hand, developmentally, adolescents are at the stage when they may want to show or assert their autonomy and maintain the image that they are in control, so informing a teacher may be viewed as a sign of weakness. Teachers therefore have to be aware of other symptoms which manifest

themselves, such as absenteeism, tearfulness, fluctuates in mood, drop in academic performance and other unusual behaviours which a learner may display.

#### **5.2.4. Equipping school personnel**

Sometimes school personnel are reluctant to get involved since cyberbullying is a relatively new type of discipline problem and some of the cyber activities may have taken place outside school hours. There is an urgent need to skill school personnel to deal with cyberbullying situations and understand cyberbullying terminology and conventions. Workshops and seminars may assist educators to gain more knowledge and skills so that they may feel more confident when confronted with cyberbullying. Educators should make sure that there is a consistent structured educational drive and awareness programme within the school to reinforce online safety.

#### **5.2.5. School Code of Conduct**

As already discussed earlier in Chapter Two cellular phones and cyberbullying may cultivate a new breed of learner and adolescent for schools and the Department of Education to manage within the learning and teaching environment. According to a study by Kreuter (2008) as much as 75% of school children owned cellular phones in the townships. With the expected substantive increase more learners have access to or own smartphones. It is therefore crucial that certain structures and policies are introduced by the school management and educational authorities to support victims and their families and to identify and rehabilitate perpetrators in matters related to cyberbullying. In terms of the schools' code of conduct, a section may have to be dedicated to the schools' policy on

possession of electronic and mobile access devices, school bullying and cyberbullying in order to maintain and improve school discipline and functionality. The school code of conduct has to be revised on an on-going basis to guard against new conventions of bullying, cyberbullying and to upgrade the school policy in regard to mobile devices. This will ensure and enhance the safety of learners, teachers and safeguard the school, especially against the legal consequences as a result of cyberbullying.

#### **5.2.6. Support networks**

The present study indicated that there were a substantial number of victims who felt that they were taken seriously when they told someone that they had been cyberbullied and that they felt that they had received the help and support needed. This is a positive outcome which indicates that outside the school environment learners were able to find the kind of support and help they needed. It is recommended that in addition to schools developing infrastructures to cope with cyberbullying, other support networks outside of the school context should be broadened and established. In addition a programme to make all children of school going age aware of these support facilities should be implemented in order for them to benefit from these services.

##### **5.2.6.1. Online Sites**

Many countries have developed online sites that provide support, help and advice to victims, parents and schools (Belsey, 2004). There are also several highly qualified individuals who are knowledgeable on the subject e.g., Parry Aftab who is one of the leading experts, worldwide, on cybercrime, internet privacy and cyber-abuse issues. She is

the founder and Executive Director the Wiressafety (a national advocacy group) and has initiated the Teenangels program. She was also the first person to write a book on internet safety called *A Parents Guide to the Internet* (Kerstetter, 2008). It is recommended that similar online sites should be created to offer this kind of support in South Africa.

At the moment there are several moves afoot to align South Africa with international practices on cyberbullying awareness and to help victims, their families and school personnel. Recently a number of South African sites have emerged offering advice to parents, teachers and school principals (Newsbytes on Children's Rights, 2011; van Tonder, 2010; van Wyk, 2011). Dr Pieter Stretcher, the founder of ParentsCorner.org.za, provides parents with such information and education. This site also provides a platform for parents to blog on issues of cyberbullying safety and request current information concerning development for online safety in South Africa (van Tonder, 2010).

#### **5.2.6.2. Parental Responsibilities**

Dr Stretcher recommends that parental control of cellular phone internet and cellular phone use, should complement the efforts made by industry to regulate cellular phone adult content and cellular phone content services in order to ensure the protection of children's rights (van Tonder, 2010). The results of this study should alert and caution parents about the need for increased vigilance, monitoring and supervision of adolescent cyber activities. Communicating with adolescence about internet, SMS and other cyber technology activities needs to be vigilantly pursued. Although traditional bullying and cyberbullying share certain features, they are distinct phenomena (Kawalski, 2008). It should not be assumed that knowledge of traditional bullying is automatically used to deal with cyberbullying. Hence a programme to integrate such information is required.

#### **5.2.6.3. Internet Service Provider (ISP)**

Dr Stretcher also recommends that parents alert the Internet Service Provider (ISP) and/or host site if their child is a victim of cyberbullying (van Tonder, 2010). Since cyberbully varies in the way it is perpetrated it is recommended that victims must be helped to clearly communicate the type of threat, the frequency of messages, the potential sources, and the nature of the threat they experienced as this will ensure that proper action is taken by the ISP. Educating potential victims and creating awareness campaigns may help to stop cyberbullying or prevent it from developing any further. Children have to be taught to keep personal information safe while online and be aware of other online dangers (Streicher, 2010).

#### **5.2.7. Cybercrimes**

A strong recommendation is to focus attention not only on cyberbullying but to be aware of the dangers of cybercrimes as well. The South African Minister of Police, Nathi Mthethwa, addressed the issue of children who were murdered after going missing as a result of being lured through cyberspace criminals who posed as a 'friend'. According to him police will receive on-going training to deal with cybercrime and he urged parents to involve the local authorities in cybercrimes (van Tonder, 2010).

#### **5.2.8. The Protection of Harassment Bill**

The Protection of Harassment Bill (Government Gazette No. 32922 of 1 February 2010) makes cyberbullying punishable under the law in South Africa. Tlali Tlali, spokesperson for the Department of Justice and Constitutional Development, says that cyberbullying is defined in the Bill as, "when electronic media such as the internet, cell phones or other

devices are used to bully a person by the sending of text, video or images intended to hurt, intimidate or embarrass another person" and "may consist of remarks of a sexual nature, threats, hate speech, ganging up on victims by making them the subject of ridicule in a forum, and posting false statements as fact, aimed at humiliation, etc."(Farish & Brien, 2011). It is recommended that schools bring the Protection of Harassment Bill to the attention of learners and parents so that they will be made aware of the law when engaged in online practices. The Life Orientation lessons should be used to teach learners about the various other hidden dangers in cyber activities and how to deal with cyberbullying. The safety in website use and the legal implication of cyberbullying, for both the school and the individuals who are allegedly implicated, have to be widely publicised and acknowledged by the various stakeholders in the light of Protection of Harassment Bill (Government Gazette No. 32922 of 1 February 2010). It is recommended that the legal implication of cyberbullying receive due acknowledgement and attention.

#### **5.2.9. Law enforcements**

In some cases it may be necessary to involve the law enforcement agencies, that is, members of the public should contact the South Africans Police Services. This is especially necessary if a threat of physical violence is present, if obscene material is involved, or if physical or sexual harassment is taking place as a result of the cyberbullying. If the victim's rights are infringed during the cyberbullying, civil prosecution may be an option and the services of an attorney should be engaged.

#### **5.2.10. Positive Outcomes**

Cyber activities are not all negative in outcomes. There are positive outcomes as well. It is prodigious that internet communication appears to be a gainful past time and an effective

way for most adolescents to be connected to friends, family and world events. Blogging, twitter and Facebook makes it possible for many individuals to stay connected and aware of what is going on in the world at large and in the lives of friends, associates and family within a few minutes and seconds of events taking place. In this study it has been found that 26% of learners used the internet via their cellular phones to stay connected to friends, local and world news and that it is fast becoming a popular socialization tool to download music, videos, documents and other helpful material as well. There is an exponential growth of the ownership of smartphones and its usage in South Africa. Many South African learners are regularly using the internet to access resource material to complete school projects and prepare for examinations because of the absence and lack of community libraries. It is recommended that learners are taught how to use the internet responsibly, to take precautions when surfing the net and how to be vigilant online so that they do not come to any harm.

### **5.3. LIMITATIONS OF THE STUDY**

There are certain limitations inherent in this study that needs to be mentioned:

- a) There were limitations concerning the questionnaire. Some of the respondents seemed to have misunderstood some questions in the questionnaire. The term “cyberbullying” could have been replaced by the term “online bullying” which may have been more self-explanatory. The questionnaire could have been designed more simply for isiZulu learners or translated into isiZulu.
- b) A further limitation of the study was that the information was based on self-reports with no input from teachers or parents. Personal interviews could also have been used to verify information and give the respondents the opportunity to clarify

questions and terms that they did not understand. On the other hand online questionnaires which target specific learners who are online and engaged in activities related to this study may have been more suitable.

- c) A further limitation of the study was the use of the shortened version of the LSS. The 3-point Likert Scales compromised the sensitivity of the measure on life satisfaction. The 7-point scale may have improved this.
- d) Acquiring appropriate test measures for the present study were difficult. There are a limited number of test measures to choose from that are relevant and reliable for the South African population. In regard to the cyberbullying questionnaire there were none, to the knowledge of the author, which were available or had been used in a South African school population before. The cyberbullying questionnaire used in this study was based on the questionnaire used in a study that was conducted in Germany. This questionnaire had to be translated and adapted.

#### **5.4. AVENUE FOR FUTURE RESEARCH**

In South Africa there is a paucity of studies on cyberbullying. From the current study the following suggestions are being made for future research in this area:

- a) There is evidence from the literature which suggest that traditional bullying is predictive of cyberbullying. Future studies should explore among other sample groups of Grade 8 to Grade 10 learners to see if this relationship between traditional bullying and cyberbullying exists in South Africa.



- b) This study has shown that cyberbullying, among Grade 8-10 learners in KwaZulu-Natal, is prevalent and psychologically, behaviourally and socially impacts on both victims and perpetrators. The current research study needs to be duplicated in the other provinces of South Africa to establish whether similar trends exist.
- c) Future studies should also consider an online version of this study which can target learners from all grades and across the different provinces in South African.
- d) Longitudinal studies are important for establishing behavioural and psycho-social developmental trends. Learners may be followed from primary into secondary school and the study may be able to yield data spanning a few years tracking and evaluating certain behavioural markers and changes, as well as monitoring and evaluating the psychological and social difficulties, mode of adaptability and functionality. Other measures such as personality and mood may be considered.
- e) More specific suggestions for future research relates to the intrusive and infiltrating nature of cyberbullying which is more harmful than traditional bullying because the victim is exposed to a wider audience and this happens in a short space of time (Brown, Jackson, & Cassidy, 2006; Li, 2007b), as well as the size of the audience expands the degree of humiliation experienced by the target, which is likely to increase the psychological impact of the event (Brown, *et al.*, 2006) on the individual. The present study found that victims of cyberbullying expressed feelings associated with depressive symptoms as well as higher levels of loneliness and social anxiety. An avenue for future research may consider examining and investigating this area of concern for victims of cyberbullying.

- f) The psychological impact on perpetrators is equally important and the current study found that perpetrators of cyberbullying had strong feelings of worthlessness, guilt, sadness, hopelessness and expressed a loss of interest in daily activities. A future study may expand the evaluation of these concepts and explore if there is a link.
- g) An investigation for future research may relate to the psycho-social adjustment problems in cyberbullying. This study assumed that both victims and perpetrators of cyberbullying struggle with social adjustment and seem to have inadequate social skills. We know that social skills are directly affected by cyberbullying since it undermines the victims trust in others and promotes ambivalence in friendships (Bauman, 2007). In perpetrators of cyberbullying it affords them the opportunity to remain anonymous and hide their identity as well as engage in activities that they would not have done in face-to-face bullying (Ybarra, et al., 2007b). It is important for future research to investigate this and consider how they predict future behavioural patterns and choices.
- h) The current study suggests that victims and perpetrators of cyberbullying have a high frequency of specific externalising behaviours, including getting into trouble at school for poor discipline, violence, school work, vandalism, victimisation and bullying. It was difficult to determine the overall relationship between these psychosocial behavioural patterns and cyberbullying or the long-term impact on victims and perpetrators. Other specific externalising disorders, such as, conduct disorder and attention deficit disorders were also not investigated in this study and this is an important area for future research. In this regard it would be useful to know the link with youth anti-social behaviour in South Africa, if any.

- i) There are many areas that need clarity especially in relation to the impact of cyberbullying on learning and teaching and on the general school performance outcomes for the victims and perpetrators. A study considering this aspect is important.
- j) When compared to other cyberbullying studies, a limitation of the present study was that it was far less sophisticated in terms of design and execution. The present study did not incorporate a score for impact factor for the various forms of cyberbullying.
- k) The present study did not incorporate a score for impact factor for the various forms of cyberbullying. This aspect should be included in future studies since the use of various social media, such as, Facebook, YouTube and Twitter will increase among South African young people in the future. According to a report by Madanmohan (2011), the research director of Mobile Africa, smartphone penetration in South Africa is likely to reach 80% by 2014. He further reports that South African are emerging as the largest base cellular phone internet generation, followed by India and that 94% of young people between the ages of 13-34 years are the dominant users.
- l) Further the behavioural and psycho-social impact on the quality of life for individuals inflicted by cyberbullying and the consequences for family life and society in general are also important areas to consider for future research. These are important studies within a South African context since it would help to create a better life.

## **5.5. CONCLUSION**

This study concluded that cyberbullying was prevalent in secondary schools under investigation. The study also supports the view that online bullying is prevalent among males and females between the ages of 12 to 18 years, both rich and poor, in rural and urban areas and from all racial and ethnic backgrounds. The most prevalent form of cyberbullying reported was 'denigration' which is the spread of bad rumours and slander using the internet or cellular phone. Friends and fellow students were identified as those who inflicted cyberbullying most frequently through harassment, rumours, threats and other electronic bullying violations.

The victims in the study preferred to speak to their friends and parents rather than teachers and other school personal about their cyberbullying experiences. Although a large number of victims reported that they needed help and support they did not identify their teachers or other members from the school management teams as individuals who could help them. As a result school personal were not involved in the management of cyberbullying incidences.

This study has enabled us to determine some of the behavioural, social and psychological impact cyberbullying had on an individual. The learner self-reports highlighted the psychological, behavioural and social impact on both victims and perpetrators of cyberbullying. Victims of cyberbullying felt depressed and had higher levels of loneliness and social anxiety. The perpetrators of cyberbullying had strong feelings of worthlessness, guilt, sadness, hopelessness and loss of interest in daily living. More research to obtain a greater understanding of the behavioural and psychosocial consequences and risks associated with cyberbullying is needed given the results of this study and the view of

Brown et al. (2006) that cyberbullying has greater psychological consequences and risks than have been found with traditional bullying. Our knowledge of 'traditional bullying' does not sufficiently equip us to adequately deal with cyberbullying. Although traditional bullying and cyberbullying share certain features, they are distinct phenomena. Cyberbullying has more serious psychological consequences which may include suicidal behaviour, murder, school dropouts, deficits in school performance, psychiatric and psychosomatic problems (Brown, et al., 2006; Kowalski & Limber, 2008; Sourander, et al., 2010).

This study significantly contributes to the knowledge-base on psycho-social and behavioural characteristics of victims and perpetrators involved in cyberbullying and provides impetus for future research, dialogue and debate.

P O Box 65716  
Reservoir Hills  
Durban  
4090

16 March 2009

**For attention: Mr Sibusiso Alwar**

Department of Education KZN  
Department of Resource Planning  
Private Bag X9137  
Pietermaritzburg  
3200

Dear Sir

**Permission to conduct research**

**Research Topic:** Behavioural and Psychosocial factors associated with Cyberbullying.

I am an Educator with the Department of Education and a M.Ed (Educational Psychology) student registered at the University of Zululand in the Faculty of Education and the Department of Educational Psychology and Special Education. I am studying the views, experiences and behaviours of learners in schools in Kwazulu-Natal in regard to cyberbullying. I request permission to conduct this research study among the Grade 8-10 learners. The sample for the study will include high school in rural, township and urban areas. The study will take one month and Grade 8 to 10 learners will be requested to participate. However, participation is voluntary. The study will require them to fill out a cyberbullying and related questionnaire.

Strict confidentiality will be maintained throughout the research. The information will be used to help improve learner and educator knowledge which will have positive outcomes for scholastic performance of learners and in the promotion of the psychological well-being of the learners.

To compensate for the effort and time of the school and learners, I will arrange a special workshop for the teachers to equip them with new skills to identify and deal with children who are victims and perpetrators of cyberbullying.

After I have completed the study I will make all pertinent information of the study available to those who have participated and to their parents if they so wish.

My contact details are as follows:

<b>Name</b>	<b>Telephone</b>	<b>Mobile Phone no.</b>
C L Pillay	031-2625958	073 366 1314
<b>Supervisor</b>		
Dr S Govender	035-9026244	0832322932

I sincerely appreciate your co-operation in this important study.

---

Ms C L Pillay

Telephone: 033-3418610  
Fax: 033-3418612  
Email [Sibusiso.Alwar@kzndoc.gov.za](mailto:Sibusiso.Alwar@kzndoc.gov.za)

### Informed Consent Letter

**Research Topic:** Behavioural and psychosocial factors associated with Cyberbullying.

Dear Sir/ Madam,

I am an Educator with the Department of Education and a M.Ed (Educational Psychology) student registered at the University of Zululand in the Faculty of Education and the Department of Educational Psychology and Special Education. I am studying the views, experiences and behaviours of learners in schools in Kwazulu-Natal in regard to cyberbullying. I request permission to conduct this research study among the Grade 8-10 learners. The sample for the study will include high school learners from rural, township and urban areas. The study will take one week and Grade 8 to 10 learners will be requested to participate. However, participation is voluntary. The study will require them to fill out a cyberbullying questionnaire.

Confidentiality will be maintained throughout the research. The information will be used to help improve learner and educator knowledge which will have positive outcomes for scholastic performance of learners and for the promotion of the psychological well-being of the learners. I will arrange a workshop for the teachers to equip them with new skills to identify and deal with children who are victims and perpetrators of cyberbullying. After I have completed the study I will avail myself to those who have participated and to their parents if they so wish.

My contact details are as follows:

<b>Name</b>	<b>Telephone</b>	<b>Mobile Phone no.</b>
C L Pillay	031-2625958	073 366 1314
<b>Supervisors</b>		
Dr S Govender	035-9026244	0832322932

I sincerely appreciate your co-operation in this important study.

---

Mrs C L Pillay



## **DECLARATION**

We \_\_\_\_\_ (full name of Principal) and  
\_\_\_\_\_ (full name of GB chairperson) hereby confirm that we understand the  
contents of this document and the nature of this research project, and we consent to allow you the use of our school in  
this research project.

We understand that we are at liberty to withdraw from the project at any time should we so desire.

\_\_\_\_\_  
Signature of Principal

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of GB Chairperson

\_\_\_\_\_  
Date

Parent Consent Form

Research Supervisor: Dr S Govender, Ph.D

Student Researcher: Mrs C L Pillay, M.Med.Sc (Behav. Med); M.Ed.Psy Candidate  
University of Zululand  
Faculty of Education  
Department of Educational Psychology and Special Education  
(031) 26259578

Dear Parent

Your child is invited to participate in a study entitled *Behavioural and Psychosocial factors associated with Cyberbullying*. Please read this form carefully and you may contact me to ask any questions that you may have.

The purpose of this research is to study the views, experiences and behaviours of Grade 8 to 10 learners in schools in KwaZulu-Natal in regard to cyberbullying. The study will require that your child fill out a cyberbullying and related questionnaire which should take approximately 30 minutes to complete.

Strict confidentiality will be maintained throughout the research. No information on any of the participants will be divulged by name. All information and data from this research project will be published and presented in summative form. Your child will be asked not to record his/her name on the survey. The researcher will keep all completed survey forms in a safe and secure place.

The information will be used to help improve and increase our understanding of the prevalence and experiences of young people in regard to cyberbullying.

The participation in the study is voluntary and your child is not required to answer any of the survey questions that he/she is uncomfortable with. I will be available to talk to any learners who are experiencing difficulties with this phenomenon and if they would prefer they may contact childline on 080 005 5555 (freeCall) or speak to their life orientation teacher.

---

(Signature of Parent)

---

(Date)

## Participants Assent Form

Researcher: Mrs C L Pillay, University of Zululand, (031) 2625958

Dear Learners

You are invited to participate in a study entitled *Behavioural and Psychosocial factors associated with Cyberbullying*. Please read this form carefully and you may ask me any questions you have.

The purpose of this research is to study the views, experiences and behaviours of Grade 8 to 10 learners in schools in KwaZulu-Natal in regard to cyberbullying. The study will require that you fill out a cyberbullying and related questionnaire which should take approximately 30 minutes to complete. Your participation is voluntary and you are not required to answer any of the survey questions that you are uncomfortable with.

Strict confidentiality will be maintained throughout the research. None of your friends, teachers or parents will be able to find out what answers you gave to any of the survey questions. The information will be used to help improve and increase our understanding of the prevalence and experiences of young people in regard to cyberbullying.

I will be available to talk to any learners who are experiencing difficulties with this phenomenon and if you would prefer you may contact childline on 080 005 5555 or speak to your life orientation teacher.

---

(Signature of Participant)

---

(Date)

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