

**EXPLORING BULLYING, CYBERBULLYING AND THE AUTHORITARIAN
PARENTING STYLE AMONG GRADE SIX AND SEVEN LEARNERS IN BENONI**

by

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DECLARATION

Student Number: 4087-967-4

I hereby declare that “*Exploring bullying, cyberbullying and the Authoritarian parenting style among Grade Six and Seven learners in Benoni*” is my own work and that all sources I have used or quoted have been indicated and acknowledged by means of complete references.

Kelly Anne Young

November 2014

Date

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ABSTRACT

This study aimed to gain insight into the nature and extent of traditional and cyberbullying among Grade Six and Seven learners in four public primary schools in Benoni. Using the Social Learning Theory as a basis for understanding bullying as a learned behaviour (socially learned through the observation of authoritarian parents), a quantitative research method was applied which utilised an online self-report questionnaire to examine the relationship between bullying and the Authoritarian parenting style. Results indicate that 50.4% of learners had been victimised, while 31.6% and 8.8% had engaged in perpetrating traditional and cyberbullying, respectively at least once ($N = 279$). Further results revealed that the Authoritarian parenting style is significantly related to the perpetration of both types of bullying. These results bring to the fore the reciprocal relationship between both types of bullying, and indicate a need for systemic intervention at the primary school level (involving parents/caregivers). Interventions should therefore not seek to separate types of bullying into discreet problems, but rather focus on their common underlying aspects, including parenting behaviours.

Key words: traditional bullying, cyberbullying, Authoritarian parenting style, Social Learning Theory, Revised Olweus Bully/Victim Questionnaire, Parenting Practices Questionnaire

LIST OF ABBREVIATIONS

OBVQ	Olweus Bully/Victim Questionnaire
R-OBVQ	Revised Olweus Bully/Victim Questionnaire
PPQ	Parenting Practices Questionnaire
APS	Authoritarian Parenting Style
ICT	Information and Communication Technology
SES	Socioeconomic Status
LSM	Living Standard Measure
SMS	Short Message Service
BBM	BlackBerry Messenger
UNISA	University of South Africa
YRU	Youth Research Unit
CJCP	Center for Justice and Crime Prevention
GSHS	Global School-based Health Survey
NSVS	National School Violence Study
ADHD	Attention Deficit Hyperactivity Disorder
LSEN	Learners with Special Educational Needs
GDE	Gauteng Department of Education
SGB	School Governing Body
PIN	Personal Identification Number

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CHAPTER 1: OVERVIEW OF THE CURRENT STUDY

In Chapter One, the reader is introduced to the problems of traditional bullying and cyberbullying among children. In presenting the rationale for the study, the researcher draws attention to the lack of research conducted on these topics amongst primary school learners within the South African context. The research aims, the research design and the data analysis techniques of the study are then addressed. A definition of each of the key concepts is provided, followed by an outline of the remaining chapters.

1.1. Research problem and rationale

Traditional bullying and cyberbullying are pervasive problems that are increasingly being recognised as important public issues (Liu & Graves, 2011). More often than not, these bullying behaviours hinder children's social development and functioning, while also damaging their psychological well-being (Swearer, Espelage, Vaillancourt, & Hymel, 2010). Despite the broader awareness of the profound impact associated with this widespread phenomenon, bullying still remains a neglected problem worldwide (Swearer et al., 2010).

South African researchers (such as De Wet, 2005; Liang, Flisher, & Lombard, 2007; Myburgh & Poggenpoel, 2009; Nesor et al., 2004; Townsend, Flisher, Chikobvu, Lombard, & King, 2008; Unisa Bureau of Market Research, 2012; Zulu, Urbani, & Van der Merwe, 2004) have confirmed the pervasiveness of traditional bullying and cyberbullying, and have provided a great deal of insight into the phenomena amongst high school learners. Notwithstanding the picture this research provides, limited research exists within the primary school setting (studies include those by Greeff & Grobler, 2008; MacDonald & Swart, 2004;

and Swart & Bredekamp, 2009). Research findings by Juvonen, Nishina, and Graham (2001); Salmivalli (2002); and Seals and Young (2003), indicate that bullying in fact peaks during primary school, specifically in the intermediate phase, from Grades Four to Six. Furthermore, Nansel et al. (2001) showed that traditional bullying occurred with greater frequency among primary school learners than it did among high school learners; more specifically, bullying occurred most frequently in Sixth through Eighth Grade. Moreover, Eslea and Rees (2001) revealed bullying to be most frequently remembered to have occurred between the ages of 11 and 13 years, thereby indicating the significance of bullying experiences for children within this age category. As such, a need exists to further explore traditional bullying and cyberbullying among primary school children in Grade Six and Seven, i.e., between the ages of 11 and 13 years.

1.2. Research aims

The current study was prompted by a void in the research findings pertaining to the nature and extent of traditional bullying and cyberbullying among primary school learners within a South African context. With the bulk of international and local studies, emphasising the negative, long-term effects that both types of bullying have on both victims and perpetrators, research in this underexplored field is crucial, and could serve as a database for further studies (Greeff & Grobler, 2008). The core aim of the current research study is therefore to gain insight into the nature and extent of traditional bullying and cyberbullying among Grade Six and Seven learners in public primary schools, in Benoni. The adjacent aims of the research project are to contrast the prevalence of bullying and cyberbullying amongst these early adolescents, while comparing the contexts (technologies) in which the cyberbullying behaviours transpire. Thereafter, potential relationships between traditional

bullying, cyberbullying, and the Authoritarian parenting style (Baumrind, 1991) will be examined.

1.3. Research questions

After considering the aims of the research study, four specific research questions were formulated in an attempt to gain insight into the nature and extent of traditional bullying, cyberbullying, and the potential underlying Social Learning aspect of the Authoritarian parenting style among Grade Six and Seven learners in public primary schools in Benoni. The four research questions underpinning the study are:

1. To what extent do traditional bullying behaviours occur amongst learners between the ages of 11 and 13 years in specifically identified Benoni primary schools, in terms of gender, age and grade?
2. To what extent, and in which contexts, do cyberbullying behaviours occur amongst learners between the ages of 11 and 13 years in specifically identified Benoni primary schools, in terms of gender, age, and grade?
3. What is the relationship between traditional bullying behaviours and cyberbullying behaviours?
4. What is the relationship between traditional bullying behaviours, cyberbullying behaviours, and the Authoritarian parenting style?

1.4. Research design

An in-depth discussion of the research design and research methods will be given in Chapter Four, the description pertaining to it here is therefore brief and introductory. A quantitative research design underpinned the research. Within this broader design, an exploratory, correlational approach was employed so as to explore the extent and nature of traditional bullying and cyberbullying among Grade Six and Seven learners.

1.5. Data collection method

The quantitative research design allowed the researcher to obtain an overview of the concepts in the current study utilising an online, self-report questionnaire to collect data. The self-report questionnaire was an adapted version of the Revised Olweus Bully/Victim Questionnaire (R-OBVQ) and included items extracted from the Parenting Practices Questionnaire (PPQ) proposed by Robinson, Mandleco, Olsen, and Hart (1995). The self-report questionnaire comprised 47 Likert scale questions which examined five domains on a 5-point scale, namely: traditional bullying victimisation; traditional bullying perpetration; cyberbullying victimisation; cyberbullying perpetration; and the Authoritarian parenting style. The questionnaire was administered online, in the computer classroom of the four participating schools, and took approximately 20 minutes to complete.

1.6. Data analysis techniques

A detailed discussion of the data analysis techniques is provided in Chapter Five. Descriptive and inferential statistical analyses were employed to analyse the data according to the positivist paradigm (Sarantakos, 2005).

After assessing the validity and reliability of the research instrument, composite scores from the identified factors were checked for normality (Field, 2009). Upon inspection, it became clear the data was not normally distributed. After three attempts at transforming the data to no avail, the researcher pursued nonparametric tests to analyse the correlations in the data.

Frequency analyses, cross-tabulations, and chi-square statistical tests were employed to determine the prevalence of bullying and to establish whether or not the prevalence was significantly associated with gender, age, and grade. Similarly, frequencies of multiple response sets were obtained to ascertain which Information and Communications Technologies (ICT) were most often used when individuals perpetrated cyberbullying behaviours. Spearman's Rho correlation coefficients were then conducted to check for possible relationships among traditional bullying, cyberbullying, and the Authoritarian parenting style. A hierarchical regression was planned to explore the relationships between the constructs (on condition the relevant regression assumptions are tenable within the current sample). Statistical software - SPSS (Version 21) - was used to analyse the data.

1.7. Definitions

For the purpose of the current study, the researcher will employ the definition coined by Olweus (1994) as a foundation for defining and understanding not only traditional bullying, but also cyberbullying. Definitions of the Authoritarian parenting style and the Social Learning Theory are then provided.

1.7.1. Learner/child

In an ordinary context, the term ‘learner’ generally refers to an individual receiving education. A child is defined in the Constitution of the Republic of South Africa, 1996 (Act 108 of 1996) as a person under the age of 18 years (*Constitution of the Republic of South Africa*, 1996). In the current context, the terms child, learner, and student, will be utilised synonymously through the remainder of the text and refer specifically to learners in a primary school setting.

1.7.2. Traditional bullying

According to Olweus (1994) a child is being bullied or victimised when he or she is repeatedly exposed to the negative actions of one child, or more. More precisely, Olweus defined bullying as the repetitive, aggressive behaviour, where a more powerful child aims to cause harm or disturbance to a less powerful child. The imbalance of power may be rooted in physical and/or psychological strengths. When the imbalance of power is rooted in psychological strength, the bullying incident often includes behaviours such as starting rumours about the victim, or banishment and exclusion of the victim (Nansel et al., 2001;

Olweus, 1994). Alternatively, when the imbalance of power favours physical strength, the bullying behaviours include name-calling, insults, and threats, along with the physical aspects of aggression such as hitting and kicking.

1.7.3. Cyberbullying

Several researchers have drawn on the aforementioned depiction provided by Olweus to define and characterise cyberbullying (Agatston, Kowalski, & Limber, 2007; Beran & Li, 2005; Burton & Mutongwizo, 2009; Li, 2007; Mishna, Saini, & Solomon, 2009). According to these researchers, and for the purposes of this study, cyberbullying is defined as traditional bullying perpetrated via information and communication technologies (ICTs). ICTs such as a short message services (SMSes), e-mails, instant message services (for example, WhatsApp, Mxit, and BlackBerry Messenger or BBM), as well as blogs and social media websites (such as Facebook and Twitter), are the portals cyberbullies use to harass, torment, and humiliate their victims (Burton & Mutongwizo, 2009; David-Ferdon & Hertz, 2009; Patchin & Hinduja, 2006).

1.7.4. Bullying prevalence

Prevalence refers to the number of people with a defined disease or condition existing at a particular point in time (point prevalence), or within a specific period of time (period prevalence or cumulative prevalence) relative to the total number of people in the population of interest (Solberg & Olweus, 2003). Similarly, when referring to the prevalence of bullying perpetration and/or victimisation, Solberg and Olweus (2003) have suggested that a period prevalence estimate of victimisation refers to the proportion or percentage of students who

have been exposed to traditional bullying behaviours by other students, with some defined frequency, within a specified time period. Furthermore, a period prevalence estimate of bullying perpetration can be defined in a similar way, as the proportion or percentage of students who, within the specified time period, have exposed one or more learners to traditional bullying behaviours with a certain defined frequency (Solberg & Olweus, 2003).

1.7.5. The Authoritarian parenting style

The Authoritarian parenting style (otherwise referred to as ‘APS’ in the current study) can be defined as a parenting style that is characterised by punishment; an indisputable power imbalance which favours the parents; and an absence of explanation and negotiation (Baumrind, 1991). Authoritarian parents emphasise their control over their child, often use enforced discipline, restrict the child’s autonomy, and decide what behaviour is appropriate. The distinction must be made between providing safe, reasonable boundaries (consistent with the Authoritative parenting style), and boundaries that are strict, non-negotiable, and reinforced with punitive consequences (consistent with the Authoritarian parenting style). Moreover, Authoritarian parents demand total obedience and expect their children to adhere to their rules and orders unquestioningly (Baumrind, 1991).

1.7.6. The Social Learning Theory

Bandura’s Social Learning Theory, the theoretical framework underpinning the current study, forwards the hypothesis that people learn through observing others’ behaviours, attitudes, as well as the outcomes of those behaviours (Bandura, 1978). Broadly put, Social Learning Theory argues that a child’s real-life experiences and that to which the

child is exposed directly or indirectly shapes future behaviour, and suggests that children learn strategies for managing their emotions, resolving conflict disputes and engaging with others through these interactions or exposures (O'Connor & Scott, 2007).

1.8. Outline of chapters

Chapter One presented the background, the statement of the problem, as well as the research questions of this study. Chapter Two presents an in-depth literature review of traditional bullying and cyberbullying along with the associated roles and outcomes. In addition to this, global prevalence data is reviewed. Chapter Three discusses the Social Learning Theory in conjunction with the Authoritarian parenting style. Chapter Four details the positivist paradigm, together with the methodology employed in the current study. Chapter Five reveals the results from the statistical analyses. To conclude, Chapter Six discusses these results along with the limitations, contributions, and practical implications of the current research project.

1.9. Summary

Bullying among school children is not a new phenomenon and has been described in academic and fictional works for many years (MacDougall, 1993). More recently, bullying permeated the cyber-realm with the advent of social media and easily accessible technology, allowing children to bully from virtually anywhere. Although the definitions of traditional and cyberbullying differ slightly, the former has most commonly been defined as the repetitive, aggressive behaviour of a more powerful individual, aimed to cause harm or

disturbance to a less powerful individual (Olweus, 1994), while cyberbullying is defined as bullying perpetrated via ICTs.

Although traditional and cyberbullying have been studied extensively within the South African context, there is a scarcity of research concerning the primary school learner. With many local and international studies highlighting the adverse effects associated with bullying, further research in this area is crucial to understanding the nature and extent of bullying and cyberbullying amongst primary school learners within the South African context. Working from within the positivist paradigm, which emphasises quantitative data collection methods and statistical analysis, this study aims to describe the prevalence of traditional and cyberbullying before investigating their link to the Authoritarian parenting style, utilising an online, self-reporting questionnaire together with inferential and descriptive statistics.

CHAPTER 2: LITERATURE REVIEW

Before delving into the causes of traditional bullying and cyberbullying, it is imperative to understand bullying as a whole (Tattum, 1993). Therefore, this chapter commences with the definitions of the two concepts, both modern and antiquated, before dealing with the identified roles and adverse outcomes associated with both types of bullying. In addition to this, international literature is presented to provide an outline of global bullying statistics.

2.1. Traditional bullying

Modern definitions of bullying can be dated back to 1972, when Heinemann first wrote on the phenomenon of aggressive behaviours during childhood (Smith et al., 2002). Heinemann used the term *mobbning*¹ to refer to a group of individuals who act violently against what the perpetrators perceive as a deviant individual. Broadly put, *mobbning* refers to group violence among school children (Pikas, 1989). Subsequent to Heinemann's research, bullying became the focus of systemic research in Scandinavia during the late 1970s (Olweus, 1978). This research, conducted by Olweus, was largely confined to the Scandinavian context and only attracted international attention during the 1980s and 1990s, when three boys committed suicide in Norway (in unrelated incidents) in the year 1982 as a result of bullying (Olweus, 1994).

Olweus, a pioneer in the field of bullying research, initially followed in Heinemann's footsteps and also used the term *mobbning*. However, where Heinemann had described

¹ From the Swedish, this translates directly into English as 'bullying'. The author has adopted it as a critical concept.

mobbing as a group process, Olweus added to Heinemann's definition to incorporate one-on-one attacks where a stronger child intends to cause harm (physically or mentally) to a weaker child (Olweus, 1978).

Olweus has since then defined bullying as a subset of aggressive behaviour, which is carried out repeatedly and over time, intending to cause harm or disturbance, and occurring within an interpersonal relationship that is characterised by an actual or perceived imbalance of power (Olweus & Limber, 2010; Olweus, 1994). The perceived or actual power differential may lie in physical and/or psychological strengths (Solberg, Olweus, & Endresen, 2007).

When the imbalance of power favours physical strength, the bullying is said to be more direct in nature. This direct bullying involves relatively open attacks on the victim. Two subtypes are described, namely: (1) *physical bullying*, which includes any physical contact that could potentially hurt or injure another person (hitting, kicking, punching, etc.); and (2) *verbal bullying*, which includes name-calling and teasing in a hurtful way (Wang, Iannotti, & Nansel, 2009). Overall, direct bullying includes physical aspects of aggression such as hitting and kicking, while verbal aggression refers to behaviours as insults and threats.

Alternatively, when the imbalance of power favours psychological strength, the bullying is said to be more indirect in nature. These indirect bullying behaviours include starting rumours about the victim, excluding the victim, and banishment (Olweus, 1994; Smith & Brain, 2000; Smith et al., 2002). Indirect bullying is often subtle in nature and includes the following subtypes: (1) *social isolation and intentional exclusion*, which pertains to systematically excluding someone from joining a group or remaining in a group (this

subtype also includes spreading rumours and manipulating other friendships); and (2) *intimidation*, which involves bullying of a threatening nature. Both subtypes of traditional bullying, direct and indirect, are depicted in Figure 2.1.

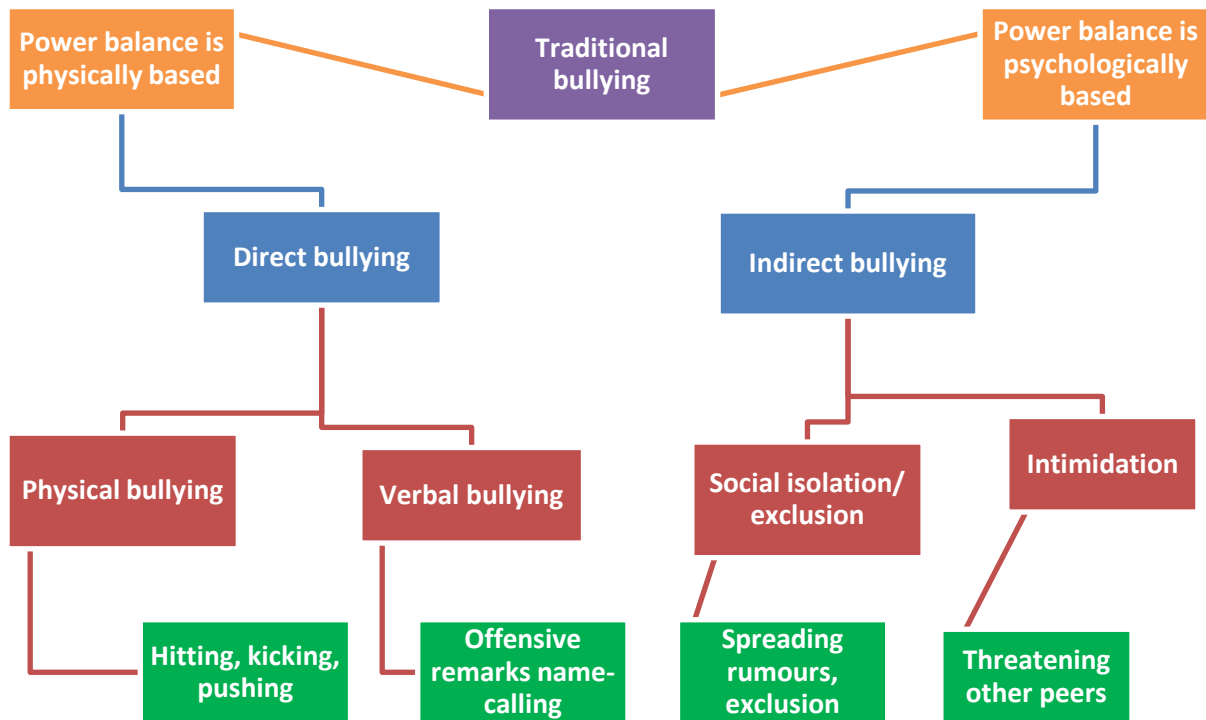


Figure 2.1: Types of traditional bullying

2.2. Identified roles

In operationalising the definition of bullying, researchers have been able to identify specific roles within traditional bullying scenarios. Solberg, Olweus, and Endresen (2007) have identified the following different roles: the bully, who engages in perpetrating bullying behaviours; the victim, who is subjected to the bullying behaviour; the bully/victim (aggressive victim), a person who is both a perpetrator and a victim; and the bystander, who is not directly involved, but is present and witnesses the incident. Additional roles have been identified within the bystander's role, namely: the reinforcers, who encourage the bully or

laugh at the victim; the defenders, who help the victim; and the uninvolved bystanders who steer clear of any involvement (Salmivalli, Lagerspetz, Bjorkqvist, & Osterman, 1996; Smith & Brain, 2000).

Research conducted by Vandebosch and Cleemput (2009) has revealed a strong connection between traditional bullying and cyberbullying with regards to the profile of perpetrators and victims, and suggest the retention of roles between settings (Vandebosch & Cleemput, 2009). As such, the roles and profiles reviewed below will be used to portray those individuals who are not only bullies in a traditional setting, but also those in the cyber setting.

2.2.1. Bully role

The role of a bully is ascribed to the child that engages in bullying peers at least once a week, on a repeated and systematic basis, for at least three months (Solberg et al., 2007). Olweus (1994) refined this broad category to include passive bullies (also known as followers or henchmen), who later participate in the bullying but do not initiate any bullying behaviours on their own (Olweus, 1994). Similarly, Salmivalli, Lagerspetz, Bjorkqvist, and Osterman (1996) identified two subtypes within the bully role: the ringleader bully, who takes the initiative in perpetrating bullying behaviours; and the follower bullies, who join in thereafter.

2.2.2. Victim role

The victim role is assigned to the child that is subjected to the bullying behaviours, at least once a week, over a period of at least three months (Solberg et al., 2007). The role of a victim can be divided into two contrasting subtypes, depending on the typical response to the

bullying incident, namely a passive victim, or an aggressive victim (also referred to as a bully/victim or provocative victim) (Olweus, 1994; Smith & Ananiadou, 2003). Passive victims are submissive and signal to others that they will not retaliate. Aggressive victims are distinguished from their passive counterparts in terms of their aggressive reactivity to being bullied, i.e., aggressive victims retaliate when being bullied by another peer.

Based on teacher nominations and peer ratings, Olweus (1978) and Pikas (1989) indicated that aggressive victims are provocative, aggressive, irritable, impulsive, restless, and play an active part in provoking bullying behaviours. Olweus revealed that it is this impulsivity and disorganised behaviour displayed by aggressive victims that provokes their peers, and as a result bullying behaviours follow (Solberg et al., 2007). Olweus (1978) was the first to identify this role and labelled those children as aggressive or provocative victims.

Since the identification of aggressive victims by Olweus, research into this role has developed in two different directions. The first direction focuses on victimisation and peer aggression, without an emphasis on the power imbalance (usually implied in bullying); whereas the second direction incorporates the power imbalance, and concerns itself with victimisation that occurs within the context of a bullying situation (Solberg et al., 2007). Furthermore, researchers focusing on aggression among peers without placing an emphasis on the power imbalance, often use the term ‘aggressive victim’, whereas researchers on bullying tend to use the term ‘bully/victim’ (Solberg et al., 2007).

In the present article, the term bully/victim will be used when bullying and victimisation are measured within the context of a bullying situation. Furthermore, the term bully/victim will be ascribed to children who are both bullies *and* victims, at some point, in

either the traditional setting, cyber setting, or both. The term ‘aggressive victim’ on the other hand, will be reserved for studies that base their measurements on broader concepts of peer aggression and victimisation, in which there is no emphasis on the power imbalance embedded in bullying (Solberg et al., 2007).

2.2.3. Bystander role

Bystanders are those children not directly involved in the bullying incident (in the sense that they are neither perpetrating nor being subjected to the bullying), however, they directly witness the bullying. Three sets of bystander behaviours have been identified in literature by Pöyhönen, Juvonen, and Salmivalli (2012), namely: defending, reinforcing, and remaining uninvolved. A bystander who displays defensive behaviours will stand-up for the victim by directly stepping in, seeking help, or comforting the victim (Pöyhönen et al., 2012). On the other hand, reinforcement involves the bystander displaying approval of the bullying behaviour(s); by laughing, or by using verbal phrases to further provoke the perpetrator (Salmivalli & Voeten, 2004). A bystander who displays uninvolved or passive behaviours will avoid any related activities (Pöyhönen et al., 2012; Salmivalli et al., 1996; Smith & Brain, 2000).

2.3. Cyberbullying

The advent of social media and easily accessible technology has allowed bullying to expand into cyberspace. Technological platforms such as the internet, e-mails, text messages, instant message services, chat rooms, cellular phones, camera phones, websites, blogs and social media websites (Brown, Jackson, & Cassidy, 2006) have enabled this transformation,

and are utilised to bully others without any risk of direct repercussions. This derivative of bullying is known as cyberbullying.

As the definitions of traditional bullying vary, so do the definitions of cyberbullying. However, Marées and Petermann (2012) have found that most researchers agree that cyberbullying is an intentional, repeated, and aggressive act or behaviour carried out by an individual or a group of individuals employing ICTs as the instrument of choice. Similarly, Dooley, Pyzalski, and Cross (2009) define cyberbullying in terms of the definition coined by Olweus, as bullying perpetrated via an electronic medium. More specifically, Smith and Mahdavi (2008, p. 376) defined cyberbullying as an “aggressive, intentional act carried out by a group/individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend him or herself.”

Just as traditional bullying takes numerous forms, so does cyberbullying. Burton and Mutongwizo (2009) discuss the following subtypes of cyber violence: harassment, denigration, impersonation, outing, trickery, exclusion, cyber-stalking, happy-slapping, and flaming. *Harassment* is the repeated sending of offensive, rude, and insulting messages. This is often persistent, repeated, and directed at a specific person (Burton & Mutongwizo, 2009). *Denigration* involves cruel gossip/rumours that are spread about a person in order to damage his/her reputation and/or relationships. This subtype is derogatory in nature, and also includes sending digitally altered photos that portray the victim in a sexualised or otherwise harmful way (Burton & Mutongwizo, 2009). *Impersonation* involves stealing another person’s identity, hacking into someone else’s accounts, and potentially posing as them, whilst sending hurtful messages to others (Burton & Mutongwizo, 2009). *Outing* involves deliberately sharing someone’s secrets, or embarrassing information, that was never intended

to be shared with others. *Trickery* describes a situation where deception is used to trick a victim into revealing secrets which are then shared with others via ICTs (Burton & Mutongwizo, 2009). *Exclusion*, which can be actual or perceived, involves excluding someone from any type of password-protected environment, or online group, such as a ‘buddy list’ (Burton & Mutongwizo, 2009). *Cyber-stalking*, much like traditional stalking; involves repeated threats of harm or intimidation, and *Happy-slapping* (a relatively new type of cyberbullying) involves the video capture of a person walking up to another and slapping him/her. The video clip is then uploaded and can be broadly distributed via technological portals (Burton & Mutongwizo, 2009). Although the last subtype of cyber violence, flaming, appears to lack the crucial aspect of repetition implicit in the definition of bullying, it will still be noted here. *Flaming* is characterised by anger and aggressive language displayed with a distinct tone, such as writing a message exclusively in capitals letters, creating the impression of yelling. Flaming leads to name-calling and offensive language, and typically occurs in public, online domains, such as chat rooms or discussion groups. More succinctly, flaming involves brief online fights, wherein angry and vulgar language is exchanged (Burton & Mutongwizo, 2009).

2.4. Outcomes of bullying

Being a victim and/or perpetrator of traditional and/or cyberbullying has frequently been associated with a broad spectrum of behavioural, emotional, and social problems (Kim & Leventhal, 2008). Although the outcomes and effects of being a bully, being a victim, or being both are largely different, there are some overlaps regarding the short and long term effects. Commonalities include depression and other psychiatric problems, lower academic performance, lower self-esteem, eating disorders, and suicidal ideation (Accordino & Accordino, 2011; Li, 2007; Slonje & Smith, 2008). Hay and Meldrum (2010) and Kim and

Leventhal (2008) have indicated that those who both bully and are bullied are at a higher risk of committing suicide when compared to their uninvolved peers. Furthermore, there are similar patterns of anxiety disorders among children who are bullied, victimised, or both (Kaltiala-Heino, Rimpelä, Rantanen, & Rimpelä, 2000).

The dissimilar outcomes are rooted in numerous domains. At home, victims often have parents who limit their opportunities and control their social circumstances (Ladd & Ladd, 1998), whereas bullies are often subject to harsh discipline by Authoritarian parents (Baldry & Farrington, 2000). Furthermore, bullies are likely to engage in criminal misconduct and substance abuse outside their home environments (Baldry & Farrington, 2000), whereas victims are likely to suffer from anxiety and spend more time alone (Salmon, James, & Smith, 1998). The divergences and commonalities compiled by Dake, Price, and Telljohann (2003) are depicted below in Figure 2.2.



Figure 2.2: Divergences and commonalities among bullies and victims

(Dake et al., 2003, p. 174)

2.4.1. Bully outcomes

Bullies are more likely than non-bullies to report frequent alcohol use and cigarette smoking, fighting, below average academic achievement, and school drop-out (Nansel et al., 2001). More severely, Farrington (1993) and Olweus (1993) have indicated that perpetrating bullying behaviour is also a unique childhood risk factor that predisposes an individual to delinquent behaviour and criminal misconduct later in life. In this regard, Farrington (1995) revealed that bullies have a propensity towards increased aggressive behaviour and domestic violence in young adulthood. Similarly, Brewster and Railsback (2001) have revealed that

those involved in bullying are also more likely to have one or more criminal convictions by the time they reach young adulthood. Results from a more recent study by Ttofi, Farrington, Lösel, and Loeber (2011) have revealed that the perpetration of bullying was a significant risk factor for later criminal offense, even after controlling for major childhood risk factors (Odds ratio [OR] = 1.82; 95% Confidence interval [CI]: 1.55–2.14). In fact, the probability of committing a criminal offence up to 11 years later was found to be much higher for school bullies than it was for non-involved learners (OR= 2.50; 95% CI: 2.03–3.08). These offences included shoplifting, theft, vandalism/property damage, violent offending, arrest and/or police/court contact (Ttofi et al., 2011).

During the same period, Jiang, Walsh, and Augimeri (2011) conducted a study in Canada. The authors examined the link between bullying behaviour in early childhood and any subsequent contact with the criminal justice system. Results revealed a strong link between perpetrating bullying behaviours during childhood and subsequent criminal offending beyond the age of 12 years old (Jiang et al., 2011). Logistic and Cox regression analyses in this study indicated that the risk of onset of criminal offence for bullies was significantly higher than for non-bullies, with the odds of onset of criminal offence for bullies showing themselves to be 1.90 times more likely than for non-bullies (95% CI: 1.11–3.26). This result held true even when demographic variables such as age, gender and other risk factors during childhood were controlled for (95% CI: 1.08–3.41). Furthermore, criminal convictions for bullies were nearly twice as high for non-bullies up to the child's eighteenth birthday: among the 260 bullies, 24 bullies (9.2%) had at least one official criminal conviction before the age of eighteen. There were 42 criminal records among the 24 offenders, with the mean age of offence at 14.4 years. These criminal transgressions ranged

from assault and weapon possession, to breaking-and-entering, theft and drug-related offences (Jiang et al., 2011).

Those involved in bullying at school are also more likely to have diagnosable psychiatric disorders (Dake et al., 2003). Perpetrators of bullying are reported to have more depression, and are more likely than their peers to display antisocial behaviour (Olweus, 1994; Salmon et al., 1998). Bullies in primary and high school have also been reported to have an increased prevalence of suicidal ideation and suicide attempts, when compared to their uninvolved peers (Kaltiala-Heino, Rimpelä, Marttunen, Rimpelä, & Rantanen, 1999; Kaminski & Fang, 2009; Van der Wal, 2005).

2.4.2. Victim outcomes

Victimised children are reported to have a myriad of physiological and psychological problems, including: sleep difficulties; bed wetting; depression; anger management problems; school phobia; low self-esteem; feelings of loneliness and helplessness; and somatic symptoms, such as headaches and stomach aches (Due et al., 2005; Kim & Leventhal, 2008). Victimised children also have a higher rate of developing childhood psychiatric disorders, where victims are: 4.60 times more likely to suffer agoraphobia; 2.70 times more likely to suffer from a generalised anxiety disorder; and 3.10 times more likely to suffer from a panic disorder, when compared to their uninvolved peers (Copeland, Wolke, Angold, & Costello, 2013). Additionally, these psychiatric disorders, along with others, may continue as the child reaches young adulthood, and may extend into their adult lives (Copeland et al., 2013).

Psychosocially, victims lack social competence and have difficulty when defending themselves from bullies (Schwartz, Dodge, & Coie as cited in Beran & Li, 2005). Other psychological outcomes include anxiety, feelings of insecurity, social isolation, and a susceptibility to depression (Neser et al., 2004; Olweus & Limber, 2010). Victimized children are from 1.60 up to as much as 6.80 times more likely to report depressive symptoms, when compared to their uninvolved peers (Due et al., 2005). In line with these research findings, Olweus (1993) followed up with victims of bullies from Grades Six through Nine, and reassessed them at age 23 years. He found that as adults, these individuals were more likely to experience depressive symptoms when compared to peers who had not been bullied during their childhood.

Victimized children often exhibit high levels of suicidal ideation and are more likely to have attempted suicide when compared to non-involved peers (Neser et al., 2004; Olweus & Limber, 2010; Rigby & Slee, 1999; Roland, 2002). Kim, Koh, and Leventhal (2005) revealed that being a victim of bullying led to increased risks of suicidal behaviour and suicidal ideation, however these results only approached statistical significance when adjusting for anxious/depression symptoms, gender, residence, family structure, and socioeconomic status (*Adjusted Odds Ratio [AOR]*= 1.69; 95% *CI*: 1.00–2.85; *AOR* = 1.29; 95% *CI*: 0.91–1.84, respectively). Similarly, Hay and Meldrum (2010) found that both traditional and cyberbullying victimisation are significantly and positively associated with self-harm and suicidal ideation.

2.4.3. Bully/victim outcomes

Bully/victims seem to experience problems in multiple areas of functioning (Schwartz, 2000; Solberg et al., 2007), possibly as a result of dealing with the adverse outcomes inherent in being both a bully *and* a victim. Bully/victims are likely to experience academic challenges, problems with alcohol and drugs, loneliness, and poor peer relations (Nansel et al., 2001). Marini, Dane, Bosacki, and Cura (2006) have revealed that bully/victims reported greater internalising and peer relational problems than bullies or uninvolved peers. Furthermore, results from a study by Townsend et al. (2008) revealed that bully/victims were more likely to drop out of high school when compared to bullies, victims, and their uninvolved peers.

Depression and neuroticism are also significantly more likely to be reported by bully/victims when compared to bullies, victims, or their uninvolved peers (Kaltiala-Heino et al., 2000). Copeland et al. (2013) found bully/victims to have a 4.80 times greater risk of developing young adult depression ($OR= 4.80$, 95% CI : 1.20-19.40, $p < .05$), and suffer a greater risk of developing suicidal thoughts, when compared to their uninvolved peers. Similarly, Kim et al. (2005) revealed that bully/victims reported more suicidal/self-injurious behaviours and suicidal ideation in the six months prior to being interviewed, and were at a significantly higher risk for suicide ideation and suicidal behaviour when compared to their uninvolved peers ($AOR= 1.90$, 95% CI : 1.26–2.87, $p < .05$; $AOR = 1.85$, 95% CI : 1.01–3.40, $p < .05$; respectively). Overall, it seems that bully/victims manifest a detrimental combination of impairments and outcomes that are characteristic of both bullies and victims (Marini et al., 2006).

2.5. The effects of traditional bullying vs. cyberbullying

While traditional bullying and cyberbullying share many debilitating outcomes, such as low self-esteem, depression, anxiety disorders, suicidal ideation, and other psychiatric disturbances (Kumpulainen, Rasanen, & Henttonen, 1999; Olweus, 1993, 1994; Wang et al., 2009; Wolke, Woods, Bloomfield, & Karstadt, 2000), the reported effects related to cyberbullying have been reported to be more traumatising than the identified effects of traditional bullying (Badenhorst, 2011). This is due in part to the extremely public nature of the cyberbullying incident, where more people are able to access and witness the victim's humiliation (Badenhorst, 2011). Moreover, it may be more difficult to gain a reprieve from the cyberbullying occurrences, given that a victim can be exposed to it even when physically removed from the bullies (Hay & Meldrum, 2010). Underwood (2003) and Willard (2007) concur with this by suggesting that cyberbullying is more detrimental than traditional bullying, due to the victim's frequent inability to identify, avoid and terminate the attacks they undergo, given that these attacks can occur at any time, day or night.

Contrary to Willard (2007) and Underwood (2003), who claim that it is difficult for cyber victims to avoid being targeted, research conducted by the Youth Research Unit (YRU) at the University of South Africa (UNISA) found that approximately seven in every ten learners who had been cyberbullied, reported that they actively avoided chat rooms and MXit following any cyberbullying incidents (Tustin & Zulu, 2012). Not only does this statistic indicate a large number of learners who willingly avoided cyberbullying victimisation, but, according to Tustin and Zulu (2012), these efforts indicate some level of self-protection. The YRU study found that half of the learners who were victims of bullying had reported the incident (while 48.7% indicated that appropriate action was taken to prevent bullying).

Unfortunately, 44% of learners who were bullied and reported it claimed that no action was taken to reprimand the cyberbully or deal with the incident. According to Tustin and Zulu (2012), this lack of consequences perpetuates the violence (relating to the bully) and can potentially increase the risk of further victimisation (against the victim).

2.6. Traditional bullying on a global scale

Research into bullying on an international basis stemmed largely from the Scandinavian developments of Olweus, and gained momentum during the late 1980s (Greeff & Grobler, 2008; Smith & Brain, 2000). Along with the grounding provided by Olweus, a Council of Europe seminar hosted in Stavanger, Norway during 1987 further stimulated cognisance of the phenomenon in countries around the globe, such as Spain, Portugal, Holland, France, Scotland, Ireland, Canada, Australia, Japan, and the United States of America (Smith & Brain, 2000). In these countries, although prevalence rates of bullying behaviour are not directly comparable (as operational definitions vary across studies and countries), prevalence rates range between 5% and 35% (Espelage & Swearer, 2003; Nansel et al., 2001; Smith et al., 2002). What follows is a summary of bullying practices across Asia, Europe, North and South America, Australia, and Africa.

2.6.1. Asia

During the 1980s, research into the nature and frequency of *ijime*², defined as insidious acts of social manipulation and group bullying of weaker peers (Naito & Gielen, 2005), was conducted in Japan (Smith & Brain, 2000). *Ijime* is in most cases a form of

² From the Japanese, this translates directly into English as ‘bullying’. The author has adopted it as a critical concept.

psychological intimidation or terror perpetrated by classmates and peers against mentally weaker victims, or simply victims who may differ from others in some way (Naito & Gielen, 2005). Findings suggested a decrease in the problem from 1982 to 1986, whereby acts of school violence decreased from 4,315 to 2,801 incidents, and as a result, research activity and public concern declined. However, a series of suicides believed to be the result of *ijime* during the early 1990s initiated a second outbreak, which currently persists (Smith & Brain, 2000).

Meanwhile, research conducted between 2003 and 2005 in a wide range of developing countries for the Global School-based Health Survey (GSHS), found that one-fifth of children in China reported being verbally or physically bullied in the 30 days preceding the study (Plan, 2010). Furthermore, the data reviewed by Eslea et al. (2004) indicated that 13.3% of girls and boys in primary and secondary schools in China ($N = 4,738$) reported being victims of traditional bullying.

The GSHS further revealed that one in every three children (between 13 and 15 years old) in the Philippines had been bullied in a traditional manner, on one or more occasion, during the 30 days preceding the study. Twenty-eight percent of those children that reported being bullied stated that they were subjected to more physical kinds of bullying, such as hitting, kicking, pushing, shoving, or being locked indoors. Furthermore, more boys (35.8%) than girls (22.2%) encountered these physical bullying behaviours (Plan, 2010).

2.6.2. Europe

The most notable research to stem from Europe was that of Dan Olweus. Olweus' systematic research was initiated during the early 1970s when three adolescent boys in Norway committed suicide, in unrelated events, as a likely consequence of being bullied at school. This research was largely confined to Norway and the Scandinavian context. However, the publication of Olweus' book, *Aggression in the Schools* (1978), and the success of his Norwegian work drew awareness to the phenomenon (Smith et al., 2002), and subsequently influenced and encouraged further related research worldwide (Olweus, 1993; Smith & Brain, 2000).

A cross-sectional survey conducted in Europe by Due et al. (2005), which examined the prevalence of bullying and the association between bullying and physical and psychological symptoms among 11, 13, and 15 year old adolescents, revealed significant variation in the prevalence of bullying across European countries. The lowest prevalence was observed in Sweden ($n = 3,802$), with 5.1% of girls, and 6.3% of boys experiencing some form of bullying, and the highest in Lithuania ($n = 4,513$), with 38.2% of girls and 41.4% of boys experiencing some form of bullying. The prevalence of bullying decreased with age in all countries except Scotland. Additionally, in all countries except Hungary and Russia, more boys than girls were victims of bullying, however in most countries gender differences were small (Due et al., 2005).

Whitney and Smith (1993) found that between 13% and 20% of children between the age of 8 and 16, surveyed from 24 schools ($N = 6758$) in Sheffield, Britain had been bullied 'sometimes', while between 5% and 8% had been bullied 'once a week or more'. Between

6% and 15% of learners had perpetrated bullying behaviour 'sometimes' (moderate bullying), while between 2% and 7% had bullied others 'once a week or more' (frequent bullying). Gender differences pertaining to victimisation were slight, but girls tended to be bullied less than boys (Whitney & Smith, 1993). Moreover, boys admitted to perpetrating bullying behaviour considerably more than girls. The research further revealed that name calling was the most common form of bullying (62%), which was most often perpetrated by one boy (35%) or a group of boys (31%).

2.6.3. North America

Nansel et al. (2001) conducted a nationwide study in the United States to measure the prevalence of bullying behaviours and to determine the association of bullying and being bullied with indicators of parenting, psychosocial adjustment (including problem behaviour), school adjustment, and social/emotional adjustment. Analysis of data from a representative sample of 15,686 students in Grades Six through Ten in public and private schools, revealed 29.9% of the sample reported moderate or frequent involvement in bullying, either as a bully (13.0%), as a victim (10.6%), or both (6.3%). Of those who perpetrated bullying behaviour, 10.6% of the sample reported bullying others 'sometimes', while 8.8% admitted to bullying others 'once a week or more'. Moreover, Nansel et al. (2001) found that males bullied others, and were bullied by others, significantly more often than females. Among male participants, both physical and verbal bullying (both taunting and sexual comments) was common, while verbal bullying and rumours were more common among females. Furthermore, traditional bullying occurred with greater frequency among primary school learners than it did among high school learners; more specifically, bullying occurred most frequently in Sixth through Eighth Grade.

In the same study by Nansel et al. (2001) a proportional odds model was used to examine the relationship between a range of psychosocial adjustment constructs and bullying. Results showed that perpetrating and experiencing traditional bullying behaviours were significantly associated with poorer psychosocial adjustment; however, different patterns of association occurred among bullies, those bullied, and those who both bullied others and were bullied themselves (Nansel et al., 2001). Those who were bullied demonstrated poorer social and emotional adjustment, reporting greater difficulty in making friends, poorer relationships with classmates, and greater loneliness; while those who bullied others were more likely to show other forms of problematic behaviour, such as drinking alcohol and smoking. Bullies showed poorer school adjustment, both in terms of academic achievement and perceived school climate, yet they reported greater ease in making friends. The participants who reported both bullying and being bullied demonstrated poorer adjustment across both social and emotional dimensions, together with various problem behaviours (Nansel et al., 2001).

2.6.4. South America

Although limited, the research on traditional bullying from South America and the Caribbean shows that approximately one-third of children surveyed in Uruguay, Ecuador, and Brazil (28%, 36.7% and 40%, respectively) reported that they had been involved in bullying either as the perpetrator or as the victim (Plan, 2008), and that as many as eight in ten children in Bolivia reported being affected by bullying behaviours in some way (Jones, Moore, Villar-Marquez, & Broadbent, 2009). However, the GSHS conducted in Uruguay ($N = 3,524$) during 2012, revealed a smaller percentage of bullied learners, where 19.1% of participants (aged between 13 and 15 years) had been bullied on one or more days during the

past 30 days preceding the study. Moreover, more girls (20.4%) reported these behaviours when compared to their male counterparts (17.7%).

The GSHS conducted during 2007 in Bogota (the capital and largest city in Colombia) surveyed a total of 1,737 students, aged between 13 and 15 years. A total of 34.2% reported being bullied on one or more days during the 30 days preceding that study. Furthermore, more boys (36.4%) than girls (32.4%) reported such behaviour. However, the small effect size means that a significant result could not be assumed.

During 2013, the GSHS was conducted in El Salvador. A total of 1,915 learners participated. Results revealed slightly lower prevalence rates when compared to the GSHS conducted in Columbia, where a total of 22.6% of participants indicated they were bullied, on one or more occasions, during the 30 days preceding the study. Furthermore, results revealed more girls (24.3%) than boys (20.9%) reported such behaviour.

2.6.5. Australia

Slee (1995) investigated the extent of bullying and the environment in which it occurred in a sample of 1,050 South Australian primary school children. On average, 23.8% of students reported being bullied once a week, or more often. Furthermore, the bullying was reported as most frequently taking place during break-time. Similar results were reported in another study conducted in Australia by Rigby and Slee, with a sample of 25,399 children, between 8 and 13 years of age (Rigby & Slee as cited in Stassen Berger, 2007). Results revealed 7% of the sample was perpetrating traditional bullying behaviours 'once a week or more', while 25% of the children claimed to have been bullied by others 'once a week or

more'. A more recent study by Rigby (2005) suggested that a substantial proportion of Australian learners engaged in bullying others, with boys reporting bullying others significantly more often than girls, with respect to hitting, kicking, pushing, and threatening others, $\chi^2 (1, N = 200) = 7.72, p < .05$; and $\chi^2 (1, N = 200) = 12.05, p < .05$, respectively.

2.6.6. Africa

Bullying affects large numbers of children in African schools (Plan, 2008). A study conducted amongst secondary school students from 17 public secondary schools in Nairobi, which surveyed a total of 1,012 learners, revealed that between 63% and 82% of public school learners (female and male learners) reported various types of bullying (Plan, 2010). A study conducted in Benin City, Nigeria found that 78% of learners in junior secondary school reported being victims of bullying, and 71% reported bullying others (Egbochuku, 2007). Within Ghana, 62% of girls aged between 11 and 12 years of age reported that they had experienced some form of bullying while at school (Plan, 2008). Furthermore, it has been documented that girls in Ghana experience high levels of sexual harassment at school, not only from their male counterparts, but from teachers as well. Similar behaviour towards female learners has been documented in other African countries, such as Botswana, Malawi and Zimbabwe (Plan, 2008).

In South Africa, bullying is pervasive, with ranges varying from 61% among a sample of high school learners in Tshwane, $N = 1,873$ (Neser et al., 2004), to 11.8% of learners reporting bullying in rural high schools in Mpumalanga (Taiwo & Goldstein, 2006). The Center for Justice and Crime Prevention (CJCP) conducted a nationwide study on violence in South African schools during 2007, namely the National School Violence Study (NSVS)

(Burton, 2008). The main aim of the NSVS was to collect data that would provide a comprehensive picture of the extent of violence in South African schools. The NSVS showed that 15.3% of children at primary and secondary schools have experienced some form of violence while at school, most commonly in the form of threats of violence, assaults and robbery.

Similar prevalence rates were obtained in a study by Liang, Flisher, and Lombard (2007), which examined the prevalence of bullying behaviour in adolescents from Cape Town and Durban, and the association of these behaviours with levels of violence and risk behaviour ($N = 5,074$). This study found that bullying behaviours are pervasive in Cape Town high schools; where, of those involved in bullying, 8.2% were bullies, 19.3% were victims and 8.7% were bully victims, with an overall involvement of 36.3% of all learners. Furthermore, bullying was more prevalent among males than it was among females (Liang et al., 2007).

Research conducted by Greeff and Grobler (2008), which surveyed 360 primary school learners in Bloemfontein, showed that 56.4% had been bullied at school. Similar to previous South African research, Greeff and Grobler (2008) also indicated that a greater proportion of South African boys (61.1%) experienced bullying behaviours when compared to their female counterparts (51.7%). Being called mean names, being made fun of, or being teased in hurtful way; deliberate exclusion from a group; being hit, kicked, pushed, shoved around or locked indoors; having false rumours spread about oneself; having money or possessions being taken away or property damaged, comments about ethnicity; and gestures with a sexual meaning, were the types of bullying behaviours reported (Greeff & Grobler, 2008). However, the results of the comparison between girls and boys with reference to the

presence or absence of bullying indicated that gender does not impact significantly on the prevalence of bullying: a chi-square test showed $\chi^2 (2, N = 360) = 3.26, p > .05$ (Greeff & Grobler, 2008). However, it is clearly reflected, although not significantly so, that a greater percentage of boys (61.1%) than girls (51.7%) experienced some form of bullying. Within the same study, no significant differences were found in the proportion of pupils who have experienced some form of bullying since the beginning of the academic year with specific reference to the pupil's grade: a chi-square test showed $\chi^2 (2, N = 360) = 3.82, p > .05$. Thus, learners from Grades Four, Five, or Six experienced bullying to similar degrees (Greeff & Grobler, 2008).

2.7. Cyberbullying on a global scale

Cyberbullying has become increasingly prevalent (Twyman, Saylor, Taylor, & Comeaux, 2010), and ranks as one of the most common forms of aggression among children (Slonje & Smith, 2008). Recently, Hinduja and Patchin (2013) reviewed 73 articles published in peer-reviewed academic journals that included prevalence rates on cyberbullying. Of those, 51 included cyberbullying victimisation rates, and 42 included cyberbullying perpetration rates. The prevalence rates obtained from these studies ranged from 2.3% to 72% for victimisation, and from 1.2% to 44.1% for perpetration. Victimisation and bullying rates are shown in Figure 2.3 and Figure 2.4, respectively.

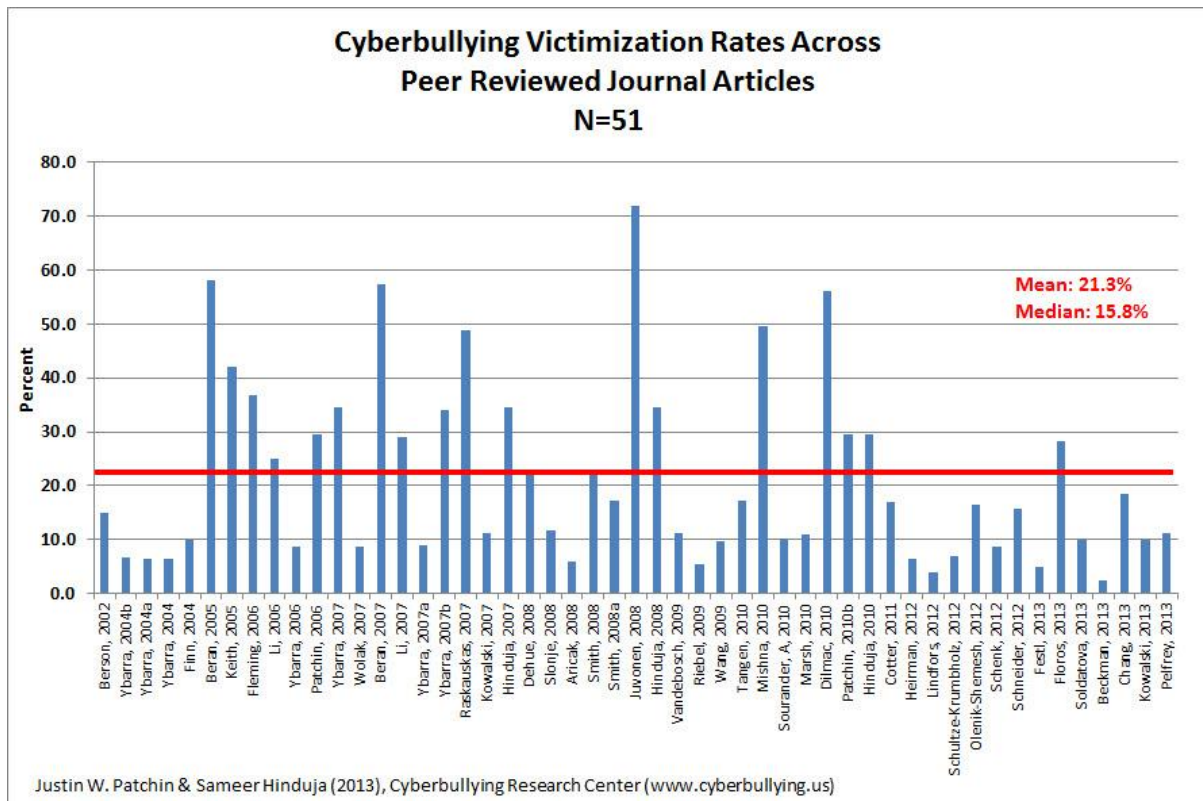
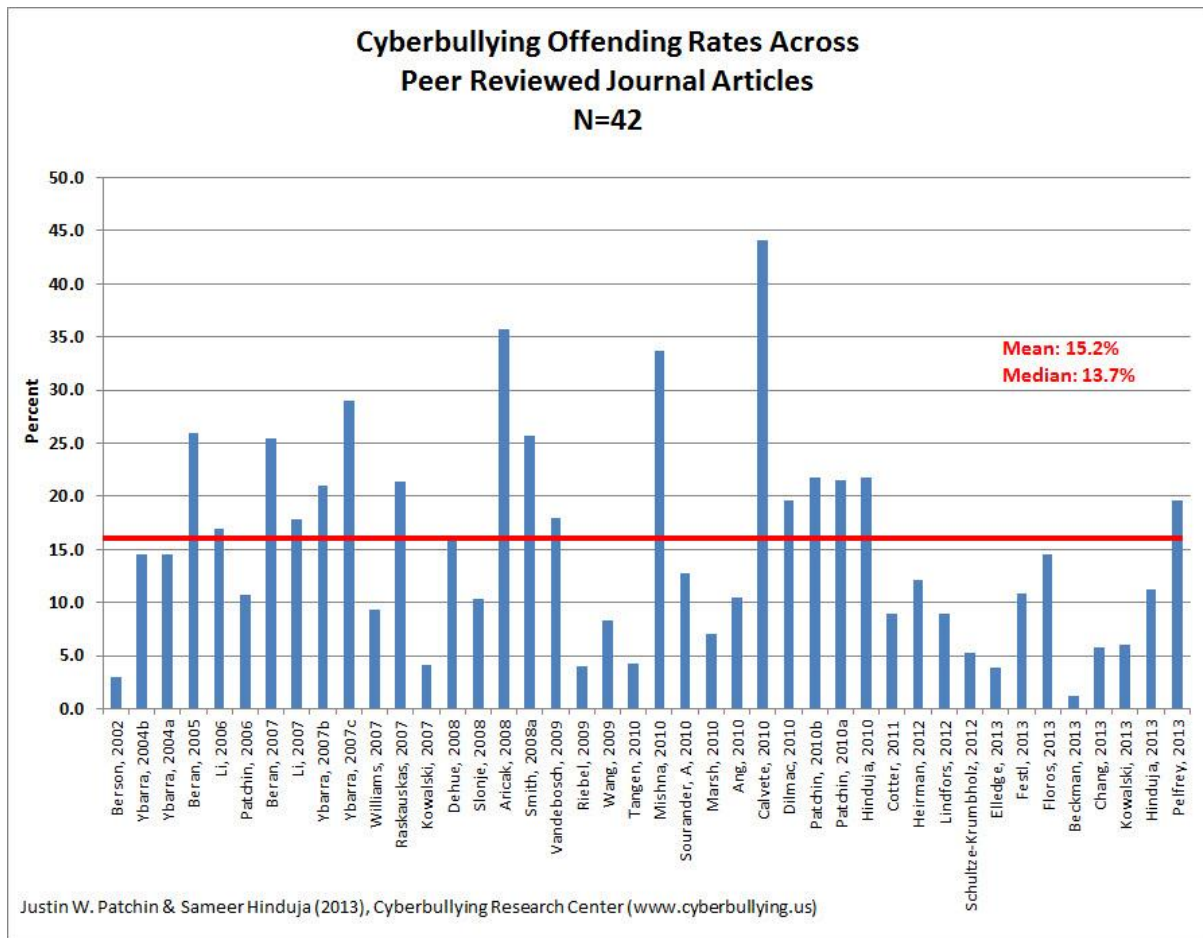


Figure 2.3: Cyberbullying victimisation rates (Patchin & Hinduja, 2012)

The average across the studies which focused on victimisation rates ($n = 51$) indicated that 21.3% of respondents had been cyberbullied, and the average across the studies which focused on perpetration rates ($n = 42$) indicated that 15.2% of respondents admitted to cyberbullying others at some point. Overall, Hinduja and Patchin concluded that approximately one out of every four respondents had experienced cyberbullying while approximately one out of every six had perpetrated it.



**Figure 2.4: Cyberbullying perpetration rates
(Patchin & Hinduja, 2012)**

South African literature has revealed similar prevalence rates of cyberbullying when compared to the average across the international journals reviewed above. A study conducted by the Youth Research Unit (YRU) at the University of South Africa (UNISA), which examined the nature, extent and impact of bullying (especially cyberbullying) among high school learners in Gauteng revealed that, of more than 3,371 learners in Grades 8 to 12, 16.9% of learners had experienced some form of cyberbullying (Unisa Bureau of Market Research, 2012). Of those cyberbullied, 53.6% of the learners received upsetting text messages and 48% were called mean names via ICTs, with both otherwise referred to as harassment (by Burton & Mutongwizo, 2009). Other cyberbullying experiences included

gossip and false rumours being spread (49%), remarks of a sexual nature (24.5%) and unflattering and suggestive personal photos being spread online (13.3%), all of which are otherwise known as denigration. Being bullied with someone else recording the incident and then distributing it online, was indicated to have been experienced by 8.7% of the participants. Burton and Mutongwizo (2009) referred to this type of cyberbullying as happy-slapping.

A different South African study revealed contradictory prevalence rates when compared to the study above. The Center for Justice and Crime Prevention (CJCP) asked 1,726 respondents (aged between 12 and 24 years) in four cities in South Africa (Johannesburg, Cape Town, Durban, and Port Elizabeth) whether they had experienced any form of cyber aggression, either within their home environment or school environment. Almost half (46.8%) of the sample reported experiencing some form of cyberbullying (Burton & Mutongwizo, 2009). One in three (31%) respondents interviewed had experienced some form of cyber aggression while at school, while 42.9% of the respondents had experienced some form of cyberbullying outside of school (Burton & Mutongwizo, 2009). The discrepancy between the South African prevalence rates, as well as those obtained from Hinduja and Patchin (2013), further ignited the need to conduct more research into traditional bullying and cyberbullying amongst primary school learners.

2.8. Summary

Bullying in schools is not a new phenomenon, and seems to be a pervasive problem worldwide. It involves the tormenting of others through verbal harassment, physical assault, or other more subtle methods of coercion such as manipulation. Four main roles have been

identified for those involved in traditional bullying and cyberbullying, namely the bully, the victim, the bully/victim, and the bystander. Research has indicated discreet negative, psychosocial outcomes and effects endured by children who suffer at the hands of traditional bullying and cyberbullying, some of which are shared by those who perpetrate such behaviours. Notwithstanding the adverse outcomes experienced by bullies and victims, bully/victims succumb to more severe outcomes when compared to their involved peers. Furthermore, it has been suggested that cyberbullying is more harmful than traditional bullying, due to the public nature of the incident, the difficulty in gaining reprieve, and/or the inability to identify the tormentor.

Chapter Three presents an overview of the theoretical framework underpinning the current study, namely the Social Learning Theory proposed by Bandura. Furthermore, the Authoritarian parenting style is incorporated as a concept into the Social Learning framework to understand and explore possible origins of bullying as a form of learned behaviour.

CHAPTER 3: THEORETICAL FRAMEWORK

In Chapter Three, the reader is guided through the theoretical framework that underpins the current study, namely the Social Learning Theory proposed by Albert Bandura. The theoretical framework is reviewed in terms of its key principles and critique. Thereafter, a description of the Authoritarian parenting style is provided. The psychological and physical profiles of bullies, victims, and bully/victims are then outlined. With these profiles borne in mind, possible developmental pathways of bullying behaviours are reviewed, with reference to the Social Learning Theory and the Authoritarian parenting style.

3.1. Bandura's Social Learning Theory

Bandura postulated that individuals acquire aggressive responses using the same mechanism that they do for other complex forms of social behaviour, namely: direct experience or the observation-modelling of others (Hart & Kritsonis, 2006). The Social Learning Theory has been applied in numerous studies and its theoretical value has been supported (studies include those by Huesmann & Eron, 1989; Low & Espelage, 2012; Pakaslahti, 2000; Schwartz, Dodge, Pettit, & Bates, 1997; Wilson, Parry, Nettelbeck, & Bell, 2003). Studies utilising the Social Learning Theory as a foundation for understanding bullying behaviours have examined childhood and adolescent aggression (Bandura, 1971; 1978); family conflict (Low & Espelage, 2012; Wilson et al., 2003); drug and alcohol use (Akers, Krohn, Lanza-kaduce, & Radosevich, 2007; Eiser, 1985; Low & Espelage, 2012); intimate partner violence (Bauer et al., 2006); and other violent and non-violent criminal behaviour (Akers & Matsueda, 1999). An area of research that has received considerable attention in the literature

and is worth exploring further is how parental/caregiver behaviours impact on the behaviour of the child.

Several researchers highlight the importance of the family as a source of social learning, and have hypothesised that inappropriate, aggressive behaviours, such as bullying, are a result of social learning within the family (D’Zurilla & Goldfried, 1971; Hogben & Byrne, 1998; Huesmann & Eron, 1989; Lochman & Lenhart, 1993; Low & Espelage, 2012; Pakaslahti, 2000). Researchers have hypothesised that bullies learn inappropriate and adverse conflict resolution tactics from their parents, which they then use in interactions with their peers (Schwartz et al., 1997; Wilson et al., 2003). Moreover, Barlow et al. (1984), and Loeber and Dishion (1984) maintain that children growing up in families where they are exposed to aggression, inconsistent and highly aversive discipline techniques, and physical punishment, learn and develop these behaviours, and then generalise these behaviours to their peer group, thus predisposing a child to display aggressive behaviours such as bullying.

3.2. Key assumptions of the Social Learning Theory

Traditional theories of learning have often depicted behaviour as the product of direct experience (Bandura, 1971). Learning, rooted in direct experience, is largely governed by the consequences, in the form of reward or punishment. Although behaviour can be shaped to some extent by rewarding or punishing consequences, Bandura and others suggest that most of the behaviours that people display are learned, either deliberately or inadvertently, through the influence and observation of a model (Bandura, 1978; Bandura, 1971; Eyal & Rubin, 2003; Mejia-Arauz, 2005).

Observational learning allows people to acquire large, integrated units of behaviour, without having to build up the patterns gradually by tedious trial and error (Bandura, 1971). Bandura (1971) reported that emotional responses can be developed observationally as well, by witnessing the affective reactions of others. What is more, negative behaviour can be exacerbated vicariously, by observing the way in which others engage in adverse activities, without experiencing any negative consequences (Bandura, 1971).

Bandura (1978) identified three models of observational learning: (1) a live model, which involves an individual demonstrating the behaviour; (2) a verbal instructional model, which involves descriptions and explanations of behaviour; and (3) a symbolic model, which involves real or fictional characters displaying behaviours in books, films, television programmes, or online media.

Bandura, Ross, and Ross (1963) carried out a study of observational learning, which demonstrated that children learn and imitate behaviours they have observed in live models. Bandura, Ross, and Ross (1963) hypothesised that children's observation of aggressive models would increase the likelihood that aggressive behaviours would be used during times of subsequent frustration (Bandura et al., 1963). Young children were placed in one of two rooms with adults interacting with a character named the 'bobo doll'. In one room, the adults attacked the bobo doll, and in another they did not. The adults acting as aggressive models attacked the bobo doll in a distinctly violent manner, using a hammer in some cases, and in other cases threw the doll in the air, shouting 'Pow, Boom!' (Bandura et al., 1963, p. 5). As a result, the researchers could be sure that, if the behaviour was repeated, it was learned, rather than spontaneous (Bandura et al., 1963). Those children, who had witnessed the aggression

displayed towards the bobo doll, began to imitate the aggressive actions of the adults they had observed in their own interactions with the bobo doll (Bandura, 1978).

Later, Bandura (1965) carried out the same experiment, with the difference that the models that behaved aggressively were either punished, rewarded, or neither for their behaviour. Children who had witnessed the adult being rewarded (and those who had seen the adult neither rewarded nor punished for their behaviour) behaved more aggressively than those who had seen the adult punished (Bandura, 1965). Overall, Bandura and associates proved that children readily mimicked aggressive behaviours of a live model, and generalised such responses to novel settings in the absence of that model (Hart & Kritsonis, 2006).

However, not all observed behaviours are effectively learned. Factors involving both the model and the learner play a role in whether or not social learning proves itself to be successful (Bandura, Barbaranelli, Caprara, & Pastorelli, 2008; Bandura & Walters, 1963; Bandura, Ross, & Ross, 1961; Bandura, 1978; Eyal & Rubin, 2003). Bandura (1971) suggests the following four steps are involved in observational learning and modelling (illustrated in Figure 3.1), and are necessary for effective learning (Bandura, 1971, p. 6):

Attention

In order to learn, an individual must pay attention. Anything that diminishes an individual's attention will have a negative effect on observational learning. If the model is interesting or there is a unique aspect to the situation, an individual is likely to pay full attention. Various factors increase or decrease the amount of attention paid, including distinctiveness, prevalence, complexity, and functional value (Bandura, 1971). An

individual's characteristics (i.e., sensory capacities, arousal level, perceptual set, and past reinforcement) may also affect attention.

Retention

Retention involves the ability to store information. This can be affected by a number of factors, but the ability to recall information later and act on it is fundamental to observational learning.

Reproduction

If attention has been paid, and the information retained, the individual will perform the observed behaviour. Further practice of the learned behaviour leads to improvement and skill advancement.

Motivation

Finally, in order for observational learning to be successful, an individual requires motivation to emulate the behaviour that has been modelled.

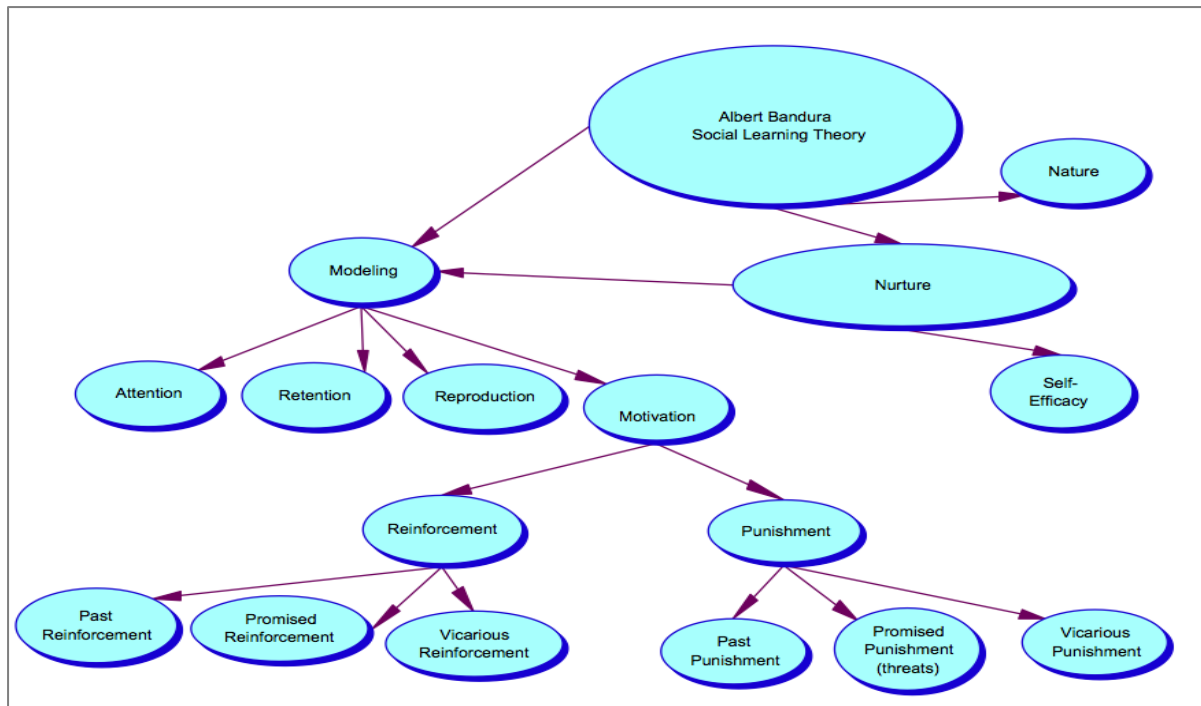


Figure 3.1: Depiction of Bandura’s Social Learning Theory

Retrieved from: <http://www.pgce.soton.ac.uk/IT/Learning/Behaviourism/>

Broadly put, Bandura’s Social Learning Theory suggests that adolescents observe, interpret, and imitate the actions, behaviours, attitudes, and emotional reactions of their parents (Bandura, 1978). Bandura’s theory has been used to show that, although adolescents spend an increasing amount of time away from home, parents still have an influence on them and are likely to remain significant models in their lives (Bandura, 1978; Gecas & Seff, 1990).

3.3. Critique of the Social Learning Theory

Bandura and associates are to be applauded for the empirical accuracy of their study (Hart & Kritsonis, 2006). Using three experimental groups and a control group for 96 children, they were able to control for potential intervening factors such as gender, as well as

behavioural dispositions/personality of the participants. The researchers are also to be commended for clearly identifying the onset of behaviours, which would be considered primarily aggressive in nature as well as imitative, along with non-imitative responses (Hart & Kritsonis, 2006). Additionally, they delineated and quantified the various forms that violence can take (physical, verbal, etc.) as well as the given subject's level of aggression inhibition prior to experimental exposure (Hart & Kritsonis, 2006). With these variables under close scrutiny, the study clarified various factors and major principles embedded in Social Learning Theory (Hart & Kritsonis, 2006)

However, no theory can escape criticism. The major criticisms of the Social Learning Theory relate to the bobo doll studies. Ferguson (2010) has suggested that the bobo doll studies are not studies of aggression at all, but rather that the children were motivated by the desire to please adults, rather than to display genuine aggression. Furthermore, Ferguson has criticised the external validity of the study, noting that bobo dolls are designed to be hit (Ferguson, 2010). According to Wortman, Loftus, and Weaver (1998), the bobo doll studies were unethical, as the subjects were manipulated to respond in aggressive ways. Moreover, Hart and Kritsonis (2006) revealed that Bandura's bobo doll participants were mostly white, of similar affluent backgrounds, and all from the nursery of Stanford University, yet Bandura makes statements on the findings when explaining the aggression and violence traits among subgroups and lower socioeconomic communities (Hart & Kritsonis, 2006). More concisely, Hart and Kritsonis (2006) suggest that the bobo doll study falls short in its failure to address several fundamental threats to internal validity, namely: selection bias, history, maturation, and ambiguous temporal sequence.

3.4. The Authoritarian parenting style

Developmental psychologist Diana Baumrind (Baumrind, 1991), claims the way in which children are raised has a major impact on their functioning and well-being. Furthermore, Baumrind noted that the manner in which parents meet the needs of their children for nurturance and boundary-setting greatly influences the child's degree of social competence and future behaviours (Baumrind, 1991). Baumrind studied parenting behaviours and identified two dimensions in parenting practices: control and demandingness (which is cited as the extent to which the parent expects more mature and responsible behaviour from a child); and warmth and responsiveness (which refers to the degree to which the parent responds to the child's needs), respectively.

Initially, Baumrind used these two dimensions to classify parenting styles into three categories, namely: the Authoritative parenting style, which is characterised by high control and high warmth; the Permissive parenting style (Indulgent), characterised by low control and high warmth; and the Authoritarian parenting style (APS), in which the parent's behaviour is high in control and low in warmth (Baumrind, 1991).

The APS is characterised by punishment, an indisputable power imbalance which favours the parents, and an absence of explanation and negotiation (Baumrind, 1991). Authoritarian-style parents emphasise their control over their child, restrict the child's autonomy, and decide which behaviour is appropriate for them (Baumrind, 1991). Authoritarian boundaries are strict, non-negotiable, and reinforced with punitive consequences. Parents adopting an Authoritarian parenting style often use enforced

discipline, demand total obedience and expect children to adhere to their rules and orders unquestioningly (Baumrind, 1991).

Baumrind (1991) documented the APS as predisposing a child to harbour certain tendencies associated with a variety of bullying behaviours, such as enforcement, conflict, physical aggression, etc. Furthermore, Becker as cited in Dwairy (2004), revealed parental hostility and control fosters a child's aggression towards others. What is more, Duncan (1999) has suggested that bullies are more likely to come from families lacking warmth, a family in which violence is common, and where discipline is harsh and inconsistent. Similarly, Oliver, Oaks, and Hoover (1994) reported that bullying was fostered in families characterised by social isolation, parental conflict, positively reinforced aggression, and punishment - all of which closely resemble the core aspects of the APS (Baumrind, 1991), and which are possibly learned through observation. Carney and Merrell (as cited in Bauer et al., 2006) have concurred with these research findings and have indicated that bullies tend to come from homes where they experience Authoritarian parenting.

3.5. Understanding bully behaviours using Social Learning

Consistent findings reveal the aggressive nature of bullies (Beaty & Alexeyev, 2008; Olweus, 1994; Smith & Ananiadou, 2003; Smith & Brain, 2000; Solberg et al., 2007; Swart & Bredekamp, 2009). The typical bully is characterised as having an aggressive reaction pattern, paired with physical and/or psychological strength (Olweus, 1994). These children tend to display more organised and goal-oriented aggressive behaviour, and rarely engage in retaliatory aggression, as displayed by bully/victims (Olweus, 1978). Bullies often demonstrate their aggression not only towards their peers, but towards adults as well

(Olweus, 1994). Furthermore, bullies utilise this aggression as an instrument for achieving peer dominance or acquiring objects and position (Dodge as cited in Schwartz, Dodge, Pettit, & Bates, 1997). Bullies are often loud and assertive, and have a low capacity for empathising with victims (Bendixen & Olweus, 1999; Olweus, 1994, 2006; Swart & Bredekamp, 2009). Bullies tend to enjoy violence and often display a moral approval of bullying behaviours (Williams and Guerra, 2007).

In general, bullies show more problematic behaviours, such as purposefully damaging property, physically assaulting others, stealing, and abusing drugs and alcohol (Ybarra & Mitchell, 2004a). A study by Pepler (2006) revealed that adolescents who bullied others were five times more likely to report alcohol use and seven times more likely to use drugs, when compared to their peers. Furthermore, Lyznicki, McCaffree, and Robinowitz (2004) found that bullies often have trouble following rules, are more likely to fail at school and/or dropout, and are more likely to commit criminal acts later in life.

Social learning advocates explain that children learn to be violent primarily through the imitation of violent role models, and acquire aggressive responses in the same way they acquire other forms of social behaviour, that is, either by direct experience or by observing others (Anderson & Bushman, 2002; Bandura, 1973). As such, if parents/guardians rely on corporal punishment or verbal abuse to control their children (consistent with the Authoritarian parenting style), they are inadvertently acting as models for bullying behaviour (Bandura, 1973; Baron, 1977).

The Cambridge Study in Delinquent Development (as cited in Farrington, 1993) examined factors that were alleged to be causes or correlates of offending and bullying.

Results revealed that Authoritarian parents were one of the most significant predictors of bullying perpetration. Similarly, Baldry and Farrington (2000) aimed to analyse the personal characteristics and parental styles of bullies and delinquents, and to establish which factors were related to the bully/delinquent group, and which were related only to bullies, or only to delinquents. Results revealed that all of the parental variables were especially related to the bully/delinquent group (Baldry & Farrington, 2000). However, while unsupportive parents were observed to be a notable feature for delinquents, Authoritarian parents were found to be a core feature for bullies (Baldry & Farrington, 2000).

3.6. Understanding victim behaviours using Social Learning

Identifying victims of bullying and creating a victim profile has been a complicated task, as throughout the literature, researchers often differ in their methods of gathering data (Greeff & Grobler, 2008). However, a typical victim is characterised by an anxious or submissive reaction pattern, most often combined with physical weakness (Olweus, 1994). A typical victim tends to be physically smaller; withdrawn; unassertive and cautious; and often exhibits a sensitive, quiet persona (Beaty & Alexeyev, 2008; Olweus, 1993, 1994; Smith & Brain, 2000; Swart & Bredekamp, 2009). Victims of bullying often hold a negative view of themselves and look upon themselves as failures (Olweus & Limber, 2010; Olweus, 1994). This attitude of a typical victim signals to others that they are insecure individuals, who are unlikely to retaliate if they are bullied. Similarly, Troy and Sroufe (1987) found that victims rarely fight back and long for approval from more powerful children, even after they have been rejected or victimised.

Bandura (1971), who argued that all learning is socially acquired, discusses reciprocal determinism in later developments of the Social Learning Theory, where people are influenced by the environment and equally influence the environment themselves. This research is concerned with theoretical reinforcement concept of learned helplessness, briefly defined as the perceived inability to surmount failure (Diener & Dweck, 1978). More specifically, learned helplessness relates to the feeling that an individual embodies after they encounter situations in which they repeatedly have no influence or control, similar to bullying scenarios (Bandura, 1971). Erdley et al. (1997) stated that children who are victims develop and learn helplessness patterns of perception and behaviour. This makes them an easy and preferred target for more frequent bullying attacks. Continuous negative feedback has been shown to result in a persistent helplessness attribution style at the primary school age, with direct negative implications for social behaviour (Goetz & Dweck, 1980). Moreover, learned helplessness implies a retention over setting, which means that even when the situation changes (e.g., from primary school to high school), the learned helplessness patterns remain fairly stable, as any escape strategy a victim may try is likely to be followed by negative feedback (Goetz & Dweck, 1980).

3.7. Understanding bully/victim behaviours using Social Learning

Children who fall into this dual category are characterised by both an anxious and aggressive reaction pattern and often experience problems in multiple areas of functioning (Olweus, 1994; Solberg et al., 2007). These children tend to have concentration problems and are often described as restless and irritable by their peers. In addition, their disorganised behaviour, hyperactivity, and impulsivity plays an active role in aggravating others (Olweus, 1994; Schwartz, 2000; Solberg et al., 2007). The overly reactive behaviour of aggressive

victims might be one important reason that they emerge as persistent targets of bullying (Olweus, 1994).

Bully/victims are described as asocial (defined predominantly by different behaviours to those describing prosocial activities) and anxious, and are often excluded by other children (Wilson et al., 2003). Consistent with this finding, Schwartz (2000) revealed that aggressive victims were substantially rejected by their peers when compared to the other subgroups. Furthermore, aggressive victims display a greater acceptance of deviance and often stem from less supportive families (Craig, 1998; Haynie et al., 2001; Kumpulainen, Rasanen, & Henttonen, 1999; Pellegrini, Bartini, & Brooks, 1999; Salmivalli & Nieminen, 2002; Schwartz, 2000).

Dake, Price, and Telljohann (2003) suggested bully/victims are more likely to have diagnosable psychiatric disorders. A study by Schwartz (2000), which investigated the behavioural profiles and psychosocial adjustment of subgroups of victims and aggressors in Grades One to Five, revealed that aggressive victims had higher scores for emotional distress, emotion dysregulation, and social rejection than each of the other subgroups (Schwartz, 2000). More importantly, the study revealed that aggressive victims scored higher than the other subgroups on the Attention Deficit Hyperactivity Disorder Rating Scale (ADHD-RS; Depaul, 1990).

The APS has been empirically linked to the characteristics and behaviours of aggressive victims (Baldry & Farrington, 1998). Aggressive victims reported more punitive, hostile, and abusive family environments, when compared to the other subtypes. Schwartz, Dodge, Pettit, and Bates (1997) suggest that the behaviours of aggressive victims arise within

a family environment in which the child has experienced poor management of emotional regulation, together with personal aggression, and that these circumstances result in inappropriate, over-reactive anger toward other children, as well as the behaviours that lead to victimisation by peers. An alarming feature of the early backgrounds of aggressive victims was their frequent exposure to violence in the home and their experience as an object of physical abuse (Schwartz et al., 1997). Mothers' responses indicated that the parents of aggressive victims tended to employ physically aggressive tactics during conflict situations with their children (Schwartz et al., 1997), which the child perhaps (socially) learns, and then employs in subsequent interactions with others.

3.8. Summary

Overall, Bandura's Social Learning Theory has suggested possible adverse effects of Authoritarian parenting. Bandura suggested that if parents are harsh, display aggression and physical violence, and are controlling and emotionally cold - all of which are consistent with the Authoritarian parenting style - children may perceive these actions as acceptable methods of resolving conflict, and learn to imitate these patterns in their own interactions with peers, thus increasing the likelihood of inappropriate behavioural aggression, such as bullying (Bandura, 1978; Bauer, Herrenkohl, & Lozano, 2006).

Chapter Four guides the reader through the research methods and techniques that were employed to gain a better understanding of traditional bullying, cyberbullying, and the Authoritarian parenting style among primary school learners in Benoni. Subsequent to the discussion of the methodology, the psychometric properties of the research instrument are noted and discussed in the latter part of the chapter.

CHAPTER 4: RESEARCH METHODOLOGY

Chapter Four introduces the research paradigm, the design, and the methods implemented in this study. The research aims and questions initiating this study are noted and followed by a description of the sampling procedure, the data collection methods, and the data analysis techniques. In addition, the questionnaires which informed the development of the research instrument are reviewed in terms of their validity and reliability. The chapter concludes with a concise summary of the ethical issues pertaining to the study.

4.1. Research paradigm

Thoughts of the research design grew from within the positivist paradigm. The positivist paradigm is based on the assumption that universal laws govern social events, and that the uncovering of these laws enables researchers to describe, predict, and control social phenomena (Tuli, 2011). Positivist ontology maintains an objective reality that is studied without any subjective input from the researcher, while its epistemology emphasises a scientific method, which encourages the detachment or dualism of the knower (researcher) and the phenomena to be known or understood (Tuli, 2011). The objectivist ontology and empiricist epistemology embedded in the positivist paradigm require a research methodology that is objective or detached, where the emphasis is on testing hypotheses, and measuring variables in quantitative terms (Sarantakos, 2005). Sarantakos (2005) suggests employing quantitative methods to obtain measurable data using highly standardised tools such as questionnaires, psychological tests, inventories, and checklists; and employing numerical/statistical data analyses (Sarantakos, 2005). As such, the quality of a positivist

study can be displayed in terms of its reliability, validity, and generalisability of findings (Mack, 2001).

4.2. Research design

Ontology and epistemology influence the type of research methodology chosen, and this in turn guides the choice of research design and instruments (Tuli, 2011). As such, the researcher adopted an exploratory, correlational design in order to analyse the strength of the relationship between variables. Correlational research observes the phenomenon being researched without direct interference, thereby obtaining an arguably natural view of it (Babbie & Mouton, 2001). However, a limitation of correlational research is that errors of causality often arise. To infer that one variable causes another, often results in misleading conclusions, as the effect could be the result of any intervening variable (Babbie & Mouton, 2001). A further limitation of correlational research is that the relationship between two variables could be the result of an artefact, such as a false positive relationship between two scales (Babbie & Mouton, 2001). Considering that only an experimental research design with random sampling (not used in the current study) could prove a definitive cause-and-effect relationship, this research will only attempt to explore and measure the degree of the relationship between the variables (Babbie & Mouton, 2001).

4.3. Research aims

The core aim of the current research study was to gain insight into the nature and extent of bullying and cyberbullying among Grade Six and Grade Seven learners in four public primary schools, in Benoni (located in the Gauteng Province, South Africa). The aim

includes the examination of the prevalence of traditional bullying and cyberbullying amongst early adolescent learners in Benoni, and the contexts (technologies) in which the cyberbullying behaviours transpired. Furthermore, the researcher wanted to examine any potential association(s) between the Authoritarian parenting style, traditional bullying behaviours, and cyberbullying behaviours.

4.4. Research questions

With this main aim in mind, specific research questions were formulated. The research questions listed beneath were based on the existing literature by Bandura (1986), Low and Espelage (2012), and Wilson, Parry, Nettelbeck, and Bell (2003), which all utilised Social Learning Theory as a basis for explaining and understanding the occurrence of bullying behaviours. The four research questions pertaining to the study were:

1. To what extent do traditional bullying behaviours occur amongst learners (11 to 13 years of age) in specifically identified Benoni primary schools, in terms of gender, age and grade?
2. To what extent, and in which contexts, do cyberbullying behaviours occur amongst learners (11 to 13 years of age) in specifically identified Benoni primary schools, in terms of gender, age, and grade?
3. What is the relationship between traditional bullying behaviours and cyberbullying behaviours?
4. What is the relationship between traditional bullying behaviours, cyberbullying behaviours, and the Authoritarian parenting style?

4.5. Population

The target population from amongst which the researcher aimed to generalise included all the Grade Six and Grade Seven learners in public primary schools in Benoni, Gauteng. Currently there are 37 public primary schools in Benoni, falling under the Ekurhuleni North District, listed with the Gauteng Department of Education. This information was retrieved from <http://www.education.gpg.gov.za/Schools/Pages/default.aspx>, accessed on 28 May, 2012. It is from these 37 public primary schools located in Benoni that the researcher drew a sample, and subsequently, inferences.

An excel document containing all the schools listed with the Gauteng Department of Education was downloaded from the URL link mentioned above. Once downloaded, the list was sorted according to individual districts. As Benoni falls under the Ekurhuleni North district, public primary schools located within this district were highlighted. Thereafter, schools located in Benoni were selected from the data set. It was from this population the researcher recruited the sample. The selection process is depicted in Figure 4.1.

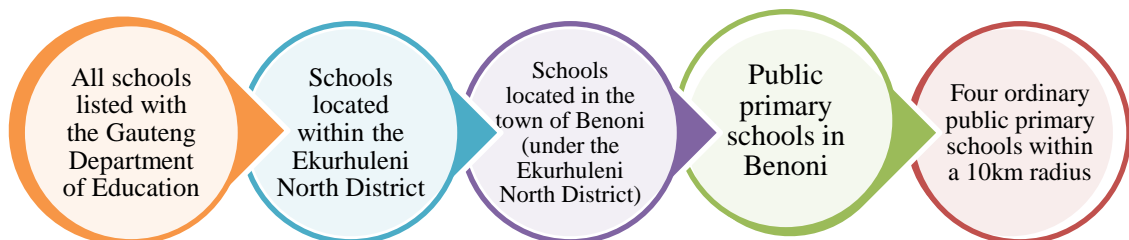


Figure 4.1: A step-by-step process of obtaining the schools for participation

4.6. The sample

Ordinary public primary schools (as opposed to LSEN public primary schools - Learners with Special Educational Needs) located within the Ekurhuleni North district, in Benoni - a city located to the east of Johannesburg, Gauteng - formed the population from which the sample was drawn. Four public primary schools were recruited to participate and were selected based on purposeful criterion sampling. The criterion for the current study was grounded in proximity; as such, four public primary schools located within a ten kilometre radius of the researcher's residence were selected for participation.

When recruiting the schools, LSEN schools and high schools were omitted from the selection, as the focus on this research study is on learners in primary school, with no special educational needs. Furthermore, only *ordinary public* primary schools, under the governance of the Gauteng Department of Education, were considered for inclusion, rather than independent schools (i.e., private schools).

Prior to obtaining the sample of learners, a total of 964 information leaflets and consent forms were distributed to the Grade Six and Seven learners in all four participating primary schools. From those, a total of 284 learners received parental consent. Thereafter, the learners were given the option to participate. One learner decided not to participate in the study, while four other learners were absent on the day of administration. A total of 279 learners completed the online questionnaire. However, data collected from seven learners were omitted from the data set, as these learners were older than the stipulated age criteria (11-13 years). A final sample consisting of 272 participants was retained, and a response rate of 28.2% was calculated. This process is depicted in Figure 4.2.

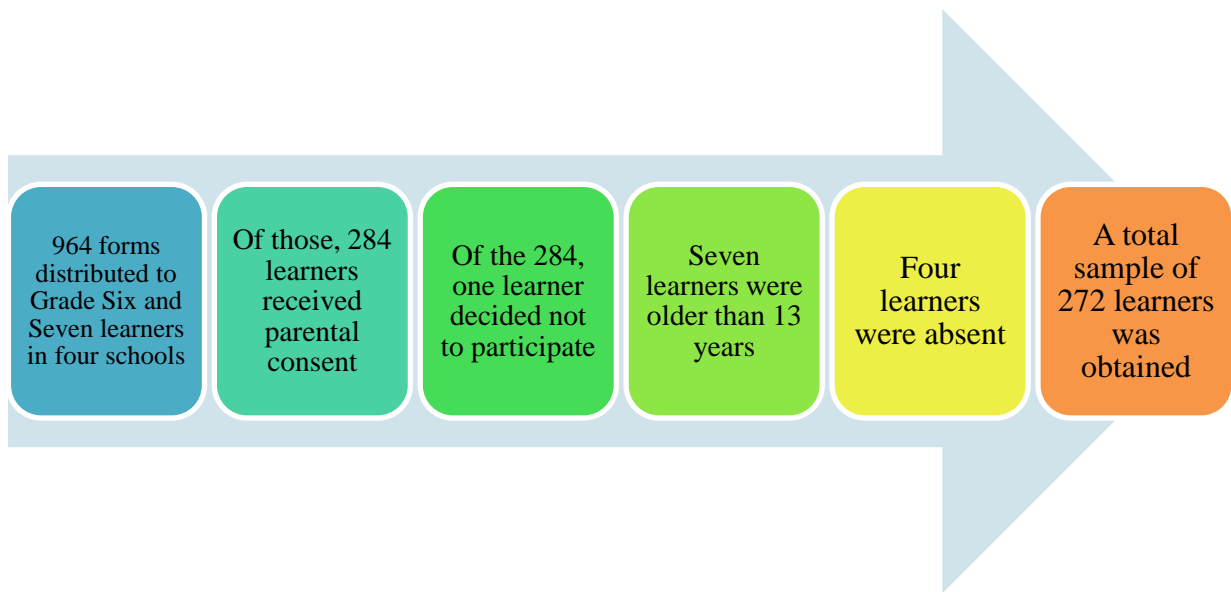


Figure 4.2: A step-by-step process of obtaining the sample

4.6.1. Demographic information: Learners

A total of 272 respondents who completed the online questionnaire comprised the final sample ($N = 272$). The majority of the participants were female ($n = 173$; 63.6%), while 36.4% ($n = 99$) of the participants were male. The age of respondents ranged from 11 years to 13 years. The mean age of respondents was 12.08 years ($SD = 0.71$). Twenty-two percent ($n = 59$) of the sample were 11 years old, 48.5% ($n = 132$) were 12 years old, and 29.8% ($n = 81$) were 13 years old. These results are shown in Figure 4.3.

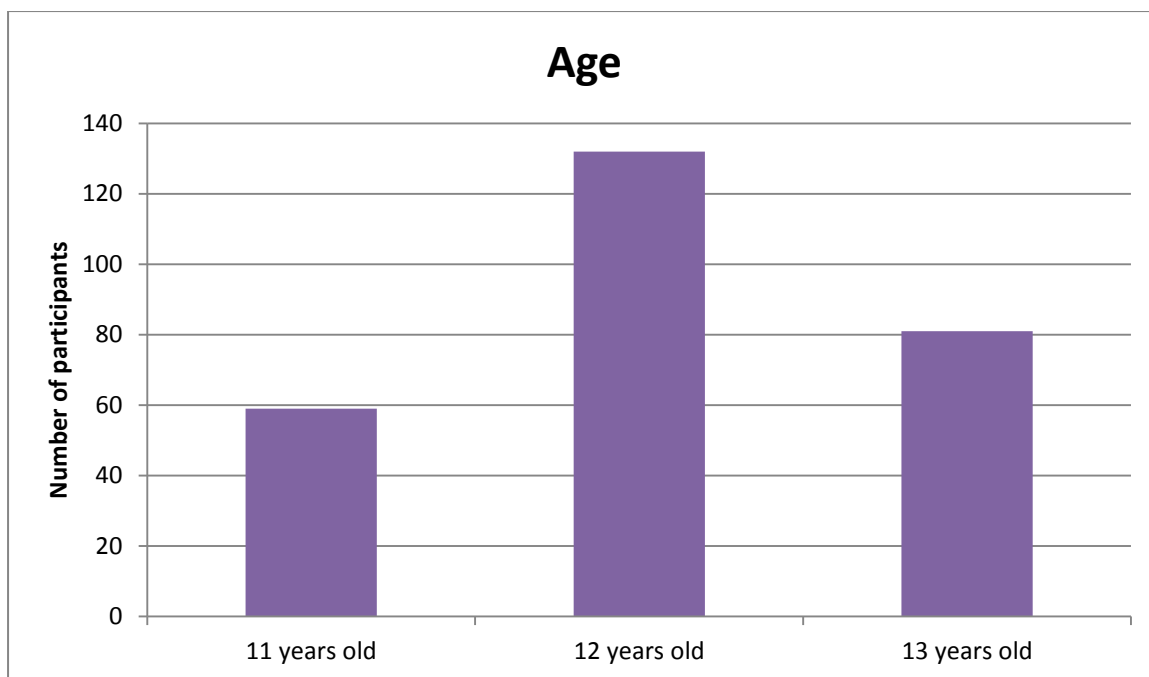


Figure 4.3: Bar chart depicting the number of learners within each age category

The sample comprised 121 Grade Six learners (44.5%) and 151 Grade Seven learners (55.5%). These results are shown in Table 4.1.

Table 4.1: Age * Grade cross-tabulation

		Grade		Total
		6	7	
Age	11	59	0	59
	12	59	73	132
	13	3	78	81
Total		121	151	272

It is important to note that the ethnic origin and Socioeconomic Status (SES)/Living Standard Measure (LSM) of the learners were not considered when recruiting the sample (nor is it reported as a demographic variable). Justification for the absence of an ethnic related question is two-fold: firstly, results from a study conducted by Greeff and Grobler (2008)

revealed no significant differences in the prevalence of bullying between white and black learners, where the two ethnic groups experienced the presence or absence of bullying to the same extent; and secondly, because the R-OBVQ was originally devised in an ethnically homogenous country (Scandinavia), it required participants to only report their age and gender, and not to solicit any information about ethnicity (Farrington, 1993). Overall, the objective of this study was not to compare bullying and cyberbullying among different racial groups or differing SES/LSM groups, but rather to gain a holistic picture of the nature, extent and prevalence among *all* children in Grade Six and Seven, between the ages of 11 and 13 years.

4.6.2. Demographic information: Parents/caregivers/guardians

Three learners (1.1% of the sample) indicated that their parents/guardians do not work, 84 learners (30.9%) stated that some of their parents/guardians work, and 185 learners (68% of the sample) said that all their parents/guardians work. The sample was then asked ‘Which grown-ups are in charge at home?’ Five alternatives were provided and the participants could select more than one option. A total of 321 responses was generated ($N = 272$). Of the 321 responses, ‘*My parent or parents*’ was selected most often, with 259 responses representing 80.7% of the total responses. The results are shown in Table 4.2.

Table 4.2: Which grown-ups are in charge at home? (N = 272)

	Responses	
	N	%
My parent or parents	259	80.7%
My sister(s) or brother(s)	16	5.0%
My grandparent(s)	27	8.4%
Other family members	8	2.5%
Guardian	11	3.4%
Total	321	100.0%

The majority of the sample ($n = 225$) indicated that their parents were the only ones in charge, while 10 participants stated that their parents, together with their grandparents were in charge at home. A similar frequency ($n = 9$) was observed in children whose parents *and* siblings were in charge at home. These results are shown in Table 4.3.

Table 4.3: Combinations of which grown-ups are in charge at home (N = 272)

	Frequency	%	Cumulative %
Guardian	3	1.1	1.1
My grandparent(s)	7	2.6	3.7
My parent or parents	225	82.7	86.4
My parent or parents, Guardian	4	1.5	87.9
My parent or parents, My grandparent(s)	10	3.7	91.5
My parent or parents, My grandparent(s), Guardian	2	.7	92.3
My parent or parents, My grandparent(s), Other family members	2	.7	93.0
My parent or parents, My sister(s) or brother(s)	9	3.3	96.3
My parent or parents, My sister(s) or brother(s), My grandparent(s)	3	1.1	97.4
My parent or parents, My sister(s) or brother(s), My grandparent(s), Other family members	1	.4	97.8
My parent or parents, My sister(s) or brother(s), My grandparent(s), Other family members, Guardian	2	.7	98.5
My parent or parents, Other family members	1	.4	98.9
My sister(s) or brother(s)	1	.4	99.3
Other family members	2	.7	100.0
Total	272	100.0	

4.7. Research instrument

The researcher utilised an anonymous, self-reporting online questionnaire to collect data from the participants. Support for the chosen research tool came from Sarantakos (2005), who suggested the use of questionnaires when working from within the positivist paradigm; and Smith and Ahmad (1994), who claimed that anonymous questionnaires are more valid than questionnaires requiring personal information, and that the prevalence of bullying is best assessed through the use of anonymous, self-reporting questionnaires.

The questionnaire consisted of six demographic questions and 41 Likert scale items, which measured five constructs on a 5-point scale; traditional bullying victimisation (9 items); traditional bullying perpetration (8 items); cyberbullying victimisation (5 items); cyberbullying perpetration (7 items); and the Authoritarian parenting style (12 items). Each of the constructs contained questions relevant to the topic being investigated. Some questions required only one response, whereas other questions required multiple responses.

Items from the Revised Olweus Bully/Victim Questionnaire (R-OBVQ) were selected with the intention of measuring the concept of traditional bullying, both victimisation and perpetration. The concept of cyberbullying was measured in the same way, using the same questions from the R-OBVQ, only altered slightly to include the term 'cyber'. Finally, items contained in the Parenting Practices Questionnaire (PPQ) developed by Robinson and Mandelco (1995) were selected to measure the Authoritarian parenting style.

4.7.1. Development of the questionnaire

The research questionnaire was developed in three stages. The initial phase entailed gaining permission to utilise the R-OBVQ. Permission was requested and granted from Dan Olweus (See Appendix A). Once permission had been obtained, items relevant to this research study were selected for inclusion in the online questionnaire.

The second phase of the development of the research instrument involved the manipulation of the items (selected from the R-OBVQ) to reflect a cyberbullying dimension. Items that referred to more physical forms of bullying were omitted from the cyberbullying section. To compare the data adequately, the concept of cyberbullying (both victimisation and perpetration) was measured in the same way as traditional bullying, where Olweus' questions pertaining to bullying were modified to include the term 'cyber'. A sub-question was added to each of the Cyberbullying perpetration items (7 items), and to each of the Cyberbullying victimisation items (5 items). This standard sub-question included five technological platforms, namely: SMS, phone call, Facebook, Mxit, and e-mail, as well as an 'other' option. A total of 12 standard sub-questions were used to establish which technological portal was most often used when cyberbullying behaviours occur, both victimisation and perpetration.

The third and final phase entailed extracting items from the journal article relating to the PPQ by Robinson et al. (1995). It is important to note that items relating to an Authoritative and Permissive parenting style were not considered for inclusion; as such, items in the current questionnaire are limited to those that measured the Authoritarian parenting style (12 items).

4.7.1.1. The Revised Olweus Bully/Victim Questionnaire

The Revised Olweus Bully/Victim Questionnaire (R-OBVQ) is a subsequent version of the Olweus Bully/Victim Questionnaire (OBVQ) developed by Olweus in 1978 and is based on the definition of bullying proposed by Olweus. The R-OBVQ contains 40 items which measure bully/victim problems, such as exposure to various physical, verbal, indirect, racial, or sexual forms of bullying/harassment; various forms of bullying other students; where the bullying behaviours occur; pro-bullying and pro-victim attitudes; and the extent to which teachers, peers, and parents are informed about and react to bullying behaviour (Olweus, 2006).

Questions on the R-OBVQ are scored according to a 5-point Likert scale, which indicated the frequency of the event. The response scale includes the following ranks: 1 = did not occur; 2 = occurred once a week; 3 = occurred two or three times a month; 4 = occurred about once a week; 5 = occurred several times a week. Responses to the items are used to classify participants into the categories of non-bullies/non-victims, victims, bullies, and bully/victims.

Within this context, Solberg and Olweus (2003) assessed the functionality of two global variables in the Olweus Bully/Victim Questionnaire (OBVQ) and the appropriateness of a special cut-off point on these variables for purposes of prevalence estimation. These two global measures are ‘how often have you been bullied at school in the past couple of months?’ and ‘how often have you taken part in bullying another student(s) at school in the past couple of months?’ A number of empirical and conceptual analyses conducted by Solberg and Olweus (2003) strongly attested to the functionality of the two variables and, in

combination with strategic arguments, indicated that ‘two or three times a month’ is a reasonable and useful lower-bound cut-off point for classifying girls and boys in the 10 to 16 year age range as victims and/or bullies (Solberg & Olweus, 2003).

Solberg and Olweus (2003) state that prevalence estimates derived in this way can be conveniently obtained, have a reasonably well-defined meaning, can be easily understood by the users, and can be reproduced unambiguously by different researchers in different time periods. Considering the aforementioned reasoning, the researcher will answer the current research questions pertaining to prevalence, utilising the variable and cut-off point suggested by Solberg and Olweus (2003).

4.7.1.1.1. Validity of the Revised Olweus Bully/Victim Questionnaire

Olweus conducted a number of analyses on the validity of the Revised Olweus Bully/Victim Questionnaire on representative samples of more than 5,000 learners (Olweus, 2006). Regarding the validity of the R-OBVQ, Olweus claimed that the R-OBVQ exhibits Pearson correlations between .40 and .60. In addition, results from studies conducted by Bendixen and Olweus (1999) provide strong evidence for the construct validity of the questionnaire dimensions of ‘being victimised’ and ‘bullying others’ when considering the relations between degree of victimisation and degree of bullying others, as well as other relevant variables (Bendixen & Olweus, 1999).

4.7.1.1.2. Reliability of the Revised Olweus Bully/Victim Questionnaire

In addition to the validity, Olweus conducted a number of analyses on the reliability (internal consistency, test-retest) of the Revised Olweus Bully/Victim Questionnaire on representative samples of more than 5,000 learners (Olweus, 2006). At the individual level (with learners as the unit of analysis), combinations of items for being victimised or bullying others, respectively, have yielded acceptable internal consistency reliabilities (Cronbach's alpha values) in the .80s or higher, depending on the number of items included in the scales. Often, however, the school is the natural unit of analysis, in which case the reliabilities are even higher, typically in the .90s. Either way, both individuals and schools can be very well differentiated with the questionnaire (Olweus, 2006).

4.7.1.2. The Parenting Practices Questionnaire (PPQ)

Robinson et al. (1995) conducted a pilot study whereby the purpose was two-fold: to develop an empirical means of assessing the global typologies of parenting styles proposed by Baumrind, and to identify specific parenting practices that occur within the context of these typologies. A 133-item parenting questionnaire was developed and piloted to parents of preschool and school-age children ($N = 1,251$). Three global parenting dimensions emerged consistent with Baumrind's Authoritative, Authoritarian, and Permissive typologies. This pilot study by Robinson et al. (1995) resulted in the development of the 62-item PPQ.

4.7.1.2.1. Validity of the Parenting Practices Questionnaire (PPQ)

During the pilot study, Robinson et al. (1995) intended to determine the dimensions and internal structures within the three typologies that might reflect specific parenting practices. Each set of items within the three global typologies (Authoritative, Authoritarian, and Permissive) were analysed using principle axes factor analysis, followed by oblimin rotation. Four factors with eigenvalues greater than one were extracted from the Authoritarian typology, accounting for 46.8% of the variance. These factors were labelled Verbal Hostility; Corporal Punishment; Non-reasoning and Punitive Strategies; and Directiveness. These four factors were verified during the factor analysis of the follow-up study by Robinson (1996), in which the psychometric characteristics of the 62-item PPQ were examined.

4.7.1.2.2. Reliability of the Parenting Practices Questionnaire (PPQ)

The items within the four identified factors (i.e., verbal hostility; corporal punishment; non-reasoning and punitive strategies; and directiveness) were then examined for internal consistency. For the purposes of this study, the researcher will report on the overall Cronbach alpha values obtained from the different countries in the study, conducted by Robinson (1996), namely the United States, Australia, China, and Russia. In its entirety, the Authoritarian typology yielded an overall Cronbach alpha value of .85 in the U.S. sample ($n = 456$), .84 in the Australian sample ($n = 294$), .88 in the Chinese sample ($n = 358$), and an overall Cronbach's alpha value of .82 in the Russian sample ($n = 376$). Overall, these Cronbach's alpha values are indicative of a reliable instrument.

4.8. Validity and reliability of the research instrument

The validity and reliability of the current research instrument was assessed utilising the data obtained from 41 of the 47 Likert scale items in the research instrument ($N = 272$). Six items were omitted from the analyses as they pertained to demographic data. An exploratory factor analysis (EFA) was planned so as to identify the hidden dimensions or constructs within the data (Field, 2009). Thereafter, an item analysis was conducted on the identified factors to measure the internal consistency of the research instrument.

4.8.1. The validity of the research instrument

Initially, the factorability of the 41 Likert scale items in the research instrument was examined using three well-recognised criteria: the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy; Bartlett's test of sphericity; and the communalities. The KMO measure of sampling adequacy tests whether or not the partial correlations among variables are small. KMO values can be interpreted in the following ways; values between .50 and .70 are mediocre; values between .70 and .80 are good; values between .80 and .90 are great; and values above .90 are superb (Hutcheson & Sofroniou, 1999; Kaiser, 1974). As a general rule, KMO values ought to be .60 or higher in order to proceed with a satisfactory factor analysis. The KMO measure verified the sampling adequacy for the current analysis, and yielded a KMO value of .84.

Bartlett's test of sphericity makes it possible to ascertain whether or not the correlation matrix is significantly different from an identity matrix (Field, 2009, p. 607). The p -value of Bartlett's test indicates the correlation structure. If the p -value is below .05, then it

can be concluded that correlations between the variables are significantly different from zero, and that there is a significantly strong enough relationship to conduct a factor analysis on the items (Field, 2009, p. 660). Bartlett's test of sphericity from the current study indicated that there is a significantly strong enough relationship among the items to conduct a factor analysis, $\chi^2(820) = 5039.26, p < .001$.

The communalities were then examined. The communalities represent the proportion of common variance within a variable (Field, 2009, p. 637). Moreover, communalities indicate the extent to which an individual item correlates with the rest of the items. A value near 1 indicates an item that correlates highly with the rest of the items, while items with low communalities (< 0.20) ought to be reconsidered (Field, 2009, p. 637). The communalities were all above .40, further confirming that each item shared some common variance with other items. Given these overall indicators, factor analysis in the current study was deemed suitable and likely to produce satisfactory results.

An initial exploratory factor analysis was conducted on the 41 Likert scale items in the research instrument, and eigenvalues were obtained. An eigenvalue indicates how much of the total variance of all variables is covered by the factor (Field, 2009). The Kaiser rule is to drop all components/factors with eigenvalues under one. Ten components (out of 41 components) had eigenvalues over Kaiser's criterion ≥ 1 and in combination explained 62.92% of the variance. Initial eigenvalues indicated that the first three factors explained 22.16%, 9.91%, and 8.29% of the variance, respectively. The fourth component had an eigenvalue over two and explained 4.98% of the variance. The fifth, sixth, seventh, eighth, ninth, and tenth factors had eigenvalues just over one, and each explained between 2% and 4% of the variance. The results are shown in the Table 4.6.

Table 4.4: Total variance explained by the components

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	9.084	22.156	22.156
2	4.065	9.914	32.069
3	3.397	8.286	40.355
4	2.041	4.977	45.332
5	1.445	3.525	48.857
6	1.393	3.398	52.255
7	1.201	2.930	55.185
8	1.084	2.643	57.829
9	1.072	2.615	60.444
10	1.016	2.477	62.921

When utilising the rotated component matrix to identify factors, it is important to bear in mind that factors can be identified if at least four variables have a loading of more than .60 (Field, 2009). Similarly, a factor can be interpreted if at least ten variables have a loading of more than .40 (Field, 2009). With this borne in mind, the researcher suggested the retention of three factors based on the factor loadings from the rotated component matrix (See Appendix B for details of these factor loadings). Although sufficient loadings are provided for a fourth factor, the items within the component reflect cyberbullying perpetration, traditional perpetration, and traditional victimisation, and thus do not make sense. Additionally, the scree plot (shown in Figure 4.4) was well-defined and showed inflexions that would justify the retention of three factors.

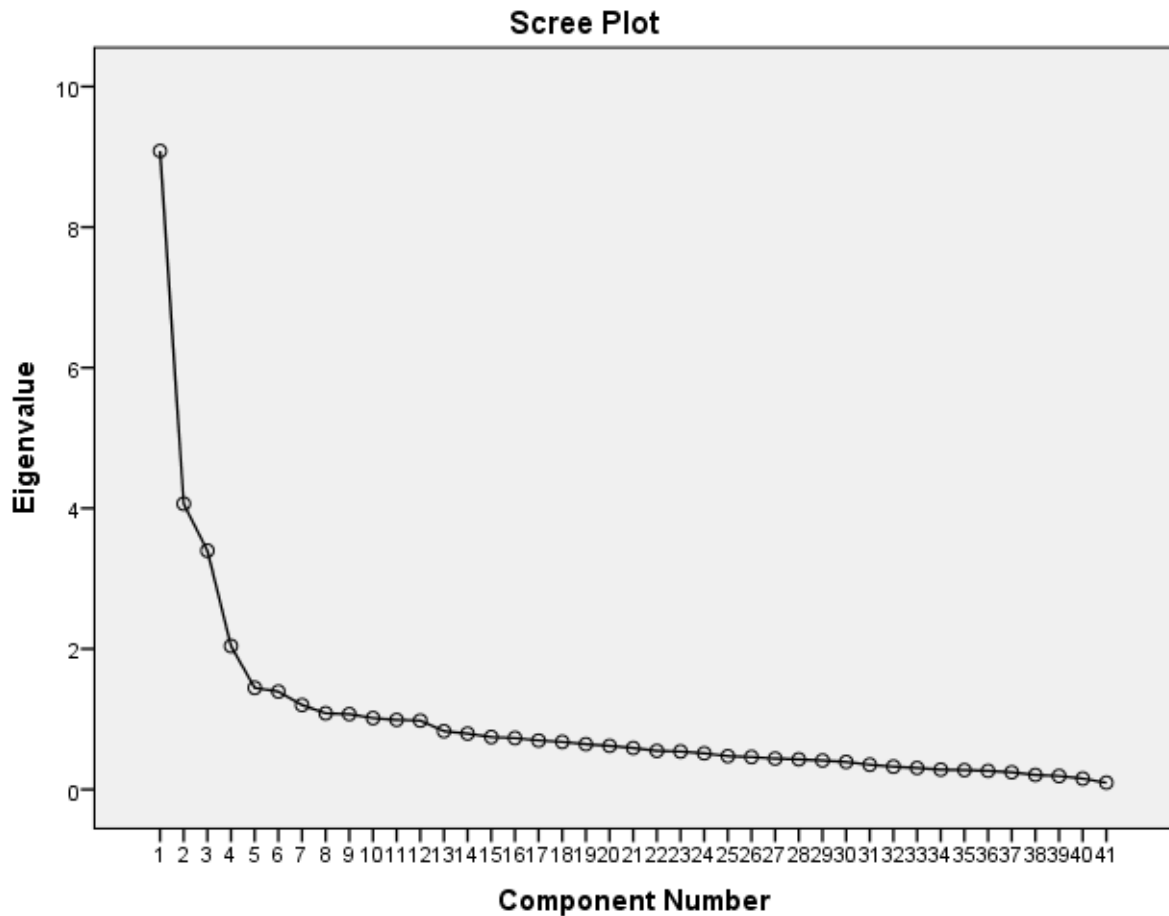


Figure 4.4: Scree plot obtained from the exploratory factor analysis

Given the large sample size, the convergence of the scree plot, Kaiser’s criterion for eigenvalues, and the output from the rotated component matrix, the researcher decided upon the retention of three components. These components were labelled as the Authoritarian parenting style (APS), Cyberbullying perpetration, and Traditional bullying perpetration.

Twenty-two items were eliminated because they did not contribute to a simple factor structure and/or failed to meet the minimum criteria of having a primary factor loading of .40 or above (These items are listed in Appendix C). It is of critical importance to realise that there are numerous reasons why an item may fail to meet the minimum standard of quality, whatever the set standard may be. Generally, it could be due to: (1) the flaws in the question;

and (2) the flaws in the instruction of the content (Krishnan, 2013). In the current study, the term ‘cyberbullying’ may have been problematic due to a lack of familiarity among the learners, which might help explain why the item ‘*how often have you taken part in cyberbullying another person this year?*’ did not load onto the cyberbullying factor. However, this item will be retained for the purposes of examining the prevalence of perpetrating cyberbullying among the sample. .

During the final stage, an EFA was conducted on the remaining 19 items (listed in Table 4.4) with orthogonal rotation (varimax). All items in this analysis had primary loadings $>.50$ and no cross-loadings were observed in the final analysis. Furthermore, three components had eigenvalues over Kaiser’s criterion of one and in combination explained 53.22% of the variance. The communalities and factor loadings are shown in Table 4.7.

Table 4.5: Rotated component matrix: Factor loadings and communalities based on an exploratory factor analysis with orthogonal rotation (varimax) for 19 items from the research instrument (N = 272)

	Component 1	Component 2	Component 3	Communality
Demand you do something.	.710			.517
Tell you what to do.	.704			.501
Yell or shout at you when naughty.	.703			.502
Explode in anger.	.684			.498
Openly criticised when behaviour does not meet expectations.	.657			.432
Use criticism to improve behaviour.	.635			.427
Remind you they are in charge.	.630			.412
Grabbed, shoved, or hit if disobedient.	.566			.336
Argue with you.	.551			.369
I threatened or forced another student to do things they didn't want to do online.		.903		.837
I bullied others with mean names about their race or colour online.		.882		.806
I bullied others with mean names, or gestures with a sexual meaning online.		.877		.792

I called another student mean names, made fun of or teased them in a hurtful way online.	.675	.489
I bullied others with mean names, or gestures with a sexual meaning.	.748	.688
I hit, kicked, pushed, or shoved another student around.	.742	.567
How often have you bullied other students at school this year?	.682	.483
I called another student mean names, made fun of or teased them in a hurtful way.	.677	.490
I bullied others with mean names about their race or colour.	.675	.603
I kept other students out of things on purpose, excluded them.	.560	.364

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalisation.

Items clustering on the same components indicate that component one represents the Authoritarian parenting style, component two represents Cyberbullying perpetration, and component three represents Traditional bullying perpetration. Furthermore, the Authoritarian parenting style factor explained 26.12% of the variance, Cyberbullying perpetration accounted for 18.03% of the variance, and Traditional bullying perpetration explained 9.07% of the variance. This is shown in Table 4.8.

Table 4.6: Total variance explained by the three identified factors (N = 272)

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
Authoritarian Parenting Style	4.963	26.122	26.122
Cyberbullying perpetration	3.426	18.031	44.153
Traditional bullying perpetration	1.723	9.069	53.222

To sum up, the analyses revealed three underlying scales in the questionnaire. Results from the exploratory factor analysis were satisfactory and revealed that the research instrument is valid.

4.8.2. The reliability of the research instrument

Reliability refers to whether or not an instrument yields or is likely to yield similar and consistent results in the future under different circumstances (Field, 2009 p. 673). Reliability measures consistency within a research instrument, such as a questionnaire, and is sometimes referred to as internal consistency. To test the reliability of the questionnaire, an item analysis was performed on the items within the three components. More specifically, the

internal consistency of the scales in the research instrument was assessed by examining the Cronbach's alpha values obtained from the item analysis. Cronbach's alpha values can be interpreted in the following ways: a value above .80 is considered good; a value between .60 and .80 is acceptable; and a value below .60 is considered unacceptable (Field, 2009 p. 675).

The item analyses yielded good Cronbach alpha values: .83 for Authoritarian parenting style (nine items), .85 for Cyberbullying perpetration (four items), and .78 for Traditional bullying perpetration (six items). However, the item analysis (pertaining to the perpetration of cyberbullying) suggested the removal of one item based on the low correlations between this variable and others in the construct. After removing the one item suggested (*I called another student mean names, made fun of or teased them in a hurtful way online*), the overall Cronbach alpha value pertaining to the construct of cyberbullying perpetration increased to .91. These results are shown in Table 4.9.

Table 4.7: Descriptive statistics for the three constructs (N = 272)

	No. of items	M (SD)	Skewness	Kurtosis	α
Authoritarian parenting style	9	2.36 (.73)	0.71	0.01	.83
Cyberbullying perpetration	4/3*	1.05 (.30)	10.02	120.51	.85/.91*
Traditional bullying perpetration	6	1.25 (.37)	4.66	39	.78

*Cronbach Alpha/Scale if item deleted

Overall, the factor analysis and the item analysis indicated that three distinct factors lay beneath the surface of the research instrument and that the research instrument was

soundly reliable and valid. Twenty-three of the 41 items were eliminated; however a similar factor structure (regarding the perpetration of traditional bullying), as proposed by Olweus (1993), was retained. These factors were utilised to answer the research questions, although some reference is made to the individual items related to victimisation. The factor structure for the three constructs is as follows:

The Authoritarian parenting style (9 items)

- 1) *How often do your parents/caregivers demand you to do something?*
- 2) *How often do your parents/caregivers tell you what to do?*
- 3) *Do you parents/caregivers yell or shout at you when you are naughty?*
- 4) *Do your parents/caregivers explode in anger towards you?*
- 5) *Do your parents/caregivers use criticism to make you improve your behaviour?*
- 6) *Do your parents/caregivers remind you that they are in charge?*
- 7) *Do you get shoved, grabbed or spanked if you are disobedient?*
- 8) *Do your parents/caregivers argue with you?*
- 9) *Do you get openly criticised when your behaviour does not meet your parents'/caregivers' expectations?*

Traditional bullying perpetration (6 items)

- 1) *How often have you taken part in bullying another student(s) at school this year?*
- 2) *I called another student mean names, made fun of or teased him or her in a hurtful way.*
- 3) *I hit, kicked, pushed, and shoved others around or locked other people indoors.*
- 4) *I bullied others with mean names or comments about his or her race or colour.*
- 5) *I bullied others with mean names, comments, or gestures with a sexual meaning.*

6) *I kept others out of things on purpose, excluded them from my group of friends or completely ignored him or her.*

Cyberbullying perpetration (3 items)

1) *I threatened or forced another person to do things he or she didn't want to do through an SMS, a phone call, on Facebook, on Mxit, or through an e-mail.*

2) *I bullied another person with mean names or comments about his or her race or colour through an SMS, a phone call, on Facebook, on Mxit, or through an e-mail.*

3) *I bullied another person with mean names, comments, or gestures with a sexual meaning through an SMS, a phone call, on Facebook, on Mxit, or through an e-mail.*

After identifying the three factors, mean scores were calculated for each and assessed for normality. This was done by adding the scores on each item in the component and dividing the sum by the number of items in the component. Thereafter, descriptive statistics were produced for each of the mean scores. Values of skewness and kurtosis were obtained and divided by their relevant standard errors to produce z -scores (z -scores above 3.29 are considered significantly non-normal). Simple calculations revealed z -scores above the upper threshold, and indicated the possibility of a non-normal distribution. Histograms were then inspected against the normal curve. Upon inspection of the histograms, it was clear that the data did not conform to requirements of a normal distribution, and appeared to be well suited for non-parametric statistical analyses. These histograms are shown in Figure 4.5.

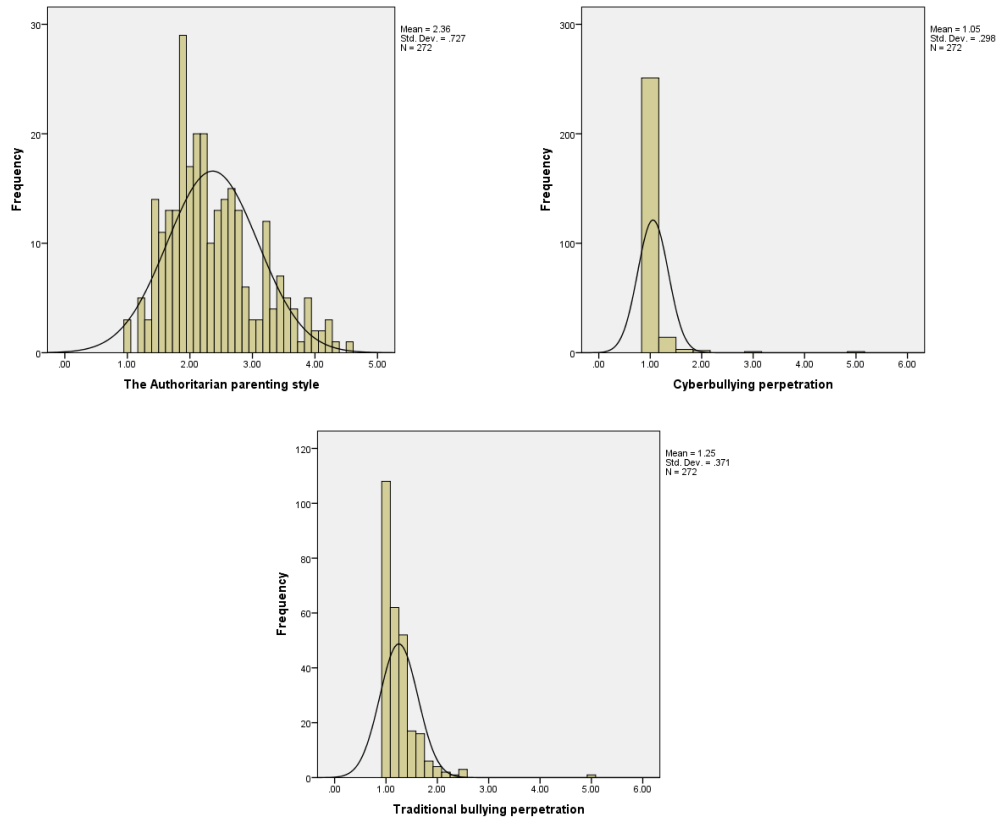


Figure 4.5: Histograms depicting the distributions from the three identified constructs

Before proceeding with the analysis, attempts were made to transform the data and correct the distribution. Three transformations were applied to the significantly positively skewed data, namely the log transformation, the square root transformation, and the reciprocal transformation. Once the variables had been computed with the applied transformation, descriptive statistics were once again produced. The values of skewness and kurtosis were obtained, and then divided by their relevant standard errors to produce z-scores. Z-scores above the upper threshold revealed that the transformations did not have a desirable effect on the distributions, and non-normal distributions remained (see Appendix D for details of these transformations).

Although the mean scores obtained for each factor are not normally distributed among the sample, there is no dispute on the possibility that the factors could be normally distributed in the general population (Central limit theorem). This could allow for data analysis using regressions. Furthermore, the positive skew evident in the data may be a result of a social desirability bias, whereby learners are reluctant to inform another about their involvement in bullying others (due to fear of punishment, peer rejection, etc.).

4.9. Collection of data

The practical research procedure was initiated upon receiving clearance from the University of South Africa (UNISA) and the Gauteng Department of Education (GDE), during which the research study was evaluated for *inter alia* adherence to the required ethical standards. Permission was granted from the GDE and the application was approved by the Ethics Committee at Unisa, without any conditions. Subsequently, permission from the principals and relevant School Governing Body's (SGB) was requested in writing, and granted.

Thereafter, the information leaflet, the parental/guardian consent, and the participant assent, all of which were approved by the Psychology Department of Unisa and the GDE, were issued to each learner in Grade Six and Seven in the four selected schools (See Appendix E, F, and G, respectively). Parents/guardians were asked to read the information leaflet, sign the consent form and return it to school, having clearly stipulated whether or not their child was permitted to participate.

Once the consent forms had been returned, learners whose parents/guardians had consented to their participation were invited to an information session in which the researcher explained the purpose of the questionnaire and answered any questions. Thereafter, the learners were asked to sign the assent form, if they wished to participate. Participants that signed the assent form were then asked to take a seat at an allocated computer (the computer's firewalls had been disabled in order to gain access to the internet), and to open the Internet Explorer web browser on the computer's desktop. Learners were guided, by verbal instruction from the primary researcher, to the correct web page, upon where the questionnaire was displayed. Once the questionnaire was visible, learners were requested to click the appropriate answer and to answer all questions honestly.

4.10. Data management

The data was automatically collected online utilising free Google software (www.google.forms.com), which was then captured in an Excel file. The data was then downloaded and stored in Google Drive for security purposes. Access to the raw data could only be obtained using the researcher's e-mail account and password, to which only the researcher and supervisor have access. Moreover, all the documents pertaining to the study (i.e., permission requests and clearances, consent and assent forms, information leaflets) were either saved in a password-protected folder on a secure computer (if documents were in an electronic format), or were filed in a lock-up cabinet (if documents were tangible), both of which only the researcher and supervisor are able to access.

4.11. Data analysis strategies

After assessing the validity of the research instrument using an exploratory factor analysis, the results indicated that items pertaining to traditional bullying victimisation and cyberbullying victimisation were not well represented in the current content. However, descriptive statistics and frequency tables for the individual items pertaining to traditional and cyberbullying victimisation will be reported on to obtain a general idea of victimisation in both contexts. As a result, the current study will answer the research questions using the variable suggested by Solberg and Olweus (2003) and the three identified factors (Authoritarian parenting style, Traditional bullying perpetration, and Cyberbullying perpetration).

Descriptive and inferential statistical analysis techniques were employed to analyse and scrutinise the data. Frequency analyses, cross-tabulations, and chi-square statistical tests were employed to obtain prevalence rates of traditional bullying perpetration and cyberbullying perpetration, and to establish whether the prevalence rates were associated with gender, age, and grade. Similarly, frequencies of multiple response sets were created so as to ascertain which ICTs were most often used when individuals had perpetrated cyberbullying behaviour. Spearman's Rho correlation coefficients were then conducted to check for possible relationships among the three factors: Traditional bully perpetration, Cyberbullying perpetration, and the APS. These relationships were to be explored further by performing a hierarchical regression analysis. The data was first inspected for violations of the assumptions associated with linear regression. Data was analysed using SPSS, version 21.

4.12. Ethical considerations

Ethical clearance for the study was obtained from the Department of Psychology at the Unisa (Appendix H). Subsequently, the researcher obtained permission from the GDE to conduct research in four ordinary public primary schools (Appendix I). The GDE stipulated specific conditions to which the researcher adhered. Thereafter, the researcher approached the school principals and relevant School Governing Body's (SGB) to gain access to the school's premises for the purposes of collecting data.

A two-fold consent form was sent home with all the Grade Six and Seven learners from the four ordinary public primary schools. The first part of the form consisted of the informed consent to the parents/guardians, which outlined the research in basic, clear language; informed them of the research's purpose, the procedure, the risks and benefits; explained the measures implemented to ensure confidentiality; and detailed what would be expected from their child (Appendix F). The parents/guardians were required to complete the informed consent form and clearly mark whether their child was permitted (or not) to participate in the study. The second part of the form was the assent form, completed by the willing learner (Appendix G). The assent form was brief, and written in a language that was comprehensible to learners in Grade Six and Grade Seven.

The learners were informed that their participation in the study was voluntary. Furthermore, participants were informed about their right to withdraw their assent, and to withdraw themselves from the study at any time, without penalty. This was stipulated in the assent form, and was reiterated by the researcher during the administration of the questionnaire.

All the information gathered was treated confidentially. The participants were assured that all the information provided by them would be held in strict confidence and that there would be no link between the data and themselves. Additionally, all participants were assured anonymity, as there was no question in the questionnaire asking the respondents to provide their names. Contact details for Childline South Africa and LifeLine Ekurhuleni were provided to each of the participants, and they were encouraged to use these numbers, either for support, or to report acts of bullying. Feedback will be provided to interested schools and families in the form of a report with aggregated data.

4.13. Summary

The current study worked from within the positivist paradigm, which is most commonly aligned with the reliability and validity of instruments and data alike, quantitative methods of data collection and analysis, and the generalisability of findings (Mack, 2001). After reviewing the reliability and validity of the R-OBVQ and PPQ, both were deemed suitable to inform the development of the research questionnaire. The sample of 272 public primary school learners from Benoni completed the questionnaire, which was found to be acceptably valid and reliable within the context it was used. An exploratory factor analysis followed by an item analysis revealed three underlying factors: APS, traditional bullying perpetration and cyberbullying perpetration. Mean scores for each factor were significantly positively skewed, indicating the suitability of non-parametric techniques to analyse the data.

Chapter Five commences by reiterating the aims and research questions, followed by a data analysis strategy. Thereafter, details of the statistical analyses that were performed, and the results obtained are highlighted.

CHAPTER 5: ANALYSIS AND RESULTS

The preceding chapters have presented an in-depth literature study of traditional bullying and cyberbullying, along with the causes and consequences of bullying behaviours. Furthermore, Social Learning Theory was explored, in conjunction with the Authoritarian parenting style, to better understand the underlying causes associated with bullying. Against this background, this chapter reiterates the research aims and questions, and describes the data analysis strategy. Thereafter, the reader is guided through the statistical procedures that were used to answer the research questions.

5.1. Aims and questions reiterated

The aim of the current research project was to gain insight into the nature and extent of traditional bullying, cyberbullying, and the Authoritarian parenting style, among Grade Six and Grade Seven learners, in public primary schools in Benoni, Gauteng. Specific research questions were formulated, thus:

1. To what extent do traditional bullying behaviours occur amongst learners, between the ages of 11 and 13 years, in specifically identified Benoni primary schools, in terms of gender, age, and grade?
2. To what extent, and in which contexts, do cyberbullying behaviours occur amongst learners, between the ages of 11 and 13 years, in specifically identified Benoni primary schools, in terms of gender, age, and grade?
3. What is the relationship between traditional bullying behaviours and cyberbullying behaviours?

4. What is the relationship between traditional bullying behaviours, cyberbullying behaviours, and the Authoritarian parenting style?

5.2. Data analysis plan

While the EFA has indicated that some of the data could be reduced, this does not necessarily imply that the other items within the questionnaire are unusable. Rather, it implies that the underlying construct is not strong. As such, descriptive statistics and frequency tables for the individual items (contained in the original questionnaire) pertaining to traditional and cyberbullying victimisation are reported on, so as to obtain a general idea of victimisation in both contexts.

In order to assess the prevalence of traditional bullying perpetration (and to answer the first research question) the researcher utilised an item suggested by Solberg and Olweus (2003) to estimate bullying prevalence (*how often have you bullied other students at school this year?*). Frequencies were obtained for this item and then cross-tabulated with gender, age, and grade using the Chi-square test, to check for any associations across the variables. Frequencies for each valid and reliable item in the Traditional bullying perpetration component were then obtained to identify which traditional bullying behaviours are most predominant among the sample (i.e., direct/indirect).

The same procedure was followed for the second research question. The item suggested by Solberg and Olweus (2003) was adapted to reflect cyberbullying perpetration (*how often have you taken part in cyberbullying another person this year?*). Frequencies were obtained on this item and cross-tabulated with gender, age, and grade using Chi-square tests.

Frequencies for each valid and reliable item in the Cyberbullying perpetration component were also obtained to ascertain which cyberbullying behaviours are predominant among the sample (i.e., flaming, harassment, happy-slapping, etc.). Multiple response sets were then created and frequencies analysed so as to establish which technological platform is most often used to perpetrated cyberbullying behaviours.

The researchers made use of the two perpetration constructs revealed by the EFA to answer the remaining research questions. In order to answer the third research question, a mean score was obtained for the Traditional bullying perpetration factor and the Cyberbullying perpetration factor. This was done by adding the scores on each item in the component and dividing the sum by the number of items in the component. These mean scores were then utilised to conduct a Spearman's Rho correlation, in order to identify potential relationships between Traditional bullying perpetration and Cyberbullying perpetration.

The same procedure was followed for the fourth research question. A mean score was obtained for the construct relating to the APS. A Spearman's Rho correlation was then conducted between the mean scores obtained for the three constructs: the APS; Traditional bullying perpetration; and Cyberbullying perpetration, to identify potential relationships. Relationships were to be further explored by performing hierarchical regression analyses among the APS, Traditional bullying perpetration, Cyberbullying perpetration, and the demographic variables (i.e., gender, age, and grade) on condition that the data met the necessary assumptions

5.3. The extent to which traditional bullying behaviours are occurring amongst learners

First research question: to what extent are traditional bullying behaviours occurring amongst learners (11 to 13 years of age) in specifically identified Benoni primary schools, in terms of gender, age and grade?

Prior to conducting the analyses on the traditional perpetration data, which revealed valid and reliable results, the researcher examined the traditional bullying victimisation data. The researcher assessed the prevalence of traditionally bullying victimisation using the variable suggested by Solberg and Olweus (2003) to estimate bullying victimisation (*How often have you been bullied at school this year?*). Frequency tables for each item relating to traditional bullying victimisation are then reported (descriptive statistics for which are provided in Appendix J).

The results revealed that 50.4% of the sample ($n = 137$) had been bullied at school *at least once*. Of these, 34.9% experienced such behaviours only once or twice; 8.5% two or three times a month; 4.8% were subjected to bullying once a week; and 2.2% experienced bullying several times a week. Using the lower-bound cut-off (i.e., two or three times a month) suggested by Solberg and Olweus (2003), 15.5% of the sample is bullied to the extent whereby they would be classified as victims. These results are shown in Table 5.1.

Table 5.1: How often have you been bullied at school this year?

	Frequency	%	Cumulative %
I haven't been bullied at school this year	135	49.6	49.6
It has only happened once or twice	95	34.9	84.6
2 or 3 times a month	23	8.5	93.0
About once a week	13	4.8	97.8
Several times a week	6	2.2	100.0
Total	272	100.0	

The more common forms of traditional victimisation among the sample were: *I was called mean names, was made fun of or teased in a hurtful way; and other pupils told lies about me or spread false rumours*. Both types of behaviours were reported to have occurred at least once by 57.4% and 50% of the sample, respectively. Although not to the same extent, *other students left me out of things on purpose* was also fairly common, and occurred at least once among 39% of the sample. Direct, physical bullying was less common, with 27.6% reporting this behaviour at least once. Verbal bullying of a racial and sexual nature were also not common in the sample, even less so than physical bullying, with 21.3% and 19.1% reporting these behaviours at least once during the year preceding the study, respectively. These results are shown in Table 5.2.

Table 5.2: Combined frequency tables for items measuring traditional bullying victimisation

<i>I was called mean names, was made fun of or teased in a hurtful way</i>	Frequency	%	Cumulative %
It has not happened to me at school this year	116	42.6	42.6
It has only happened once or twice	98	36.0	78.7
2 or 3 times a month	23	8.5	87.1
About once a week	20	7.4	94.5
Several times a week	15	5.5	100.0
Total	272	100.0	
<i>Other students left me out of things on purpose</i>	Frequency	%	Cumulative %
It has not happened to me at school this year	166	61.0	61.0
It has only happened once or twice	78	28.7	89.7
2 or 3 times a month	11	4.0	93.8
About once a week	13	4.8	98.5
Several times a week	4	1.5	100.0
Total	272	100.0	
<i>I was hit, kicked, pushed, or shoved around</i>	Frequency	%	Cumulative %
It has not happened to me at school this year	197	72.4	72.4
It has only happened once or twice	58	21.3	93.8
2 or 3 times a month	8	2.9	96.7
About once a week	8	2.9	99.6
Several times a week	1	.4	100.0
Total	272	100.0	
<i>Other pupils told lies about me or spread false rumours</i>	Frequency	%	Cumulative %
It has not happened to me at school this year	136	50.0	50.0
It has only happened once or twice	105	38.6	88.6
2 or 3 times a month	15	5.5	94.1

About once a week	8	2.9	97.1
Several times a week	8	2.9	100.0
Total	272	100.0	
<i>I was threatened or forced to do things I didn't want to do</i>	Frequency	%	Cumulative %
It has not happened to me at school this year	219	80.5	80.5
It has only happened once or twice	40	14.7	95.2
2 or 3 times a month	6	2.2	97.4
About once a week	3	1.1	98.5
Several times a week	4	1.5	100.0
Total	272	100.0	
<i>I was bullied with mean names about my race or colour</i>	Frequency	%	Cumulative %
It has not happened to me at school this year	214	78.7	78.7
It has only happened once or twice	41	15.1	93.8
2 or 3 times a month	5	1.8	95.6
About once a week	8	2.9	98.5
Several times a week	4	1.5	100.0
Total	272	100.0	
<i>I was bullied with mean names, or gestures with a sexual meaning</i>	Frequency	%	Cumulative %
It has not happened to me at school this year	220	80.9	80.9
It has only happened once or twice	33	12.1	93.0
2 or 3 times a month	8	2.9	96.0
About once a week	4	1.5	97.4
Several times a week	7	2.6	100.0
Total	272	100.0	

The researcher assessed the prevalence of traditionally bullying perpetration and answered the first research question using the variable suggested by Solberg and Olweus (2003) to estimate bullying perpetration (*how often have you bullied other students at school this year?*). After an initial frequency analysis, results indicated that 68.4% of the respondents stated that they had not bullied another student at school. Cumulatively, 31.6% of the sample perpetrated traditional bullying behaviours *at least once* during the year preceding the study. Of these, 28.3% of the sample reported bullying another student once or twice; 1.8% of the respondents indicated that they bullied another student two or three times a month; and 1.5% of the sample indicated bullying others several times a week. This is shown in Table 5.3.

Table 5.3: How often have you bullied other students at school this year?

	Frequency	%	Cumulative %
I haven't bullied another student at school this year	186	68.4	68.4
It has only happened once or twice	77	28.3	96.7
Two or three times a month	5	1.8	98.5
Several times a week	4	1.5	100.0
Total	272	100.0	

Utilising the cut-off point suggested by Solberg and Olweus (2003) to identify bullies, the results indicated an overall bully prevalence rate of 3.3%, with 'two or three times a month' accounting for 1.8% and 'several times a week' accounting for 1.5% of the bully prevalence rate. Cumulatively, non-bullies (those who indicated not having bullied another student, and those who perpetrated bullying behaviours once or twice) constitute 96.7% of the sample.

5.3.1. Direct bullying

When the imbalance of power favours physical strength, the bullying is said to be more direct in nature. Direct bullying involves relatively open attacks on the victim and includes two subtypes: physical and verbal bullying.

Physical bullying

Physical bullying includes any physical contact that could potentially hurt or injure another person (hitting, kicking, punching, etc.). The majority of the sample (86%) stated that they had not perpetrated this direct, physical bullying behaviour, while 12.1% reported such behaviour only once or twice. Less than 1% of the sample indicated bullying others in such a manner ‘two or three times a month’ and ‘about once a week’. Only one learner indicated that they had hit, kicked, pushed, or shoved others around ‘several times a week’, as shown in Table 5.4.

Table 5.4: *I hit, kicked, pushed, and shoved others around or locked other people indoors*

	Frequency	%	Cumulative %
It has not happened at school this year	234	86.0	86.0
It has only happened once or twice	33	12.1	98.2
Two or three times a month	2	.7	98.9
About once a week	2	.7	99.6
Several times a week	1	.4	100.0
Total	272	100.0	

Verbal bullying

Verbal bullying includes name-calling and teasing in a hurtful way (Wang et al., 2009). Sixty percent of the sample reported not having bullied another student by calling them mean names, making fun of them or teasing them in a hurtful way, while over a third of the sample did report such behaviour, indicating they had done so ‘only once or twice’. Three percent of the sample reported bullying others with mean names, ‘two or three times a month’ and one percent reported this behaviour ‘several times a week’. The results are shown in Table 5.5.

Table 5.5: *I called another student mean names, made fun of or teased him or her in a hurtful way*

	Frequency	%	Cumulative %
It has not happened at school this year	157	57.7	57.7
It has only happened once or twice	103	37.9	95.6
Two or three times a month	9	3.3	98.9
Several times a week	3	1.1	100.0
Total	272	100.0	

Ninety percent of the sample indicated no involvement in calling others mean names or making comments of a racial nature, while 8.5% reported perpetrating this behaviour only once or twice. The results are shown in Table 5.6.

Table 5.6: I bullied others with mean names or comments about his or her race or colour

	Frequency	%	Cumulative %
It has not happened at school this year	246	90.4	90.4
It has only happened once or twice	23	8.5	98.9
Two or three times a month	1	.4	99.3
About once a week	1	.4	99.6
Several times a week	1	.4	100.0
Total	272	100.0	

The majority of the sample stated that they had not bullied others with mean names, comments, or gestures with a sexual meaning. Eighteen learners reported perpetrating bullying behaviours in this manner once or twice, while two learners stated that they had bullied others in this regard ‘two or three times a month’. These results are shown in the Table 5.7.

Table 5.7: I bullied others with mean names, comments, or gestures with a sexual meaning

	Frequency	%	Cumulative %
It has not happened at school this year	251	92.3	92.3
It has only happened once or twice	18	6.6	98.9
Two or three times a month	2	.7	99.6
Several times a week	1	.4	100.0
Total	272	100.0	

5.3.2. Indirect bullying

When the imbalance of power favours psychological strength, the bullying is said to be more indirect in nature. Indirect bullying is characterised by threatening the victim into

social isolation. This isolation is achieved through a wide variety of techniques, including: spreading rumours; banishment; exclusion; bullying other people who wish to socialise with the victim; and criticising the victim’s manner of dress and other socially-significant markers, including the victim's race, religion, disability, etc. (Olweus, 1994; Smith & Brain, 2000; Smith et al., 2002). Indirect bullying is often subtle in nature and includes the following subtypes: social isolation and intentional exclusion; and intimidation.

Social isolation and intentional exclusion

Social isolation and intentional exclusion are the names given to behaviours which involve systematically excluding someone from joining a group or remaining in a group (this subtype also includes spreading rumours and manipulating other friendships). Over three quarters of the sample (77.6%) indicated that they had not perpetrated traditional bullying by keeping others out of things or excluding others, while 21% reported that they had perpetrated this behaviour only once or twice. Furthermore, three learners indicated they had perpetrated this behaviour ‘two or three times a month’ while only one learner reported bullying others in this manner ‘several times a week’, as shown in Table 5.8.

Table 5.8: *I kept others out of things on purpose, excluded them from my group of friends or completely ignored him or her*

	Frequency	%	Cumulative %
It has not happened at school this year	211	77.6	77.6
It has only happened once or twice	57	21.0	98.5
Two or three times a month	3	1.1	99.6
Several times a week	1	.4	100.0
Total	272	100.0	

5.4. Traditional bullying behaviours and gender

In an attempt to identify an association between the perpetration of traditional bullying and gender, the researcher created a cross-tabulation between the variable identified by Solberg and Olweus (2003) '*how often have you bullied other students at school this year?*' and gender. Results indicate that 69.4% of female learners reported not having bullied any other students, with their male counterparts reporting a similar percentage (66.7%). Over a quarter of female and male learners said they had bullied another individual once or twice (27.2 % and 30.3 % respectively). A similar percentage of male and female learners (1% and 2.3% respectively) reported bullying others two or three times a month. Furthermore, 2% of male learners indicated that they had bullied others several times a week, and 1.2% of female learners indicated the same behaviour. Using the cut-off point suggested by Olweus and Solberg, results indicate 3% of male learners and 3.5% of female learners in the sample are bullies. Overall, the frequency analysis revealed that a similar percentage of female and male learners perpetrated traditional bullying behaviour. These results are shown in Table 5.9.

Table 5.9: How often have you bullied other students at school this year? * Gender cross-tabulation

		Gender		Total
		Boy	Girl	
	Count	66	120	186
I haven't bullied another student at school this year	% within <i>How often have you bullied other students at school this year?</i>	35.5%	64.5%	100.0%
	% within Gender	66.7%	69.4%	68.4%
	Count	30	47	77
It has only happened once or twice	% within <i>How often have you bullied other students at school this year?</i>	39.0%	61.0%	100.0%
	% within Gender	30.3%	27.2%	28.3%
	Count	1	4	5
Two or three times a month	% within <i>How often have you bullied other students at school this year?</i>	20.0%	80.0%	100.0%
	% within Gender	1.0%	2.3%	1.8%
	Count	2	2	4
Several times a week	% within <i>How often have you bullied other students at school this year?</i>	50.0%	50.0%	100.0%
	% within Gender	2.0%	1.2%	1.5%
	Count	99	173	272
Total	% within <i>How often have you bullied other students at school this year?</i>	36.4%	63.6%	100.0%
	% within Gender	100.0%	100.0%	100.0%

A Chi-square association test was conducted to examine the potential association between ‘*how often have you bullied other students at school this year?*’ and gender. The Chi-square test yielded results which indicated that there is no statistically significant association between gender and perpetrating traditional bullying behaviours, $\chi^2 (3, N = 272) = 1.19, ns$. This is shown in Table 5.10.

Table 5.10: Chi-Square Test: Gender and ‘How often have you bullied other students at school this year?’

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.186 ^a	3	.756
Likelihood Ratio	1.229	3	.746
Linear-by-Linear Association	.222	1	.637
N of Valid Cases	272		

a. Four cells (50.0%) have expected count less than 5. The minimum expected count is 1.46.

5.5. Traditional bullying behaviours and age

In an attempt to identify an association between traditional bullying perpetration and the age of a learner, the researcher created a cross-tabulation between the variable identified by Solberg and Olweus (2003) ‘*how often have you bullied other students at school this year?*’ and age. Results from the cross-tabulation (Table 5.11) revealed that 62.7% of the 11-year-old learners, 63.6% of 12-year-old learners, and 80.2% of 13-year-old learners had not bullied another learner in a traditional manner. Furthermore, a similar percentage of 11 and 12-year-old learners reported bullying another student once or twice (35.6% and 31.1%,

respectively), while 18.5% of 13-year-old learners reported bullying another learner to the same degree. These results are tabulated below, in Table 5.11.

Table 5.11: How often have you bullied other students at school this year? * Age cross-tabulation

		Age (years)			Total
		11	12	13	
I haven't bullied another student at school this year	Count	37	84	65	186
	% within <i>How often have you bullied other students at school this year?</i>	19.9%	45.2%	34.9%	100.0%
	% within Age	62.7%	63.6%	80.2%	68.4%
It has only happened once or twice	Count	21	41	15	77
	% within <i>How often have you bullied other students at school this year?</i>	27.3%	53.2%	19.5%	100.0%
	% within Age	35.6%	31.1%	18.5%	28.3%
Two or three times a month	Count	0	5	0	5
	% within <i>How often have you bullied other students at school this year?</i>	0.0%	100.0%	0.0%	100.0%
	% within Age	0.0%	3.8%	0.0%	1.8%
Several times a week	Count	1	2	1	4
	% within <i>How often have you bullied other students at school this year?</i>	25.0%	50.0%	25.0%	100.0%
	% within Age	1.7%	1.5%	1.2%	1.5%
Total	Count	59	132	81	272
	% within <i>How often have you bullied other students at school this year?</i>	21.7%	48.5%	29.8%	100.0%
	% within Age	100.0%	100.0%	100.0%	100.0%

A Chi-square association test was conducted to examine the potential association between ‘*how often have you bullied other students at school this year?*’ and age. The Chi-square test revealed that age is not significantly associated with being a traditional bully, $\chi^2(6, N = 272) = 11.94, ns$. This is shown in Table 5.12.

Table 5.12: Chi-Square Test: Age and ‘*how often have you bullied other students at school this year?*’

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.937 ^a	6	.063
Likelihood Ratio	14.085	6	.029
Linear-by-Linear Association	3.301	1	.069
N of Valid Cases	272		

a. Six cells (50.0%) have expected count less than 5. The minimum expected count is .87.

5.6. Traditional bullying behaviours and grade

In an attempt to identify an association between the perpetration of traditional bullying and the grade a learner is in, the researcher created a cross-tabulation between the variable identified by Solberg and Olweus (2003) ‘*how often have you bullied other students at school this year?*’ and grade. Results revealed 74.8% and 60.3% of Grade Seven and Grade Six learners, respectively, indicated that they had not bullied another student in a traditional manner. Twenty-two percent (22.5%) of Grade Seven learners reported only bullying another student once or twice, compared to over a third (35.5%) of Grade Six learners, who reported the same.

Three percent (3.3%) of Grade Six learners indicated bullying another student two or three times a month, while only one Grade Seven learner in the sample reported bullying another learner two or three times a month. Similarly, only one Grade Six learner reported bullying another learner several times a week, compared to 2% of the Grade Seven learners. Overall, 4.1% of Grade Six learners appear to be perpetrators of traditional bullying, compared to 2.7% of Grade Seven learners. These results are shown in Table 5.13, below.

Table 5.13: How often have you bullied other students at school this year? * Grade cross-tabulation

		Grade		Total
		6	7	
I haven't bullied another student at school this year	Count	73	113	186
	% within <i>How often have you bullied other students at school this year?</i>	39.2%	60.8%	100.0%
	% within Grade	60.3%	74.8%	68.4%
It has only happened once or twice	Count	43	34	77
	% within <i>How often have you bullied other students at school this year?</i>	55.8%	44.2%	100.0%
	% within Grade	35.5%	22.5%	28.3%
Two or three times a month	Count	4	1	5
	% within <i>How often have you bullied other students at school this year?</i>	80.0%	20.0%	100.0%
	% within Grade	3.3%	0.7%	1.8%
Several times a week	Count	1	3	4
	% within <i>How often have you bullied other students at school this year?</i>	25.0%	75.0%	100.0%
	% within Grade	0.8%	2.0%	1.5%
Total	Count	121	151	272
	% within <i>How often have you bullied other students at school this year?</i>	44.5%	55.5%	100.0%
	% within Grade	100.0%	100.0%	100.0%

The differences in the responses between grades were statistically significant, $\chi^2 (3, N = 272) = 9.26, p < .05$, thus it appears as if there is an association between the grade of a learner and the perpetration of bullying behaviours, i.e., Grade Six learners were significantly more likely to have perpetrated traditional bullying behaviours than Grade Seven learners. Results of the chi-square test are shown in Table 5.14.

Table 5.14: Chi-Square Test: Grade and ‘how often have you bullied other students at school this year?’

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.258 ^a	3	.026
Likelihood Ratio	9.382	3	.025
Linear-by-Linear Association	2.787	1	.095
N of Valid Cases	272		

a. Four cells (50.0%) have expected count less than 5. The minimum expected count is 1.78.

5.7. The extent to which cyberbullying behaviours are occurring amongst learners

Second research question: to what extent, and in which manner, are cyberbullying behaviours occurring amongst learners (11 to 13 years of age) in specifically identified Benoni primary schools, in terms of gender, age, and grade?

Prior to conducting the analyses on the cyberbullying perpetration data which revealed valid and reliable results, the researcher aimed to examine cyberbullying victimisation among the sample, during which a flaw in the research design emerged: there

was no question in the research questionnaire, which asked participants how often they had been cyberbullied in the past year. As such, there is no data indicating an overall victimisation rate, and only frequency tables for each item relating to cyberbullying victimisation are reported (descriptive statistics for these items are provided in Appendix K).

The more common forms of cyber-victimisation among the sample were *I was called mean names, was made fun of or teased in hurtful way online* and *other pupils told lies about me or spread false rumours online*. Both types of behaviours were reported to have occurred at least once by 25.4% and 23.9% of the sample, respectively. Other forms of cyber-victimisation were less common among the sample, such as *I was bullied with mean names, or gestures with a sexual meaning online, I was bullied with mean names about my race or colour online*, and *I was threatened or forced to do things I didn't want to do online*, with 11.4%, 11%, and 7.7% of the sample reporting these behaviours at least once, respectively. These results are shown in Table 5.15, below.

Table 5.15: Combined frequency tables for items measuring cyberbullying victimisation

<i>I was called mean names, was made fun of or teased in a hurtful way online</i>	Frequency	%	Cumulative %
It has not happened to me at school this year	203	74.6	74.6
It has only happened once or twice	58	21.3	96.0
2 or 3 times a month	6	2.2	98.2
About once a week	3	1.1	99.3
Several times a week	2	.7	100.0
Total	272	100.0	

<i>Other pupils told lies about me or spread false rumours online</i>	Frequency	%	Cumulative %
It has not happened to me this year	207	76.1	76.1
It has only happened once or twice	52	19.1	95.2
2 or 3 times a month	10	3.7	98.9
About once a week	3	1.1	100.0
Total	272	100.0	

<i>I was threatened or forced to do things I didn't want to do online</i>	Frequency	%	Cumulative %
It has not happened to me this year	251	92.3	92.3
It has only happened once or twice	20	7.4	99.6
About once a week	1	.4	100.0
Total	272	100.0	

<i>I was bullied with mean names about my race or colour online</i>	Frequency	%	Cumulative %
It has not happened to me this year	242	89.0	89.0
It has only happened once or twice	23	8.5	97.4
2 or 3 times a month	6	2.2	99.6
Several times a week	1	.4	100.0
Total	272	100.0	
<i>I was bullied with mean names, or gestures with a sexual meaning online</i>	Frequency	%	Cumulative %
It has not happened to me this year	241	88.6	88.6
It has only happened once or twice	25	9.2	97.8
2 or 3 times a month	4	1.5	99.3
Several times a week	2	.7	100.0
Total	272	100.0	

For the purposes of answering the second research question, the researcher adapted the item suggested by Solberg and Olweus (2003) to assess cyberbullying perpetration (*how often have you taken part in cyberbullying another person this year?*). Results from an initial frequency analysis indicated that 91.2% of the sample stated that they had not taken part in perpetrating cyberbullying behaviours, while 8.8% indicated that they had perpetrated such behaviour once or twice. However, utilising the cut-off point suggested by Solberg and Olweus (2003), no learners were identified as cyberbullies. This is shown in Table 5.16.

Table 5.16: *How often have you taken part in cyberbullying another person this year?*

	Frequency	%	Cumulative %
I haven't cyberbullied another person this year	248	91.2	91.2
It has only happened once or twice	24	8.8	100.0
Total	272	100.0	

Just as traditional bullying takes numerous forms, so does cyberbullying. Burton and Mutongwizo (2009) discuss the following subtypes of cyber violence: harassment, denigration, impersonation, outing, trickery, exclusion, cyber-stalking, happy-slapping, and flaming. Only two of these forms are represented in the current context, namely: harassment and cyber-stalking.

Harassment

Harassment is the repeated sending of offensive, rude, and insulting messages. This is often persistent, repeated, and directed at a specific person. A large majority (95.6%) indicated that they had not bullied others with mean names about their race or colour. Twelve

learners (4.4%) had perpetrated this form of cyber aggression *at least* once or twice. This is shown in Table 5.17.

Table 5.17: I bullied others with mean names about their race or colour online

	Frequency	%	Cumulative %
It has not happened this year	260	95.6	95.6
It has only happened once or twice	10	3.7	99.3
About once a week	1	.4	99.6
Several times a week	1	.4	100.0
Total	272	100.0	

Concerning the technological portal through which this behaviour is perpetrated, seventeen responses were generated from the multiple response set; which indicated that BBM was most often used by cyberbullies within this scenario, representing 41% of the responses.

Cyberbullying others with mean names or gestures of a sexual nature is also considered harassment. Again, a large majority (95.6%) indicated that they had not bullied others with mean names or gestures of a sexual meaning. Twelve learners (4.4%) had perpetrated this form of cyber aggression *at least* once or twice, with one of these learners perpetrating such behaviours several times a week. These results are shown in Table 5.18.

Table 5.18: I bullied others with mean names, or gestures with a sexual meaning online

	Frequency	%	Cumulative %
It has not happened this year	260	95.6	95.6
It has only happened once or twice	11	4.0	99.6
Several times a week	1	.4	100.0
Total	272	100.0	

When perpetrating cyberbullying behaviours of a sexual nature, BBM was once again the technological portal of choice for perpetrators, representing 38% of the total responses.

Cyber-stalking

Cyber-stalking, much like traditional stalking involves threats of harm or intimidation through repeated online harassment. Within the current situation, eight learners indicated perpetrating such behaviour *at least* once, while the majority (97.1%) reported no involvement in such behaviour. These results are tabulated below.

Table 5.19: I threatened or forced another student to do things they didn't want to do online

	Frequency	%	Cumulative %
It has not happened this year	264	97.1	97.1
It has only happened once or twice	6	2.2	99.3
2 or 3 times a month	1	.4	99.6
Several times a week	1	.4	100.0
Total	272	100.0	

Of the ten responses obtained from the multiple response set for the item '*I threatened or forced another student to do things they didn't want to do online*' BBM was selected most often with four responses, representing 40% of the total responses.

5.8. Cyberbullying behaviours and gender

A parallel percentage of female (90.8%) and male learners (91.9%) stated that they had not taken part in cyberbullying another person. Similarly, there was a resemblance in the percentages of male and female learners who reported perpetration of such behaviour once or twice (8.1% and 9.2%, respectively). These results are shown in Table 5.20.

Table 5.20: How often have you taken part in cyberbullying another person this year? * Gender cross-tabulation

		Gender		Total
		Boy	Girl	
I haven't cyberbullied another person this year	Count	91	157	248
	% within <i>How often have you taken part in cyberbullying another person this year?</i>	36.7%	63.3%	100.0%
	% within Gender	91.9%	90.8%	91.2%
It has only happened once or twice	Count	8	16	24
	% within <i>How often have you taken part in cyberbullying another person this year?</i>	33.3%	66.7%	100.0%
	% within Gender	8.1%	9.2%	8.8%
Total	Count	99	173	272
	% within <i>How often have you taken part in cyberbullying another person this year?</i>	36.4%	63.6%	100.0%
	% within Gender	100.0%	100.0%	100.0%

The differences in the responses between male and female learners were not statistically significant, $\chi^2 (1, N = 272) = 0.11, ns$, thus it appears as if no association exists between the gender of a learner and the variable ‘*how often have you taken part in cyberbullying another person this year?*’ This is shown in Table 5.21.

Table 5.21: Chi-Square Test: Gender and ‘How often have you taken in cyberbullying another person this year?’

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.107 ^a	1	.744		
Continuity Correction ^b	.011	1	.917		
Likelihood Ratio	.108	1	.742		
Fisher's Exact Test				.827	.465
Linear-by-Linear Association	.106	1	.744		
N of Valid Cases	272				

a. Zero cells (.0%) have expected count less than 5. The minimum expected count is 8.74.

b. Computed only for a 2x2 table

5.9. Cyberbullying behaviours and age

Ninety percent of 12-year-old learners said that they had not taken part in perpetrating any cyberbullying behaviours compared to 84% of 13-year-old learners. Furthermore, 98.3% of 11-year-old learners stated that they had not perpetrated any cyberbullying behaviours. Approximately seven percent (7.6%) of 12-year-old learners reported cyberbullying others once or twice, while only one 11-year-old learner claimed to have cyberbullied another (once

or twice). Sixteen percent of 13-year-old learners reported cyberbullying another person once or twice. These results are cross-tabulated in Table 5.22.

Table 5.22: How often have you taken part in cyberbullying another person this year? * Age cross-tabulation

		Age (years)			Total
		11	12	13	
	Count	58	122	68	248
I haven't cyberbullied another person this year	% within <i>How often have you taken part in cyberbullying another person this year?</i>	23.4%	49.2%	27.4%	100.0%
	% within Age	98.3%	92.4%	84.0%	91.2%
	Count	1	10	13	24
It has only happened once or twice	% within <i>How often have you taken part in cyberbullying another person this year?</i>	4.2%	41.7%	54.2%	100.0%
	% within Age	1.7%	7.6%	16.0%	8.8%
	Count	59	132	81	272
Total	% within <i>How often have you taken part in cyberbullying another person this year?</i>	21.7%	48.5%	29.8%	100.0%
	% within Age	100.0%	100.0%	100.0%	100.0%

The differences in the responses between the three ages are statistically significant χ^2 (2, $N = 272$) = 9.24, $p < .05$, therefore an association exists between the age of a learner and the variable ‘*How often have you taken in cyberbullying another person this year?*’ This is shown in Table 5.23.

Table 5.23: Chi-Square Test: Age and ‘how often have you taken in cyberbullying another person this year?’

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.239 ^a	2	.010
Likelihood Ratio	10.025	2	.007
Linear-by-Linear Association	9.066	1	.003
N of Valid Cases	272		

a. Zero cells (.0%) have expected count less than 5. The minimum expected count is 5.21.

5.10. Cyberbullying behaviours and grade

Results from the cross-tabulation revealed that 95.9% of Grade Six learners claimed no involvement in perpetrating any cyberbullying activities, compared to 87.4% of Grade Seven learners. Furthermore, 4.1% of Grade Six learners and 12.6% of Grade Seven learners admitted to cyberbullying another person once or twice, shown in Table 5.24.

Table 5.24: How often have you taken part in cyberbullying another person this year? * Grade cross-tabulation

		Grade		Total
		6	7	
I haven't cyberbullied another person this year	Count	116	132	248
	% within <i>How often have you taken part in cyberbullying another person this year?</i>	46.8%	53.2%	100.0%
	% within Grade	95.9%	87.4%	91.2%
It has only happened once or twice	Count	5	19	24
	% within <i>How often have you taken part in cyberbullying another person this year?</i>	20.8%	79.2%	100.0%
	% within Grade	4.1%	12.6%	8.8%
Total	Count	121	151	272
	% within <i>How often have you taken part in cyberbullying another person this year?</i>	44.5%	55.5%	100.0%
	% within Grade	100.0%	100.0%	100.0%

The differences between the Grade Six and Seven learner responses measured statistically significant, $\chi^2 (1, N = 272) = 5.96, p < .05$, hence an association exists between the grade of a given respondent and the variable ‘*how often have you taken in cyberbullying another person this year?*’ In the current context, Grade Seven learners were significantly more likely to have perpetrated cyberbullying than learners in Grade Six. Results of the chi-square test are shown in Table 5.25.

Table 5.25: Chi-Square Test: Grade and ‘*how often have you taken in cyberbullying another person this year?*’

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.963 ^a	1	.015		
Continuity Correction ^b	4.958	1	.026		
Likelihood Ratio	6.425	1	.011		
Fisher's Exact Test				.017	.011
Linear-by-Linear Association	5.941	1	.015		
N of Valid Cases	272				

a. Zero cells (.0%) have expected count less than 5. The minimum expected count is 10.68.

b. Computed only for a 2x2 table

5.11. The relationship between Traditional bullying perpetration and Cyberbullying perpetration

Third research question: what is the relationship between perpetrating traditional bullying and cyberbullying behaviours?

The researcher explored the possible relationship between traditional bullying and cyberbullying behaviours by performing a Spearman’s Rho correlation on the mean scores obtained for the factors: Traditional bullying perpetration; and Cyberbullying perpetration. The direction of the relationship was not specified as such a two-tailed analysis ensued. The results suggest that there is a statistically significant relationship between perpetrating traditional bullying and perpetrating cyberbullying, $r_s(270) = .37, p < .01$. Results are shown in Table 5.26.

Table 5.26: Spearman’s Rho correlation between Traditional bullying perpetration and Cyberbullying perpetration

		Cyberbullying perpetration	Traditional bullying perpetration
Cyberbullying perpetration	Correlation Coefficient	1.000	.371**
	Sig. (2-tailed)	.	.000
	N	272	272
Traditional bullying perpetration	Correlation Coefficient	.371**	1.000
	Sig. (2-tailed)	.000	.
	N	272	272

** . Correlation is significant at the 0.01 level (2-tailed).

5.12. The relationship between Traditional bullying perpetration and the Authoritarian parenting style

Fourth research question (a): what is the relationship between traditional bullying behaviours and the Authoritarian parenting style?

In order to establish whether or not the APS is related to perpetrating bullying behaviours, the researcher ran a Spearman's Rho correlation between the mean scores obtained for the factors: Traditional bullying perpetration; and the APS. A one-tailed hypothesis was borne in mind, where the presence of Authoritarian behaviours could potentially enable/increase traditional bullying behaviours in the learners, and as such, a one-tailed analysis was conducted. The results suggest that the APS is significantly related to Traditional bullying perpetration, $r_s(270) = .31, p < .01$. These results are shown in Table 5.27.

Table 5.27: Spearman's Rho correlation between the Authoritarian parenting style and Traditional bullying perpetration

		Traditional bullying perpetration	Authoritarian parenting style
Traditional bullying perpetration	Correlation Coefficient	1.000	.307**
	Sig. (1-tailed)	.	.000
	N	272	272
Authoritarian parenting style	Correlation Coefficient	.307**	1.000
	Sig. (1-tailed)	.000	.
	N	272	272

** . Correlation is significant at the 0.01 level (1-tailed).

5.13. The relationship between Cyberbullying perpetration and the Authoritarian parenting style

Fourth research question (b): what is the relationship between cyberbullying behaviours and the Authoritarian parenting style?

A Spearman's Rho was once again used to investigate the potential relationship between the APS and the perpetration of cyberbullying behaviours. As assumed in the previous question, a one-tailed hypothesis was borne in mind, whereby the presence of Authoritarian parenting behaviours could enable/increase cyberbullying perpetration. Results suggest that the APS is significantly related to Cyberbullying perpetration, $r_s (270) = .13, p < .05$. Results are shown in Table 5.28.

Table 5.28: Spearman's Rho correlation between the Authoritarian parenting style and Cyberbullying perpetration

			Cyberbullying perpetration	Authoritarian parenting style
Spearman's rho	Cyberbullying perpetration	Correlation Coefficient	1.000	.129*
		Sig. (1-tailed)	.	.016
		N	272	272
		Correlation Coefficient	.129*	1.000
	Authoritarian parenting style	Sig. (1-tailed)	.016	.
		N	272	272

*. Correlation is significant at the 0.05 level (1-tailed).

5.14. Regression analyses

To further explore the relationships found between the APS, traditional and cyberbullying perpetration, hierarchical regression analysis was planned. The researcher aimed to create: (1) a hierarchical equation, regressing traditional bullying perpetration onto the demographic variables, cyberbullying perpetration, and the APS; and (2) a hierarchical equation, regressing cyberbullying perpetration onto the demographic variables, traditional bullying perpetration, and the APS.

As with any regression, a hierarchical regression assumes certain assumptions have been met in order to draw conclusions about the intended population. These assumptions are: interval data; non-zero variance; no perfect multicollinearity; homoscedasticity; independent errors; normally distributed errors; independence; and linearity (Field, 2009). Several of these assumptions were tested on the mean scores (obtained from the each of the three factors) prior to conducting the hierarchical regression, namely: normality (normal distribution); multicollinearity; independent errors; homoscedasticity; normally distributed errors; and linearity.

Normal distribution

The first assumption that was checked was that of a normal distribution. Values of skewness and kurtosis were obtained for each factor and then divided by their respective standard errors to produce z -scores. Z -scores can be useful when inspecting the distribution for normality; in the sense that a z -score above 3.29 can be considered significantly non-normal. However, when the sample size exceeds 200, Field (2009) suggests 2.58 as a

significant cut-off point. Z-scores were calculated, which indicated that the three factors violated the assumption of normality, with z-scores ranging from 4.77 to 353.94.

A further way to examine normality is to perform the Kolmogorov-Smirnov or the Shapiro-Wilk test. Significant results found in these tests indicate that the distribution is significantly different from a normal distribution. Across both tests, results revealed that the three factors are not normally distributed, and violate the assumption of normality. These results are shown in Table 5.29.

Table 5.29: Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
APS (Mean score)	.121	272	.000	.955	272	.000
Cyberbullying perpetration (Mean score)	.461	272	.000	.242	272	.000
Traditional bullying perpetration (Mean score)	.250	272	.000	.623	272	.000

a. Lilliefors Significance Correction

Multicollinearity

Field (2009) suggests that there should be no perfect linear relationship between two or more of the predictors, and the predictor variables should not correlate too highly with one another (correlations above .80 or .90). Multicollinearity was assessed via inspection of the correlation matrix, which revealed the assumption was tenable, and had not been violated.

Independent errors

For any two observations the residual terms should be uncorrelated (or independent). This eventuality is sometimes described as a lack of autocorrelation (Field, 2009). This assumption can be tested with the Durbin–Watson test, which tests for serial correlations between errors. Specifically, it tests whether adjacent residuals are correlated. The test statistic can vary between 0 and 4 with a value of 2 meaning that the residuals are uncorrelated. A value greater than 2 indicates a negative correlation between adjacent residuals, whereas a value below 2 indicates a positive correlation (Field, 2009). The size of the Durbin–Watson statistic depends upon the number of predictors in the model and the number of observations. Field (2009) suggest a very conservative rule of thumb; values less than 1 or greater than 3 are cause for concern, and may indicate the violation of the assumption. In the current study, the Durbin-Watson statistics fell within the acceptable range, as such the researcher concluded that this assumption had not been violated, and was tenable.

Homoscedasticity

At each level of the predictor variable(s), the variance of the residual terms should be constant. In other words, the residuals at each level of the predictor(s) should have the same variance (otherwise known as homoscedasticity or homogeneity of variances) (Field, 2009). Levene’s test tests this assumption, and tests the null hypothesis that the variances in different groups are equal (Field, 2009). According to Field (2009), if Levene’s test is significant, it indicates that the variances are significantly different from one another, and therefore the assumption of homogeneity of variance has been violated.

Due to lack of unique spread/level pairs, the regression slopes of the spread vs. level plots for three factors could not be computed (SPSS output warning), as such, the researcher performed Levene's test on the individual items within those three factors. Significant variances arose from the following variables: '*I kept other students out of things on purpose, or excluded them*' $F(3, 268) = 3.81, p < .05$; '*I hit, kicked, pushed, or shoved another student around*' $F(3, 268) = 3.38, p < .05$; '*I bullied others with mean names about their race or colour*' $F(3, 268) = 5.16, p < .05$, and '*I bullied others with mean names, or gestures with a sexual meaning*' $F(3, 268) = 4.86, p < .05$. Further significant differences in the variances were found in '*I bullied others with mean names about their race or colour, online*', $F(2, 246) = 6.47, p < .05$; and '*I bullied others with mean names, or gestures with a sexual meaning, online*', $F(2, 246) = 5.44, p < .05$. Lastly, one of the variables relating to the APS violated the assumption of homogeneity of variance; '*do your parents/caregivers use criticism to make you improve your behaviour?*' Overall, results from Levene's test indicate that the assumption of homoscedasticity has been violated in the three identified factors.

Normally distributed errors

It is assumed that the residuals in a regression model are random; normally distributed variables with a mean of 0. This assumption implies that the differences between the model and the observed data are most frequently zero or very close to zero and that differences greater than zero happen only occasionally. In order to test this assumption, residuals - ZRESID and ZPRED - were plotted against the Y-axis and X-axis, respectively. Fitting a line to the model suggested that the errors within the model are not normal, and thus violate the assumption of normally distributed errors.

Linearity

The mean values of the outcome variable for each increment of the predictor(s) lie along a straight line (Field, 2009). Generally speaking, it is assumed that the relationship that is being modelled is a linear one. Linearity in the current study was assessed by constructing a scatterplot matrix. Upon inspection of the matrix, it was clear that the factors did not form neat linear relationships, and as such the assumption of linearity is not tenable in the current application.

Overall, a number of assumptions regarding the application and execution of a hierarchical regression have been violated in the current study. As a result, no regression analyses were performed on the constructs.

5.15. Summary

Using the lower-bound cut-off (i.e., two or three times a month) suggested by Solberg and Olweus (2003), 15.5% and 3.3% of the participants were identified as traditional victims and traditional bullies, respectively. On the other hand, no participants in the study met the criteria to be identified as cyberbullies. Furthermore, there were no statistically significant associations found between the gender and age of an individual, and perpetrating traditional bullying. Grade was, however, significantly associated with the perpetration of traditional bullying and older learners (Grade Seven) are greater perpetrators of traditional bullying than Grade Six learners.

A small percentage of the sample (8.8%) indicated that they had perpetrated cyberbullying behaviour(s) once or twice, and more often than not, the most utilised portal where such perpetration occurs is BBM (BlackBerry Messenger). Just as in traditional bullying perpetration, there was no association found between the gender of a learner and perpetrating cyberbullying behaviours. However, a statistically significant association was revealed between the age and grade of a learner and cyberbullying perpetration. This form of perpetration is more common among Grade Seven than Grade Six learners.

Finally, the results suggest that there are three statistically significant correlations between the constructs. Correlations between perpetration of traditional bullying and perpetrating cyberbullying, on the one hand and between the APS and perpetration of traditional bullying on the other, are modest, yet significant at $p < .001$. The correlation between the APS and cyberbullying perpetration is small and significant at $p < .05$.

Chapter Six delves into these findings, drawing conclusions whilst suggesting future research directions and concluding the chapter with a brief overview of an anti-bullying programme whose foundation falls well within the scope of this study.

CHAPTER 6: DISCUSSION OF RESULTS AND CONCLUSION

This chapter provides a summary of the current study and draws attention to the research findings. The research findings are discussed within the South African context and compared to international findings. The chapter concludes by highlighting the contributions and limitations of the current study whilst suggesting directions for future research.

6.1. Overview of the current study

The current research aimed to gain insight into the nature and extent of bullying and cyberbullying among Grade Six and Seven learners, incorporating the APS into the Social Learning Theory as a basis for understanding bullying as a learned behaviour. This aim was accomplished by obtaining prevalence rates for bullying victims and then examining the traditional bullying and cyberbullying perpetration using the work of Solberg and Olweus (2003). Perpetration rates were compared across gender, age, and grade and the technological platforms most often used by perpetrators of cyberbullying were identified. The relationships between traditional bullying, cyberbullying, and the APS were then explored using non-parametric, correlational analyses.

The study was conducted using an exploratory correlational design and the population consisted of Grade Six and Grade Seven learners in public primary schools in Benoni, Gauteng. Learners from four schools comprised the sample, with a total of 272 learners who participated in the study and completed the questionnaire. The research instrument contained items from the Revised Olweus Bully Victim Questionnaire (R-OBVQ) together with items from the Parenting Practices Questionnaire (PPQ). An EFA was conducted on the 19 items

with orthogonal rotation (varimax) followed by an item analysis. All items yielded primary loadings $>.50$ and communalities $>.30$. Three components had eigenvalues over Kaiser's criterion of one, namely the APS, Traditional bullying perpetration, and Cyberbullying perpetration; and in combination, explained 53.22% of the variance. Furthermore, these three factors yielded high Cronbach alpha values of .83, .78, .91, respectively. As such, the researcher concluded that the research instrument was valid and reliable. However, two original components (being a victim of traditional bullying, and being a victim of cyberbullying) did not meet the majority of the necessary criteria.

6.2. Traditional bullying behaviours

The results of the current study indicated that 50.4% of the sample ($n = 137$) experienced traditional victimisation *at least once* since the beginning of the academic year. Greeff and Grobler (2008) revealed similar results in their study, indicating that 203 of the 360 students (56.4%) who participated had reported victimisation, of some sort, at least once since the beginning of the academic year. However, one must be cautioned against classifying these learners as victims of bullying, since substantial proportions of children may be victims of occasional or isolated incidents of aggressive behaviour. With this in mind, and using the lower-bound cut-off (i.e., two or three times a month) suggested by Solberg and Olweus (2003), 15.5% of the learners in the current sample were identified as victims of bullying.

The percentage of reported bullying in this study is higher than that which is described in some international literature (Due et al., 2005; Nansel et al., 2001; Whitney & Smith, 1993), as well as in previous South African studies (Burton, 2008; Taiwo & Goldstein,

2006). According to Greeff and Grobler (2008), there are various possible explanations for a high incidence of self-reported victimisation: Being egocentric, young learners are more concerned with what happens to themselves and may therefore over-interpret a slight. Alternatively, the methodology employed to investigate the nature and prevalence of bullying in the sample may have lent itself to reporting challenges. The current study only utilised self-report questionnaires to gather information, and according to Greeff and Grobler (2008) there has been a long-standing dispute in the literature regarding the advantages and disadvantages of self-report measures. Salmivalli (2002) regards self-report measures as being too subjective and lacking any collateral validation, whereas Leff and Kupersmidt (1999) regard peer reports at a young age to be unreliable as young learners are not capable of making accurate observations about the social world around them.

The more common forms of traditional victimisation among the sample were *I was called mean names, was made fun of or teased in a hurtful way* and *other pupils told lies about me or spread false rumours*. Both types of behaviours were reported to have occurred at least once by 57.4% and 50% of the sample, respectively. Although not to the same extent, *other students left me out of things on purpose* was also fairly common and occurred at least once among 39% of the sample. Direct, physical bullying was less common among the sample, with 27.6% reporting this behaviour at least once. Verbal bullying of a racial and sexual nature were also not as common among this sample, even less so than physical bullying, with 21.3% and 19.1% reporting these behaviours at least once during the year, respectively. These results should serve as an indication to the schools involved in the study, that racist bullying within the respective schools –although not eradicated – is less common when compared to the South African study by Greeff and Grobler (2008).

Prevalence of perpetration was analysed further, using the results of the EFA. Utilising the suggested cut-off point by Solberg and Olweus (2003), 3.3% of the learners in the current study were identified as traditional bullies, where 1.8% of the sample reported bullying others two or three times a month, while 1.5% of participants reported bullying others several times a week. These results reflect a lower percentage of traditional bullies when compared to a South African study by Liang et al. (2007), which revealed an 8.2% prevalence of perpetration.

Notwithstanding the cut-off criterion suggested by Solberg and Olweus (2003), 31.6% of the learners in the current study engaged in bullying someone *at least* once during the year in a traditional manner. The prevalence rates found in the current study are higher than those found by Accordino and Accordino (2011), which revealed 25% of the participants reported bullying another person in a traditional manner, which was lower than those found by Liang et al. (2007) in which over a third (36.3%) of students were involved in perpetrating traditional bullying behaviours. However, results from the current study reflect a higher percentage of traditional bullying perpetration when compared to those found by the Unisa Bureau of Market Research (2012), which revealed that 23.3% of learners indicated that they had bullied someone in a traditional manner during the year preceding the study.

The higher prevalence revealed in the current study may be due to the reporting of involvement in bullying over the last year, rather than a shorter time frame (Liang et al., 2007). Furthermore, it seems reasonable to assume that these students may be exposed, either directly or indirectly, to the high levels of violence and crime current in South Africa, and therefore exhibit more aggressive and perpetrating behaviours in schools (Greeff & Grobler, 2008), perhaps as a result of social learning.

The majority of the sample (86%) stated that they had not perpetrated any direct, physical bullying behaviour (i.e., hitting, kicking, pushing, shoving) while 14% reported perpetrating such behaviour *at least once* during the academic year. A much higher percentage was reported when participants admitted to calling another student mean names, teasing others, or making fun of others in a hurtful way – 42.3% reported perpetrating such behaviour *at least once*. Keeping others out of things, excluding others, or completely ignoring another was also common among the sample, with 22.4% perpetrating such behaviours. Verbal bullying of a racial nature was not common among the sample, with 9.6% reporting such behaviour *at least once*. Even less common was verbal bullying of a sexual nature, with 7.7% of participants perpetrating such behaviour *at least once* during the academic year. Similar results have been revealed by Wang et al. (2009), which indicated (at the item level) that the two most common types of bullying behaviours were calling someone mean names and social isolation. However, perpetrating such behaviours only once or twice does not constitute bullying, and as such interventions and/or anti-bullying programmes should be holistic in their approach, rather than trying to eradicate specific bullying behaviours.

In the current study, a Chi-square test revealed that gender was not significantly associated with traditional bullying perpetration, $\chi^2(3, N = 272) = 1.19, ns$. This finding is contrary to that of Nansel et al. (2001); Olweus (1994); and Wang et al. (2009), which have indicated that males are significantly more likely than females to perpetrate traditional bullying behaviours. Moreover, Liang et al. (2007) revealed that a significantly higher proportion of males were involved in perpetrating traditional bullying behaviours (10.7%) when compared to their female counterparts (6.6%; $p = .03$). One explanation for these discrepant results among studies may be the fact that the schools from which sample groups

were obtained did not have the same demographic make-up in terms of gender (Greeff & Grobler, 2008). These differing conclusions found in studies relating to the gender of bullies means that researchers have been unable to generalise research results (Greeff & Grobler, 2008).

No significant associations were found between the age of a learner and perpetrating traditional bullying behaviours, $\chi^2 (6, N = 272) = 11.94, ns$. This result is in stark contrast to the results found by Liang et al. (2007), which revealed a significantly greater proportion of involvement from younger participants, when compared to their older counterparts ($p < .01$), suggesting a decline in perpetration as age increases. Just like the current study, Liang et al. (2007) examined differences among two grades (i.e., Grade 8 and 11), however unlike the current study, Liang and associates did not examine consecutive ages of the learners. This may account for the opposing results.

A significant association was revealed between the grade of a participant and being a traditional bully, $\chi^2 (3, N = 272) = 9.26, p < .05$, indicating that more Grade Six learners perpetrated bullying behaviours when compared to their Grade Seven counterparts. However, this association between the two variables was weak, *Cramer's V* = .184, $p = .026$ (Pallant, 2011). Nevertheless, the researcher suggested that as a child progresses from one grade to the next, the bullying perpetration decreases. Similarly, Liang et al. (2007) revealed a significantly greater proportion of learners in Grade 8 were involved in perpetrating traditional bullying behaviours (40.4%) when compared to learners in Grade 11 (32.1%; $p < .01$). Moreover, Nansel et al. (2001) reported that middle school youth perpetrate a higher frequency of bullying than do high school youth, perhaps suggesting the decrease of bullying perpetration as a learner progresses through school. The study also yielded a similar trend to

that found by Greeff and Grobler, (2008); Seals and Young, (2003); and Selekman and Vessey (2004), whose studies indicated a steady decline in self-reported experiences of bullying with the advancement in grade levels. Salmivalli (2002) maintain that the decrease in frequency with age, and subsequently with grade, is true only for studies using self-report measures. The present study employed only self-report measures to obtain data, and therefore the possibility exists that results for these participants could differ when other measures are employed.

Overall, these results could serve as an indication to the respective schools involved in the current study that traditional bullying behaviours are likely to be perpetrated by males and females equally. Although the results only approached statistical significance, it is worth noting that more 11-year-old learners indicated bullying others *at least once* when compared to their counterparts, and more 12-year-old learners reported perpetrating such behaviours when compared to the 13-year-old learners. Both results suggest that traditional bullying perpetration decreases as learners get older. Additionally, the differences between the grades measured statistically significant, not only indicating that perpetration occurs to a greater degree among Grade Six learners in the sample, but also that perpetration decreases as a learner progresses from one grade to the next. Moreover, direct verbal bullying (name-calling) is often the preferred method of perpetration among the sample followed by social isolation.

6.3. Cyberbullying behaviours

Prior to conducting the analyses on the cyberbullying perpetration data which revealed valid and reliable results, the researcher aimed to examine cyberbullying

victimisation among the sample, at which point a flaw in the research design emerged: There was no question in the research questionnaire which asked participants how often they had been cyberbullied in the past year. As such, there is no data indicating an overall victimisation rate, and only frequency tables for each item relating to cyberbullying victimisation are reported (descriptive statistics for these items are provided in Appendix K). Despite reporting the results, these victimisation results must be interpreted with caution, since the items related to cyber-victimisation did not perform adequately on the EFA.

The more common forms of cyber-victimisation reported among the sample were harassment, as described by Burton and Mutongwizo (2009) - *I was called mean names, was made fun of or teased in hurtful way online* (experienced at least once by 25.4% of the sample), *I was bullied with mean names, or gestures with a sexual meaning online* (experienced at least once by 11.4% of the sample), *I was bullied with mean names about my race or colour online* (experienced at least once by 11% of the sample); and denigration - *other pupils told lies about me or spread false rumours online* (experienced at least once by 23.9% of the sample). Cyber-stalking - *I was threatened or forced to do things I didn't want to do online* - was less common among the sample, with 7.7% of the sample experiencing this behaviour at least once during the past academic year. As was the case with traditional bullying, these results should be interpreted with caution, as occasional or isolated acts of cyber-aggression do not constitute cyber-victimisation.

Results from the current study reflect lower percentages of cyber-victimisation when compared to those found by Unisa (Unisa Bureau of Market Research, 2012). Of those whose experienced cyberbullying in the Unisa study 49% experienced gossip and rumours being spread about them (equated with *other pupils told lies about me or spread false rumours*

online in the current study); 48% were called mean names (equated with *I was called mean names, was made fun of or teased in hurtful way online* in the current study); 29.6% received threatening messages (equated with *I was threatened or forced to do things I didn't want to do online* in the current study); and 24.5% experienced sexual remarks (equated with *I was bullied with mean names, or gestures with a sexual meaning online* in the current study).

One reason for the discrepancy between the percentages revealed in this study and that of Unisa's could be due to the nature of the items measuring cyber-victimisation in the each study. Neither study utilised a standardised cyberbullying questionnaire and the conceptualisation on victimization is different across the two studies. Nonetheless, both studies reveal evidence of sexting as a new cyberbullying phenomenon emerging among South African learners (Unisa Bureau of Market Research, 2012).

As was the case with traditional bullying, prevalence of perpetration was analysed further, but not victimisation. Even when using the lower-bound cut-off suggested by Olweus and Solberg (i.e., two or three times a month) no participants could be identified as cyberbullies. However, 8.8% of learners stated they had engaged in cyberbullying someone *at least once* during the year preceding the study. Similar results have been found in international studies: Accordino and Accordino (2011); Patchin and Hinduja (2006); and Slonje and Smith (2008) revealed 5%, 11%, and 10.3% of the participants had perpetrated cyberbullying behaviours, respectively. These results reflect a higher proportion of cyberbullying perpetration when compared to results found by the Unisa Bureau of Market Research (2012) and Beran and Li (2005), which indicated that 1.3% and 3% of participants were involved in perpetrating cyberbullying behaviours, respectively.

Perhaps the higher incidence in the current study could be explained by the increasing rate at which individuals are becoming technologically savvy, the advent of social media, easily accessible technology, and the growing affordability of smartphones and data bundles in South Africa (Popovac & Leoschut, 2012). In line with this, South African studies have shown that 92.9% of participants between the ages of 12 and 24 year either own or have access to a mobile phone, which they use for personal reasons (Burton & Mutongwizo, 2009), and 81% of learners in Cape Town, Durban and Johannesburg between 13 and 17 years old had access to a computer at home and 62% were able to use their home computers to access the internet (Chetty & Basson as cited in Popovac & Leoschut, 2012).

The majority of the sample (95.6%) stated that they had not cyber-harassed another with mean names of a sexual nature or about their race or colour, while 4.4% of the sample perpetrated such behaviours. Even less common was cyberstalking, which was perpetrated among 2.9% of the sample *at least once* since the beginning of the academic year. Moreover, the technological portal most frequently used when these cyberbullying behaviours were perpetrated was BBM, accounting for 38%, 41%, and 40% of the responses respectively. Similarly, Kowalski and Limber (2007) revealed that cyberbullies reported using instant messaging most frequently, followed by chat rooms and e-mail messaging, to bully others electronically.

Burton and Mutongwizo (2009) reported that the most common mediums through which electronic aggression was perpetrated in South Africa, in order of frequency, was text messaging (18.3%) followed by phone calls (16.9%), chat rooms (12.2%), instant messaging (11.8%), videos/photos (9.2%), websites (7.6%), and e-mails (7.4%). This follows the broad trends identified in research conducted in the United Kingdom (Burton & Mutongwizo,

2009). Similarly, the Unisa Bureau of Market Research (2012) revealed that cyberbullying takes place predominantly through SMSes, MXit and social networks accessed through cell phones. Despite SMSes, Mxit, and Facebook being listed among the technological portals in the questionnaire, results revealed that cyberbullying was most often perpetrated via BBM; perhaps suggesting a shift in the medium most frequently used to cyberbully others.

It is important to note that BBM was not listed among the technological portals in the research questionnaire; however, participants were able to list any other portal (not otherwise listed) under the ‘*other*’ option. As a result, BBM emerged. What is interesting from the findings relating to this technological portal is that BBM is an internet-based *PIN* instant messenger, which requires the pairing of two PINs (and the subsequent acceptance of the pairing) in order to enable communication between the two devices (i.e., cell phones). This could suggest that both the perpetrator and his/her victim were at some point friends and exchanged PINs. Furthermore, it seems unlikely that a cyberbully could remain anonymous in a BBM setting, since BBM PINs are assigned to a particular phone, and thus are ultimately traceable. Either way, the discrepancy around the ICT most often used when cyberbullying behaviour transpires warrants further investigation.

Both female and male participants in the current study reported having cyberbullied others to similar degrees. A chi-square association test revealed no significant associations between gender and the frequency of cyberbullying perpetration, $\chi^2 (1, N = 272) = 0.11, ns$. Consistent results have been revealed by Beran and Li (2005); Popovac and Leoschut (2012); Slonje and Smith (2008); and Ybarra and Mitchell (2004b), which indicate gender is not significantly associated with cyberbullying perpetration, and males and females were equally likely to perpetrate such behaviours. Furthermore, Burton and Mutongwizo (2009) have

suggested that gender is unlikely to be a sound predictor of cyberbullying perpetration within the South African context.

However, David-Ferdon and Hertz (2009) noted that girls are more likely to perpetrate cyberbullying when compared to their male counterparts. Contrary to David-Ferdon and Hertz – but still revealing a significant difference between male and female learners - Li (2006) revealed that males were more likely to cyberbully others when compared to their female counterparts; $\chi^2(1, n = 233) = 4.82, p = 0.021$. Similarly, Wang et al. (2009) indicated that males are more likely to be cyberbullies when compared to their female counterparts. While numerous studies have examined gender and its relation to cyberbullying, variations and discrepancies in gender differences have emerged. As a result, there is currently no consensus on the gender of a cyberbully and it seems plausible to suggest that both male and female learners perpetrate cyberbullying to similar degrees.

Thirteen year old learners indicated perpetrating cyberbullying behaviours more often than the 11 and 12 year old learners in the sample. This association (between age and cyberbullying perpetration), although significant as shown by the chi-square test, $\chi^2(2, N = 272) = 9.24, p < .05$, was weak, *Cramer's V* = .184, $p = .01$ (Pallant, 2011). Contrary to the results from the current study, Slonje and Smith (2008) revealed no significant association between age (12, 13, 14 and 15 year old learners) and cyberbullying perpetration. However, similar results to those in this study have been found by Ybarra and Mitchell (2004b), who indicated that age is significantly related to an increased likelihood of perpetrating bullying towards another person online, and that older youth were more likely than the younger participants to engage in cyberbullying (*OR*: 1.71, *CI*: 1.51 - 1.86). Therefore, one could suggest that as the age of a learner increases, so does cyberbullying perpetration (and vice

versa). In line with this, Slonje and Smith (2008) suggest that the opportunity for cyberbullying may increase with age as older pupils more often (than younger peers) have cell phones and access to the internet.

Grade Seven learners indicated perpetrating cyberbullying behaviours more often than their Grade Six counterparts, where the differences were small but significant, $\chi^2 (1, N = 272) = 5.96, p < .05$. Despite the significance, this association was very weak, *Cramer's V* = .148, $p = .015$ (Pallant, 2011). Significant differences by grade were also observed in a study by Kowalski and Limber (2007) which showed that Seventh and Eighth Graders were more likely to perpetrate cyberbullying behaviours when compared to their Grade Six counterparts, $\chi^2 (6, n = 152) = 52.00, p < .001$. Specifically, Sixth Graders were half as likely as Seventh or Eighth Graders to be bullies. According to Kowalski and Limber (2007), grade differences in perpetration are not altogether surprising - as children move through middle school, they spend more time on computers and related technologies, and become more skilled at their use. Furthermore, as children move from one grade to the next they are also more likely to begin participating in social network sites (Kowalski & Limber, 2007).

However, the results revealed in the current study are in contrast to those of Beran and Li (2005) which revealed no significant differences between the grade of a respondent (Grade 7, 8, 9) and cyberbullying perpetration ($p > .05$). Wang et al. (2009) also revealed that cyberbullying did not vary by grade, with the only exception being that the proportion of bullies was lower for Ninth and Tenth Graders than for Sixth Graders. These differing and incoherent conclusions found in studies relating to the grade of bullies means that, up until recently, researchers have been unable to generalise research results (Greeff & Grobler, 2008).

Overall, a different profile of cyberbullies emerged when compared to the traditional bullies in the current study. Although similar in one regard – perpetration occurs equally across gender – the results suggest that cyberbullying perpetration increases with age, and consequently with grade. As such, the results suggest that cyberbullies in the current study are equally likely to be male or female, are older than traditional bullies and more likely to be in Grade Seven, as opposed to Grade Six. Additionally, cyber-harassment was common among the cyberbullies, most often perpetrated utilising BBM.

6.4. Traditional bullying perpetration and Cyberbullying perpetration

A two-tailed Spearman's Rho correlation revealed a significant relationship between perpetrating traditional bullying and engaging in similar behaviour online, $r_s(270) = .37, p < .01$. Furthermore, this relationship was a positive one, indicating that as bullying perpetration increases, cyberbullying perpetration increases. In line with this, results revealed that 6.2% of the sample had perpetrated both traditional and cyberbullying *at least once* during the academic year. Notwithstanding the significance of this relationship, the relationship was moderate, in terms of effect size (i.e., the correlation coefficient) (Pallant, 2011; Field, 2009).

Several studies concur with these findings and further suggest that traditional bullying is significantly related to engaging in similar behaviour online (Dehue, Bolman, & Völlink, 2008; Twyman et al., 2010; Ybarra, Diener-West, & Leaf, 2007). Consistent results have also been revealed by Li (2007), in which a significant, positive relationship was identified between being a traditional bully, and being a cyberbully ($\tau = 0.298, p < 0.001$), indicating that traditional bullies, compared to non-bullies, tended to be cyberbullies. Li (2007) also found that, within the traditional bully group, almost 30% reported perpetrating cyberbullying

behaviours as well. Additionally, Dehue, Bolman, Vollink, and Mienke (2012) revealed a significant association between youths involved in traditional bullying perpetration and those involved in cyberbullying perpetration (*Cramer's V* = .23, $p < .01$).

Beran and Li (2005) have suggested that traditional bullying begins at school and then extends into the home and community through the use of technology. Beran and Li have also indicated that it is possible that bullying at a distance by using computers and cell phones then leads to traditional bullying. More specifically, as a result of not receiving consequences for engaging in cyberbullying, learners may then continue the harassment when in close contact with a learner at school (Beran & Li, 2005).

6.5. Traditional bullying perpetration and the Authoritarian parenting style

During the current study, the researcher implicitly hypothesised that children originating from an Authoritarian household are more likely to perpetrate traditional bullying behaviours. As such, the researcher preceded with a one-tailed, Spearman's Rho analysis. This hypothesis was partially confirmed by the analysis, with results indicating a significant, moderate, positive relationship between the APS and Traditional bullying perpetrating, $r_s(270) = .31, p < .01$. This relationship revealed that, as Authoritarian behaviours displayed by parents/guardians increased (or intensified), so did traditional bullying perpetration. Although not as strong of an effect as was found between traditional bullying and cyberbullying perpetration, the relationship was also moderate, in terms of effect size (Pallant, 2011, Field, 2009,).

In line with the current results, Baldry and Farrington (2000) have found that, not only is the APS an exclusive feature of traditional bullies, but that the APS best predicts bullying perpetration when compared to the other parenting styles (Baldry & Farrington, 2000; Georgiou, Fousiani, Michaelides, & Stavriniades, 2013). Furthermore, Baldry and Farrington (2000) have suggested that bullies differ significantly from non-bullies in having Authoritarian, high punitive and low supportive parents who disagree with each other. In this regard, Farrington (1993) found that violent homes are among the highest risk factors for the development of antisocial behaviour such as bullying.

Aside from the research by Baldry and Farrington, other researchers have also reported that children who bully their peers are more likely to come from families where parents use Authoritarian, harsh, and punitive child-rearing practices (Espelage, Bosworth, & Simon as cited in Georgiou et al., 2013). Similarly, Wilson et al. (2003) revealed that adverse parental conflict tactics (similar to those displayed by Authoritarian parents) are significantly related to the aggression and violence displayed by children, $F(3, 332) = 6.00, p = .001$. More recently, Georgiou and colleagues conducted two studies, with both indicating that the Authoritarian parenting is significantly correlated with traditional bullying perpetration, $r = .22, p < .01$ (Georgiou, Fousiani, et al., 2013), and $r = .30, p < .01$ (Georgiou, Stavriniades, & Fousiani, 2013).

A possible explanation for the relationship between traditional bullying and the APS has been suggested by Georgiou, Fousiani, Michaelides, and Stavriniades (2013) - parents who are demanding and rigid but not responsive or supportive (i.e., Authoritarian parents), and who are also competitive and have low or no respect for egalitarian values, tend to transmit these vertical individualistic cultural values (i.e., competitiveness, an imbalance of power,

Authoritarianism) to their children. Georgiou has suggested that these elements of vertical individualism, especially the power imbalance, prompt individuals to perpetrate peer aggression acts, such as bullying (Georgiou, Fousiani, et al., 2013).

In a different study by Georgiou, Stavrinides, et al. (2013), it was suggested that children of Authoritarian parents tend to perceive their family as insensitive to their own pain and therefore, they themselves show little empathy to less powerful individuals (Stavrinides et al. as cited in Georgiou, Stavrinides, et al. 2013). Moreover, Georgiou, Stavrinides, et al. (2013) suggest that, through social learning, the children of Authoritarian parents may come to accept physical or psychological violence as an appropriate method for dealing with interpersonal conflict. Overall, these results, together with those from the current study, could indicate that traditional bullies socially learn the aggression and hostility displayed by Authoritarian parents via observation and modelling, and then portray these behaviours in their own interactions with others.

While the APS is significantly related to both traditional bullying perpetration and cyberbullying perpetration (discussed below), the relationship between the APS and traditional bullying perpetration is stronger, perhaps indicating a greater role for Social Learning in the modelling of overt aggression (more commonly associated with traditional bullying) than in the covert behaviours commonly associated with cyberbullying.

6.6. Cyberbullying perpetration and the Authoritarian parenting style

During the current study, the researcher implicitly hypothesised that children originating from an Authoritarian household are more likely to perpetrate cyberbullying

behaviours. This hypothesis was partially confirmed, with results from the Spearman's Rho correlation, which suggested that exposure to the APS is significantly related to cyberbullying perpetration, $r_s(270) = .13, p < .05$. Although a weak relationship, the results indicate a positive relationship, suggesting as Authoritarian behaviours portrayed by the parents increase, cyberbullying perpetration increases.

Similarly, some studies have examined the relation between characteristics of parenting and cyberbullying, and have found that children who perpetrate cyberbully behaviours experience limited parental monitoring, stronger parental discipline, and a weaker emotional bond with their parents than children who do not cyberbully (Wang et al., 2009; Wong, 2010; Ybarra & Mitchell, 2004b). In this regard, Ybarra and Mitchell found that frequent discipline was significantly related to cyberbullying perpetration, and poor parent-child relationships are a key identifier of cyberbullies. Similarly, Accordino and Accordino (2011) revealed that learners with distant and/or poor parent-child relationships tended to have higher incidences of perpetrating cyberbullying.

Despite the previous literature which suggests the APS is significantly related to cyberbullying perpetration, Dehue, Bolman, Vollink, and Mienke (2012) revealed that children with Permissive parents cyberbullied more often than children whose parents adopt an APS. However, these differences were not significant ($F(3,535) = 1.81, p > .05$). It therefore seems plausible to suggest that parents who interact with their children in a hostile, cold, and indifferent manner either inadvertently encourage their children to interact with others in the same manner, or act as models in which the behaviour is observationally learned, thereby affecting the socialisation of the child, which may increase the likelihood of becoming a cyberbully (Pontzer, 2010).

6.7. Practical implications

Despite the variation of bullying prevalence rates, the current results contribute to the scarce body of existing literature on traditional and cyberbullying among primary school learners in Gauteng. These results could also assist teachers, school counsellors, school management, educational psychologists, and the Gauteng Department of Education, in order to better understand the nature and extent of traditional and cyberbullying perpetration, and the relationships between these and the APS. Furthermore, demographic characteristics, as well as the different forms of perpetration and the portals through which they transpire should be considered when examining or planning bullying interventions/programmes aimed at reducing and preventing bullying at the primary school level.

After considering the research results of the study, it seems imperative at this point to draw attention to an intervention in line with the scope and purposes of this study. Even though an intervention program against bully/victim problems in school is essential to reducing the suffering of the victims, it is also highly desirable to counteract the negative effects endured by bullies and bully/victims (Olweus, 1994). As reported in the literature (Brewster & Railsback, 2001; Farrington, 1993; Marini et al., 2006; Nansel et al., 2001; Olweus, 1993; Schwartz, 2000; Solberg et al., 2007; Townsend et al., 2008; Ttofi et al., 2011), bullies and bully/victims are much more likely than other students to follow an antisocial/criminal path later in life. Accordingly, it is essential to try to redirect their activities into more socially acceptable channels (Olweus, 1994). For these reasons, and due to the theoretical backbone of this study, the researcher has chosen to elaborate on the anti-bullying programme proposed by Olweus (which embeds the features mentioned above) to conclude the chapter.

Olweus developed and implemented one of the first anti-bullying programmes worldwide, the Olweus Bullying Prevention Programme (OBPP). The primary goals of the OBPP were to reduce existing bullying problems among learners at school, to prevent any new bullying problems, and achieve better peer relations among learners (Olweus & Limber, 2010).

The OBPP is based on four key principles, where adults (parents and teachers) should: (1) show warmth and a positive interest in the child's life; (2) set firm boundaries for unacceptable behaviours; (3) use consistent nonphysical negative consequences when rules are broken; and (4) function as authorities and positive role models (Olweus, 1993). These key principles are consistent with the concepts related to the Authoritative parenting style proposed by Baumrind (1991). Baumrind suggested that adults who act in line with the Authoritative parenting style monitor and impart clear standards for the child's conduct, they are assertive but not intrusive or restrictive, and their disciplinary methods are support rather than punitive (Baumrind, 1991). These adults teach children to be socially responsible, self-regulated, and cooperative individuals, therefore reducing the chance/occurrence of bullying perpetration (Baumrind, 1991).

The OBPP was evaluated in terms of the effects of it had, and was based on data collected from approximately 2500 learners originally belonging to 112 Grade Four to Seven classes, in 42 primary and high schools in Bergen (modal ages at Time 1 were 11,12,13 and 14 years, respectively) (Olweus, 1994). Each of the four grade/age cohorts consisted of 600-700 learners with a roughly equal distribution of boys and girls (Olweus, 1994). The first time of data collection (Time 1) was in late May 1993, approximately four months before

introduction of the intervention program (Olweus, 1994). New data was collected in May 1984 (Time 2) and May 1985 (Time 3).

Overall, the results from the evaluation revealed that there was a marked reduction in the levels of bully/victim problems (for both direct and indirect bullying, and for bullying others) (Olweus, 1994). Furthermore, reductions were observed for both boys and girls across all cohorts. In terms of percentages of students reporting being bullied or bullying others, the reductions amounted to approximately 50% or more in most comparisons (Olweus, 1994). There was also a clear reduction in general antisocial behaviour such as vandalism, fighting, and stealing. Moreover, the intervention program not only affected already existing victimization problems; it also reduced the number of new victims (Olweus, 1994); the program thus has both primary and secondary prevention effects (Cowen as cited in Olweus, 1994).

6.8. Limitations and contributions

Limitations

There are several limitations to the findings of the current study. Firstly, the current study is limited to a non-random, convenience sample of learners from four schools. With the study restricted to Benoni learners only, the results cannot be generalised to other parts of Gauteng or South Africa, and should thus be interpreted contextually. The 28.2% response rate was also somewhat low. Widening the sample and conducting the research in multiple primary schools in different areas of the Gauteng may yield interesting data concerning the contextual nature and extent of traditional and cyberbullying among primary school learners.

Secondly, the correlational design of the study limited the ability to infer causal conclusions. As a result, the study only explored and measured the degree of the relationship between traditional bullying perpetration, cyberbullying perpetration, and the APS (Babbie & Mouton, 2001). Two future directions are recommended: An experimental research design with random sampling, whereby a definitive cause-and-effect relationship can be identified between the APS and both types of bullying perpetration (Babbie & Mouton, 2001); or a longitudinal study whereby developmental trends of bullying and Authoritarian parenting, based on repeated observations over long periods of time, can be identified. Both future directions are necessary to substantiate the predictive effects of the APS on traditional and cyberbullying perpetration.

Thirdly, the findings are based purely upon self-reported data, which can be subject to faulty and differential recall, intentional distortion, inattention, and over and under-reporting (Liang et al., 2007; Townsend et al., 2008), all of which may have affected the research findings. Moreover, Salmivalli (2002) regards self-report measures as being too subjective and lacking any collateral validation. A possibility also exists that results for these participants could differ when other measures are employed (Greeff & Grobler, 2008). This highlights the need for future bullying research to employ consistent measures of traditional and cyberbullying behaviour so as to aid comparisons, to use multiple sources of information; and to explore possible determinants of bullying behaviour. Furthermore, the use of other methods such as observation during various times of the day in the classroom and around the school grounds, may enhance the research findings by providing additional information regarding classroom management, sites where bullying occurs, and the culture of the school.

Next, only Grade Six and Seven learners were recruited to participate in the study. Notwithstanding the valuable information this age group provides, these pupils are only a single system within the schooling environment. It would be important to consider the perspectives of other learners in different grades, school management, school teachers, parents and other individuals in the school community. Generating data from learners, school management, other school staff, parents and individuals from the wider school community, may yield different, and possibly critical perceptions and experiences regarding traditional and cyberbullying perpetration. Through this process, a holistic picture of the phenomenon of traditional bullying and cyberbullying may be obtained at the primary school level, which may be beneficial to creating, implementing and evaluating necessary and effective prevention and intervention procedures.

Furthermore, the concepts of bully/victims in either setting (i.e., traditional/cyber) were not examined. Considering the vast amount of literature documenting the adverse outcomes associated with being a bully *and* a victim (Copeland et al., 2013; Kaltiala-Heino et al., 2000; Marini et al., 2006; Nansel et al., 2001; Schwartz, 2000; Solberg et al., 2007; Townsend et al., 2008), future studies are recommended to establish the nature and extent of traditional bully/victims and cyberbully/victims and explore possible determinants.

Moreover, given the fact that parents' consent was required for their child's participation in this study, there is a possibility that the respondents had a rather close parent-child relationship. This implication is two-fold: Firstly, this could imply that parents/caregivers of learners who participated in the study may be more Authoritative in nature; and secondly, the parents who had not consented may therefore be a more accurate

reflection of Authoritarian parents. These conclusions remain merely speculative; however, both implications could warrant further research.

Finally, the current research project only examined the relationships within *one* of Baumrind's typologies - APS. It would be useful to include items, in further research, that measure the other parenting styles identified by Baumrind, the Authoritative, and Permissive parenting styles. Examining all the parenting styles would allow for a complete comparison among all parenting styles (identified by Baumrind) and their individual relationship with traditional and cyberbullying. As such, future researchers could consider the use of the Parental Authority Questionnaire (PAQ; Buri, 1991). The PAQ is a self-report measure that is designed to measure the children's perspective concerning their parents' rearing practices. Based on Baumrind's (1991) taxonomy, the instrument yields three distinct factors representing Authoritarian, Authoritative, and Permissive styles. The instrument consists of 30 questions, measured on a 5-point Likert scale which measures three constructs, namely the Authoritative, Authoritarian, and Permissive parenting styles (10 items for each construct).

Contributions

This study extends previous literature in at least three ways. Firstly, the current study has confirmed that traditional bullying victimisation and traditional bullying perpetration among primary school learners are on-going problems, with 15.5% and 3.3% of the sample being identified as victims and bullies in a traditional manner, respectively. The traditional bullying prevalence rates fall towards the higher end of the spectrum when compared to other local and international studies (Burton, 2008; Espelage & Swearer, 2003; Nansel et al., 2001; Nansel, Craig, Overpeck, Saluja, & Ruan, 2004; Smith & Brain, 2000; Smith et al., 2002;

Taiwo & Goldstein, 2006). The higher prevalence may be due to the reporting of *any* involvement in bullying (rather than that of a specified severity) and over the duration of the last year (rather than a shorter time frame). Another reason for the wide variation among this study and others could relate to the lack of standard assessments used throughout the studies (Wang et al., 2009) Nonetheless, the incidence of bullying identified in the current study is higher than some local and international trends, and this necessitates further investigation.

Secondly, traditional bullying and cyberbullying were measured using the same format as in the R-OBVQ, which has been used internationally to measure the traditional forms of bullying (Solberg & Olweus, 2003). Using equivalent time frames and response categories among the two forms of bullying allowed for comparisons between the cyber-setting and the traditional setting, which confirmed the documented significant relationship between traditional bullying perpetration and cyberbullying perpetration (Dehue et al., 2008, 2012; Li, 2007; Twyman et al., 2010; Ybarra et al., 2007). Furthermore, by allowing learners to indicate which portal they had perpetrated cyberbullying behaviours, a new portal emerged – BBM, thus allowing future researchers the backing to focus on instant messaging when designing and implemented anti-cyberbullying programmes.

Next, the current research laid its foundations exclusively within the Social Learning Theory, which, like other studies have found (Bandura, 1971; 1978; Bauer et al., 2006; D’Zurilla & Goldfried, 1971; Hogben & Byrne, 1998; Huesmann & Eron, 1989; Lochman & Lenhart, 1993; Low & Espelage, 2012; Pakaslahti, 2000; Wilson et al., 2003), was a useful theory for understanding the development of bullying behaviours, especially in the current context where the focus of learned behaviours was on Authoritarian parents. As implicitly hypothesised, results confirmed the documented relationship between the APS and

perpetrating bullying behaviours, both traditional (Baldry & Farrington, 2000; Georgiou, Fousiani, et al., 2013; Georgiou, Stavrinides, et al., 2013; Wilson et al., 2003) and cyber (Wang et al., 2009; Wong, 2010; Ybarra & Mitchell, 2004b). Overall, this study has highlighted the importance of the family as a source of social learning, and suggests that inappropriate behavioural aggression, such as bullying, is a probable result of the social learning of Authoritarian behaviours within the family.

6.9. Summary

The importance of a clearer understanding of bullying in South Africa cannot be underestimated, given the serious implications of this social phenomenon. This research indicates that primary school bullies may differ in their choice of tactics to those in high school, which implies that interventions may have to be adjusted across the lifespan. The implication of the relationship between parent behaviour and bullying in this study makes a strong case for systemic interventions that involve parents and caregivers.

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APPENDIX A: PERMISSION TO USE THE REVISED-OBVQ (R-OBVQ)

Hello,

Please find attached the Olweus Bullying Questionnaire (OBQ) materials and some publications you may find useful. Use of OBQ should be referenced as Olweus, D. (1996). *The Revised Olweus Bullying Questionnaire*.

Mimeo. Bergen, Norway: Research Center for Health Promotion (HEMIL), University of Bergen, N-5020 Bergen, Norway.

Good luck with your work!

Please note that, due to copyright regulations, you are not allowed to include a copy of the Questionnaire in a thesis/dissertation or any other unpublished or (to be) published materials. However, selected text portions from the Questionnaire that have already been published, for example, in the attached Solberg & Olweus 2003 paper can be included/published without restrictions.

For possible further inquiries, you may contact Sue Thomas - srthomas@hazelden.org.

Kind regards

Dan Olweus

Research Professor of Psychology

Uni Health and the HEMILCenter, UiB

PB 7810

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Address for visit:

Christies gate 13

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APPENDIX B: ROTATED COMPONENT MATRIX (EFA)

Rotated Component Matrix from the Exploratory Factor Analysis

	Component									
	1	2	3	4	5	6	7	8	9	10
Yell or shout at you when naughty	.745									
Demand you do something	.724									
Tell you what to do	.705									
Remind you they are in charge	.604									
Grabbed, shoved, or hit if disobedient	.583									
Explode in anger	.548					.416				
Openly criticised when behaviour does not meet expectations	.535					.430				
Use criticism to improve behaviour	.526									
Argue with you	.523									
I bullied others with mean names, or gestures with a sexual meaning		.710								
I hit, kicked, pushed, or shoved another student around		.702								
How often have you bullied other students at school this year?		.698								
I told lies about another student or spread false rumours, tried to make others dislike them		.664								
I bullied others with mean names about their race or colour		.618					.415			
I called another student mean names, made fun of or teased them in a hurtful way		.618								

I threatened or forced another student to do things they didn't want to do	.492		
I threatened or forced another student to do things they didn't want to do online		.900	
I bullied others with mean names, or gestures with a sexual meaning online		.872	
I bullied others with mean names about their race or colour online		.867	
I called another student mean names, made fun of or teased them in a hurtful way online		.631	
Other pupils told lies about me or spread false rumours			.725
Other students left me out of things on purpose			.666
Other pupils told lies about me or spread false rumours online			.650
I told lies about another student or spread false rumours, tried to make others dislike them online			.510
I was called mean names, was made fun of or teased in a hurtful way			
I was bullied with mean names, or gestures with a sexual meaning online			.768
I was called mean names, was made fun of or teased in a hurtful way online		.472	.591
I was threatened or forced to do things I didn't want to do online			.535
How often have you taken part in cyberbullying another person this year?			.401
Punished by withholding love			.680

Use threats as a form of punishment	.573		
Punish by taking away privileges	.564		
I was bullied with mean names about my race or colour online		.701	
I was bullied with mean names about my race or colour		.677	
I was bullied with mean names, or gestures with a sexual meaning		.488	.411
I was hit, kicked, pushed, or shoved around			.753
I was threatened or forced to do things I didn't want to do			.535
How often have you been bullied at school this year?			.514
I kept other students out of things on purpose, excluded them online			.680
I kept other students out of things on purpose, excluded them	.419		.608
Do you like school?			-.814

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

APPENDIX C: ITEMS OMITTED BASED ON EFA

Items omitted based on the results from the initial EFA (N = 272)

Other pupils told lies about me or spread false rumours

Other students left me out of things on purpose

Other pupils told lies about me or spread false rumours online

I told lies about another student or spread false rumours online

I told lies about another student or spread false rumours

I was called mean names, was made fun of or teased in a hurtful way

I was bullied with mean names, or gestures with a sexual meaning online

I was called mean names, was made fun of or teased in a hurtful way online

I was threatened or forced to do things I didn't want to do online

I was threatened or forced to do things I didn't want to do

How often have you taken part in cyberbullying another person this year?

Punished by withholding love

Use threats as a form of punishment

Punish by taking away privileges

I was bullied with mean names about my race or colour online

I was bullied with mean names about my race or colour

I was bullied with mean names, or gestures with a sexual meaning

I was hit, kicked, pushed, or shoved around

I was threatened or forced to do things I didn't want to do

How often have you been bullied at school this year?

I kept other students out of things on purpose, excluded them online

Do you like school?

APPENDIX D: TRANSFORMATIONS

Descriptive statistics for the four constructs following the log transformation (N = 272)

	No. of items	<i>M (SD)</i>	Skewness	Std. error	Kurtosis	Std. error
Authoritarian parenting style	9	0.37 (.13)	-0.07	0.148	-0.27	0.294
Perpetration of traditional bullying	6	0.05 (.08)	3.00	0.148	15.17	0.294
Perpetration of cyberbullying	3	0.02 (.07)	6.42	0.148	51.81	0.294

Descriptive statistics for the four constructs following the square root transformation (N = 272)

	No. of items	<i>M (SD)</i>	Skewness	Std. error	Kurtosis	Std. error
Authoritarian parenting style	9	1.55 (.24)	0.303	0.148	-0.35	0.294
Perpetration of traditional bullying	6	1.06 (.12)	4.54	0.148	34.73	0.294
Perpetration of cyberbullying	3	1.02 (.10)	8.05	0.148	80.99	0.294

Descriptive statistics for the four constructs following the reciprocal transformation (N = 272)

	No. of items	<i>M (SD)</i>	Skewness	Std. error	Kurtosis	Std. error
Authoritarian parenting style	9	0.45 (.14)	0.97	0.148	1.59	0.294
Perpetration of traditional bullying	6	0.91 (.14)	-1.64	0.148	2.99	0.294
Perpetration of cyberbullying	3	0.97 (.10)	-4.53	0.148	23.36	0.294

APPENDIX E: INFORMATION LEAFLET FOR PARENTS AND LEARNERS

**INFORMED CONSENT FOR THE PROJECT ENTITLED:
EXPLORING BULLYING, CYBERBULLYING AND THE AUTHORITARIAN
PARENTING STYLE AMONG GRADE SIX AND SEVEN LEARNERS**

Good day,

My name is Kelly Anne Young. I am a full-time Master's student at UNISA, Pretoria. As part of the Master's curriculum, MA students are required to conduct a research project. I have chosen to conduct research on bullying and cyberbullying within public, ordinary primary schools. Your child is invited to participate in our research project that is centred on bullying, cyberbullying, and the Authoritarian parenting style. This information leaflet is here to help you to decide if you would like your child to participate in the study. **PLEASE READ AND UNDERSTAND THIS DOCUMENT BEFORE THE START OF THE STUDY.** Before you give permission for your child to take part in this study, you should fully understand what is involved. You should not agree to take part unless you are completely happy about what is expected. If you have any questions, please do not hesitate to ask.

WHAT WILL YOUR CHILD BE EXPECTED TO DO?

Your child will be asked to fill out a questionnaire. The questionnaire contains 47 closed questions. The questionnaire will be completed online and should take approximately 25

minutes. The introduction to the questionnaire contains questions relating to your child (age, grade, and gender). Please note, your child will not be asked to put his/her name on the questionnaire, therefore the researcher will not know which child is yours. Your child can therefore feel free to be honest. The next part of the questionnaire focuses on bullying and cyberbullying while the final section of the questionnaire contains questions relating to the Authoritarian parenting style.

WHO WILL HAVE ACCESS TO MY INFORMATION?

The implication of completing the questionnaire is that informed consent has been obtained from you. Data that may be reported in scientific forums (such as journals) will not include any information that identifies your child as a participant in this study. All information obtained during the course of this study is strictly confidential.

Participation in this study is voluntary and you can refuse your child's participation. Furthermore, you may withdraw your child from the study at any time without stating any reason. Your withdrawal will involve no penalty or loss of benefits, but as data is anonymous, please understand that you will not be able to recall your child's data, as your child's information will not be traceable.

The electronic data will be kept on a password-protected, electronic file on a computer. This data will be stored and kept under 'lock & key' for five (5) years (for auditing purposes). The researcher and the supervisor will be the only two people who will have access to the data.

HAS THE RESEARCH RECEIVED ETHICAL APPROVAL?

The proposal was evaluated for adherence to appropriate standards in respect of ethics as required by the Psychology Department of UNISA, as well as the Gauteng Department of Education (GDE). Permission has been granted from the GDE, and the application was approved by the Ethics Committee at UNISA without any conditions.

WHAT ARE MY RIGHTS AS A PARTICIPANT IN THIS RESEARCH?

Your child's participation in this research is entirely voluntary and your child can refuse to participate or stop at any time without stating any reason. The researcher retains the right to withdraw your child from the study if it is considered to be in your child's best interest.

ARE THERE RISKS INVOLVED IN THIS RESEARCH? CAN ANY OF THESE RESEARCH PROCEDURES RESULT IN DISCOMFORT OR INCONVENIENCE?

Some learners may be uncomfortable about the nature of the questions - as they relate to sensitive issues such as bullying and cyberbullying. Please remember that we are trying to understand bullying, cyberbullying, and the Authoritarian parenting style. We ask only that your child be honest in his/her answers. You and your child are welcome to let the researcher know about your discomfort with certain questions.

SOURCE OF ADDITIONAL INFORMATION

If your child feels that he/she is being bullied, they will be advised to tell a teacher or an adult. Furthermore, sources of additional information (such as contact numbers for LifeLine) will be provided at the end of the assent form.

CONFIDENTIALITY

All information obtained during the course of this research is strictly confidential. Data that may be reported in, for instance, scientific journals will not include any information which identifies your child as a participant in this research.

Thank you for taking the time to read through this information leaflet. If you would like your child to participate in this study please complete the informed consent form on the next page and return it to school as soon as possible.

APPENDIX F: INFORMED CONSENT TO PARENTS

**INFORMED CONSENT FOR THE PROJECT ENTITLED:
EXPLORING BULLYING, CYBERBULLYING AND THE AUTHORITARIAN
PARENTING STYLE AMONG GRADE SIX AND SEVEN LEARNERS**

ALL PARENTS MUST PLEASE COMPLETE THIS SECTION:

Tick the best answer for you, please only tick one option.

I would **like** my child to participate and therefore give consent.

(Please complete the following page)

I would **not like** my child to participate and therefore do not consent.

(Please do not complete the following page)

INFORMED CONSENT FOR PARENTS/GUARDIANS

(ON BEHALF OF MINORS UNDER 18 YEARS OLD)

I hereby confirm that I have been informed by the investigator about the nature, conduct, benefits and risks of the study. I have also received, read and understood the above written information regarding the investigation. I am aware that the results of the research may be anonymously processed into a research report. I may, at any stage and without prejudice, withdraw my consent and participation in the research. It has been explained to me that I will be free to withdraw my child from the research at any time, without any disadvantage to future care. I have understood everything that has been explained to me and I consent to my child participating in this research.

Parent/guardian(s) name: (Please print) _____ Signature _____ Date _____

My child's name: (Please print) _____ Child's signature* _____ Date _____

The investigator herewith confirms that the above participant has been informed fully about the nature, conduct and risks of the above research.

Investigator's name: **Kelly Anne Young**

Investigator's signature: _____

Date: **March to September 2013**

***Minors competent to understand must please participate as fully as possible in the entire procedure**

APPENDIX G: ASSENT FORM TO PARTICIPANTS

**ASSENT FORM FOR THE PROJECT ENTITLED:
EXPLORING BULLYING, CYBERBULLYING AND THE AUTHORITARIAN
PARENTING STYLE AMONG GRADE SIX AND SEVEN LEARNERS**

My name is Kelly Anne Young. I am trying to learn about bullying and cyberbullying because I want to know if bullying and cyberbullying are problems in schools in Benoni. If you would like, you can be in my study. If you decide you want to be in my study, you will have to fill out a questionnaire on a computer (a teacher can help you on the computer).

This study will help to create awareness on bullying. This research will find out if bullying and cyberbullying are problems that Grade Six and Grade Seven learners face. Other people will not know if you are in my study. I will put things I learn about you together with things I learn about other children, so no one can tell what things came from you. When I tell other people about my research, I will not use your name, so no one can tell who I am talking about.

Your parents or guardian have to say it's OK for you to be in the study. After they decide, you get to choose if you want to do it too. If you don't want to be in the study, no one will be mad at you. If you want to be in the study now and change your mind later, that's OK. You can stop at any time.

Agreement/Assent

I have decided to be in the study even though I know that I don't have to do it. Kelly Anne Young has answered all my questions.

Signature of Study Participant (child)

Date

Signature of Researcher

Date

If you feel like you would like to talk to someone about your bullying experiences, feel free to contact the following organisations:

1. Childline South Africa: 0800 055 555
2. LifeLine Ekurhuleni: 011 422 4242 or 0861 322 322

APPENDIX H: ETHICAL CLEARANCE FROM UNISA



20-11-2012

ETHICAL CLEARANCE OF A RESEARCH PROJECT INVOLVING HUMAN PARTICIPANTS

Project: Exploring bullying, cyberbullying and the authoritarian parenting style among grade 6 and 7 learners

Researcher: Kelly Anne Young

Supervisor: C Govender (Department of Psychology, Unisa)

The proposal was evaluated for adherence to appropriate standards in respect of ethics as required by the Psychology Department of Unisa. The application was approved by our Ethics Committee without any conditions.



Prof P Kruger
*Department of Psychology
College of Human Sciences
University of South Africa*



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Pretter Street, Muckleneuk Ridge, City of Tshwane
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APPENDIX I: PERMISSION FROM THE GDE



GAUTENG PROVINCE

Department of Education
REPUBLIC OF SOUTH AFRICA

For administrative use:
Reference no. D2013/246

GDE RESEARCH APPROVAL LETTER

Date:	23 November 2012
Validity of Research Approval:	4 February 2013 to 27 September 2013
Name of Researcher:	Young K.
Address of Researcher:	P. O. Box 145296 Farramere Benoni 1501
Telephone Number:	011 849 3188 / 082 894 9133
Fax Number:	011 849 3188
Email address:	youngkellyanne@gmail.com
Research Topic:	Exploring bullying, cyberbullying and the authoritarian parenting style among Grade six and seven learners
Number and type of schools:	FOUR Primary Schools
Districts/HO	Ekhuruleni North

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

Making education a societal priority

Office of the Director: Knowledge Management and Research

3rd Floor, 111 Commissioner Street, Johannesburg, 2001
P.O. Box 77-0, Johannesburg, 2000 Tel: (011) 365 6264
Email: David.Makhaeni@gauteng.gov.za
Website: www.education.gpp.gov.za

APPENDIX J: DESCRIPTIVE STATISTICS FOR TRADITIONAL VICTIMISATION ITEMS

Descriptive statistics for items measuring traditional bullying victimisation

		<i>How often have you been bullied at school this year?</i>	<i>I was called mean names, was made fun of or teased in a hurtful way</i>	<i>Other students left me out of things on purpose</i>	<i>I was hit, kicked, pushed, or shoved around</i>	<i>Other pupils told lies about me or spread false rumours</i>	<i>I was threatened or forced to do things I didn't want to do</i>	<i>I was bullied with mean names about my race or colour</i>	<i>I was bullied with mean names, or gestures with a sexual meaning</i>
N	Valid	272	272	272	272	272	272	272	272
	Missing	0	0	0	0	0	0	0	0
Mean		1.75	1.97	1.57	1.38	1.70	1.28	1.33	1.33
Std. Error of Mean		.058	.069	.054	.044	.056	.043	.048	.050
Median		2.00	2.00	1.00	1.00	1.50	1.00	1.00	1.00
Mode		1	1	1	1	1	1	1	1
Std. Deviation		.955	1.143	.890	.718	.923	.701	.784	.824
Variance		.911	1.305	.792	.516	.852	.492	.615	.679
Skewness		1.467	1.254	1.875	2.313	1.761	3.298	2.898	3.079
Std. Error of Skewness		.148	.148	.148	.148	.148	.148	.148	.148
Kurtosis		1.970	.800	3.420	5.777	3.441	12.442	8.702	9.666
Std. Error of Kurtosis		.294	.294	.294	.294	.294	.294	.294	.294
Range		4	4	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	5

APPENDIX K: DESCRIPTIVE STATISTICS FOR CYBER-VICTIMISATION ITEMS

Descriptive statistics for items measuring cyberbullying victimisation

		I was called mean names, was made fun of or teased in a hurtful way online	Other pupils told lies about me or spread false rumours online	I was threatened or forced to do things I didn't want to do online	I was bullied with mean names about my race or colour online	I was bullied with mean names, or gestures with a sexual meaning online
N	Valid	272	272	272	272	272
	Missing	0	0	0	0	0
Mean		1.32	1.30	1.08	1.14	1.15
Std. Error of Mean		.039	.036	.019	.028	.030
Median		1.00	1.00	1.00	1.00	1.00
Mode		1	1	1	1	1
Std. Deviation		.646	.592	.316	.460	.497
Variance		.418	.350	.100	.212	.247
Skewness		2.721	2.172	4.711	4.175	4.671
Std. Error of Skewness		.148	.148	.148	.148	.148
Kurtosis		9.600	4.913	29.635	22.608	27.931
Std. Error of Kurtosis		.294	.294	.294	.294	.294
Range		4	3	3	4	4
Minimum		1	1	1	1	1
Maximum		5	4	4	5	5