University of Alberta

In Their Own Words: How do Students, Parents, and Teachers Describe Cyberbullies

by

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Abstract

The lack of a well-accepted definition of cyberbullying has become a serious issue for the field of research. I surveyed 545 students, parents, and teachers to determine how they described bullies and cyberbullies and whether they applied academic definitional criteria to their concepts of traditional bullying and cyberbullying. Data were analysed using analysis of variance, principal components analysis, and thematic analysis. Taken together, the findings indicated that participants (a) generally describe bullies and cyberbullies similarly, and (b) endorse academic definitional criteria to their personal notion of a bully and a cyberbully. These findings support using Olweus' definition criteria to create a unified definition of cyberbullying that reflects the views of those who most often experience cyberbullying.

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Chapter 1

Introduction

Cyberbullying can have devastating effects on its victims. Megan Meier was one of the first and most well-known victims of cyberbullying. Her cyberbully was Lori Drew, the mother of one of Megan's former friends. Lori had created a false identity on MySpace, a 16-year-old boy named Josh who befriended her, gathered information about her, and then "dumped" her. The message written by Lori Drew said "You are a bad person and everybody hates you. Have a shitty rest of your life. The world would be a better place without you." Megan responded with "You're the kind of boy a girl would kill herself over." Twenty minutes later, the 13-year-old was found in her bedroom closet; she had hanged herself with a belt. (http://www.meganmeierfoundation.org/megans-story.html)

Online bullying is an issue not only for school-age children, but also anyone with an online presence like celebrities, businesses and restaurants; however, determining which behaviours are truly cyberbullying is not always as simple as it seems. Part of the reason why the Megan Meier suicide was so widely publicised was due to the clear violation, which had taken place. Lori Drew was an adult who acted anonymously, repeatedly, and intentionally to hurt a thirteen-year-old. Many acts of cyberbullying are not as clear-cut.

On a recent episode of FOX's "Kitchen Nightmares", Amy Bouzaglo, owner of Amy's Baking Company, said that reviewers and bloggers were making up lies complaining about the quality of the food and causing the restaurant to lose business. (See http://www.buzzfeed.com/ryanhatesthis/this-is-the-most-epic-

brand-meltdown-on-facebook-ever for a timeline of the events or http://www.youtube.com/watch?v=J84QTe2JEtQ for the full episode of Kitchen Nightmares.) In the episode, the owner and her husband, Samy, are shown reacting poorly to criticism, responding with screaming, swearing, threats, and even physical shoving when customers complain about the food or service. After the episode aired, people began commenting on the restaurant's site on Facebook, and Amy and Samy began responding to the comments on their Facebook page. The Facebook updates became more frequent, and a screen capture of the meltdown was posted to the link-sharing site Reddit, which brought more attention to the Facebook page. A few days later, the couple complained that their page was hacked and they had not made the raving posts.

This "brand meltdown" raises many questions about the concept of cyberbullying. Are negative online reviews cyberbullying? What if the reviews are based on real experiences? If the original insults are considered cyberbullying, are insulting retaliatory comments also cyberbullying? Despite the fact that cyberbullying has been the subject of scientific inquiry for over eight years, there is no definition of cyberbullying that is recognized and agreed upon by the majority of researchers, and many point to this lack of consistency as the most pressing concern in the field of study.

"Electronic aggression, or cyberbullying, is a relatively new phenomenon. As such, consistency in how the construct is defined and operationalized has not yet been achieved, inhibiting a thorough understanding of the construct and how it

related to developmental outcomes" (Law, Shapka, Hymel, Olson, & Waterhouse, 2012, p. 226). The lack of a consistent definition of cyberbullying creates serious problems within the field of study. Prevalence rates of cyberbullying vary wildly from 9% (Ybarra, Mitchell, Wolak, & Finkelhor, 2006) to as high as 58% (Beran & Li, 2005). The differences in these rates can be due to populations studied, time periods included, and cohort effects, but the lack of a unified definition is one of the most fundamental problems in the field today.

Numerous researchers have commented on the multiple terms used to describe the behaviour of cyberbullying including, electronic bullying, cyberbullying, internet bullying, online bullying, internet harassment, online harassment (Campbell, 2010; David-Ferdon & Hertz, 2007; Klomek, Souraner & Gould, 2010; O'Keefe & Clarke-Pearson, 2011; Tokunaga, 2010). Some researchers use these terms synonymously, while others view each as describing a separate phenomenon (O'Keefe & Clarke-Pearson, 2011). The multiplicity of terms is difficult enough in one language, but cyberbullying is a global phenomenon and researchers must also compare terms and translations used in international studies (Akbulut, Sahin, & Erisi, 2010; Nocentini et al., 2010).

With so many terms in use, it's not surprising that there are multiple definitions of cyberbullying actively used in this topic of study. These inconsistencies are extremely problematic to the field of cyberbullying research and "lead scholars to study vastly different phenomena under the same title" (Tokunaga, 2010, p. 278). David-Ferdon and Hertz describe the problems

plaguing the field perfectly: "The variety of terms used and the lack of standardized operational definition makes it extremely difficult to pool results and draw conclusions across the limited studies. The problem is further compounded by the lack of a gold standard to measure electronic aggression" (2007, p. 52). Can academics look to the people most often affected by cyberbullying; students, parents, and teachers, to determine a more universal definition of cyberbullying?

In the remainder of this chapter I give a detailed description of the academic definition of traditional bullying, show all of the ways that cyberbullying is similar to traditional bullying, and follow that with a thorough look at the fundamental ways in which cyberbullying is different from traditional bullying. I then describe the differences between the definitions of bullying for lay people and for academics. Finally, I describe the study that motivated this thesis as well as the study that will compose the thesis itself.

Can We Use the Definition of Bullying to Define Cyberbullying?

The terms *bullying* and *traditional bullying* will both be used to describe any type of bullying activity that does not involve an electronic aspect). Many traditional bullying researchers use Olweus' definition of bullying (Boulton, 1997; Boulton, Bucci, & Hawker, 1990; Huang & Chou, 2010; Naylor, Cowie, Cossin, Bettencourt, & Lemme, 2006; Vaillancourt et al., 2008), which is characterized by three criteria: "(a) aggressive behaviour or intentional 'harmdoing' (b) which is carried out 'repeatedly and over time' (c) in an interpersonal relationship characterized by an imbalance of power" (1993, p.

1173). Olweus' definition will be the basis of this thesis. However, it should be noted that even the more established field of traditional bullying has not unanimously agreed upon a single definition of the phenomenon and the definitions of traditional bullying are always evolving. Any further analysis of traditional bullying is beyond the scope of this thesis.

Using Olweus' definition of traditional bullying is a sensible starting point because of the similarities between the two phenomena.

Demographic Correlates of Bullying and Cyberbullying Are the Same

Various personal characteristics of bullying and cyberbullying are similar. Correlates of traditional bullying like family conflict and academic failure are also correlates of cyberbullying (Hemhill et al., 2012). Traditional bullies are significantly more likely to cyberbully than those not involved in bullying. (Dehue, Bolman, & Vollink, 2008; Dooley, Pysalski, & Cross, 2009; Erudur-Baker, 2010; Gradinger, Strohmeier, & Spiel, 2009; Hemhill et al., 2012; Li, 2007; Raskauskas & Stoltz, 2007; Riebel, Jager, & Fischer, 2009; Steffgen et al., 2011; Williams & Guerra, 2007). This was especially true for traditional bullies who preferred to use relational aggression (Hemhill et al., 2012). One study even found a predictive link between being a traditional bully in Grade 7 and a becoming a cyberbully two years later (Hemhill et al., 2012). Likewise, victims of traditional bullying are significantly more likely to be victims of cyberbullying as well (Beran & Li, 2005; Dehue et al., 2008; Erentaite, Bergman, & Zukauskiene, 2012; Hinduja & Patchin, 2008; Katzer, Fetchenhauer, & Belschak, 2009; Li,

2007; Ortega, Elipe, Mora-Merchan, Calmaestra, & Vega, 2009; Raskauskas & Stoltz, 2007; Riebel et al., 2009; Schneider, O'Donnel, Stueve, & Coulter, 2012; Tokunaga, 2010; Twyman, Saylor, Taylor, & Comeau, 2012; Vandebosch & Van Cleemput, 2009). Victims of both types of bullying also tend to have similar experiences: One study found that the most common type of bullying behaviour mentioned by victims was "being threatened" while the most common type of cyberbullying behaviour mentioned was also "to threaten or harass" (Huang & Chou, 2010). Developmental patterns of bullying and cyberbullying are also similar: Both bullying and cyberbullying are much more common in lower secondary (equivalent to north American junior high schools) than sixth form colleges (equivalent to north American high schools) (Slonje & Smith, 2008).

Participants Say Bullying and Cyberbullying Are the Same

When asked outright, some participants said that cyberbullying is "pretty much the same, just over the internet". This was especially true of bullying and cyberbullying activities like spreading rumours, making threats, and derogatory comments" (Mishna, Saini, & Solomon, 2009). When surveyed, some students believe that the impact of cyberbullying is similar to that of traditional bullying (Smith et al., 2008;). Said one student, "I think it hurts as much as 'ordinary' bullying" (Slonje & Smith, 2008, p.152).

I found similar results during my undergraduate thesis research (Welker, 2009) when I surveyed students in Grades 6, 8, and 10 and spoke with them in brief, structured interviews. I asked them, "What is your definition of bullying?"

followed a series of prompts to clarify their thoughts on bullying. A significant majority stated in brief structured interviews neither bullying nor cyberbullying is worse than the other. This response was found in males and females, as well as students of all grades. When probed for further response, most students who stated that both types of bullying were similar cited the fact that both types involve the same behaviours and deliver the same results, whether bullying online or in "real" life. When asked whether their personal definitions of bullying included both traditional and cyber behaviours, 100% said that both types of behaviours should be defined as bullying. Three quarters of participants believed that a single occurrence of aggression should be defined as bullying or cyberbullying. Nearly all students said that they would personally classify an adult being aggressive with a child as bullying; however, less than half said that a child being aggressive to an adult should be defined as bullying. Finally, 80% of participants believed that mistreating anyone, even if you have never met that person in real life, should be defined as bullying or cyberbullying.

Why We Should be Cautious Applying Bullying Definitions to Cyberbullying

Clearly traditional bullying and cyberbullying are very similar. Can we then use Olweus' well accepted definition of traditional bullying to define cyberbullying? The two types of bullying are obviously related, but as some have stated, "considering cyberbullying merely as the electronic form of face-to-face bullying may overlook intricacies of these behaviours" (Dooley et al., 2009).

There are many ways that cyberbullying is qualitatively different from traditional bullying: the nature of cyber communication; differences in personal characteristics of bullies, bully victims, cyberbullies, and cybervictims; and lastly the very nature of the criteria that are so important to Olweus' definition of traditional bullying can be significantly different in cyberbullying.

Nature of Cyber Communication

Cyber victims can often simply delete the offending message; this is not an option available to traditional victims. One participant stated "a text is easier to ignore than something that happened in a specific place" (Smith et al., 2008). Another study found that email and text bullying were seen as less harmful than traditional bullying because email was seen as less personal (Slonje & Smith, 2008). In 2007, Wolak, Mitchell, and Finkelhor said that online interactions, unlike instances of traditional bullying, could be easily terminated. But in 2007, the same authors backpedalled and stated that there are some instances of online victimization, such as uploaded images or videos, which are not easily terminated (as cited in Dooley et al., 2009).

Asynchronicity, the notion that online communication does not take place in real time but can involve delays between replies, is also an issue unique to cyberbullying. Some suggest that the asynchronous nature inherent in electronic communication may stimulate cyberbullying (Suler, 2004; Valkenburg & Peter, 2011). Not seeing the face of the victim may also make it easier for bullies to continue or escalate their behaviour (Jager, Amado, Matos, & Pessoa, 2010;

Steffgen, Konig, Pfetsch, & Melzer 2011; Suler, 2004). On the other hand, some researchers speculate that seeing the victim's face is reinforcing, therefore cyberbullying is less reinforcing than traditional bullying (Dooley et al., 2009). Some focus groups of students have suggested that the indirect nature of cyberbullying leads to bullies that are bolder than they would be offline (Mishna et al., 2009; Smith et al. 2008).

Potential for constant contact between bully and victim. One of the biggest differences between these bullying and cyberbullying is that cyberbullying can happen in the relative safety of the home; harassment can take place at any time, not just during school hours (Grigg, 2010; Klomek et al., 2010; Law et al., 2012; Li, 2008; Mishna et al., 2009; Patchin & Hinduja, 2006; Pujazon-Zazik & Park, 2010; Slonje & Smith, 2008; Smith et al., 2008). One participant stated "it's constant all the time, really hard to escape" (Smith et al., 2008), another said "I believe that cyberbullying most often can be worse for the victim [compared to traditional bullying]… because the bullying takes place outside school, in other words when the victim is at home. Home is usually a sanctuary for most people. But the bullies take this sanctuary away" (Slonje & Smith, 2008, p. 151). Some studies have found that the majority of cyberbullying takes place outside of school hours (Smith et al., 2008; Slonje & Smith, 2008). The potential for inescapable harassment also changes the nature of power imbalance for cyberbully victims compared to traditional bully victims.

Large Potential Audience. Acts of cyberbullying can have a larger audience that can be reached more quickly than acts of traditional bullying (Huang & Chou, 2010; Jager et al., 2010; Li, 2008; Nocentini et al., 2010, Patchin & Hinduja, 2006; Smith et al., 2008; Valkenburg & Peter, 2011) A participant of one study stated "loads of people can see it if it's on the internet" (Smith et al., 2008, p. 381).

Legal/Jurisdiction Issues. While laws vary around the world, and are constantly evolving, generally cyberbullying is out of the jurisdiction of most schools, so it cannot be dealt with until harassment reaches criminal levels (Li, 2008). Additionally, many students think that adults are unaware of most cyberbullying, so children are less likely to report victimization (Slonje & Smith, 2008). One participant stated "You can't tell anyone about cyberbullying because no one really knows what's going on." (Mishna et al., 2009, p. 1124). Another study found that found that students felt that teachers were far more likely to prevent face to face bullying than cyberbullying (Tangen & Campbell, 2010). Additionally, there is much less adult supervision online (Patchin & Hinduja, 2006).

Cyberbullying can spread a perfect copy of a file (photo, video, etc.) to be shared with others and can never be permanently deleted (Li, 2008; Slonje & Smith, 2008; Valkenburg & Peter, 2011), however the electronic file may also act as evidence of cyberbullying and could aid in prosecution or punishment.

Demographic Correlates and Other Research Findings

Other studies found that certain demographic correlates differed for bullying and cyberbullying. For example, one study found a significant decrease in traditional bullying from Grades 9 to 12, but no such decrease in cyberbullying, suggesting that the two phenomena are different (Schneider et al., 2012). Another study found that having more friends was related to an increase in bullying, but not cyberbullying perpetration (Wang, Iannotti, & Nansel, 2009).

Other studies found that a factor analysis of bullying experiences broke down across by bullying type (relational/verbal, physical, overt, and cyber) suggesting that the types of bullying are more different than they are similar (Dempse, Sulkowski, Nichols & Storch, 2009; Hunt, Peters, & Rapee, 2012). This finding is bolstered by another study which found that traditional bullying concept factors tended break down by role (bully, victim, bystander) while cyberbullying concept factors were broken down by mode of aggression such as sending mean messages or posting embarrassing photos (Law et al., 2012).

When asked outright, many students said that certain cyberbullying behaviours like picture/video clip bullying were more severe than traditional bullying (Dooley et al., 2009; Slonje & Smith, 2008; Smith et al., 2008). Other studies found that most of their participants see cyberbullying as “very different” from face to face bullying (Cassidy, Jackson, & Brown, 2009).

Differences in Definition Criteria

Even the most fundamental criteria that Olweus uses to define bullying are qualitatively different with electronic communication.

Imbalance of power and anonymity. As difficult as it is to assess the imbalances of power at play in instances of traditional bullying, it can be even more difficult to assess them in cyberbullying (Campbell, 2010; Dooley et al., 2009; Klomek et al., 2010). In traditional bullying, power can be social, physical, or age-based, but which factors create power in instances of cyberbullying? Some studies suggest that power in cyberbullying can be interpreted as advanced technological skills (Dooley et al., 2009; Grigg, 2010; Vandebosch & VanCleemput, 2009; Menesini & Nocentini, 2009; Nocentini et al., 2010; Law et al., 2012). Other studies operationalized imbalance of power in cyberbullying as having more than one harasser or asking for adult intervention (Wolak, Mitchell, & Finkelhor, 2007).

While it is possible in the context of traditional bullying, anonymity is a more common problem in cyberbullying (Huang & Chou, 2010; Jager et al., 2010; Klomek et al., 2010; Li, 2008; Mishna et al., 2009; Patchin & Hinduja, 2006; Spears et al., 2009; Steffgen et al., 2011; Suler, 2004; Valkenburg & Peter, 2011). Many studies suggest that the anonymity of online interactions allows people to become cyberbullies who otherwise would not be so aggressive in person (Dooley et al., 2009; Hoff & Mitchell, 2009; Mishna et al., 2009; Pujazon-Zazik & Park, 2010; Stauffer, Heath, Coyne & Ferrin, 2012; Tokunaga, 2010;

Vandebosch & VanCleemput, 2008;). Another study echoed that view: “The anonymity of the internet and mobile phone and knowledge of ICT applications indeed seemed to empower those who were unlikely to become real life bullies or who were even victims of traditional bullying” (Vandebosch & VanCleemput, 2008, p. 502). In a study assessing forum posts, cyberbullying comments were significantly more likely to be anonymous than neutral comments (Moore, Nakano, Enomoto & Suda, 2012). In some studies, those that admitted to cyberbullying said that they used anonymity to disguise themselves when they bullied someone they knew (Vandebosch & VanCleemput, 2008). Other studies stated that anonymous bullies made victims feel even more powerless; revealing how important the aspect of anonymity can be (Dooley et al., 2009; Grigg, 2010; Hoff & Mitchell, 2009; Vandebosch & VanCleemput, 2008). However, it should be mentioned that many studies have found that the majority of incidents of cyberbullying do not happen anonymously (Dehue et al., 2008; Dooley et al., 2009; Huang & Chou, 2010; Juvonen & Gross, 2008; Kowalski & Limber, 2007; Mishna et al., 2009; Price & Dalhleish, 2010).

Repetition and Intention. Repetition is a difficult issue that plagues definitions of cyberbullying. Some cyberbullying is direct (text messages or emails) and individual instances can easily be quantified; however, much of cyberbullying is indirect (posts on a public Facebook wall, making embarrassing photos public, or mass texts/emails) and determining repetition is much more difficult. Dooley et al. summarize the issue: “A single aggressive act such as uploading and embarrassing picture to the internet can result in continued and

widespread ridicule and humiliation for the victim. Whereas the aggressive act is not repeated, the damage caused by the act is relived through the ongoing humiliation" (p. 183, 2009). Many researchers have identified the problematic nature of repetition when it comes to cyberbullying definitions (Campbell, 2010; David-Ferdon & Hertz, 2007; Dooley et al., 2009; Grigg, 2010; Law et al., 2012; Nocentini et al., 2010; Vandebosch & VanCleemput, 2008; Vandebosch & VanCleemput, 2009). Some researchers suggest that if a single instance of cyberbullying victimization follows a history of traditional bullying victimization, that single cyberbullying instance should be considered repetition (Vandebosch & VanCleemput, 2008). Other researchers said that repetition is unnecessary for a definition of cyberbullying and is not an important criterion (Coyne, Chesney, Logan & Madden, 2009; Grigg, 2010). The permanence and innumerable copies of publicly posted videos and photos should also be taken into account when considering repetition and cyberbullying (Dooley et al., 2009; Law et al., 2012; Menesini & Nocentini, 2009). Repetition also plays into the nature of intentionality and cyberbullying: the participants of one study stated that if a behaviour was repeated it must be intentional, while other participants in that same study disagreed (Nocentini et al., 2010).

Because of the differences listed above, it would be irresponsible to superimpose the definition of bullying onto cyberbullying without further study and analysis of how these definition criteria are used by those most often affected by cyberbullying.

Self-Created Definitions versus Academic Definitions

Many researchers have found differences between academic definitions and those of lay-persons when defining bullying and cyberbullying. Some researchers have found that when asked for definitions of bullying and cyberbullying, participants will give example behaviours of bullying instead of listing criteria as an academic definition would (Spears, Slee, Owens & Johnson, 2009; Vandebosch & VanCleemput, 2008). Law et al. summarize the issue well: "Common definitions emphasize power differential, repetition, and intention. Spontaneous lay definitions of bullying by both educators and youth do not typically recognize the components" (2012, p. 227). One study tried to determine what cyberbullying "looked like" and "sounded like", and both categories were simply filled with examples of cyberbullying behaviours and the technologies used to perform the behaviours (Spears et al., 2009). Could the use of examples as definitions be minimized if participants are asked about bullies instead of bullying?

Discussions of bullying and cyberbullying made by lay persons also tend to include the reasons why bullies behave the way they do. Some of the reasons suggested by participants include lack of confidence, desire for control, for fun, to demonstrate power, envy of relationships or achievements, to feel better about themselves, to look cool, and because they have family problems (Hoff & Mitchell, 2009; Li, 2010; Smith, et al. 2008; Steffgen, Konig, Pfetsch & Melzer, 2011).

Other researchers have found that some participants say that a specific bullying behaviour has happened to them, however when those participants are asked the general question "have you ever been bullied" they answer "no" (Walker, Sockman, Rajan, & Koehn, 2011).

It is unclear if the differences between academic researchers' definitions and spontaneous lay-persons' definitions are due to fundamentally different concepts or simply different ways of thinking about the phenomena. If students, parents, and teachers are presented with academic definitions, will they endorse the same definitional criteria in their descriptions of bullies and cyberbullies?

Developing Research Questions

The purpose of this thesis is to inform a unified, evidence based, definition of cyberbullying by discovering how participants describe bullies and cyberbullies for themselves, learning whether participants endorse the academic criteria of bullying in their descriptions, and determining whether different groups give significantly different descriptions. Not only will this information inform academic definitions, but it will also inform future interventions aimed at students, parents, and teachers by giving the creators of those interventions a clear idea of how these populations view bullying and cyberbullying.

Upon completing my undergraduate thesis, I wanted a more detailed look at personal definitions notions of bullying and cyberbullying. I wanted to know whether participants used Olweus' definition criteria in their own concepts of bullying and cyberbullying. Previous research has found that these criteria are

rarely used by laypeople when they define traditional bullying in their own words; however these studies did not present participants with academic definition criteria to determine which criteria applied to their personal concepts (Naylor et al., 2006; Vaillancourt et al., 2008). No current research looks at application of Olweus' definition criteria and the cyberbullying definitions of laypeople.

Related to the analysis of application of Olweus' definition criteria, I was not only interested in overall application, but also differences in application across demographic groups (age; sex; student, parent, or teacher). Understanding developmental differences in concepts would help determine whether the use of academic definition criteria is the result of a more mature way of thinking and is therefore more likely in older students and adults. Group differences would also reveal whether children, adolescents, and adults think of bullying and cyberbullying in different ways, informing future interventions that might target these groups. Numerous studies have demonstrated differences in cyberbullying experiences across gender (Akbulut et al., 2010; Aricak, 2009; Card, Sawalani, Stucky & Little, 2008; Calvete, Orue, Estevez, Villardon, & Padilla, 2010; Dempsey, Sulkowski, Nicols, & Storch, 2009; Devine & Lloyd, 2012; Erdur-Baker, 2010; Goebert, Else, Matsu, Chung-Do, & Chang, 2011; Gradinger et al., 2009; Hoff & Mitchell, 2009; Huang & Chou, 2010; Kowalski & Limber, 2007; Li, 2006; Mesch, 2009; Mishna, Khoury-Kassabri, Gadalla, & Daciuk, 2012; Ortega et al., 2009; Price & Dalgleish, 2010; Schneider et al., 2012; Slonje & Smith, 2008; Smith et al., 2008; Varjas, Henrich, & Meyers, 2009; Wang, Iannotti, & Nansel, 2009; Williams & Guerra, 2007; Ybarra & Mitchell, 2007;

Yilmaz, 2011), and some have also shown gender differences in attitudes toward cyberbullying (Agaston, Kowalski, & Limber, 2007; Gini, Pozzoli, Borghi, & Franzoni, 2008; Welker, 2009). A number of studies have also shown age differences in cyberbullying experiences (Bauman, 2010; Dehue et al., 2008; Kowalski & Limber, 2007; Ortega et al., 2009; Schneider et al., 2012; Slovak & Singer, 2011; Smith et al., 2008; Tokunaga, 2010; Varjas et al., 2009; Wang et al., 2009; Williams & Guerra, 2007), and again, one study showed age differences in attitudes toward cyberbullying (Gini et al., 2008), though these studies all looked at student populations, with no research on adult experience with or attitudes towards cyberbullying. Because of the clear indication that gender and age can affect one's experiences with and attitudes toward cyberbullying, it is sensible to assume that age and sex may also have a bearing on one's concept of cyberbullying and description of cyberbullies.

Given the lack of comparative research and different definitions of cyberbullying, I was interested in how academic definition criteria were used in the descriptions of both bullies and cyberbullies generated by students, parents, and teachers. Do participants think of bullies and cyberbullies similarly or differently? In other words, would an analysis of the application of definition criteria reveal patterns indicating bullying and cyberbullying are separate constructs, or would patterns show that the criteria vary together because the two constructs are quite similar? I also wondered whether patterns would differ across demographic groups. Menesini and Nocentini (2009) suggested that future researchers should look at group differences to determine construct validity and

invariance across groups; we must be sure that students endorse Olweus' criteria in the same way as their parents and their teachers, or at least have full knowledge of the differences amongst groups to aid in the creation of a unified cyberbullying definition and to inform future intervention. To search for these differences Law et al. (2012) and Menesini and Nocentini (2012) both recommended the use of factor analysis to determine how application of Olweus' definition breaks down across type of bullying and definition criteria.

In addition to application of Olweus' definition criteria, I was very interested in how laypersons described bullies and cyberbullies in their own words. "Common [academic] definitions emphasize power differential, repetition, and intention. Spontaneous lay definitions of bullying by both educators and youth do not typically recognize these components" (Law et al., 2012, p. 227). I wanted to ask students, parents, and teachers how they described bullies and cyberbullies to see whether they would use Olweus' criteria spontaneously, and to see whether there were developmental or demographic differences in their use of the academic criteria. Menesini and Nocentini found that there were age differences in how participants described cyberbullying: "Younger children use a broad distinction between aggressive acts and nonaggressive acts, whereas adolescents and adults tend to be more discriminative and concerned with power differences, repetition of actions, and physical and non-physical acts" (2009, p. 231). I wanted to see whether these findings were borne out in my sample as well. I was also interested how participants would describe bullies in other ways that did not include examples or definition criteria. What kinds of themes would

emerge? Would the descriptions of cyberbullies have similar additional themes as the descriptions of traditional bullies? While some studies have looked at how students and teachers define bullying or cyberbullying themselves, I have not seen a study comparing the personal descriptions between these two types of bullying. Direct comparisons will be helpful in determining if Olweus' bullying criteria can be applied to an evidence-based definition of cyberbullying.

With all of the previous literature in mind, I formulated these research questions:

1. Do participants endorse Olweus' criteria in their descriptions of bullies and cyberbullies?
2. Are there age or sex differences in students' application of Olweus' criteria to their descriptions of bullies and cyberbullies?
3. Are there group differences? Do students, parents, and teachers differ in their application of Olweus' criteria to their descriptions of bullies and cyberbullies?
4. Does participant application of Olweus' definition criteria for bullies vary together with the definition criteria for cyberbullies? If so, how?

For this research question there were two competing hypotheses:

a. Bullies and cyberbullies are described differently, and definition criteria will group together by type of bullying.

b. Bullies and cyberbullies are described similarly, and definition criteria will group together by definition criteria instead of type of bullying.

5. How do participants conceptualize bullies and cyberbullies in their own words?
    a. Do these concepts use Olweus' bullying definition criteria?
    b. Are the concepts of bullies and cyberbullies similar? How are they different?
    c. What other themes emerge from these concepts? Are the emerging themes similar for both bullies and cyberbullies?

Development of Method

Sample

To answer these questions, I chose to survey students from Grades 4 to 11, their parents, and their teachers. While developmental trends in cyberbullying are not clear, the general trend seems to point to middle school and/or junior high (Grades 6-9) as the age when cyberbullying behaviours are most frequent (Bauman, 2010; Hinduja & Patchin, 2008; Kowalski & Limber, 2007; Mishna et al., 2012; Ortega et al., 2009; Price & Dalgeish, 2010; Schneider et al., 2012; Worthen, 2007; Slovak & Singer, 2011; Smith et al., 2008; Tokunaga, 2010; Varjas et al., 2009; Wang et al., 2009; Williams & Guerra, 2007). I chose to survey children starting in Grade 4 in order to be sure I captured the developmental beginnings of this behaviour and because I believed that Grade 4

would be the earliest that children would be given unsupervised access to the internet. I was interested in any developmental differences between children and adults and therefore followed the advice of Dehue et al., who stated that studies "should therefore be aimed not only at youngsters but also at their parents and their social environment, including teachers" (2008, p. 227) and surveyed not only children in Grades 4-11 but their parents and teachers as well.

Measures

Informed by my research questions, I created a survey. I took the advice of Vandebosh and VanCleemput (2009) who said: "Much of the existing evidence with regard to cyberbullying is based on quantitative, cross sectional research…Therefore, future research should try to provide more in-depth information about the phenomenon by using qualitative methods" (p. 1369), and I created a survey which began with two open-ended "complete the sentence" type questions. The questions read "a bully is" and "a cyberbully is" similar to the survey designed by Vaillancourt et al. (2008) when they studied traditional bullying definitions in students.

For the next section of the survey I listed six definition criteria and for each item I asked whether the criterion was not true of any bullies, was true for some bullies, or was true for all bullies. The next section of the questionnaire followed the same format, but asked about cyberbullies. The last section of the questionnaire asked for the participants' birth date and sex.

Knowing all of the background of the issues with defining cyberbullying, it is little wonder that a restaurant owner like Amy Bouzaglo might see negative reviews of her business as examples of cyberbullying. Reviews can hold great power over the success of a business, especially when negative reviews begin to outnumber positive reviews, and it is impossible to determine the true intentions of bloggers and "online haters". Are Amy and Samy correct in saying that what happened to them was cyberbullying? Would students, parents, and teachers tend to agree with them?

Chapter 2
Method & Results

Participants

Participants were recruited from six schools: two elementary schools (Grades 1-6), one junior high school (Grades 7-9), one high school (Grades 10-12), one junior high / high school (Grades 7-12), and one K-12 school (see Table 1 for student participant summary and Table 2 for overall participant summary) in Edmonton and Vermilion, Alberta. Principals were contacted and given information about the study. Some principals offered us access to all of their Grade 4 - 11 students; others offered specific classrooms for our study. The parents recruited were the parents of the students studied. The teachers worked at the school from which the students were recruited, though were not necessarily the students' teachers.

Three hundred three students participated: 122 males and 179 females (2 unspecified). Participation between grades was not equal (see Table 1). Two hundred and ten parents participated: 183 mothers and 27 fathers. Thirty-two teachers (7 male, 24 female, 1 unspecified) participated.

Materials

All procedures and materials received ethical approval from the university research ethics board in accordance with the Tri-Council policy concerning ethical conduct for research involving humans.

Materials consisted of a four-part questionnaire given to students, parents, and teachers (see Appendix 1). Part one (page 1) described the purpose of the

study, gave general instructions for the questionnaire and ethical information about the study. This page was read aloud to all participants before the questionnaires were distributed.

Part two contained an open ended statement asking students to describe a bully and a cyberbully by completing the sentences "A bully is:" "A cyberbully is:" at the top, with the rest of the 8½" X 11" paper available to respond. I followed the example of Vandebosh et al. and asked about bullies and cyberbullies instead of bullying and cyberbullying, in hopes of getting deeper answers and avoiding a list of example behaviours when asking participants to complete the phrase "Bullying is".

Part three of the questionnaire listed six criteria found in many academic definitions of bullying and cyberbullying: The first three criteria refer to the importance of an aggressive action, intentionality, and repetition. The last three criteria explore an imbalance of power in various forms- physical, social, and age. These three types of power imbalance were selected to bring context to the somewhat vague term "power imbalance". I also expected physical power to be less important with cyberbullying. Each criterion was followed by three options: this is not true of any bullies, this is true for some bullies, and this is true for all bullies. The participants selected one option for each criterion. The next page began with a very basic description of cyberbullies, "A cyberbully uses the Web, a cell phone, or any other kind of electronic communication".

Table 1

Numbers of Student Participants by Sex, School Type, and Location

	Sex		School Type				Location		
Grade	Males	Females	K-6	7-9	7-12	K-12	Vermilion	Edmonton	Total
4	13	15	20	0	0	8	4	24	28
5	25	29	46	0	0	8	24	30	54
6	22	26	37	0	0	11	25	23	48
7	22	28	0	12	17	21	17	33	50
8	23	33	0	12	23	21	23	33	56
9	10	24	0	9	10	17	10	26	36
10	5	14	0	0	10	9	10	9	19
11	2	10	0	0	0	12	0	12	12
Total	122	179	103	33	60	103	113	190	303

Table 2

Numbers of Participants by Group, Sex, and Location

	Sex		Location		
Group	Males	Females	Rural	Urban	Total
Students	122	179	113	190	303
Parents	27	183	81	133	210
Teachers	7	24	0	32	32

Again, the definition criteria were presented in a table with each criterion on the left, under the heading "A cyberbully is:" and a series of check boxes on the right with the headings "This is not true of any cyberbullies", "This is true for some cyberbullies", and "This is true for all cyberbullies".

The questionnaire concluded with demographic information including date of birth and sex and took approximately 15 minutes to complete.

The task order was fixed for all participants. The overall purpose of the study was to find if the definition criteria of bullying could be applied to cyberbullying; the task order of describing bullies first and cyberbullies second seems to be a logical order. I recognized that there may be a fatigue effect, making cyberbully descriptions shorter and less detailed. However, at the time of survey design and data collection, the term "cyberbully" was not as ubiquitous

and I wanted to ease participants into the survey by asking them to describe the more familiar term.

Procedure

The researcher visited schools twice. On the first visit, she briefly described the study to the students and handed out information letters (see Appendix 2), consent forms (see Appendix 3), and parent questionnaires. Teacher questionnaires were distributed via staff mailboxes during the first school visit.

Approximately one week later, the researcher returned for the second school visit. On the return visit, students with a signed consent form were given a student questionnaire to complete during the class time devoted to the study. For students in Grades 4 and 5, the researcher read the questions aloud to the class. The researcher read the instructions on the first page of the questionnaire aloud to all participants. After the student questionnaires were completed they were collected in an envelope together with the corresponding consent form and parent questionnaire (if completed). Completed teacher questionnaires were collected during the return visit.

Endorsement Data

Data Entry and Coding Procedures

Data were entered by one researcher. Participants were assigned a code based on their school, grade, and group (student, parent, or teacher). This code was used to maintain anonymity in the data entry and analysis procedure.

Responses to the first endorsement check box questions on page four were coded numerically: “this is not true of any bullies” was coded as 1, “this is true for some bullies” was coded as 2, and “this is true for all bullies” was coded as 3. Responses to the second endorsement check box questions on page five were coded identically to the previous questions: “this is not true of any cyberbullies” was coded as 1, “this is true for some cyberbullies” was coded as 2, and “this is true for all cyberbullies” was coded as 3.

Analyses

Analyses began with a visual inspection of criteria means, as well as criteria means by group. Following that, I performed an ANOVA to determine whether students should be treated as a single group or whether age and/or sex differences were present. Next, an ANOVA was performed to determine whether there were group differences in ratings between students, parents, and teachers. Differences that appeared to be statistically significant were evaluated according to partial eta squared effect size (small > 0.01, medium > 0.06, large > 0.14; Cohen, 1969; Robinson, 2011). Lastly, I performed data reduction analyses to examine relationships between ratings for types of bullying and bullying criteria; these analyses were performed for the entire sample of responses.

Do Participants Endorse Olweus’ Criteria in Their Descriptions of Bullies and Cyberbullies?

Means, standard deviations, and modes for all criteria overall and by group are displayed in Table 3. Means of all definition criteria for both bullies and

cyberbullies are between 2 (“True for some bullies”) and 3 (“True for all bullies”), indicating that participants endorse Olweus’ definition criteria to be true for at least some bullies and cyberbullies. Modal scores indicate participants most commonly felt that the criteria of performing an aggressive action on purpose and repeatedly were true of all bullies and cyberbullies, while abusing different forms of a power imbalance were only true of some bullies and cyberbullies. This high level of application indicates that participants tend to endorse Olweus’ definition criteria when describing both bullies and cyberbullies.

Are There Age or Sex Differences in Students’ Application of Olweus’ Definition Criteria for Their Descriptions of Bullies and Cyberbullies?

Before I could begin more in depth analyses I wanted to determine whether there were age or sex differences among students or whether students could be treated as a single group in later analyses. There were not enough students from each grade to analyse by individual grade; instead, students were divided into three age groups: elementary (Grades 4-6), junior high (Grades 7-9), and high school (Grades 10 and 11). Additionally, there were not enough male parents or teachers to use an overall ANOVA with all groups. Instead, sex differences were tested amongst students only.

A mixed-design ANOVA with sex (male, female) and age groups (elementary, junior high, high school) as between-subjects variables and type of bullying (traditional, cyber) and definition criteria (hurt, purpose, repeat, strong, popular, young) as within-subjects variables revealed no main effects of sex or age groups.

There was a significant interaction between definition criteria and age group, however the effect size was small ($F(10, 1395) = 2.261$, $p = 0.013$, $\eta_p^2 = 0.016$, see Table 4 for means and standard deviations). There was also an interaction between type of bullying and sex, however the effect size was small ($F(1, 279) = 4.714$, $p = 0.031$, $\eta_p^2 = 0.017$, see Table 5 for means and standard deviations). Based on these findings, I treated students as a single group for all remaining analyses, and sex differences were not studied further

Are There Group Differences? Do Students, Parents, and Teachers Differ in Their Application of Olweus' Definition Criteria to Their Descriptions of Bullies and Cyberbullies?

A mixed-design ANOVA with groups (student, parent, or teacher) as the between-subjects variable and type of bullying (traditional, cyber) and definition criteria (hurt, purpose, repeat, strong, popular, young) as within-subjects variables revealed a main effect of criteria, with a large effect size ($F(5, 2540) = 125.445$, $p < 0.000$, $\eta_p^2 = 0.198$).

I also found a significant main effect of group, however the effect size was small ($F(2, 508) = 9.546$, $p < 0.000$, $\eta_p^2 = 0.036$). I found a significant interaction between group and criteria, however the effect size was also small ($F(10, 2540) = 3.285$, $p < 0.000$, $\eta_p^2 = 0.013$, see Table 6).

Table 3

Means, Standard Deviations, and Modes for Bully and Cyberbully Definition Criteria by Groups

	Overall			Students			Parents			Teachers		
Bully Criteria	Mean	Std Dev	Mode	Mean	Std Dev	Mode	Mean	Std Dev	Mode	Mean	Std Dev	Mode
Something Hurtful	2.8	0.44	3	2.8	0.47	3	2.8	0.42	3	2.8	0.40	3
On Purpose	2.7	0.48	3	2.7	0.52	3	2.8	0.39	3	2.6	0.50	3
More Than Just Once	2.6	0.54	3	2.6	0.55	3	2.6	0.52	3	2.7	0.46	3
Power Imbalance:												
Not As Strong	2.4	0.50	2	2.3	0.47	2	2.5	0.51	3	2.2	0.45	2
Not As Popular	2.2	0.46	2	2.2	0.45	2	2.3	0.49	2	2.1	0.34	2
Younger	2.1	0.39	2	2.1	0.37	2	2.2	0.42	2	2.1	0.30	2
Cyberbully Criteria												
Something Hurtful	2.8	0.42	3	2.8	0.45	3	2.9	0.39	3	2.8	0.42	3
On Purpose	2.7	0.46	3	2.7	0.49	3	2.8	0.39	3	2.6	0.50	3
More Than Just Once	2.6	0.55	3	2.5	0.55	3	2.6	0.55	3	2.6	0.50	3
Power Imbalance:												

Not As Strong	2.2	0.49	2	2.1	0.45	2	2.4	0.51	2	2.2	0.40	2
Not As Popular	2.2	0.45	2	2.2	0.43	2	2.3	0.47	2	2.1	0.30	2
Younger	2.2	0.40	2	2.1	0.38	2	2.2	0.44	2	2.1	0.25	2

Note. Total sample includes 303 students, 210 parents, and 32 teachers.

Survey responses were coded as follows: “this is not true of any bullies” = 1, “this is true for some bullies” = 2, and “this is true for all bullies” = 3

.Table 4

Student Means and Standard Deviations for Definition Criteria by Student Age Groups

	Elementary		Junior High		High School	
Criteria	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
Something Hurtful	2.7	0.43	2.8	0.33	2.8	0.40
On Purpose	2.6	0.50	2.8	0.38	2.8	0.34
More Than Just Once	2.5	0.54	2.6	0.46	2.5	0.53
To Someone Who is:						
Not As Strong	2.2	0.40	2.2	0.40	2.2	0.40
Not As Popular	2.2	0.40	2.2	0.36	2.2	0.35
Younger	2.2	0.36	2.1	0.29	2.0	0.26

Table 5

Student Means and Standard Deviations for Type of Bullying by Student Sex

	Males		Females	
Type	Mean	Std Dev	Mean	Std Dev
Traditional Bullying	2.4	0.26	2.4	0.27
Cyberbullying	2.4	0.26	2.4	0.27

Table 6

Means and Standard Deviations for Definition Criteria by Group

	Students		Parents		Teachers	
Criteria	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
Something Hurtful	2.8	0.39	2.8	0.37	2.8	0.40
On Purpose	2.7	0.44	2.8	0.36	2.6	0.48
More Than Just Once	2.6	0.50	2.6	0.50	2.7	0.46
To Someone Who is:						
Not As Strong	2.2	0.40	2.4	0.46	2.2	0.41
Not As Popular	2.2	0.38	2.3	0.45	2.1	0.30
Younger	2.1	0.32	2.2	0.41	2.1	0.26

I also found a significant interaction between group and type of bullying, however the effect size was small ($F(5, 2540) = 2.903$, $p = 0.013$, $\eta_p^2 = 0.006$, see Table 7). Therefore, it would seem that the only important difference from this ANOVA is the criteria main effect. Table 8 shows the means and standard error for each criterion averaged across bullying and cyberbullying. The means show that the criterion most often judged as true of all bullies is a hurtful action; indicating that a hurtful action is the most essential part of a description of bullies. This criterion was followed (in decreasing order of mean values, with each successive criterion seen as less "true of all bullies" than the last) by an intentional action, a repeated action, and an imbalance of power in the form of

strength, popularity, and age difference. Post-hoc tests (Tukey's honestly significant difference test) revealed that all definition criteria were significantly different from one another ($HSD = 0.0708$, $p < 0.05$). The findings of the ANOVA and post-hoc tests further reinforce the conclusion that while individual criteria differ in their importance in a description of bullies, the type of bullying does not significantly influence the description.

Table 7

Means and Standard Deviations for Type of Bullying by Group

	Students		Parents		Teachers	
Type	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
Traditional Bullying	2.4	0.26	2.5	0.29	2.4	0.22
Cyberbullying	2.4	0.27	2.5	0.30	2.4	0.24

Does Participant Application of Olweus' Definition Criteria for Bullies Vary Together with the Definition Criteria for Cyberbullies? If So, How?

I was interested in how the definition criteria in descriptions of bullies and cyberbullies varied with each other and used a principal components analysis to answer this research question. As described in the introduction, I considered two hypotheses: (a) Bullies and cyberbullies are defined differently, and bullying

criteria will form one factor while cyberbullying will form a second factor, and (b) Bullies and cyberbullies are defined similarly, and individual criteria from both types of bullying will form separate factors. This hypothesis would result in a six factor solution if the three power imbalance criteria each formed separate factors, or a four factor solution if the power imbalance criteria all varied together and formed a single factor.

Table 8

Overall Criteria Mean Scores Averaged Across Type of Bullying

Criteria	Mean	Standard Deviation
Something Hurtful	2.80	0.38
On Purpose	2.74	0.41
More Than Just Once	2.57	0.50
To Someone Who is:		
Not As Strong	2.29	0.44
Not As Popular	2.23	0.41
Younger	2.14	0.36

To determine how the definition criteria and descriptions related to each other, I performed a principal components analysis on the entire sample of responses as suggested by Menesini and Nocentini (2009). I used a principal

components analysis as the method of factor extraction and a varimax rotation because it is the most common extraction method and choice for orthogonal rotation respectively and will create solutions that are more easily interpretable. I used an orthogonal rotation to look for discrete categories; to determine whether Olweus' criteria are distinct from one another for both bullying and cyberbullying. The eigenvalues and explained variance are displayed in Table 9.

Because the purpose of the principal components analysis was exploratory, I chose a factor loading cut off of 0.400 (Hair, Anderson, Tatham, & Black, 1998). This meant that any factor loading greater than or equal to 0.400 indicated acceptable contribution to the factor.

Table 9

Eigenvalues and Variance Explained by Factors for Principal Components Analysis with Varimax Rotation

Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.008	33.398	33.398	3.511	29.259	29.259
2	1.944	16.200	49.598	1.696	14.132	43.390
3	1.323	11.025	60.623	1.595	13.288	56.679
4	1.110	9.247	69.869	1.583	13.190	69.869
5	.781	6.505	76.374			
6	.599	4.989	81.363			
7	.531	4.423	85.786			
8	.502	4.181	89.967			
9	.357	2.974	92.941			
10	.303	2.523	95.464			
11	.288	2.403	97.867			
12	.256	2.133	100.000			

Extraction Method: Principal Component Analysis.

To determine the number of factors for my final solution I used both the Kaiser criterion and a scree plot. The Kaiser criterion is the most common means of determining the number of factors in a factor analysis (Zwick & Velicer, 1986). The scree plot is displayed in Figure 1, however determining the visual "elbow" of this plot is difficult; there is a bend after the second factor, but the remaining factors simply show a linear decrease. Because of the lack of a clear cut off, I thoroughly explored both two factor and four factor solutions.

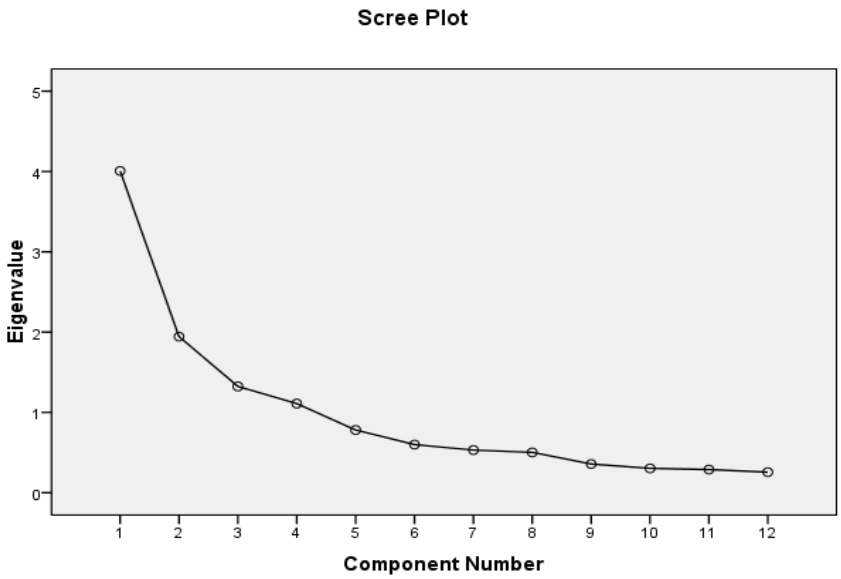

Figure 1 Scree Plot.. Eigenvalues by component number for a principal components analysis with a varimax rotation including all participants. Determine the visual "elbow" of the plot.

Two factor solution. The two factor solution is supported by the slight elbow in the scree plot, however the Kaiser criterion suggests that there are more factors available to extract. The two factor solution divides the power imbalance

criteria into a single factor and collapses the remaining definition criteria of aggressive action, repetition, and intentionality into a single factor (see Table 10 for factor loadings). To further review the two factor model, I created a component plot which is displayed in Figure 2. The 2 factor solution plot clearly shows the separation of the power imbalance criteria; however the remaining criteria appear to also be clustering within the factor, suggesting that more factors would be useful.

Table 10

Factor Loadings Two Factor Solution Principal Components Analysis

Rotated Component Matrix[a]

	Component	
	1	2
hurt	-.044	.581
purpose	.094	.652
repeat	.262	.561
strong	.690	.131
popular	.718	.195
young	.736	.071
Churt	-.054	.648
Cpurpose	.101	.679
Crepeat	.338	.552
Cstrong	.776	.067
Cpopular	.807	.077
Cyoung	.790	.010

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

a. Rotation converged in 3 iterations.

The two factor model is a conservative estimate supported by the scree plot. It shows the imbalance of power criteria of both bullying and cyberbullying collapsing into a single factor and the remaining definition criteria: a hurtful action, intentionality, and repetition, for both bullying and cyberbullying also collapse into a single factor. While this solution does not perfectly align with my second hypothesis, the factors clearly do not divide by type of bullying, instead they divide by criteria; specifically, imbalance of power criteria and remaining definition criteria.

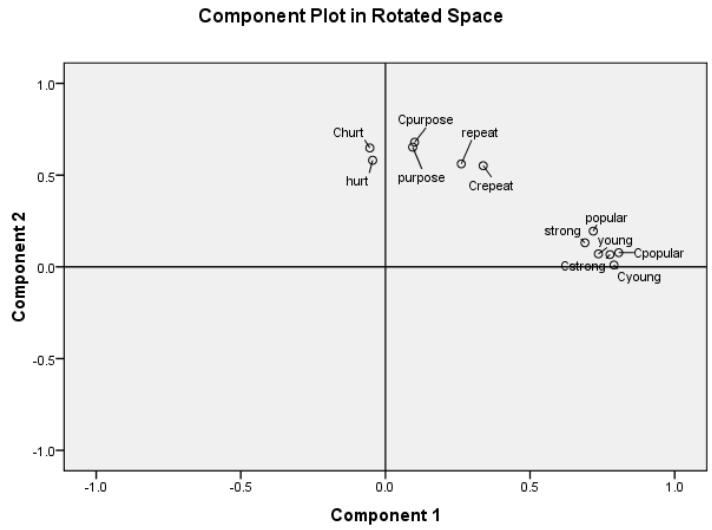

Figure 2. *Component Plot for a Two Factor Principal Components Analysis*

Four factor solution. The four factor solution is supported by the Kaiser criterion, however there is no distinct "elbow" at the fourth factor on the scree plot. The factor loadings of the four factor solution are displayed in Table 11. The

four factor solution collapses all six of the power imbalance criteria into a single factor. The remaining definition criteria are each collapsed into individual factors containing the definition criteria from both the bully and cyberbully descriptions. The first factor that emerged from the four factor solution (see Table 11 for factor loadings) was power imbalance. This factor included the strength, popularity, and age variables from both the bully and cyberbully descriptions. The second factor included the repetition variables from both the bully and cyberbully descriptions. The third variable included the intention variables from both the bully and cyberbully descriptions. Finally, the fourth variable included the aggressive action variables for both traditional bully and cyberbully descriptions.

Table 11

Factor Loadings of Four Factor Solution Principal Components Analysis

Rotated Component Matrix[a]

	Component			
	1	2	3	4
hurt	.053	.001	.088	.875
purpose	.088	.112	.873	.084
repeat	.128	.900	.127	.061
strong	.697	.140	-.030	.149
popular	.721	.123	.155	.077
young	.745	.031	.113	-.009
Churt	.025	.106	.123	.863
Cpurpose	.097	.134	.851	.134
Crepeat	.207	.883	.134	.054
Cstrong	.779	.118	-.033	.065
Cpopular	.800	.121	.063	-.020
Cyoung	.790	.037	.087	-.087

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

a. Rotation converged in 5 iterations.

To further explore the four factor solution I created component plots to visually plot the factors. The four factor solution requires more than three dimensions to display, so there are a series of component plots to give a graphical representation of this solution (See Figures 3-6). Three of the four component plots beautifully illustrate the structure of the model while the fourth plot is somewhat difficult to differentiate due to the three dimensional graph being displayed in only two dimensions.

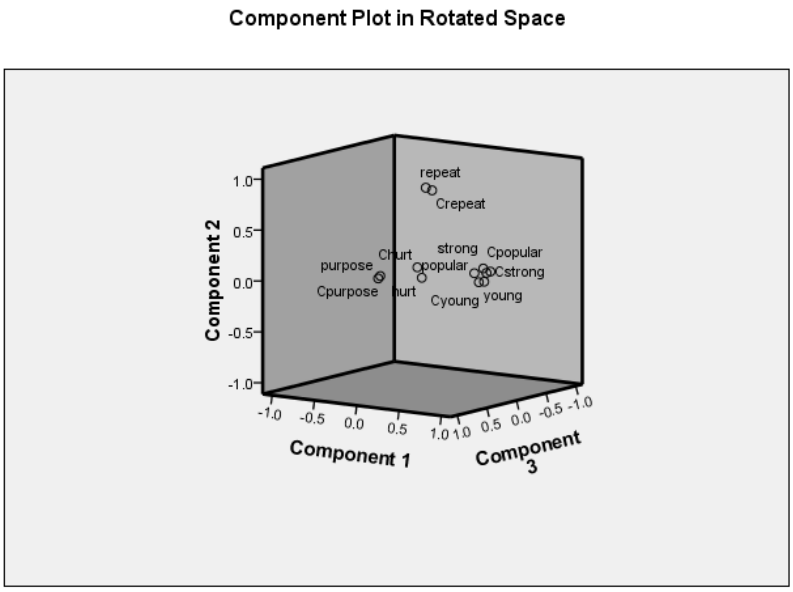

Figure 3. *Component Plot 1 of 4 for a Four Factor Principal Components Analysis*

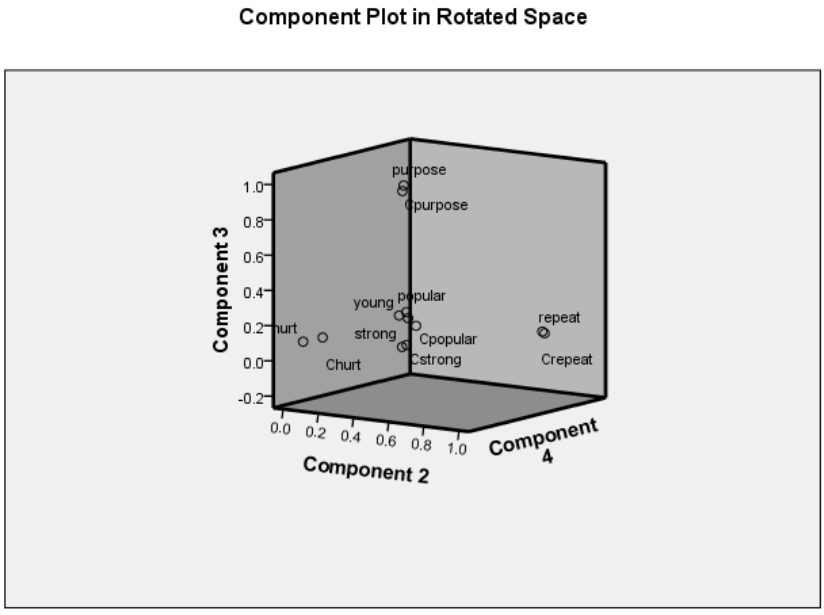

Figure 4. *Component Plot 2 of 4 for a Four Factor Principal Components Analysis*

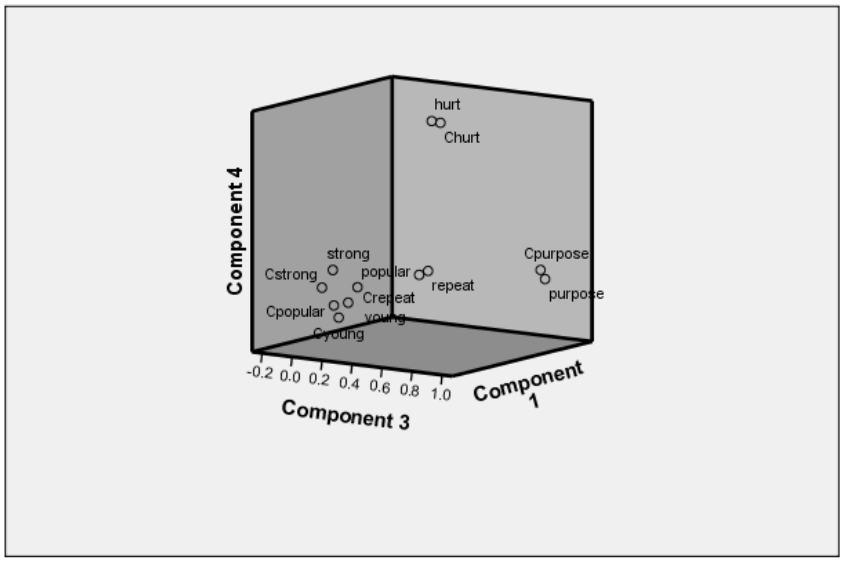

Figure 5. *Component Plot 3 of 4 for a Four Factor Principal Components Analysis*

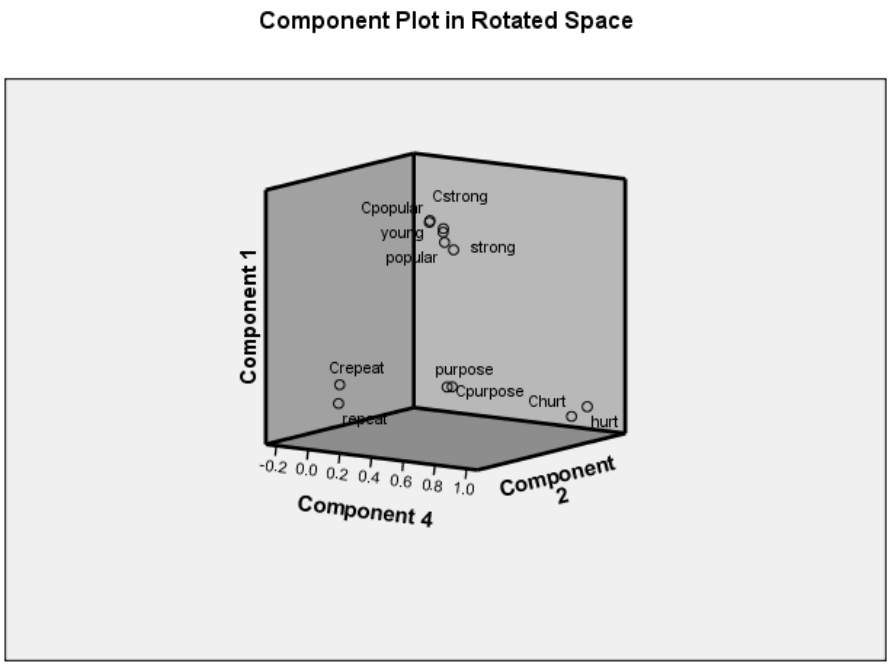

Figure 6. *Component Plot 4 of 4 for a Four Factor Principal Components Analysis*

The use of the four factor model is supported by the Kaiser criterion, and a thorough review of the factor loadings and graphical representations of multiple models. The final four factor model that emerged was consistent with my second hypothesis: Bullies and cyberbullies are described similarly, and individual definition criteria from both types of bullying form separate factors.

Though I previously found that there were no significant group or sex effects, I ran a four factor principal components analysis with varimax rotation for students, parents, teachers, as well as males and females to confirm the invariance of concepts across these groups as suggested by Menesini and Nocentini (2009) (see Tables 12-16 for factor loadings). The factor structure for all groups remained the same, with only slight variations in factor order; however, power

imbalance was always the Factor 1, indicating that it explained the most variance in the data.

Taken together, both the two factor and the four factors solutions indicate that the descriptions of bullies and cyberbullies are more similar than they are different because individual criteria vary together when applied to the two different types of bullying. The aggressive action criteria for traditional bullying varies with the aggressive action criteria for cyberbullying, and the repeated action criteria for cyberbullying varies with the repeated action criteria for traditional bullying. In other words, the variance is explained best by the definition criteria being used, not by the type of bully being described. Therefore my second hypothesis (division across criteria) is accepted and the first hypothesis (division by type of bullying) is rejected.

Open-ended Data

Data Entry and Coding Procedures

Responses to the questions "A bully is" and "A cyberbully is" were entered by a researcher. Spelling errors were corrected (e.g., righting to writing). Illegible responses were read by multiple researchers and, if possible, a best guess was entered in brackets. For example, "A person you (meet) on the computer that can take personal information and call you bad things. You can start a (fight) with a cyberbully". Open-ended responses were transferred from Excel to Nvivo 9.2. These responses were coded into multiple nodes collaboratively by the researcher and the research assistant. Using Olweus' criteria and the criteria from part three

of the questionnaire, four nodes were created for bullying and four for cyberbullying: Aggressive Action, Intentional, Repeated, and Power Imbalance. Any response mentioning these criteria was highlighted and coded into the appropriate node. Aggressive Action examples were subdivided into recurring themes and coded into thematic nodes. Power Imbalance was further subdivided into four nodes: General or Unspecified, Physical Power Imbalance, Social Power Imbalance, and Age Difference. In this thesis, node titles will be capitalized and node hierarchy will be identified by a slash. For example, Bullying Definition Criteria/Aggressive Action/Threaten or Intimidate indicates that Threaten or Intimidate is a sub node of Aggressive Action, which is a sub node of Bullying Definition Criteria.

Because the endorsement data analyses revealed that there were no significant group or sex differences, the open-ended responses were only analysed for themes, not for differences between groups.

The Same

Researchers found that many participants described cyberbullies by referring back to their bully description, for example "It's like bullying, but on the computer". To track these responses, the node The Same was created. There were 115 descriptions coded as The Same. Later, an additional Nvivo file was created where these responses were analysed. In this additional file, cyberbully responses coded as The Same were assigned identical criteria as the bully response to which they referred. For example, perhaps a bully description mentioned an aggressive

action, repetition, and a social power imbalance, and the cyberbully description stated “it’s like bullying, but it happens on Facebook and MSN”. In the additional Nvivo file, this cyberbullying description would be coded into the nodes for Aggressive Action, Repetition, Power Imbalance, and Power Imbalance/Social Power Imbalance.

If the cyberbully description referred back to the bully description, but mentioned additional criteria, the coding was not repeated. For example, a cyberbully description might state “it’s like bullying, but online. People call you names on MSN or post something embarrassing on your Facebook wall.” In this case, the cyberbully description mentions an aggressive action and also refers back to the bully description. To avoid duplication and overrepresentation of criteria, a response like this would be highlighted and coded into all nodes mentioned in the bully description *except* Aggressive Action because the aggressive action of “call you names on MSN or post something embarrassing on your Facebook wall” would already be in the Cyberbullying Definition Criteria / Aggressive Action node.

Node structure, hierarchy, and common example phrases can be seen in Table 17. Because the The Same node simply repeated bullying definition criteria, listing examples of common responses is irrelevant. However, the number of references in each criterion node is listed in Table 17.

Definition Criteria

Aggressive action. Most descriptions of both bullies and cyberbullies focused on listing examples of the behaviours that a bully or cyberbully might exhibit or broadly described something that a bully or cyberbully might do. There were 518 references to aggressive actions for traditional bullying and 396 references for cyberbullying. Some common examples of traditional bullying behaviours included “makes fun of someone”, “hurts others, physically or verbally”, “mean to you” while common examples of cyberbullying behaviours included “email you something nasty”, “threatens you over the internet”, “picks on people online”. Because these nodes contained such a broad range of examples, the node was broken down into thematic subnodes. First I’ll discuss the subthemes that were shared between the two types of bullying, followed by the themes which were unique to one type of bullying only.

Shared subthemes of aggressive action.

Verbal or written. This subnode contained any reference to using words to hurt someone. There were 259 references for bully descriptions, 231 references for directly stated cyberbully descriptions and 275 references for descriptions calling cyberbullying “The Same” as bullying. Table 18 has a summary of examples that were coded under the Verbal subtheme.

For bullying this subtheme included calling names, teasing, swearing, insulting, being rude, putting down, belittling, degrading, demeaning, criticizing, ridiculing, or making fun. This node also included any mention of using words,

Table 17

Node Structure, Hierarchy, and Common Example Words and Phrases

Bully			Cyberbully			
Criteria	References	Example Words and Phrases	Criteria	References	Example Words and Phrases	The Same References
Aggressive Action	518	makes fun of someone, hurts others, physically or verbally, mean to you	Aggressive Action	396	email you something nasty, threatens you over the internet, picks on people online	396
Verbal	259	using words, phrases, language, writing, making statements, talking, using speech, telling someone something, saying something, verbal, verbally	Verbal or Written	231	writing bad stuff to you, calling you names, emails, hate comments, hurt with words	275
Non-Specified "Mean" or "Hurt"	148	hurt, hurtful, mean, pick on, make people feel bad, mistreat, harm, unkind, do bad things, bother, inflict pain, make life miserable, or targets someone	Non-specific Hurt	95	mean, hurt, pick on, not nice, harm, hostile behaviours, bad stuff, and hurtful things were coded in this node	126
Threaten or	100	threaten, intimidate, boss around, scare, fear,	Threaten, Frighten,	96	threaten, intimidate, frighten, blackmail,	111

Intimidate		pressure, blackmail, manipulate, control, exert will, impose, coerce, use dominance	and Blackmail		scare, scare tactics, manipulate, and use of force	
Rumour Spreading	13	rumour, gossip, spreading truths that were told in confidence	Social	55	embarrass, bad pictures, creating a 'hate page', humiliate, for others to see, spreading, showing, and reputation	55
Stealing	13	stealing money or personal items	Personal Information	24	personal information, phone number, name, address, find you, know more about you, account, password, username, and identity	24
Harass	10	Harass, harassment	Hack and Viruses	10	like virus, hack, delete files, spam, and junk mail	10
Physical	212	Physical hurt, physical harm, physical abuse				
Abuse	32	abuser, abusive				
Repeated	40	repetitive, doesn't stop, continuous	Repeated	8	repeated and more than once	18

Intentional	61	on purpose, deliberate, knowingly	Intentional	25	on purpose, knowingly, intentionally, purposefully	35
Power Imbalance	86	Weak, won't fight back	Power Imbalance	4	weakness	22
Social	14	less popular	Social	0		8
Physical	30	Physically weak, smaller	Physical	0		5
Age	19	Younger	Age	1	younger	9

phrases, language, writing, making statements, being vocal, talking, using speech, telling someone something, saying something, or the words *verbal* or *verbally*.

Table 18

Aggressive Action/Verbal Subnode Examples

Bullying (259 references)	Cyberbullying (231 references)
Bullies make fun of people, call them names, tease them, and other things like that (Grade 4)	I think that it is when someone is writing bad stuff to you and like calling you names and making you feel bad in the inside (Grade 6)
Someone who insults, teases, hurts or makes fun of either someone or more than one person (Grade 7)	Emails hate comments to you. A cyberbully isn't a really physical upfront bully. He likes to hurt more with words (Grade 7)
Someone who repeatedly teases, physically, verbally (in words) either in person or written another which hurts, or makes them uncomfortable in anyway (Parent)	A bully who uses the computer or other electronics (Facebook on iPod, etc.) and the written word and/or pictures to knowingly aggravate embarrass or intimidate another person (Parent)
Someone who asserts their power over someone else (by gossip, physical force or threats, verbal abuse, etc.) (Teacher)	Someone who purposefully writes negative comments, rumours or threats against another person (Teacher)

For cyberbullying, this subnode contained calling names, swearing, insulting, making fun, putting down, or bringing down. It also included any mention of using words, language, writing, messages, stating, comments, saying, stories, verbal, or typing. Because text messages and posts can contain also photos, simply referring to "texting" or "posting" was not sufficient for inclusion

in this node under cyberbullying. Instead, the participant needed to mention writing, comments, or messages to be included.

For both bullying and cyberbullying, descriptions of verbal or written aggression were the most frequently listed example of behaviour. Both types of bullying included written words, swearing, calling names, insulting, making fun, and putting down.

Non-specific hurt. Any mention of hurting that was ambiguous or was not clarified as physical or emotional hurt was placed in this node. There were 148 references for bully descriptions, 95 references for directly stated cyberbully descriptions and 126 references for definitions calling cyberbullying "The Same" as bullying. Table 19 has a summary of examples that were coded under the Non-Specific Hurt subtheme.

For bullying, this subtheme included words and phrases like hurt, hurtful, mean, pick on, make people feel bad, mistreat, harm, unkind, do bad things, bother, inflict pain, make life miserable, or targets someone. Words with an obvious physical or verbal connotation, like *belittle* or *insult*, were not included in this node, and were instead coded under the physical or verbal subthemes.

For cyberbullying, this subtheme contained words and phrases like mean, hurt, pick on, not nice, harm, hostile behaviours, bad stuff, and hurtful things. In the same way as the bullying subtheme, words with an obvious verbal or written connotation, like insult, were not included here. For both bullying and cyberbullying, vague statements like "being mean" or "being hurtful" were quite

common. Both types of bully descriptions included hurt, hurtful, mean, and pick on.

Table 19

Aggressive Action/Non-Specific Hurt Examples

Bullying (148 references)	Cyberbullying (95 references)
Somebody who does mean stuff to another person (Grade 4)	Someone who makes fun of people on the computer and they do it on the internet. They hurt people on the computer or any electronic device (Grade 5)
Someone who goes out of their way to make another person's life miserable (Grade 10)	Someone who does something hurtful to another person electronically (Grade 11)
A mean person (Parent)	Someone who can do something hurtful to another using electronic technology and has a chance to remain nameless/faceless (Parent)
Someone who repeatedly targets another person in a negative way (Teacher)	All the things a bully is, but uses technology to carry out hurtful things or others (Teacher)

Threaten or intimidate. This node included any reference to threats or intimidation. There were 100 references for bully descriptions, 96 references for directly stated cyberbully descriptions, and 111 references for descriptions calling cyberbullying "The Same" as bullying. Table 20 has a summary of examples that were coded under the Threaten or Intimidate or Blackmail subtheme.

Table 20

Aggressive Action/Threaten or Intimidate Examples

Bullying (100 references)	Cyberbullying (96 references)
Someone that threatens others into doing or giving them something (Grade 6)	Sends you threatening emails and/or blackmails you (Grade 6)
Someone who harms (intimidates) someone physically, mentally, emotionally or psychologically. They might even just threaten someone (Grade 10)	Someone that threatens people by using technology (Grade 9)
Someone who intimidates others through real or implied/ threatened force or harm or assault (Parent)	A cyberbully uses social networking sites to intimidate. He or she may post messages online to threaten, intimidate and humiliate his or her victims (Parent)
Bully uses power to intimidate, threaten, minimize the victim (Teacher)	Being 'mean' to someone else using technology. Want to embarrass, intimidate, stalk, threaten or emotional abuse another person/group (Teacher)

For bullying, this subtheme included words and phrases like threaten, intimidate, boss around, scare, fear, pressure, blackmail, manipulate, control, exert will, impose, coerce, and use dominance. For cyberbullying, this subnode contained words and phrases like threaten, intimidate, frighten, blackmail, scare, scare tactics, manipulate, and use of force.

Interestingly, this was one of the only subthemes where the number of references for both bullying and cyberbullying were approximately equal. It would appear that in self-created descriptions, threats and intimidation are equally salient for both types of bullying.

Stealing. This node covered references to stealing both physical items for traditional bullying and personal information for cyberbullying. There were 13 references for bully descriptions and 24 references for directly stated cyberbully descriptions. Table 21 has a summary of examples that were coded under the Stealing subtheme.

For bullying, this subtheme included words like steal, stealing, and taking. All of these references referred to stealing money or personal items, and not something more abstract like dignity (which would be placed in the unspecified hurt node). For cyberbullying, the subtheme included words and phrases like personal information, phone number, name, address, find you, know more about you, account, password, username, and identity.

Because the two subthemes focused on two rather different types of stealing, the additional references that would come from the descriptions that called cyberbullying "The Same" were not included. Even without these additional references, there was almost double the number of references in the cyberbully descriptions than the bully descriptions. It would seem that when students, parents, and teachers think of bullying and stealing they no longer think of a traditional bully stealing your lunch money, but a cyberbully stealing your passwords.

Table 21

Aggressive Action/Stealing Examples

Bullying (13 references)	Cyberbullying (24 references)
Someone who picks on you and steals your money and calls you names (Grade 4)	They could take your personal information quickly without you knowing. They can make up to say they were a little girl but they could be someone older and they could hurt you (Grade 4)
Someone that is mean who no one likes, steals, lies, … does things on purpose to see if they get in trouble (Grade 10)	A cyberbully can say mean things or ask personal information like your address, phone number, or name which can lead them to finding you and hurting you (Grade 5)
Someone who does things to hurt people on purpose like yelling at their victim, … stealing, and damaging their things (Parent)	Uses scare tactics to obtain private information (Parent)

Social. This subnode contained any references to social aggression for traditional bullying as well as references to "large audiences" for cyberbullying. There were 13 references for bully descriptions and 55 references for directly stated cyberbully descriptions. For descriptions that called cyberbullying "The Same" as bullying, there were no additional references added. Table 22 has a summary of examples that were coded under the Social subtheme.

Table 22

Aggressive Action/Social Examples

Bullying (13 references)	Cyberbullying (55 references)
Start rumours about you (Grade 5)	Wants a big group of people to know something (Grade 6)
Physical and emotional hurting people. Abuse. Gossip and rumours (Grade 10)	People may post stuff about you that is not true and they know you might find it embarrassing (Grade 5)
Usually a combination of intimidation and humiliation is used. Such as name calling, stating that the victim is useless at whatever they do and or spreading gossip and rumours, etc. (Parent)	Cyberbullying can be a powerful tool for a bully as the bully's audience is amplified through how many people can watch or be privy to knowing the bullied and/or bully (Parent)
	A person who does something that will ridicule another person and many people see it on the internet and will laugh at them (Teacher)

For bullying, this subtheme included words and phrases like rumour, gossip, and spreading truths that were told in confidence. For cyberbullying, the subtheme included words and phrases like creating a hate page, for others to see, spreading, showing others, reputation, rumour spreading and gossip as well as mentioning the large audience available online.

The Social subtheme was the only one where the number of references from cyberbully descriptions was more than four times greater than the number of references from traditional bully descriptions. Clearly, participants feel that the

social aspect of bullying is far more potent when it comes to cyberbullying than with traditional bullying.

Non-shared subthemes.

Physical. This subnode was found in 212 descriptions of traditional bullies and contained any reference to using physical violence against someone. Table 23 had a summary of examples that were coded under the Physical subtheme.

This subtheme included hitting, kicking, pushing, fighting, beating, poking, using violence, using force, and using strength. The theme also included any mention of the word physical or physicality. The words hurt, harm, and abuse had to be accompanied by the word physical to be coded in this node, as these words could also be applied to a more emotional hurt or abuse.

Hack or virus. This subtheme was unique to cyberbullying and described how cyberbullies may attempt to hack into their victims computers or give their victims a computer virus. There were 10 references from cyberbully descriptions. Table 24 has a summary of examples that were coded under the Hack or Virus subtheme.

This subtheme contained words like virus, hack, delete files, spam, and junk mail, and it was unique to cyberbully descriptions.

Table 23

Aggressive Action/Physical Examples

Bullying (212 references)
Someone who says mean things, might hit or kick people , steals your stuff, and doesn't do anything to you but threatens you (Grade 5)
Bullying can include physical and/or verbal (Grade 10)
Someone who intentionally hurts (either physically or emotionally) another person (or non-human animal). Many ways of doing this: Physical-hitting, kicking, any hurt to the physical being (Parent)
Someone who intentionally physically or emotionally hurts another repeatedly (Teacher)

Intentional. This node contained references that mentioned the intentionality of a bully's actions. There were 61 references for bully descriptions, 25 references for directly stated cyberbully descriptions, and 35 references for descriptions calling cyberbullying "The Same" as bullying. Table 25 has a summary of examples that were coded under the Intentional theme.

Table 24

Aggressive Action/Hack or Virus Examples

Cyberbullying
(10 references)
Hackers (when they find a username and password, they go on your account and rob it) (Grade 4)
A person who sends junk mail to people with a computer (Grade 4)
[A cyberbully] will send you…some nasty virus that will make your computer crash (Parent)

For bullying, this theme contained words and phrases like “on purpose”, “deliberate”, and “knowingly”. For cyberbullying, the theme contained words and phrases like on purpose, knowingly, intentionally, and purposefully. Interestingly, 6 traditional bully descriptions and one cyberbully description discussed how someone might bully someone unintentionally, and that, whether by accident or on purpose, it was still bullying/cyberbullying. Examples of this type of thinking include, “It is not always on purpose, but sometimes it is” (Grade 5 student), “[a bully] intentionally or unintentionally hurts another person” (parent) and “[it] does not matter if it is intentional or not” (teacher).

Table 25

Intentional Examples

Bullying (61 references)	Cyberbullying (25 references)
Someone who intentionally hurts or intimidates someone else (Grade 8)	A bully (someone who insults on purpose and refuses to say sorry) that uses the internet or texting in order to accomplish this (Grade 9)
Someone who intentionally makes you feel like garbage, or bugs you or makes fun of you or threatens you or beats you up (Grade 11)	A type of bully. Just like a normal bully, a cyberbully purposely hurts people (Grade 10)
Someone who is intentionally emotionally and/or physically hurtful to others (Parent)	Using cell phone, text, internet and/or social network tools to purposely harass and humiliate another individual (Parent)
Someone imposing his/her will upon someone else. Intentional use of harm, whether physical, emotional, or verbal (Teacher)	Someone who purposefully writes negative comments, rumours or threats against another person (Teacher)

Repeated. This theme focused on how frequently a bully needed to perform aggressive actions for participants to considered them a bully. There were 40 references for bully descriptions, 8 references for directly stated cyberbully descriptions, and 18 references for descriptions calling cyberbullying "The Same" as bullying. Table 26 has a summary of examples that were coded under the Repeated theme.

Table 26

Repetition Examples

Bullying (40 references)	Cyberbullying (8 references)
If a person is hurting your feelings repeatedly (Grade 5)	A person using media to inflict mental pain on another person. This is repeated so it happens more than once (Grade 8)
Someone who repeatedly hurts others by using verbal, emotional, or physical abuse (Grade 10)	Someone who repeatedly hurts someone else through the internet or other electronic communication devices (Grade 10)
A person who demonstrates an unacceptable behaviour repeatedly towards other people but most especially to his/her peers (Parent)	A person who uses means of electronic communication to hurt another person repeatedly and often in a premeditated manner (Parent)
Someone who intentionally and repeatedly imposes unwanted behaviour over another person (Teacher)	Someone who uses technology to repeatedly target another person in a negative way (Teacher)

For bullying, words and phrases like, repetitive, doesn't stop, and continuous were used. Some descriptions suggested weekly and even daily repetition. For cyberbullies, words and phrases like repeated and more than once were used frequently in this theme. Unlike the bully descriptions, no frequency of repetition was specified in any of the cyberbully descriptions.

A few traditional bully descriptions specifically stated that if something happened just once it would not be considered bullying, saying "[A bully is] someone who picks on you weekly, not just once in a while" (Grade 7) and

"[they] never occur as one time attacks, but as several attacks over time"(parent). One person said, "It must happen in some type of regular pattern, not spontaneous outbursts. Unless the outbursts happen in a pattern" (teacher).

Power imbalance. This theme focussed on the nature of the relationship between the bully and the victim. There were 86 references for bully descriptions, 4 references for directly stated cyberbully descriptions, and 22 references for descriptions calling cyberbullying "The Same" as bullying. Table 27 has a summary of examples that were coded under the Power Imbalance theme.

For both bullying and cyberbullying, most participants focused on the weakness of the victim, but a few described the power of the bully. To be included in this node, a participant had to describe the relationship or power differential between the bully and the victim, simply mentioning a bully's desire for power would not warrant inclusion.

Because power imbalance was broken down into social power, physical power, and age difference in part three of the questionnaire, it was also broken down in the open-ended analysis.

Age. This node looked at an imbalance of power as a result of an age difference. There were 19 references for bully descriptions, only one reference for directly stated cyberbully descriptions, and 9 references for descriptions calling cyberbullying "The Same" as bullying. Table 28 has a summary of examples that were coded under the Power Imbalance/Age subtheme.

Table 27

Power Imbalance Examples

Bullying (86 references)	Cyberbullying (4 references)
Someone who is threatening/hurting the public. Preys on people who are weaker. (Grade 8)	Finds vulnerable people online (especially children) (Parent)
Finds someone else who is weak and won't fight back (Grade 9)	They feel brave in saying the things they do to others because they only need to type. They prey on the weak (Teacher)
Uses their strength to hurt someone else (Parent)	
Someone who picks on someone weaker than themselves, it most often involves the bully forcing, in one way or another, the victim do something they don't want to do. The victim feels powerless (Teacher)	

Table 28

Power Imbalance/Age Examples

Bullying (19 references)	Cyberbullying (1 reference)
Someone who picks on kids who are younger and are more easy to tease or pick on (Grade 4)	Someone who does something hurtful to someone who is younger than them by using electronic communication (Parent)
Someone who picks on younger kids (Grade 10)	
Usually directed at someone younger…than the bully (Parent)	

Social power. This subtheme contained references to an imbalance of social power or popularity. There were 14 references for bully descriptions, 0 references for directly stated cyberbully descriptions and 8 references for descriptions calling cyberbullying "The Same" as bullying. Table 29 has a summary of examples that were coded under the Social Power subtheme.

Table 29

Power Imbalance/Social Power Examples

Bullying (14 references)
Someone who hurts mentally or verbally someone who is… not as popular or someone they don't like very much (Grade 6)
Harasses someone who may be considered less popular (Grade 7)
Someone who chooses to pick on others that might seem weaker, less popular, and those that might not fight back (Parent)

Physical power. This node focused on the imbalance of power that emerges from differing physical strength. There were 30 references for bully descriptions and 0 references for directly stated cyberbully descriptions. Table 30 has a summary of examples that were coded under the Power Imbalance/Physical Power subtheme.

Table 30

Power Imbalance/Physical Power Examples

Bullying
(30 references)
Someone who likes to pick on smaller people to give them power (Grade 4)
When someone feels bigger than someone else and uses that on someone smaller to make themselves feel powerful and bigger (Grade 11)
A person who pushes small kids around asking them for their lunches, spare money, etc. (Parent)

While many examples cited that victims were "weaker" than their bullies, researchers concluded that weaker could possibly be interpreted as something other than physical weakness; therefore descriptions that simply mentioned weakness were only included in the general Power Imbalance node. While there were 5 references for descriptions calling cyberbullying "The Same" as bullying, they should not be applied to the description of cyberbullying due to its inherently non-physical nature.

While some participants used Olweus' definition criteria of intentionality, repetition, and power imbalance when describing bullies and cyberbullies, the majority did not. Instead, personal descriptions tended to focus on listing

examples of aggressive actions performed by bullies and cyberbullies. Some participants described bullies and cyberbullies using criteria and themes not proposed by Olweus. Those themes are summarized below.

Additional Nodes

While coding the definition criteria nodes, the researcher and research assistant independently noted certain trends in the open-ended descriptions that were not covered by the previous definition criteria nodes. These trends were coded into four nodes which are visible in Table 31: Motivation and Emotional State of Bully. The additional nodes described were not coded with "The Same" node.

Bully/Cyberbully Motivation. These nodes contained any references to *why* someone would become or act like a bully.

Shared subthemes

To feel better, emotional coping. This subtheme contained references describing emotional motivations of bullies. The most common example in this subtheme was "to make themselves feel better". There were 69 references for bully descriptions and 13 references for cyberbully descriptions. Table 32 has a summary of examples that were coded under this Emotional subtheme.

For bully descriptions, this subtheme included either the negative feeling experienced by the bully before bullying a victim (angry, insecure, lack of self-confidence, low self-esteem, troubled, helpless, inadequate, inferior) or the

Table 31

Node Structure, References, and Examples for Additional Nodes

Bully			Cyberbully		
Motivation	References	Examples	Motivation	References	Examples
To Feel Better, Emotional Coping	69	Feel better, powerful, big, superior, angry, insecure, troubled, helpless, inadequate, inferior	To Feel Better, Emotional Coping	13	Better, good, superior, empowered, gratification
Power and Popularity	51	Power, powerful, over power, empower, control, dominance, respect, cool, popular, impress, important, group, peers, friends	Power and Popularity	4	Power, powerful, popularity, popular
Enjoyment or For Fun	11	Fun, funny, enjoyment, satisfaction, pleasure,	Cowardly	3	Cowardly, don't want to face you
Hurt Victim	10	Scare, anger, feel bad, hurt, belittle			
Attention	9	Get attention, like			

audience

Emotional State					
Feel Bad	42	Feel bad, low self-esteem, hurting, ashamed, don't feel loved, no self-worth, miserable, inadequate	Emotional State		
Family Issues	17	Family issues, siblings, problems at home, family members, parent are bullies, no family love them	Low Self-Esteem	2	Low self esteem
Victim of Bullying	14	Bullied, victim	Jealous	1	Jealous at times
Jealous	4	Jealous, jealousy			

positive feeling experienced by the bully after they victimize someone (better, good, strong, powerful, big, superior). For cyberbullying descriptions, the most common motivation was to feel better. This node contained words and phrases like better, good, superior, empowered, and gratification.

Table 32

Motivation/Feel Better, Emotional Coping Examples

Bullying (69 references)	Cyberbullying (13 references)
A bully is someone who picks on someone either calls them names or hurts them or just makes them feel bad usually bullies are mean because they feel bad about themselves and to feel better they pick on someone. Not good! (Grade 4)	Someone who puts other people down to make themselves feel better but they are too afraid to do it face to face so they use the computer and stuff like that (Grade 6)
Someone that picks on other kids to make themselves to feel better (Grade 11)	A cyberbully is someone who hurts others and/or makes them feel inferior by using various technologies to make themselves feel better (Grade 9)
Someone who makes himself/herself feel better by putting others down (Parent)	Someone who uses any means by way of an electron device to belittle or degrade someone else to make themselves feel superior (Parent)
Bullies usually pick on people who appear weaker in order to make themselves feel better about their own inadequacies (Teacher)	A person who feels better about themselves when they can hurt other people (Teacher)

Interestingly, unlike the bullying motivation node, no participants mentioned the negative feeling of the cyberbully before they bully a victim, only

the positive feelings after the victimization were noted. However, those positive feelings were very similar for both types of bullying.

Power or popularity. This subtheme contained references to a bully's or cyberbully's desire for power or popularity. There were 51 references for bully description and 4 references for cyberbully descriptions. Table 33 has a summary of examples that were coded under the Power or Popularity subtheme.

Table 33

Motivation/Power or Popularity Examples

Bullying (51 references)	Cyberbullying (4 reference)
Or a person who beats you up in an effort to try to be cool or make he or she feel better about themselves (Grade 5)	Someone that uses technology to hurt others to gain power and popularity (Grade 8)
A person who uses their power to physically or mentally hurt someone else. They gain power from other people's suffering (Grade 9)	The bully can feel more powerful when he/she thinks no one can see (Parent)
A bully is also someone who thinks bullying other people makes them stronger and cooler (Parent)	
A bully is someone who often feel power by trying to overpower someone else (Teacher)	

Many participants believed that a common motivation for traditional bullies was gaining power over people, getting respect from peers, or becoming more popular. This node contained words like friends, power, respect, powerful,

cool, popular, over-power, impress, popularity, empower, important, control, group, peers, and dominance.

In terms of power, this subtheme was separate from the imbalance of power criteria described above which described a power difference between bully and victim; this subtheme simply speaks to a general desire for power over another. Likewise, this subtheme was not used to describe an imbalance of social power between bully and victim; instead it described gaining more social power as the motivation for bullying others

There were enough references in the traditional bully descriptions to separate the power and popularity themes. Unfortunately, there were very few references in the cyberbully descriptions; therefore, for the purposes of comparison between the two types of bullying, the two themes were combined. The words and phrases used in cyberbully descriptions were quite similar, just used less frequently.

Enjoyment. Many participants suggested that bullies simply enjoy bullying their victims. There were 11 references for bully descriptions and 3 references for directly stated cyberbully descriptions. Table 34 has a summary of examples that were coded under the Enjoyment subtheme.

The most common description was "[They bully others because] they think its fun". This subtheme contained words like fun, funny, enjoy, enjoyment, satisfaction, pleasure, and gratification.

There were very few references to cyberbullying for fun or enjoyment, however there was an overall trend for less detailed descriptions of cyberbullies compared to bullies, and this lack of references fits with that trend.

Table 34

Motivation/Enjoyment Examples

Bullying (11 references)	Cyberbullying (3 references)
Someone who picks on people either for fun or because they think it's cool (Grade 5)	A person who uses internet, texting things like that to bully you…they're probably just bullying you for fun but don't want to face you (Grade 5)
Someone who makes you mad or sad, someone who will tease you and sometimes beats you up for fun (Grade 5)	Someone who emotionally hurts someone through technology like a bully they enjoy people's misfortunes (Grade 6)
They are enjoying inflicting emotional or physical pain on a person. They like to control people (Parent)	Enjoys hurting other people, someone who might think they are funny (Parent)
Someone who works to intimidate others in order to get personal pleasure or gratification (Teacher)	

Non-shared subthemes.

Attention. Some participants believed that the main motivation for some traditional bullies was the attention that comes with bullying others. The most common phrase was "[They bully others] to get attention" (Grade 4), but "likes an audience" (parent) was also used. There were 9 references in this subtheme, and this theme was not reflected in cyberbully descriptions.

Cowardly. This subtheme was unique to cyberbullying. It suggested that participants believed that people choose cyberbullying over traditional bullying because they are too cowardly to bully their victims face to face. One participant said "I think that it is for cowardly bullies. They don't want to bully you to your face, so they bully you online" (Grade 7). Three descriptions cited this as a motivation to become a cyberbully.

Emotional state. These subthemes contained references to how a bully or cyberbully feels or the general emotional issues that are part of their lives. While it could be extrapolated that these issues are part of the motivation to bully others, the references contained in these nodes did not explicitly state that the feelings and issues were the motivation, simply that these feelings and issues were part of what a bully or a cyberbully "is".

Shared subthemes.

Feel bad. This node described the general negative feelings that participants believe are a part of a bully's life. There were 42 references for bully descriptions and only two for cyberbully descriptions. Table 35 has a summary of examples that were coded under the Feel Bad subtheme.

While many of the Motivations/Feel Better, Emotional Coping references were placed in this section, not all references to negative emotions indicated that those feelings were the motivation behind the behaviour. Additionally, this node does not contain descriptions that only stated that bullying makes the bully 'feel

better', as we did not want to assume that the bully feels bad to begin with, unless explicitly stated in the description.

Table 35

Emotion/Feel Bad Examples

Bullying (42 references)	Cyberbullying (2 references)
They are troubled inside and they bring it out on you (Grade 7)	A cyberbully is usually someone that's not as strong or confident to bully someone in person and might have a low self esteem (Grade 11)
Someone that is mad at something and wants to show everyone how hurt he/she is by hurting, saying mean things, offending, and threatening other people around them (Parent)	Someone who has low self-esteem (Parent)
Someone who has low self-esteem (Parent)	
They are people who have a low self-esteem and feel bigger when they make someone feel smaller (Teacher)	

This subtheme contains any reference to negative emotions. For the bully descriptions, this node contained words and phrases like feel bad, low self-esteem, hurting, hurt on inside, insecure, troubled inside, ashamed, don't feel loved, no self-worth, no self-confidence, inner turmoil, personal issues, miserable, inadequate, and emotional or physical problems. There are only two references from the cyberbully descriptions and both use the phrase "low self esteem". No participants described a cyberbully as someone who feels bad about himself.

Interestingly, there were also three references from the bully descriptions that stated that sometimes the self-esteem of bullies is too high: "A bully is someone with either a really low self esteem level or a really high self esteem level" (Grade 4).

Family Issues. Many participants felt that part of being a bully was having issues at home or being bullied by family members. There were 17 references from bully descriptions and one from a cyberbully description. Table 36 has a summary of examples that were coded under the Family Issues subtheme.

Table 36

Emotion/Family Issues Examples

Bullying (17 references)	Cyberbullying (1 reference)
A bully is a person who takes out his anger on people at school because they might be from a bad family that bullies him or her (Grade 5)	Someone who picks on people because they have been exposed to violence in their family, neighbourhood, school which caused them to be a bully (Grade 5)
They love putting people down, hurting people, and they're usually people who have a tough life. I.e. Family issues (Grade 8)	
I think bullies are those that have no friends or family (that love them) they are lonely (Parent)	

This subtheme contains many references to a troubled home life including family issues, bullying by siblings, bad family, problems at home, learned

behaviours from home, troubles at home, family members, bad family situation, family problems, parents are bullies, bullying at home, and no family that love them. Again, there are distinctly fewer references to these additional nodes for cyberbully descriptions, and the Family Issues subtheme is no exception.

Jealous. The final shared emotional subtheme was jealousy. There were 4 references from the bully descriptions and only 1 reference to cyberbullies. Table 37 has a summary of examples that were coded under the Jealous subtheme.

Table 37

Emotion/Jealous Examples

Bullying	Cyberbullying
(4 references)	(1 reference)
They pick on kids because they could be jealous of the other kid (Grade 4)	Has others notice his actions when he/she namecalls, put down others, build himself up. Jealous at times. (Parent)
They might also be jealous of the person they are bullying (Parent)	

This subtheme was sparsely populated for both bullying and cyberbullying.

Non-shared subthemes.

Victim of bullying. Another common aspect of the descriptions of traditional bullies from my participants was the notion that bullies are victims of bullying themselves. There were 14 references from the bully descriptions only.

Table 38 has a summary of examples that were coded under the Victim of Bullying subtheme.

Table 38

Emotion/Victim of Bullying Examples

Bullying (14 references)
Sometimes this bully could be having troubles at home or they could be being bullied themselves (Grade 8)
Someone who makes you mad or sad, someone who will tease you and sometimes beats you up for fun (Grade 8)
A bully is also someone who may be bullied at home by older/younger siblings (Parent)

As stated above, some descriptions specifically mentioned the bully was being bullied by his/her family. These descriptions were doubly coded in both the previous node and this node. This node contained all references to being bullied, or any references to being a victim currently or previously. Interestingly, there were no descriptions of cyberbullies that referred to cyberbullies being victims themselves.

General Observations on Open-ended Responses

Participants tended to answer the question "A bully is" by listing examples of actions that a bully might do. The same response pattern was given for the question "A cyberbully is". Clearly the behaviours are the most salient aspect of a bully or a cyberbully. Many of the listed behaviours were the same for both types of bullying (mean, calling names, threaten, rumours), except for some logical exceptions like hitting or pushing. Many cyberbully descriptions related directly back to the bully descriptions stating "It's the same as bullying, but online". It is possible that relating back to the bully description is due to the fixed task order for all participants (describe bullies first, describe cyberbullies second), however bully is also a much more commonly used term, and at the time this survey was designed cyberbully was a relatively new phenomenon.

The fixed task order may have resulted in less detailed descriptions of cyberbullying causing the large differences in the number of references of some subthemes (such as Motivation/Feel Better, Emotional Coping and Motivation/Power or Popularity). The analysis of numerical differences in open-ended responses is beyond the scope of this thesis. Future researchers should vary task order to test if this result is due to an issue with the survey instrument or is a valid reflection of participant descriptions.

Chapter 4
Discussion

Taken together, the findings from the open-ended and endorsement results indicate that (a) students, parents, and teachers generally consider bullies and cyberbullies to be similar, and (b) participants applied academic definition criteria to their personal notion of a bully and a cyberbully. This gives us evidence-based reasons to use Olweus' definition criteria as we create not only a unified definition of cyberbullying, but also a definition that reflects the views of those who most closely experience cyberbullying.

Bullying And Cyberbullying Are The Same

Endorsement results suggest that bullies and cyberbullies are described and thought of in the same way. Our analysis of variance did not reveal a significant main effect of type of bullying. At the very least this finding shows that bullies and cyberbullies are not described significantly differently, and the finding lends evidence to the idea that participants define bullying and cyberbullying similarly.

Conclusions from the ANOVA results were bolstered by the overall principal components analysis, which showed that factors broke down by criteria and not by bullying type. This adds further evidence to the notion that bullying and cyberbullying are the same, at least where Olweus' definition criteria are concerned. When factor analyses for individual groups were studied, variables broke into different factors than during the overall analysis, but factors always divided in a similar structure separated by criteria. These results contrast other studies that found that a factor analysis of bullying victimization experiences

tended to form factors broken down by type of bullying (relational/verbal, cyber, physical, overt) (Dempsey et al., 2009; Hunt et al., 2012). This could indicate the difference between how definition criteria vary together and how victimization experiences vary together. Another study found that when asked about their involvement with bullying, students define themselves by their role in bullying (bully, victim, bystander) instead of by the type of bullying (traditional or cyberbullying) they are involved in (Law et al., 2012), suggesting that students feel little need to separate traditional and cyberbullying when describing their personal involvement.

The pattern of bullies and cyberbullies being described as "the same" continued in the open-ended portion of the analysis. Some of the most important evidence for bullying and cyberbullying being the same thing is the fact that when asked to describe a cyberbully, participants very commonly said it was "the same as a bully". Out of 549 definitions, 115 participants indicated that cyberbullying was "the same" as bullying. Other than listing examples of aggressive behaviours, stating that it is "the same" as a bully was the most common way to describe a cyberbully. Similarly, Mishna, Saini, and Solomon (2009) found that all of their participants defined cyberbullying as simply another form of bullying. One 10-year-old girl seemed exasperated at the thought that the two types of bullying were different, saying "cyberbullying oh my god! It's another way to bully just over the computer" (Mishna et al., 2009, p. 1224).

Other studies have also found that cyberbullying is described as "the same" as traditional bullying. Researchers have found that some cyberbullying behaviours are rated by participants as comparable to traditional bullying behaviours (Mishna et al., 2009; Slonje & Smith, 2008; Smith et al., 2008). These studies found that behaviours like spreading rumours, phone calls, making threats, website bullying, derogatory comments, and chatroom bullying were all rated as equally harmful compared to traditional bullying. This is especially significant because the most common way of defining both traditional and cyberbullying is by listing example behaviours.

In a broader sense, a multitude of studies have found that bullying and cyberbullying are very similar because the perpetrators and victims of one type of bullying also tend to be the perpetrators and victims of the other type of bullying (Beran & Li, 2005; Dehue et al., 2008; Dooley et al., 2009; Erdur-Baker, 2010; Erentaite et al., 2012; Gradinger et al., 2009; Hemhill et al., 2012; Hinduja & Patchin, 2008; Katzer et al., 2009; Li, 2007; Ortega et al., 2009; Raskauskas & Stoltz, 2007; Riebel et al., 2009; Schneider et al., 2012; Smith et al., 2008; Steffgen et al., 2011; Tokunaga, 2010; Twyman et al., 2012; Vandebosch & VanCleemput, 2009; Williams & Guerra, 2007). In other words, a traditional bully is far more likely to also be a cyberbully than an uninvolved peer, just as a traditional victim is more likely to also be a cyber-victim than an uninvolved peer; the two types of bullying are clearly closely related to one another.

Some studies found that this relationship was especially strong for the victims of verbal and relational traditional bullying (but not for physical traditional bullying) suggesting a stronger similarity between those types of bullying and cyberbullying (Erentaite et al., 2012). Some studies have found that the link is even predictive; student roles in traditional bullying predict their roles in cyberbullying (Raskaus & Stoltz, 2007) even two years later (Hemhill et al., 2012). Another study found that the most common experience of victims of traditional bullying was being threatened and the most common cyberbullying experience was also being threatened, so at the very least the basic experiences of victims is very similar for both types of bullying (Huang & Chou, 2010).

When Presented with Olweus' Definition Criteria, Participants Believed that they Described Most Bullies

Inspection of questionnaire means shows that participants believe that Olweus' definition criteria are true of between "some" and "all" bullies. Additionally, definition criteria were equally as accepted for descriptions of bullies as they were for descriptions of cyberbullies. My finding mirrors the findings of other authors who found that cyberbullying descriptions and definitions used Olweus' bullying criteria (Dooley et al., 2009; Grigg, 2010; Mishna et al., 2009; Moore et al., 2012; Spears et al., 2009; Vandebosch & Van Cleemput, 2008;)

However, other authors found the very opposite, stating that the criteria that are so important to Olweus' definition of bullying should not have a bearing

on the definition of cyberbullying. Some authors stated that intention was not required for a definition of cyberbullying (Menesini & Nocentini, 2009; Nocentini et al., 2010; Vandebosch & Van Cleemput, 2008; Vandebosch & Van Cleemput, 2009); some said that repetition was not required (Campbell, 2010; Coyne et al., 2009; David-Ferdon & Hertz, 2007; Dooley et al., 2009; Grigg, 2010; Law et al., 2012; Menesini, & Nocentini, 2009; Nocentini et al., 2010; Vandebosch & Van Cleemput, 2009; Wolak et al., 2007); and some stated that an imbalance of power was not required (Campbell, 2010; Coyne et al., 2009; Grigg, 2010; Law et al., 2012). More research is clearly required to determine if general populations would agree with endorsing Olweus' definition criteria in a definition of cyberbullying, and if there are differences between specific populations in this regard.

Creating Personal Descriptions Versus Endorsing Academic Definition Criteria Resulted in Different Results

Analysis of open-ended responses showed that when creating descriptions on their own, some participants describe bullies and cyberbullies using Olweus' criteria, but most do not. How then, do we reconcile this finding with the check box data? Endorsing definition criteria is far different than trying to construct an independent description. When asked to describe bullies or cyberbullies on their own, most participants list examples of what bullies do (list aggressive actions). This fits with a study by Grigg (2010) who found that during focus groups and interviews, both young people and adults tended to spend a lot of time "naming

and identifying negative acts" (p. 148). Interestingly, the same study by Grigg also mentions that intention was found as a minor subtheme in the self-generated descriptions of cyberbullying, though repetition and imbalance of power were not mentioned.

Motivations

Although the purpose of the survey was to find whether students, parents, and teachers used Olweus' definition criteria when describing bullies and cyberbullies, like other researchers, we found that participants often included motivations and emotional states when describing cyberbullies.

Cowardly

In our study, cowardice was only mentioned as a motivation for cyberbullying, and was not mentioned in any descriptions of traditional bullying. Previously, other researchers found that participants stated that cyberbullies used computers because they lacked confidence, or were cowards, and the anonymity of cyberbullying provided a comfort to say things they would not otherwise say (Hoff & Mitchell, 2009; Pujazon-Zazik & Park, 2010). Some participants related: "bullying on computer is quite cowardly, because they can't face up to the person themselves", "people are too scared to do stuff face to face", and "there is less fear of getting caught" (Smith et al., 2008, p. 380).

For Fun

Eleven participants stated that traditional bullies found bullying enjoyable or they they "did it for fun". Previous studies found that participants also believed that cyberbullying is fun for cyberbullies (Li, 2010; Pujazon-Zazik & Park, 2010; Smith et al., 2008). Other studies found that the cyberbullies themselves stated that they cyberbullied others "for fun" (Cassidy et al., 2009; Dooley et al., 2009; Raskaus & Stoltz, 2007) or "because they were bored" (Vandebosch & Van Cleemput, 2008).

To Hurt Victim

Some of my participants suggested that people bully because they want to hurt their victim. This motivation was also found by other studies where the cyberbullies themselves stated that they cyberbullied others because they did not like the victim, because the victim upset them, or because they had had an argument (Cassidy et al., 2009; Dooley et al., 2009; Raskaus & Stoltz, 2007; Vandebosch & VanCleemput, 2008; Ybarra & Mitchell, 2007). One study found that bullies gain satisfaction from hurting others (Diamanduros, Downs & Jenkins, 2008).

Because They Were Bullied First

We found that many participants stated that a common motivation for becoming a bully was actually being a victim of bullying oneself, perhaps explaining a bully's need to lash out at others. Other studies have found this

explanation given by participants defining bullying. One study found that the best predictor of cyberbullying was cybervictimization (Bauman, 2010). Additionally, cyberbullies themselves indicated that being a victim of bullying was part of the reason they were aggressive online (Cassidy et al., 2009). Some cyberbullies even stated that they specifically targeted people who had bullied them or someone they knew (Vandebosh & VanCleemput, 2008; Diamanduros et al., 2008; Dooley et al., 2009; Konig, Gollwitzer, & Steffgen, 2010). This finding is also corroborated by the multitude of studies showing that bullies and victims tend to be the same people, referred to as "bully-victims" (Beran & Li, 2005; Diamanduros et al., 2008; Dehue et al., 2008; Dooley et al., 2009; Erdur-Baker, 2010; Erentaite et al., 2012; Gradinger et al., 2009; Hemhill et al., 2012; Hinduja & Patchin, 2008; Katzer et al., 2009; Li, 2007; Mishna et al., 2012; Ortega et al., 2009; Raskauskas & Stoltz, 2007; Riebel et al., 2009; Sahin, 2012; Schneider et al., 2012; Sevcikova & Smahel, 2009; Smith et al., 2008; Steffgen et al., 2011; Tokunaga, 2010; Twyman et al., 2012; Vandebosh & VanCleemput, 2009; Wang et al., 2009; Williams & Guerra, 2007; Ybarra & Mitchell, 2004; Ybarra & Mitchell, 2007; Ybarra et al., 2006; Yilmaz, 2011). One study looked at cyberbullies who explained that their behaviour was merely a reaction to the aggression of others (reactive), by contrast, they described the behaviour of those that aggressed against them as intentional (proactive). Even when describing scenarios that were examples of both proactive and reactive aggression, adolescents tend to justify their own behaviour as a reaction to the aggression of others (Law, Shapka, Comene, & Gagne, 2012).

Respect or Popularity

We found that some participants believed that one of the main motivations for bullies was to fit in with their peers or to gain popularity. Other studies found that participants believed that cyberbullies are motivated by a need to be "cool" (Li, 2010). In previous studies, some cyberbullies did admit to cyberbullying because their friends were doing it (Cassidy et al., 2009), and cyberbullies tend to have a lack of peer support (Williams & Guerra, 2007). Some researchers have found that cyberbullies tend to have poor peer relations, few friends, and have clinically significant social problems, so seeking popularity might be even more of a draw (Card et al., 2008; Diamanduros et al., 2008; Vandebosch & VanCleemput, 2009 Ybarra et al., 2006). On the other hand, when youth feel their school has a climate of fairness, trust, and support, students report less involvement in bullying (Williams & Guerra, 2007).

To Show Their Power

Many of my participants said that showing power or dominance in a situation was one of the main motivations of bullies. This motivation was actually echoed by participants who admitted to cyberbullying behaviours to display power and technological skills (Diamanduros et al., 2008; Dooley et al., 2009; Law, Shapka, Comene et al., 2012; Vandebosch & VanCleemput, 2008).

Self Esteem/To Feel Better

The most commonly mentioned bully motivation and emotional state focused on negative feelings. Other studies also found that feeling better or acting out to boost one's self-esteem were actions commonly associated with cyberbullies (Hoff & Mitchell, 2009; Li, 2010). "By putting down someone else, student reported that it helps people 'try to feel good about themselves'" (Hoff & Mitchell, 2009, p.656). Bullies themselves have even admitted to bullying because of low self-esteem (Raskauskas & Stoltz, 2007). Many other researchers have found that bullies tend to have higher depressive, hyperactivity, conduct, and somatic symptoms than uninvolved peers (Aricak, 2009; Gradinger et al., 2009; Sourander et al., 2010; Ybarra & Mitchell, 2004; Ybarra & Mitchell, 2007;). Those involved in cyberbullying also had more suicidal thoughts and attempted suicide significantly more than uninvolved peers (Klomek et al., 2010). Other researchers found that anyone involved in cyberbullying (as bully or victim) had a significantly lower self-esteem than uninvolved peers (Patchin & Hinduja, 2010). Those involved in cyberbullying feel disconnected in school, have below average grades, are more likely to have police contact, steal, and consume or abuse cigarettes or alcohol (Hinduja & Patchin, 2008; Vandebosch & VanCleemput, 2009; Ybarra & Mitchell, 2004).

Interestingly, a few participants stated the exact opposite; the self-esteem of bullies is too high. Some researchers can support that statement, finding that

proactively aggressive children (traditional bullying) are often seen as positive leaders with high self-esteem (Dooley et al., 2009).

Family Issues

Many of our participants mentioned that bullies likely have family issues that cause them to act out. Participants in other studies also believe that cyberbullies tend to have family issues (Li, 2010). This hypothesis is borne out in the literature. Researchers have found that cyberbullies tend to have parents who are less involved with their internet use and they are more likely to damage property, have contact with police, steal, and to physically assault others (Hinduja & Patchin, 2008; Vandebosch & VanCleemput, 2009; Ybarra & Mitchell, 2004). Cyberbullies also tend to come from homes where physical punishment is used (Diamanuros et al., 2008). Other studies found that high parental support was negatively related to aggression, and poor emotional bonds with caregivers and family conflict increased cyberbullying (Hemhill et al., 2012; Wang et al., 2009; Ybarra & Mitchell, 2004; Ybarra & Mitchell, 2007).

Jealousy

Some of our participants mentioned that jealousy is part of the emotional makeup of bullies. This point of view was also shared by participants in other studies who stated that most incidents of cyberbullying emerge from relationship problems, envy of relationships, as well as jealousy over characteristics or achievements. These researchers said, “In all cases, the cyberbully seemed unable to cope with the relationship envy, and resorted to cyberbullying as a way to vent

frustration" (Hoff & Mitchell, 2009, p. 655). Interestingly, other research found that high academic achievers were more likely to be cyberbullies as well as cybervictims, so perhaps the relationship between achievement, jealousy, and cyberbullying is not so clear (Yilmaz, 2011).

Limitations of This Study

One of the issues I came across during the analysis of the endorsement data was the division of the power imbalance criteria by types of power. For future studies I would suggest creating a general power imbalance item and followed by additional items divided by type of power. With this small change, it becomes easier to interpret whether participants view a power imbalance as an important part of a bullying definition overall, as well as which types of power imbalance are more important to different types of bullying.

Survey interpretation might also be simplified by changing the rating scale from a three-point scale to a dichotomous scale: "This is essential to my idea of a bully" and "This is not essential to my idea of a bully". Alternatively, the scale could be expanded to a five-point scale to determine if it is the small, three-point scale or the nature of the questions that leads to ceiling effects. Asking about criteria which are not part of an academic definition (e.g. Performing an aggressive action in front of other people, or performing an aggressive action on someone who doesn't know who you are) could also determine which criteria are truly essential the participant notions of bullying and cyberbullying. In terms of the open-ended portion of the survey, interpretability could be enhanced by

directly asking for a definition of bullying and cyberbullying, and giving a brief description of what a definition should involve.

Another issue with the survey was the fixed task order. While I did anticipate that there could be a fatigue effect which led to shorter and less detailed descriptions of cyberbullies, the effect was quite pronounced and future studies should be mindful to vary the task order.

Future Directions

As stated earlier, I would recommend changing aspects of the survey that were described in Limitations of This Study. These changes include: (a) changing the task order of open ended questions so that fatigue effects to not affect the level of detail given by respondents, (b) creating a general power imbalance criterion to make results easier to interpret, and (c) changing the response scale to a dichotomous scale: “This is essential to my idea of a bully” and “This is not essential to my idea of a bully”, or a five-point scale while adding additional criteria to the survey.

While short survey questions asking about specific aggressive actions are easy to use and analyse, I would suggest that these brief questions are overly simplistic and ignore the context that the definition criteria require. For example, “In the last 12 months has anyone posted a photo online that embarrassed you?” is not truly a question about cyberbullying because there is no description of intentionality, repetition, or an imbalance of power. Any question referring to cyberbullying must also ask about the intentional and repeated targeting of the

victim as well as the imbalance of power involved. These questions become more complex to clearly write, answer, and even analyse, but this specificity is essential to determine the true prevalence and demographic trends of cyberbullying.

Moreover, I would recommend the use of focus groups for these types of "personal concept" studies. Focus groups would allow participants to come to a group personal concept of bullying and cyberbullying. Groups involving different demographics could provide interesting insights into sex and developmental differences in definitions. This live format would also allow researchers to determine group agreement with academic definition criteria one at a time and to question the group for a more thorough understanding of how they define bullying. Would the group agree that imbalance of power is an essential part of bullying? Under what circumstance might it not be essential?

Additionally, many researchers in the past have separated types of cyberbullying by listing technologies used to perform the aggressive action (David-Ferdon & Hertz, 2007; Law et al., 2012; Spears et al., 2009; Steffgen et al., 2011). In my opinion, this is a losing battle. Popular websites and electronic devices will constantly change, and type of technology used is irrelevant to the definition, causes, and effects of cyberbullying. More important aspects of an aggressive action include whether the action was made public or kept private, whether there was a previous incident of traditional, offline bullying involved, and the relationship between cyberbullying and victim. Other researchers agree that differentiating acts of cyberbullying by type of technology used is unwise

(David-Ferdon & Hertz, 2007; Menesini & Noventini, 2009), and one study of cyberbullying and empathy found that there was no difference in levels of empathy whether a cyberbully used the internet or a mobile phone, suggesting no differences in type of technology used (Steffgen et al., 2011).

Using a unified definition, vigorous research methods, and validated measures, cyberbullying researchers can create an extensive knowledge base and begin proposing and testing theories of cyberbullying and creating interventions to begin to stop this problem from affecting vulnerable children.

Conclusions

My study found that Olweus' criteria are useful when it comes to describing cyberbullies, so I propose the following definition of cyberbullying:

> "**Electronic** aggression or intentional 'harmdoing', which is carried out repeatedly and over time, in an interpersonal relationship characterized by an imbalance of power or **anonymity**".

This new definition loses none of the definition criteria of Olweus' definition, but adds the words electronic and anonymity to denote cyberbullying and its change to power dynamics.

In October 2010, an International Cyberbullying Think Tank of many cyberbullying researchers was convened in Arizona.

> The objectives of the meeting were: (a) to discuss definitional issues and come to consensus regarding the construct of cyberbullying, (b) to discuss

> methodological issues (sampling, research design, statistical analyses) that could increase the quality and consistency of research in this area, (c) to examine and evaluate existing measures and identify promising measures that could be piloted and subjected to rigorous psychometric analyses in different countries, (d) to identify substantive research questions that should be addressed to advance this field of inquiry, and (e) to plan future collaborative projects to address these questions. (International Cyber Bullying Think Tank, 2010)

The Think Tank tentatively concluded that the term *cyberaggression* should refer to "intentional harmful behaviour to another person using electronic technology", while *cyberbullying* should refer to cyberaggression, also involving a specific target, and an imbalance of power. They also stated that cyberbullying "should not be inferred from the reaction of the victim, but should be inferred from the 'outside' perspective as much as possible" (Jarra2022, 2010).

Examples of imbalances of power included "withholding of identity; OR if perpetrator is known: technological knowhow of perpetrator (compared to the) victim; relationship to offline situation of victim (compared to the) perpetrator, e.g. status, friends; race, disability, sexual orientation, generally- marginalized group position" (Jarra2022, 2010).

Repetition was acknowledged as a difficult criterion, however it was determined that the larger potential audience and rapid dissemination of bullying messages should not affect the definition of cyberbullying, and repetition was

instead maintained as a subsidiary criterion and not a core criterion. Additionally, they decided that any study that did not include aggression against a specific target and an imbalance of power, were actually studies of cyberaggression, not cyberbullying (Jarra2022, 2010). While my study is not designed to rule out any specific criteria, I did find that, overall, there was more variability in the responses to the repetition criterion for cyberbullying than for any other criteria. Additionally, repetition was rarely offered in the open-ended descriptions of both bullies and cyberbullies.

With this new, unified definition of cyberbullying finally agreed upon by top researchers in the field, creating a solid body of knowledge about cyberbullying and cyberaggression is more probable than ever. An exciting next step for researchers might involve finding evidence to support the notion that cyberbullying and cyberaggression are separate concepts, and educating students, parents, and teachers, about how to handle both types of scenario.

Although it was very clear that what happened to Megan Meier was cyberbullying (an intentional, repeated aggressive action performed by an adult upon a child), what happened with Amy and Samy is far less apparent. Perhaps "cyberaggression" is the perfect term for what took place between Amy's Baking Company and the internet in May 2013. There was no imbalance of power between the two groups; Amy and Samy did not feel that they were incapable of defending themselves from the "online haters", indeed, their defensive and retaliatory comments are what caused the incident to become such a viral

sensation. In any case, neither the Arizona Think Tank's new definition, nor my evidence-based definition of cyberbullying would recognize the incident as cyberbullying. Sorry Amy, you're not the victim (or the chef) you claimed to be.

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Appendix 1- Additional Tables

Table 12

Factor Loadings of Four Factor Principal Components Analysis for Students

Rotated Component Matrix[a,b]

	Component			
	1	2	3	4
hurt	.045	-.060	.788	.210
purpose	.047	.225	.178	.771
repeat	.044	.864	.065	.197
strong	.690	.067	.230	-.157
popular	.597	.223	.283	-.112
young	.627	-.035	-.134	.265
Churt	.026	.184	.769	.183
Cpurpose	.018	.174	.246	.761
Crepeat	.179	.862	.056	.185
Cstrong	.764	.009	.012	.040
Cpopular	.696	.217	.062	-.052
Cyoung	.700	-.029	-.256	.264

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

a. parorteach = 0

b. Rotation converged in 7 iterations.

Table 13

Factor Loadings of Four Factor Principal Components Analysis for Parents

Rotated Component Matrix[a,b]

	Component			
	1	2	3	4
hurt	.027	.040	.018	.925
purpose	.101	.013	.914	.019
repeat	.201	.893	.095	.016
strong	.618	.378	.094	.048
popular	.796	.173	.268	.004
young	.873	.043	.120	.050
Churt	.010	.011	.059	.925
Cpurpose	.150	.164	.878	.064
Crepeat	.217	.877	.083	.032
Cstrong	.763	.309	-.078	.062
Cpopular	.890	.131	.068	-.050
Cyoung	.896	.053	.079	-.009

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

a. parorteach = 1

b. Rotation converged in 4 iterations.

Table 14

Factor Loadings of Four Factor Principal Components Analysis for Teachers

Rotated Component Matrix[a,b]

	Component			
	1	2	3	4
hurt	.150	.978	-.057	-.024
purpose	.046	-.038	-.013	.918
repeat	.144	-.124	.934	-.001
strong	.784	.236	.095	-.015
popular	.816	.076	.199	-.186
young	.748	.016	-.023	.192
Churt	.150	.978	-.057	-.024
Cpurpose	.046	-.005	.032	.948
Crepeat	.136	.015	.961	.022
Cstrong	.784	.236	.095	-.015
Cpopular	.923	.035	.125	-.029
Cyoung	.875	-.016	.054	.224

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

a. parorteach = 2

b. Rotation converged in 5 iterations.

Table 15

Factor Loadings of Four Factor Principal Components Analysis for Males

Rotated Component Matrix[a,b]

	Component			
	1	2	3	4
hurt	.001	-.113	.799	.221
purpose	-.010	.189	.218	.773
repeat	.047	.862	.054	.242
strong	.770	.161	.121	-.070
popular	.685	.125	.298	-.187
young	.678	-.007	-.299	.385
Churt	.013	.182	.731	.150
Cpurpose	.017	.304	.273	.640
Crepeat	.201	.873	.020	.146
Cstrong	.774	-.041	-.022	.091
Cpopular	.767	.176	.014	-.128
Cyoung	.703	.006	-.279	.327

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

a. Sex = 1

b. Rotation converged in 8 iterations.

Table 16

Factor Loadings of Four Factor Principal Components Analysis for Females

Rotated Component Matrix[a,b]

	Component			
	1	2	3	4
hurt	.079	.026	.061	.892
purpose	.114	.101	.889	.056
repeat	.160	.901	.089	.053
strong	.672	.133	.051	.122
popular	.735	.164	.220	.030
young	.757	.030	.069	.065
Churt	.037	.081	.116	.892
Cpurpose	.116	.104	.872	.128
Crepeat	.208	.883	.130	.062
Cstrong	.778	.163	-.011	.064
Cpopular	.818	.143	.078	-.002
Cyoung	.815	.026	.062	-.051

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

a. Sex = 2

b. Rotation converged in 5 iterations.

Appendix 2

With this questionnaire, I'm hoping to find out how you define bullying and cyberbullying for yourself. The first part of the questionnaire will ask you to state in your own words what a bully is and what a cyberbully is. You don't have to use complete sentences, but try to write clear and complete answers.

The next part of the questionnaire lists some characteristics of what might make a person a bully. Think about whether that characteristic is true for all bullies, some bullies, or if it's not true for any bullies, then check the box that corresponds to your answer. Please only check one box for each question, if you make a mistake, erase it or cross it out and check the box you meant to check.

Because I'm interested in your definitions and your opinions, there are no right or wrong answers, and your answers won't affect your school grades. Your answers will be anonymous, which means that I won't know who you are when you answer, and your teacher will never see your answers, so please answer the questions honestly. You may leave questions blank.

Please complete the following sentence. You don't have to use complete sentences, but try to write clear and complete answers.

A bully is:

Please complete the following sentence. You don't have to use complete sentences, but try to write clear and complete answers.

A cyberbully is:

The next part of the questionnaire lists some characteristics of what might make a person a bully. Think about whether that characteristic is true for all bullies, some bullies, or if it's not true for any bullies, then check the box that corresponds to your answer. Please only check one box for each question, if you make a mistake, erase it or cross it out and check the box you meant to check.

A bully is:	This is not true of any bullies	This is true for some bullies	This is true for all bullies
A bully is someone who does **something hurtful** to someone else	☐	☐	☐
A bully is someone who does something hurtful **on purpose** (not accidentally)	☐	☐	☐
A bully is someone who does something hurtful **more than just once**	☐	☐	☐
A bully is someone who does something hurtful **to someone who is not as strong**	☐	☐	☐
A bully is someone who does something hurtful **to someone who is not as popular or as well known**	☐	☐	☐
A bully is someone who does something hurtful **to someone who is younger than them**	☐	☐	☐

Please go to the next page

A cyberbully uses the Web, a cell phone, or any other kind of electronic communication. This part of the questionnaire lists some characteristics of what might make a person a cyberbully. Think about whether that characteristic is true for all cyberbullies, some cyberbullies, or if it's not true for any cyberbullies, then check the box that corresponds to your answer. Please only check one box for each question, if you make a mistake, erase it or cross it out and check the box you meant to check.

A cyberbully is:	**This is not true of any cyberbullies**	**This is true for some cyberbullies**	**This is true for all cyberbullies**
A cyberbully is someone who does **something hurtful** to someone else by using electronic communication	☐	☐	☐
A cyberbully is someone who does something hurtful **on purpose** (not accidentally) by using electronic communication	☐	☐	☐
A cyberbully is someone who does something hurtful **more than just once** by using electronic communication	☐	☐	☐
A cyberbully is someone who does something hurtful **to someone who is not as strong** by using electronic communication	☐	☐	☐
A cyberbully is someone who does something hurtful **to someone who is not as popular or as well known** by using electronic communication	☐	☐	☐
A cyberbully is someone who does something hurtful **to someone who is younger than them** by using electronic communication	☐	☐	☐

Please go to the next page

Date of Birth: _____

Sex: ☐ Male ☐ Female

Appendix 3

Dear Parent or Guardian:

Children have access to many communication media: instant messages, social networking websites, text messages, and emails, to name a few. These new means of communication allow children to talk with larger numbers of people quicker and easier than ever before. Sometimes electronic communication media are misused in the form of cyberbullying. We are interested in what children and young people think of this new form of bullying.

We would like to ask your permission to allow your child to participate in a study looking at children's definitions of cyberbullying. Your child will be asked to complete a survey asking how your child defines cyberbullying for himself/herself. In total, your child's participation in this research will take approximately 15 minutes.

We would also like to ask you to participate in the parent portion of our study. We have enclosed the parent survey with this information package. The questionnaire will ask how you define bullying and cyberbullying for yourself. In total, your participation in this research should only take approximately 15 minutes.

You and your child are free to opt out of the questionnaire or to discontinue at any time without any consequences. You will not be evaluated on your responses to the questionnaire, and your child's participation and responses will not affect your child's evaluation. If you and your child participate, your responses will be linked to your child's response with an anonymous code. All information will be held in strictest confidence, no identifying information will be collected, and all responses will be an anonymous part of group results. Data will be stored in a locked cabinet.

The risks of this study are minimal, but in the event that a child becomes distressed, the researcher will escort them to a teacher or school counselor to ease this distress. If you have questions or issues with the questionnaire feel free to contact me at kwelker@ualberta.ca or at 780 492-0970.

At the conclusion of the study, we will discuss the research process, our specific research questions, and our results with all participants. We hope that the results of this study will reveal how children, parents, and teachers define cyberbullying for themselves.

This project has been reviewed and approved by the University of Alberta Arts, Science and Law Research Ethics Board and has the full support of your child's school. If you have any questions, please feel free to contact Dr. Connie Varnhagen at 780 492-0970. Your cooperation in this project is greatly appreciated. If you agree to participate and/or to have your child participate, please sign the accompanied permission form and have your child return it to school at your earliest convenience. Thank you very much for your time and consideration.

Sincerely,
Kristen Welker

Appendix 4

University of Alberta Research Consent Form

I,_____, hereby consent
(print name of parent/legal guardian)

☐ for _____
(print name of child)

☐ for myself _____

(print your name)

to participate in a project lead by researchers from the Department of Psychology, University of Alberta.

I understand that:

- the project will take about 15 minutes
- the child portion of the project will take place during the regular school day
- my portion of the project should be completed and returned to school with my child
- we may withdraw from the research at any time without penalty
- no identifying information will be collected
- all information gathered will be treated confidentially
- all data will be stored in a locked cabinet
- my child and I will not be identifiable in any documents resulting from this research
- our data will be an anonymous part of group results

I also understand that the results of this research will be used only in the following:

- presentations and written articles that further the understanding of attitudes and definitions of cyberbullying

_____
(signature of parent/legal guardian)

Date signed:_____

For further information concerning the completion of this form, please contact Dr. Connie Varnhagen, University of Alberta, Department of Psychology, 780 492-0970 or Kristen Welker at kwelker@ualberta.ca