

Cyberbullying: Defining our Future Norms

By

Yesir Alamin

A Thesis

Submitted in partial fulfillment
of the requirements for the degree of
Master of Arts in Child and Youth Study

Mount Saint Vincent University

Halifax, Nova Scotia

©Yesir Alamin, 2017

Acknowledgements

For Ayah and Lena. My two shining stars.

TABLE OF CONTENTS

Chapter

1. INTRODUCTION	
Literature review.....	6
Bullying Defined.....	6
Cyberbullying Defined.....	7
Dangers of Cyberbullying.....	10
Limitations of Bullying Research	14
Legislation	16
Review of Legislation and its Implications	16
2. DISCUSSION OF RESEARCH	
Method of research	20
Analysis of research articles.....	23
Discussion.....	35
Conclusion	44
Limitations of Research.....	44
Canadian legislation	44
Recommendations for Future Legislation	48
Recommendations for Future Research	49
REFERENCES	55
APPENDIX Summary of studies measuring cyberbullying included in analysis.....	52

Chapter One

Introduction

The prevalence of Internet communication and social networking in contemporary society has given rise to the phenomenon of “cyberbullying” (Belsey, 2007). Cyberbullying is a new form of bullying that has emerged alongside the advances of technology in the twenty-first century. Ybarra (2004) estimated that 97% of today’s North American youth are connected to the Internet; however, the epidemic of cyberbullying is not fully understood. As a recent phenomenon educators and public policymakers have struggled to address cyberbullying and its impacts on schools (Mitchell, 2012). Currently there is no universally accepted definition of what constitutes cyberbullying. The principal issue discussed in this study is the extent to which the various definitions of cyberbullying have resulted in a wide, and inconsistent range of research findings on the prevalence of cyberbullying. This thesis conducted a thorough analysis of various studies to understand the issue of cyberbullying.

Media has played a role in shining a light on many tragic consequences of cyberbullying, often highlighting the failure of educational institutions to intervene. A number of cases in Nova Scotia have hit mainstream media exposing the brutal realities of cyberbullying. Rehtaeh Parsons was a 17-year-old Nova Scotian who was bullied for months after a nude picture of her circulated her school. Rehtaeh was called a slut and a whore as people forwarded the picture to their friends. Despite moving schools, the rumours followed her on social media. She committed suicide unable to cope with the public scrutiny and humiliation from her peers.

Rehtaeh's story raised many questions in Canada about sexual violence, cyberbullying, and the role of social media. This thesis looked closer into the Cyber-safety Act, a ground-breaking piece of legislation created after the death of Rehtaeh Parsons, which was struck down by the Supreme Court of Nova Scotia in 2015. The major issue with this Bill was the definition of cyberbullying, having been too broadly. Despite the legislature's efforts, the Bill revealed the challenges with dealing with a phenomenon that encompasses a very broad range of deplorable behaviour from "revenge porn" to organized exclusion, to online harassment. There is sometimes a fine line between legitimate expression, hurting someone's feelings, or causing someone real harm. This thesis analyzed the failed Nova Scotia legislation on cyberbullying in addition to current research on cyberbullying in order to assess the extent to which a new and universally accepted definition of cyberbullying would be necessary in order to implement successful legislation.

A universal definition of cyberbullying has multifaceted purpose for research, legislature and policy. Amending the Nova Scotia Cyber Safety Act might reinstate the CyberSCAN unit created under the Safer Communities and Neighbourhoods Act. This Act was introduced as a result of the Parsons tragedy. This unit was the first in Canada created to investigate complaints of cyberbullying and obtain cyberbullying prevention orders from the Supreme Court of Nova Scotia. The dismantling of the legislation left Nova Scotians with limited resources to remedy acts of cyberbullying. There is general consensus, often after tragic events, that cyberbullying is a problem requiring a legislative response. However, there is considerable debate as to how to deal with the issue. Researchers and policymakers

face many challenges when attempting to create and implement legislation and policies on cyberbullying partly due to the varying definitions of cyberbullying.

Literature review

Cyberbullying has emerged alongside the advances of technology in the 21st century. What was once thought to be a rite of passage, name calling on the playground, is now known as traditional bullying. Growing up in the 21st century with access to technology such as smartphones, internet, and social media, has affected how bullies target their victims. The emergence of cyberbullying research generally appeared around 2004 and coincided with the influx of popular social networking websites such as Facebook and MySpace (Mitchell & Ybarra, 2007). Although a relatively new phenomenon, cyberbullying research indicates that the negative effects of cyberbullying are at least similar to those of more traditional forms of bullying (Ybarra & Mitchell, 2004). Because of this, it is important to take a look at the definition of traditional bullying in order to gain a better understanding of cyberbullying.

Bullying is defined as repeated and targeted peer aggression that can take on many forms including physical and verbal aggression (Olweus, 2005). Research suggests there are three factors that are involved in bullying. The first is the intention to cause harm to the victim; the second is the cause of that harm being attributed to the imbalance of power between the bully and victim; and the third is repetition of the behaviour over time (Liu & Graves, 2011). Most definitions of bullying include the following elements (Sullivan, Cleary, Sullivan, 2004, p. 5):

- the bully has more power over the victim.
- bullying is concealed, systematic and organized.
- bullies are often opportunistic however continue to bully over time.
- bullying can be physical, emotional and/or psychological.

Bullying behaviours can be further categorized as direct or indirect. Direct bullying refers to verbal and physical behaviours conducted during face-to-face interactions. Physical forms include hitting, pushing, and kicking (Olweus, 1993). Indirect bullying consists of actions that do not necessarily require the bullies or the victim to be present. It generally involves emotional or psychological forms of victimization. Examples are spreading rumors and gossip as well as excluding someone from the group (Olweus, 1993). Furthermore, indirect bullying is often referred to as relational aggression that includes spreading rumors, and is intended to damage someone's reputation or social relationships (Espelage, Low & De La Rue, 2012).

Cyberbullying can have qualities of indirect bullying, such as spreading rumors online or through text messaging. According to Belsey (2004), "cyberbullying involves the use of information and communication technologies to support deliberate, repeated, and hostile behavior by an individual or group that is intended to harm others" (p.15). Cyberbullying has been defined as the intentional and repeated harm perpetrated through the use of computers, cell phones, or other electronic devices (Kowalski & Limber, 2007; Patchin & Hinduja, 2010, Hinduja & Patchin, 2009). The Royal Canadian Mounted Police identify cyberbullying on their

website as using “communication technologies such as the Internet, social networking sites, websites, email, text messaging and instant messaging to repeatedly intimidate or harass others”(“Bullying and Cyberbullying,” 2016). A number of studies omit the presence of repetition or imbalance of power in their definition of cyberbullying (Smith, del Barrio & Tokunaga, 2013), while some researchers illuminate cyberbullying as containing a considerable overlap between traditional bullying (Smith, 2012; Tokunaga, 2010). Some researchers have found similarities between traditional bullying in terms of the characteristics outlined in the American Psychological Association document (2004). Studies have shown some cyberbullies also bully in conventional ways (Smith et al., 2008; Williams & Guerra, 2007). Other research suggests that cyberbullying is a distinct separate category of bullying behaviour (Aboujaoude, 2011; Beckerman & Nocero, 2003). There are nine different forms of cyberbullying according to Willard (2006, p. 1):

Flaming: a form of cyber bullying defined as fights or arguments that transpire through messaging. These messages are angry and have vulgar language.

Harassment: Another form, in which the cyberbully repeatedly sends insulting messages.

Denigration: insulting someone online ("dissing"). This can include sending or posting gossip and spreading negative rumors about a person.

Impersonation: pretending to be someone else with malicious intentions. Most often to get that person in trouble with other people or to damage their reputation and friendships.

Outing: Sharing someone's secrets or embarrassing information, photos without his/her permission.

Tricker: is when the cyberbully will trick the victim to reveal secrets or embarrassing information and then share it with others online.

Exclusion: is intentionally excluding someone from an online group.

Cyberstalking: is repeated, intense harassment and denigration that includes threats or creates a significant amount of fear in the victim.

Cyberthreats: are defined as either threats or "distressing material," general statements that make it sound like the writer is emotionally upset and may be considering harming someone else, themselves, or committing suicide.

Cyberbullying encompasses many elements. Often when the media presents information about the negative effects of cyberbullying, it is women who identify as the victims. Cyber misogyny is a term used to capture the abusive, gender specific hatred directed towards women (Shaw, 2016). An example of cyber misogyny that hit mainstream media was the case of Dalhousie University dentistry students. A group of 13 male students, part of a private social media group called the "Class of DDS 2015 Gentlemen" posted controversial misogynistic and homophobic posts written about women and their female classmates. This case highlighted the many forms cyberbullying can take and demonstrated how cyberbullying is not limited to just youth. Cyber misogyny is defined in a West Coast LEAF article #CyberMisogyny (2011) as sexist, racist, homophobic, and transphobic hate speech. Researchers argue that the term cyberbullying marginalizes this abuse of power. Elements of cyber misogyny are not specified in many definitions of cyberbullying.

Cyberbullying has many forms. "Revenge porn" is the non-consensual sharing or distribution of intimate images. Many cases of revenge porn have been highlighted in the media, such as Rehtaeh Parsons who was a victim of revenge porn.

The term “sexting” is used to describe males and females who take nude or partially nude pictures of themselves and send it to another person. Society today, with an influx of social media and the hyper sexualized culture we live in, has manifested into potential dangers technology can cause our youth (Steeves, 2014). Dangers manifest when pictures are passed on to peers, or people who were not intended to see the picture. Research suggests sexts of boys are more likely to be forwarded than sexts of girls (26% compared to 20% of girls) (Steeves, 2014). Hinduja and Patchin (2010) found that 1 in 5 adolescents in the United States posted or sent sexually themed or nude images to others. Wsocki and Childers (2011) found males were approximately 1.5 times less likely than females to participate in behaviour associated with sexting (52.2% compared to 67.5%).

Another form of cyber misogyny is gender based hate speech. Women and lesbian, gay, bisexual, trans, or questioning (LGBTQ) people are often targeted in online hate speech. The Dalhousie dentistry students who called themselves the “gentlemen’s club” are an example of the misogynistic hate speech that people express online. Far from being harmless locker-room talk, the Dalhousie male dentistry students would often post derogatory jokes about LGBTQ women and their desire to rape women. As technology becomes a greater part of our lives, we have to understand the effects of cyberbullying and implement ways to monitor it as parents, teachers, and members of society.

Dangers of Cyberbullying

Research on victims of cyberbullying has documented behaviours that include frustration, anger, and sadness (Beran & Li, 2005; Hinduja & Patchin, 2007).

Research has shown cyberbullying to be linked to low self-esteem, academic problems, school violence, as well as family problems (Hinduja & Patchin, 2010). A study conducted by Hinduja and Patchin (2010) found victims of cyberbullying to be more likely to struggle emotionally and psychologically in addition to displaying more behavioural problems than children and youth who have not been cyberbullied. A study in 2010 revealed effects of cyberbullying are not limited to emotional and psychological traumas, but can also affect the development of the brain (Teicher, Samson, Sheu, Polcari, & McGreenery, 2010). Adolescents who were exposed to verbal abuse had psychical scars like structural imprint on the brain. Morris, Compas, and Garber's (2012) research suggests that victims of extreme cases of bullying have shown signs similar to individuals with post-traumatic stress disorder (PTSD). Emerging literature on bullying indicates that the experience of peer victimization has immediate and lasting effects on biological functioning and implications for future mental and physical health, as well life longevity (Kimura et al., 2008; Van der Harst et al., 2010). Vaillancourt, Hymel, and McDougall (2013) have described the feelings associated with being bullied as a social pain and humiliation. Recent studies have shown that social pain and physical pain can have similar neurobiological responses, and that emotional pain is experienced in a similar way as physical pain. Vaillancourt et al., (2013) also highlight the fact that victims of bullying experience social and emotional pain from being bullied, long after the bullying has stopped. The vast audience cyberbullies have through the World Wide Web gives them an enormous platform to socially humiliate their victims. The long-term effects of cyberbullying are still unknown.

Cyberbullying differs from traditional bullying due to the anonymity of the internet. Cyberbullies do not face consequences for their actions and can be very malicious. Often the cyberbully will feel invincible as their identity remains unknown and, as a result, tend to say more hurtful things to their victims (Juvonen & Gross, 2008). Although the identity of the cyberbullies is sometimes unknown, Juvonen and Gross (2008) reported 73% of the respondents to their study were “pretty sure” or “totally sure” of the identity of their attackers. There is also no escaping cyberbullying. Having 24 hours a day, 7 days a week access to the Internet makes it nearly impossible to ever get away (Heirman & Walrave, 2008). In traditional bullying the victim can avoid school or run away from the bully; however, cyberbullying can happen at any moment even without the victim knowing it, making it more difficult for the victim to escape or avoid cyberbullying. Not knowing who is bullying you, or who is participating, can result in the victims developing distrust in all relationships.

The internet is harder to monitor (Heirman & Walrave, 2008). Teachers cannot physically see cyberbullying as they would traditional bullying in a schoolyard. The absence of monitoring by teachers and parents allows cyberbullying to continue without any intervention. Cyberbullying is more likely than other forms of bullying to go unreported to parents or administrators (Juvonen & Gross, 2008). It was reported that 90% of the respondents in the Juvonen and Gross (2008) study stated they did not tell an adult about being cyberbullied. Many youth believe their internet privileges will be monitored or taken away and therefore do not report cyberbullying. Adolescents are left to deal with the stress and shame of

cyberbullying that can lead to extreme repercussions such as violence and suicide (Marr & Field, 2001). Suicide as a result of bullying is referred to as “bullycide” (Marr & Field, 2001, p.1). This term is controversial as many believe it suggests the bully committed suicide and not the victim. Additionally, Hinduja and Patchin (2010) found that youth who are cyberbullied are about two times more likely to have attempted suicide than non-bullied youth. There has been no shortage of media stories about adolescents who have participated in school shootings or committed suicide due to cyberbullying.

Rehtaeh Parsons hung herself after being cyberbullied for months. Constant harassment on social media sites such as Facebook made Rehtaeh, like many victims of extreme cyberbullying, unable to ever escape her bullies. Slut shaming is a term used to describe cyberbullying where girls are targeted and humiliated on social media for their sexuality. Often this occurs through pictures and videos of the victim or through rumors to label a female as a ‘slut’.

Although the long-term consequences for the victims of cyberbullying have not been extensively studied, it appears to be more harmful emotionally and psychologically than traditional bullying (Hinduja & Patchin 2010; Reid, Monsen, & Rivers, 2004). International research suggests that the incidence rates of cyberbullying are rising, with prevalence rates as high as 30% (Zacchilli & Valerio, 2011). Cyberbullying has been shown to produce significant harm to its victims, including increased depression, social anxiety and low self-esteem among victims (Hinduja & Patchin, 2010). Although there is a general consensus that the cyberbullying problem requires a legislative response, there is considerable debate as

to how the issue should be dealt with. Cyberbullying related tragedies including the suicide of Rehtaeh Parsons has increased public pressure on Provincial legislators and Parliament to take action.

Limitations of Bullying Research

Research in the area of cyberbullying is limited by a heavy reliance on self-report. Ideally, research could be supported through peer or parent reporting. Self-reporting poses the issue of validity limitations, as the validity of self-report is unknown (Furlong, Sharkey, Bates, & Smith, 2004). Another limitation of self-reporting surveys is the language used in the questionnaires and how victims interpret the language. To a victim of bullying, frequency could be over exaggerated as to the actual number of times they are cyberbullied due to the traumatic nature of their reporting. Another limitation of self-reporting is perception, as perception can significantly vary from person to person. Teachers, parents, and youth might all have very different perceptions of how often cyberbullying occurs.

Research indicates that between 10% and 30% of children and youth are involved in bullying, however, prevalence rates vary (Solberg & Olweus, 2003). This limitation is a function of how cyberbullying is measured from researcher to researcher. Typically, assessments use a definition of bullying. This procedure has been debated as some researchers insist a definition is crucial (Solberg & Olweus, 2003), and others claim this will create biased responses, as a definition will prime individuals. However, without explicit reference to cyberbullying it becomes open to interpretation to the participants.

Another limitation in cyberbullying literature is that the experiences of bystanders has largely been overlooked. Researches do not yet understand how witnesses of cyberbullying are affected or how their presence impacts the bully or victim. More research in the area of bystanders could give researchers a broader understanding of cyberbullying and its implications on bystanders, victims, and bullies. Another limitation is the area of research pertaining to neurological implications and its connection between PTSD and bullying. Researchers are just beginning to understand the physiology that underlies peer victimization. Biological mechanisms are just starting to be studied in relation to bullying. If bullying behaviour has similarities to cyberbullying how does this impact the victims of cyberbullying?

Due to the advancements in technology since the year 2000 and the influx of social media, more research needs to be done in the area of cyberbullying. There is a consensus among researches on many components of cyberbullying, however, due to the lack of research conducted no universal definition has been agreed on. To date, cyberbullying has been difficult to define and compare as the methods in which the cyberbullying occurs can vary tremendously.

Another limitation is that few studies have examined at gender differences in cyberbullying. Some research findings suggest that females are more often involved in cyberbullying both as a victim and as a cyberbully. Although a fairly new topic of research, cyberbullying seems to have major implications on the lives of adolescents. The long-term effects of cyberbullying are still unknown as well as the long-term effects on women who are slut shamed. As technology becomes a greater part of our

lives, establishing a universal definition of cyberbullying becomes crucial to understanding the effects of cyberbullying and to developing effective solutions.

Legislation and its Implications

Canada's first attempt on addressing cyberbullying was through bill C-273, An Act to amend the Criminal Code. The introduction of bill C-273 in August of 2013, raised fears that the government's response to the issue of cyberbullying would come to be defined by a punitive enforcement-focused policy that seeks to curtail cyberbullying through deterrence via criminal sanction. In this commentary, I review the purpose and nature of bill C-273, its implications on the provisions of the Criminal Code. A common misconception-surrounding bill C-273 was that it proposes to create the new and distinct offence of "cyberbullying." Bill C-273 merely proposed to clarify the forms of communication that fall within the ambit of the existing offences of criminal harassment. Although there are a number of provisions of the Criminal Code under which cyberbullying can ostensibly be prosecuted as a criminal offence, the language of these provisions does not explicitly list digital mediums as forms of communication covered under the provisions. It can be argued that the amendments proposed by bill C-273 would bring these provisions into the 21st century by providing the precision and clarity required to ensure that potential offenders are aware that they may be entering an area of risk for criminal sanction when using digital forms of communication unscrupulously. There was wide acknowledgment that the problem of cyberbullying is something that cannot be solved through a punitive enforcement-focused policy. However, fears that bill C-

273 represented a movement towards a punitive policy that would attempt to curtail cyberbullying through overuse of criminal sanction were misdirected. The Bill did not create any new distinct offences. It merely brings sections 264, 298 and 372 of the Criminal Code into the 21st century by acknowledging the prevalence of digital communication in contemporary society and ensuring that the language of these provisions reflects current realities. However, bill C-273 was never passed.

In 2013, the federal government proposed bill C-13, and bill 61, The Cyber-Safety Act. The purpose of bill C-13 was to protect Canadians from online crime. Bill C-13 would make the distribution of intimate images without the consent of the subject illegal under the Criminal Code. This Bill, often referred to as the Rehtaeh Parsons law, was introduced as a response to the public outrage surrounding her case. The Act was punishable up to five years in prison. The proposed Bill was remarkably controversial. Many believed the Bill was ambiguous and only increase the government's surveillance powers and erode civil liberties. Critics also believed distribution of unwanted intimate pictures of anyone under the age of 18 years was already illegal under the child protection act, as it should be considered child pornography, bill C-13 was passed in 2013. In Addition, The Cyber-Safety Act was introduced in 2013, the first of its kind in Canada. Nova Scotia invested \$800,000 a year to establish the CyberSCAN Investigative Unit, a 5-person team dedicated to assisting victims, investigating complaints, and resolving cyberbullying situations through both informal and legal means. The Cyber-Safety Act, CyberScan and Bill C-13 are products of a public outrage over how the RCMP and school board handled the Rehtaeh Parsons case, as school officials, parents, and the police were all aware

that nude images of Rehtaeh were being circulated throughout the school, but no laws were in place to hold anyone accountable.

On December 11, 2015, the Supreme Court of Nova Scotia struck down the anti-cyberbullying law passed in response to the death of Rehtaeh Parsons. The Supreme Court of Nova Scotia ruled that the Cyber-Safety Act was unconstitutional as it violated the right to freedom of expression under the Charter of Rights. The Cyber-safety Act defined cyberbullying as:

any electronic communication through the use of technology including, without limiting the generality of the foregoing, computers, other electronic devices, social networks, text messaging, instant messaging, websites and electronic mail, typically repeated or with continuing effect, that is intended or ought reasonably be expected to cause fear, intimidation, humiliation, distress or other damage or harm to another person's health, emotional wellbeing, self-esteem or reputation, and includes assisting or encouraging such communication in any way.
(Canada Department of Justice, 2013, p. 1)

The Cyber-Safety Act was highly criticized for being too broad in its language and violating the freedom of speech of Canadian Citizens. Most experts recognize that the issue of cyberbullying cannot be solved through the criminal justice system alone. Professor Wayne McKay (2012), author of The Report of the Nova Scotia Task Force on Bullying and Cyberbullying noted that adolescents who

may engage in cyberbullying are unlikely to execute a cost/benefit analysis of the potential criminal consequences of their actions. McKay concludes that: “the criminal law, while necessary and useful in certain serious cases, is a limited and often ineffective tool against the social problem of bullying” (2012, p. 9).

Proponents of the early intervention model and restorative justice approach have criticized this bill as a step in the wrong direction. Many critics of the legislation changes felt the costs of investigating, and prosecuting youth who engage in cyberbullying would be better placed in prevention and early intervention programs. A proactive prevention approach could be more effective in protecting youth from cyberbullying.

Taking into consideration free speech, where do we as a society draw the line between hurting someone’s feelings, and criminally prosecuting people? Despite its efforts, the Act revealed great challenges. The Nova Scotia Cyberbullying Task Force noted: “Statistics on bullying incidents are highly inconsistent and experts speculate that this may be attributed to many causes. Wide variation in perceptions and definitions of the term ‘bullying’ is likely to be a key factor” (Mackay, 2012, p. 11). A better understanding of the scope of the problem in terms of form, definition and prevalence will help guide us in creating better interventions and legislation to help reduce cyberbullying.

Chapter Two

DISCUSSION OF RESEARCH

As there is currently no universally accepted definition of what constitutes cyberbullying, the objective of this study was to examine research studies completed in the area of cyberbullying. A thorough analysis was conducted on various studies to understand the issue of cyberbullying. I believe it was important to look at research conducted on the prevalence of cyberbullying and examine the definitions used in the research. As there is no universal definition, it was of interest to examine the different definitions of cyberbullying and how their prevalence rates vary.

A comparative analysis of cyberbullying research was conducted to evaluate the many definitions of cyberbullying and prevalence rates associated with these definitions. A systematic search was conducted for all cyberbullying measurement strategies published between 2004 and 2016. Key search terms such as cyberbullying, prevalence, and definition were reviewed using the Mount Saint Vincent University library search tool on its website. The terms were used in combination with each other to narrow the results. Using the terms, a search was performed of the following electronic databases: PsychInfo, PsychArticles, MedLine, ERIC, the Psychology and Behavioral Sciences Collection, the Professional Development Collection, SocIndex with Full Text, Expanded Academic Index ASAP, and Science Direct.

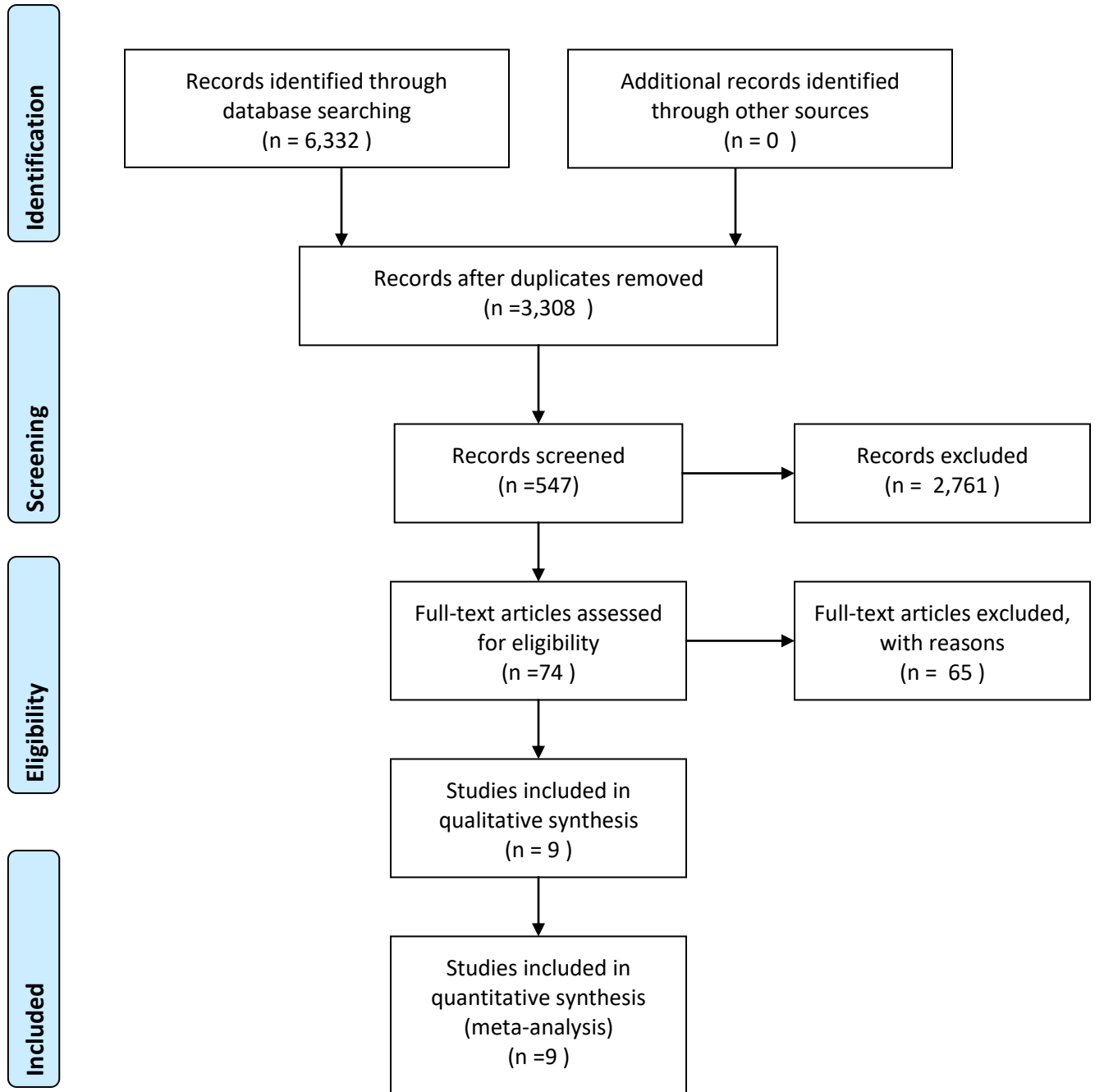
Studies were included if they provided self-reported global prevalence rates for online bullying and/or victimization in school-aged participants (i.e., <20 years).

Studies were excluded if they did not measure or report prevalence rates, re-analysed previously published data, or primarily sampled adults.

The search yielded 6,332 results (see Figure 1, p. 22), which was imported into Refworks (a bibliographic management software) to remove duplicates, which left 3,024 unique results. Of these, I selected peer-reviewed research, which yielded 2,331 articles. I filtered out research in languages other than English, which yielded 2,130 English articles. Further narrowing the search, I selected the subject to be on cyberbullying, which yielded 547 articles. Articles that were not relevant to the population or outcome of interest were screened out in the title-and-abstract scan, leaving 74 studies for a full-text review.

A total of 65 studies were excluded, 35 defined cyberbullying, 13 were redundant with other included or excluded studies, and 17 assessed an adult population. Those that did not present in their methodology or procedure sections on how cyberbullying was defined in their research to their participants were also excluded. This yielded a total of 9 studies, which surveyed a total of 12,014 participants.

Figure 1.
PRISMA flow Diagram of systematic review



Analysis of Research Articles

I took a closer look at the research articles that studied prevalence rates of cyberbullying and examined what definition was used. For the purpose of this review, I was interested in how researchers defined cyberbullying and what methodologies were utilized to conduct the study. The articles reviewed were summarized (see Appendix for a table of summarized articles reviewed).

Bayraktar, Machackova, Dedkova, Cerna, and Sevcikova (2015) conducted an online survey to examine adolescents' experiences with cyberbullying. They wanted to distinguish between three groups of adolescents involved in cyberbullying: cyber- victims, cyberbullies, and cyberbully-victims. Participants who indicated a cyber-victimization experience were labelled as cyber-victims, those who indicated bullying someone were labelled as cyberbullies, and those who indicated both experiences were labelled as cyberbully-victims. Bayraktar et al., wanted to examine whether cyberbullies, cyberbullies, and cyberbully-victims exhibit gender differences; if age affects the role of cyberbullying, or if low self-control, aggression, self-esteem, peer rejection or parental attachment contributes to the role of being a cyberbully.

In their study Bayraktar et al., (2015) defined cyberbullying to their participants as “misusing the Internet or mobile phone to purposefully and repeatedly harm or harass another person who cannot easily defend himself or herself” (2015, p. 3201). Participants of this study were 2,092 Czech adolescents aged 12 to 18 years. A description was given with examples of cyberbullying to help participants understand the different ways people can cyberbully. An example given

to participants was sending offensive and vulgar e-mails, texts, or instant messages.

Bayraktar et al., found 25.2% of all their participants had been involved in cyberbullying and 16.8% of them reported being cybervictims, 3.6% cyberbullies, and 4.8% cyberbully-victims. The main distinction Bayraktar et al., found between cybervictims versus the other two groups was gender. In their sample, males were more often involved as cyberbullies, and females more often being cybervictims.

Storm, Storm, Wingate, Kraska, and, Beckert, (2012) conducted a study where they administered an online poll to measure how cyberbullying affects the personal lives of their participants. Their participants were grade 5, 6, 7, and 8 students, ages 10 to 14 years, from three different schools (N=2,006). Storm et al., focused on participants who were age 10 to 14 years as this was the age cyberbullying is believed to originate (as cited in Kowalski, Limber, & Agatston, 2008).

Storm et al., defined cyberbullies as “persons who rely on cell phones, instant messaging, texting, chat rooms, or e-mail to cause humiliation, worry, and helplessness in victims” (2012, p. 141). Storm et al., found that the most significant correlation to student perceptions about cyberbullying was grade level and school location (78% statistically significant). Similarly, age showed to have the second largest relationship to student perceptions about cyberbullying at 72% statistically significant. The older the participants were the greater their understanding and experiences with cyberbullying. Responses to the online poll were 53% statistically significant with gender. Ethnicity was least related to student responses at 25%

statistically significant. The majority of students reported cyberbullying as a problem with the greatest proportion of those students, 68%, in junior high school.

Students in the Storm et al., study stated the main motivation for cyberbullying was breakups between boyfriends and girlfriends (70% junior high and 47% of elementary school students). The second main reason students reported being cyberbullied was for not looking like or acting like other people (junior high 54%, elementary 36%, or intermediate school 43%).

Li's (2007) study examined the nature and extent of adolescents' cyberbullying experiences. A total of 177 Canadian grade seven students from two different schools (97 females, 80 males) completed the survey.

In the self-reporting cyberbullying survey Li (2007) defines cyberbullying as "bullying via electronic communication tools" (p. 1789). A total of 26 questions including the frequency of using computers were analysed to answer the research questions of this study. The results showed that 24.9% of the participants had been cyberbullied (cyber victim); 14.5% have bullied others using electronic communication tools. A total of 53.7% of the students reported being both the bully and victim at one point. The results from Li's study also indicated that bullying occurred through many forms of electronic communication. Participants who reported they were bullied reported they were bullied through email (22.7%), in chat rooms (36.4%), and been bullied through multiple sources including email, chat-room, and cell phones (40.9%). Those who used an electronic communications to cyberbully reported using email at a rate of 9.1%; 36.4% used only chat-rooms;

54.5% used multiple sources. Gender differences were also observed with 60% of the cyber victims being female, and over 52% being males.

Beran, Mishna, McInroy, and Shari (2015) conducted a study with 1,001 children (513 males, 488 females) from all ten provinces of Canada (excluding Yukon, Northwest Territories, and Nunavut). Parents of the participants were selected from census data derived from Statistics Canada. Parents were contacted by e-mail and asked to give consent for their children to complete an online survey. Participants were between the ages of 10 and 17 years.

The definition used for Beran et al's., (2015) research was similar to Li's (2007): bullying through electronic means without specifically defining cyberbullying. Participants read the following definition.

There are lots of ways to hurt someone. A person who bullies wants to hurt the other person. A person who bullies does it because they can. They may be older, stronger, bigger, or who bullies wants to hurt the other person. A person who bullies does it because they can. They may be older, stronger, bigger, or have other students on their side. There are different kinds of bullying: 1. physical, such as, hitting, or spitting; 2. verbal, such as, name-calling, or mocking; 3. social, such as, leaving someone out, or gossiping. 4. electronic, such as, Facebook, or email; 5. racial, such as, saying hurtful things about someone whose skin is a different colour; 6. sexual, such as, grabbing, or saying something sexual; and 7. sexual preference, such as, teasing

someone for being gay whether they are or not. (Pepler, Craig, Ziegler, & Charach, 1993, as cited in Beran et al's., 2015, p. 49)

The results of this research concluded that 13.99% of the participants had been cyberbullied, and 7.99% had cyberbullied others (Beran et al., 2015). Participants who were cyberbullied were also 94.28% likely to be bullied through another form. Only seven children in the entire sample reported that they were solely cyberbullied. Beran et al., (2015) found that cyberbullying rates did not vary with the child's demographic characteristics. Similar to Li (2007) and Storm et al., (2012), they also found that boys reported slightly higher rates of perpetration than girls.

Cappadocia, Craig, and Pepler (2006) drew data from the Canadian records of the *Health Behaviour in School-Aged Children (HBSC) Study*, a cross-national study conducted by the World Health Organization (WHO). Participants included 1,972 Canadian high school students, with 881 boys and 1,091 girls from 16 different schools. HBSC included two waves of school-based surveys in 2006 and 2007 spring semesters. Participants were enrolled in Grades 9, 10, and 11 during the first wave of data collection and in Grades 10, 11, and 12 during the second wave (Cappadocia et al., 2006).

Cappadocia et al., (2006) provided students with a standard definition of bullying which included the three main components of bullying, the intention to harm, repetition, and having a power differential. These components have been well established to define bullying (Sullivan, Cleary, & Sullivan, 2004). The participants were then asked to report how often they were involved in cyberbullying and cyber-

victimization. An example of the statements Cappadocia et al., 2006 used in their survey is as follows;

(a) I bullied another student(s) using a computer or e-mail messages or pictures and (b) I bullied another student(s) using a mobile phone.

Two statements were also given regarding cyber victimization: (a) I was bullied using a computer or e-mail messages or pictures and (b) I was bullied using a mobile phone. (p. 176)

Five response options given to the participants were: never, once or twice, two or three times a month, about once a week, and several times a week. Results did not vary significantly across both surveys with only 4.9% of the participants report being cyberbullied in the first survey, and 4.7% in the second. The results for cyber victimization were 5.1% in the first survey, and 6.5% in the second. Students reported rates of simultaneous involvement in cyberbullying and cyber victimization at a rate of 1.4% during the first survey and 2.7% (Cappadocia et al., 2006).

Calvete, Orue, Estevez, Villardon and Padilla (2010) conducted a study with 1431 adolescents between the ages of 12 and 17 years (726 were females, 682 male, 23 did not indicate gender). Participants were high school students from 10 different schools in Spain. The study took place in the students' classrooms, where they filled out the questionnaires.

The Cyberbullying Questionnaire (CBQ) used in their study, consists of 16 items that describe 16 forms of cyberbullying. One form is sending threatening or intimidating messages to someone, or impersonating someone. Cyberbullying was

described by various acts, without using the term cyberbullying. Calvete et al., (2010) defined cyberbullying as “an aggressive and deliberate behavior that is frequently repeated over time, carried out by a group or an individual using electronics and aimed at a victim who cannot defend him- or herself easily (Smith, 2006, as cited in Cavete et al., 2010, p. 161), deliberate and repeated harm performed with some kind of electronic text (Patchin & Hinduja, 2006, as cited in Cavete et al., 2010, p.161). Of the sample, 44.1% of the participants indicated they have partaken in at least one of the items listed of the CBQ. The most frequent behaviours reported by 20.2% of the participants, was that of intentionally excluding a classmate from an online group, 20.1% partook in rumours, gossip, or embarrassing comments about a classmate on the Internet. Furthermore, 16.8% admitted sending the link of the embarrassing comments or gossip to others. Calvete et al., found that 18.1% of their participants admitted to hacking in order to send messages by e-mail that could cause trouble for the victim. Gender differences were also observed, much like the other research analysed in this review, males were more likely to participate in cyberbullying, 47.8% of the boys and 40.3% of the girls responded agreeably to at least one of the CBQ items (Calvete et al., 2010).

Roberto et al., (2014) conducted a research study that sampled 1, 606 University freshmen through an online survey. This study has been included in this analysis because the goal of Roberto et al., was to assess experiences with cyberbullying during their participants' senior year of high school, excluding these participants who did not graduate high school the year before. Roberto et al., opted to describe and focus on the specific behaviors of interest, without actually using the

term “cyberbullying.” Participants had to answer yes or no to questions about a specific behaviour. For example;

Please answer “yes” (1) if you sent such messages directly to another person, (2) if you posted such messages about another person in public places, (3) if you sent such messages about a person to other people, or (4) if you used communication technology in some other way hurt or embarrass another person. (2010, p. 1131)

Roberto et al., found 47% of their participants indicated that they had been cyberbullied. 34% of these victims were male, and 66% were female. Participants indicated cyberbullying perpetration at a rate of 35%. Roberto et al., found no significant gender differences between cyberbullying perpetration (34.80% of males, and 34.85% of females). Interestingly, perpetrators reported that 56% of their victims were female and 35% were male (with the remainder either not knowing or not reporting the gender of their victim). Roberto et al., found that participants cyberbullied a friend (37.6%), another student (24.9%), an ex-boyfriend or ex-girlfriend (15.9%), or someone they didn't know (2.5%). They used a variety of methods to bully including cell phones (76.9%), the Internet (54.6%), instant messaging (41.7%), e-mail (22.0%), and other (20.6%). Cyberbullying was self-reported to occur in groups of two or more people, with only 31.5% indicating they cyberbullied others alone.

An interesting finding of Roberto's et al., research was that approximately 35% of cyberbullying instances lasted a day or less, and 26% lasted more than one

day but less than one week, and 14% lasted more than a week but less than a month, with the remaining lasting more than one month. Finally, 22.2% of cyberbullies also reported engaging in traditional bullying against their victims.

Currently, research in the area of cyberbullying is still developing. Therefore, the components of cyberbullying have not been well established. Ybarra, Boyd, Korchmaros and Openheim (2011) sought out to identify the best method for measuring cyberbullying, conducting a study to examine how variations in definition and how word sequence affect prevalence rates. Ybarra et al., conducted two mini studies (split form surveys) to examine the prevalence rates of cyberbullying when question order was changed. The participants were 1,200 students, 6 to 17 year olds. Those between ages 6 to 9 years completed the survey with a guardian.

This first study examined the relationship between the word “bullying” and prevalence rates. It questioned whether youth would admit to being bullied, as seeing the word ‘bully’ might feel like a label. The second study examined prevalence rates based on only the definition of bullying. All questions used a 5-point likert scale and referred to the “past year.” Youth were grouped into one of three groups: never, less frequently than monthly, and monthly or more often (i.e., a few times a month, a few times a week, every day, or almost every day).

In the first study, youth were randomly assigned to one of four different forms of the survey question.

1. The *definition + word “bully” form*,

2. The *definition-only form* was the same, but with a modified first sentence,
3. The “*bully*”-only form and
4. The final form presented *neither the definition nor the word*: the definition provided did not differentiate between mode, environment, and type because this was unimportant for participants to consider. (Ybarra et al., 2011, p. 55)

Ybarra et al., primed their participants to think about bullying experiences broadly, and the preceding items response options forced the differentiation between forms of bullying. Ybarra et al., then presented all the youth with the same behavioural list of experiences;

(1) hit, kicked, pushed, or shoved you around; (2) someone made threatening or aggressive comments to you; (3) you were called mean names; (4) you were made fun of or teased in a nasty way; (5) you were not let in or you were left out of a group because someone was mad at you or was trying to hurt you; (6) someone spread rumours about you, whether they were true or not; and (7) some other way.
(2011, p. 56)

If the listed behaviours were experienced in the past year, participants were asked to identify which bullying behaviour took place. Across the two studies, an average of 25% reported being bullied at least monthly in person, 10% were bullied

at least monthly online, 7% via telephone (cell or landline); and 8% via text messaging.

Ybarra et al., concluded that measures for English-speaking individuals should include the word “bully” when possible. They found the definition seems less critical in affecting prevalence rates finding no significant difference. A behavioural list of bullying experiences without a definition or the word “bully” results in higher prevalence rates and likely measures experiences that are beyond the definition of “bullying”. They found the word “harassment” to be meaningfully different from bullying, and does not suggest additional context for participants. They found participants’ prevalence rates were not affected when presenting them with a different term with which to identify the act of bullying. They establish that measuring aspects of differential power and repetition over time with follow-up questions reduces the misclassification of bullying.

Ybarra et al., propose three mutually exclusive components of bullying to maximize reliability and eliminate double reporting of the same instance of bullying. The first component of bullying is the type of bullying, for example is it physical or emotional. The second component is communication mode (e.g., online). Lastly, what environment is bullying taking place in (2011, p. 56).

Wade and Beran (2011) conducted a research study to explore the prevalence rates of cyberbullying among adolescents. They also wanted to evaluate whether gender differences existed for cyberbullying, and if age factored into prevalence rates. This Canadian study surveyed 19 public junior high and high schools in Midwestern Canada (N= 529). Students were from grades 6, 7, 10, and 11,

corresponding to ages 10 to 13 years and 15 to 17 years.

In their study, Wade and Beran defined cyberbullying as “bullying that occurs online” (p.48). Participants were asked to complete a questionnaire, consisting of 140 questions, which were divided into eight sections. Students were informed to skip question sets that did not apply to their experiences.

Wade and Beran found 21.9% participants reported at least one form of cyberbullying behaviour perpetrated against them. The common forms experienced were: being called names (30.3%); having rumours spread about them (22.8%); having someone pretend to be them online (16.1%); being threatened (13.0%); and receiving unwanted sexual content (11.5%). The least frequent form of cyberbullying included being asked to do something sexual (7.3%) and having someone send private pictures of them to others (3.3%). Twenty-nine point seven percent of the participants reported being the perpetrators of cyberbullying. The most frequent was calling people names at (20.1%), imitating someone online (13.2%), and spreading rumours about someone else online (9.9%). The least frequent were threatening someone (3.7%), sending unwanted sexual content to others (1.6%), and sending private pictures of someone to others (1.0%). Wade and Beran found cyberbullying to have occurred amongst approximately 21% of students with females at greater risk for victimization. Male and females were found to be equally targeting each other at similar rates (29%), with a peak occurring in Grade seven.

Discussion

The aim of the current study was to conduct a systematic review and content analysis of measures administered to youth, in an effort to gain a better understanding of the specific definition components of cyberbullying.

The principal issues discussed in this study were the extent to which the various definitions of cyberbullying have resulted in a wide, and inconsistent range of research findings on the prevalence rate of cyberbullying. Thorough my analysis similarities were observed among definitions used to define cyberbullying. This review uncovered five studies that incorporated the term bullying in their strategy, two of which included a bullying definition. Using the term bullying without providing additional guidance for participants in the form of a definition or list of behaviours may be problematic, as researchers are uncertain how their participants perceived the term. Using the term bullying in measurement may also impact prevalence rates. Beran et al., Cappadocia et al., Li, Roberto et al., and Wade and Beran all incorporated the term bullying when defining cyberbullying. Belsey (2004) described the main difference between traditional bullying and cyberbullying lies in the fact that in cyberbullying technological devices are being used to carry out the act of bullying.

Research suggests there are three factors that are involved in bullying. The first is the intention to cause harm to the victim; the second is the cause of that harm being attributed to the imbalance of power between the bully and victim, the third is repetition of the behavior over time (Liu & Graves, 2011). These are three common criteria used to define traditional bullying. Bayraktar et al., Cappadocia et al., and

Calvete et al., included these three common criteria in their definitions of cyberbullying (see figure 2, p. 37). Cappadocia et al., provided their participants the three components of a bullying definition; intention to harm, repetition and power differential. Cappadocia et al., reported 4.9% of participants were cyberbully perpetrators and a 5.1% victimization prevalence rate (see Figure 2, p.37). Similarly, Calvete et al., conducted a study and also provided their participants the three main components of bullying. However, their results are much higher (perpetration 44.1% and 30.1% victimization). Bayraktar et al., also included the same three components of bullying and reported a victimization rate of 16.8% and perpetration rate of 3.6% (See Figure 2, p. 37).

Figure 2. Definitions of Cyberbullying

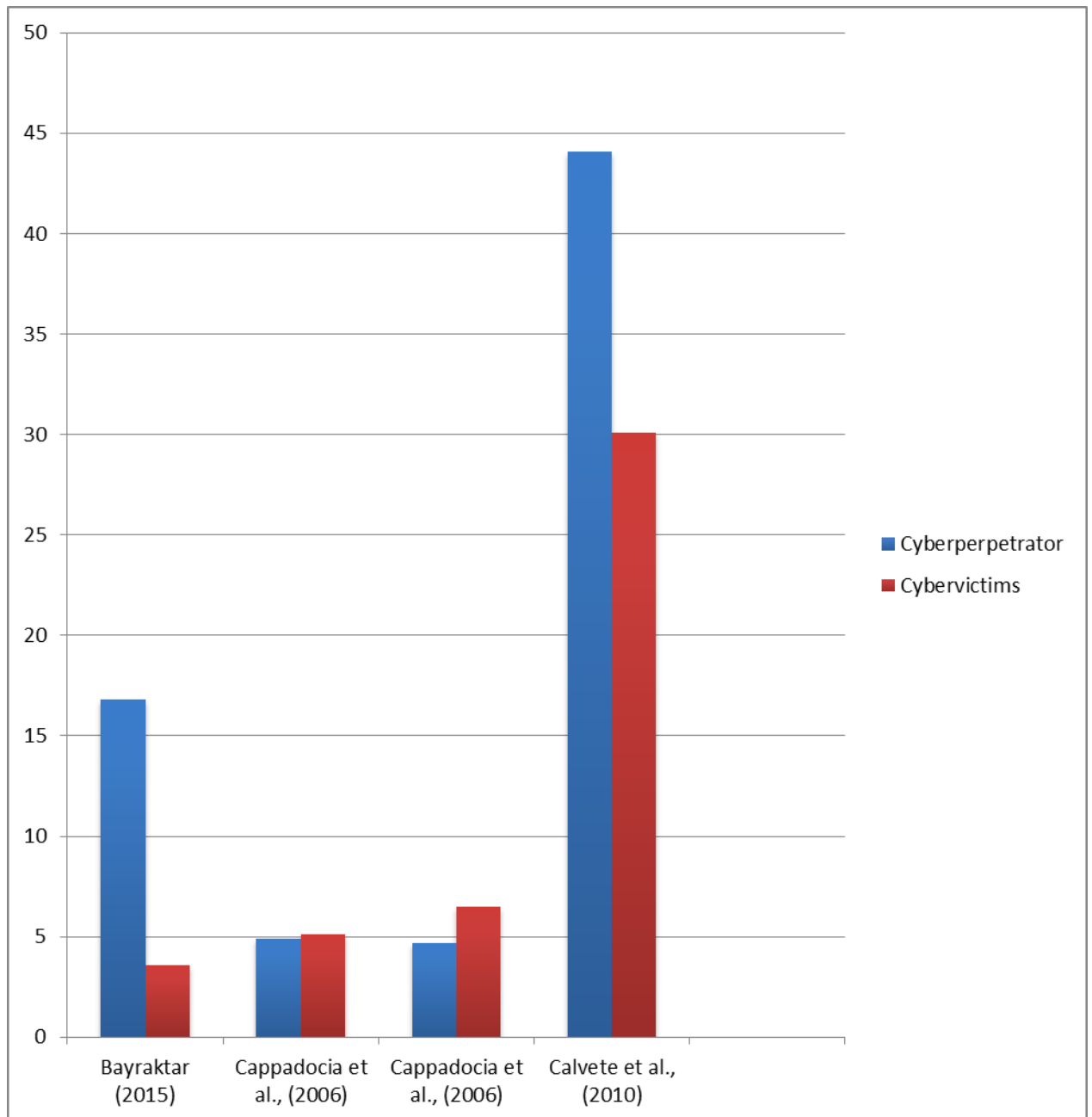


Figure 2. Research Articles that Included Intention to Harm, Repetition and Power in Definition.

Li refers to cyberbullying as “bullying via electronic communication tools” (p.1789) and reported a victimization rate of 24.9% and perpetration rate of 14.5%. Similarly, Wade and Beran describe cyberbullying as “bullying that occurs online” (p.48) and too report a higher victimization rate (21.9%) and perpetration rate (29.7%) (See Figure 3, p.39). Higher prevalence rates could be attributed to several factors. A definition of bullying could trigger the participants’ memories recalling specific instances where they have been cyberbullied whereas using just the term bullying does not resonate with participants. Participants may feel the term bully labels them, lowering prevalence rates.

Figure 3. Definition of Cyberbullying

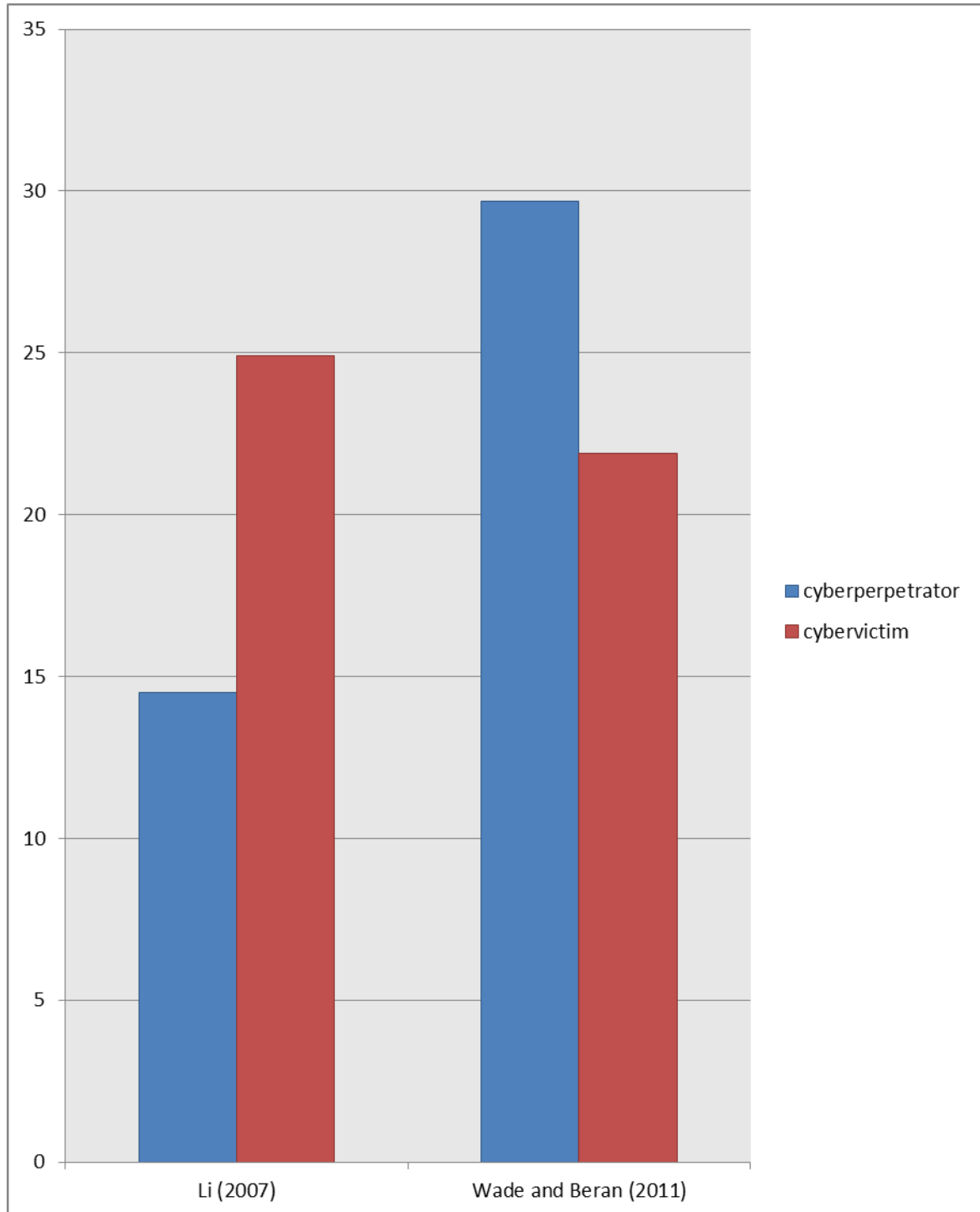


Figure 3. Research Articles that Describe Cyberbullying as Bullying through Electronic Communications to Participants.

Beran et al., definition of cyberbullying corresponds with Belsey's definition of cyberbullying. A definition was used to define bullying and specified specific ways you could cyberbully someone, for example through Facebook. Beran et al., research study reported 13.99% victimization rates and 8% perpetration rates for cyberbullying (see figure 4, p. 41). These results are lower than the studies that only defined cyberbullying as bullying that occurs online, or via electronic communication tools with no definition of bullying provided to participants.

Roberto et al., opted for describing the specific behaviours of cyberbullying, without using the word cyberbullying to their participants. Roberto et al., prevalence rates for their research were 47% victimization and 35% cyber perpetrator rate (see Figure 4, p.41). In hopes of gaining a better understanding on the wide-ranging definitions of cyberbullying Ybarra et al., (2011) conducted a study that suggests using the word bully in a survey and incorporating follow up question reduces miss categorization and attributes to help reduce inconsistent findings. Furthermore, Ybarra et al., suggest providing participants a behavioural list of bullying experiences without using the word bully results in a higher prevalence rate, 10% reported being bullied online, 7% through a telephone and 8% through text messages.

Figure 4. Definition of Cyberbully

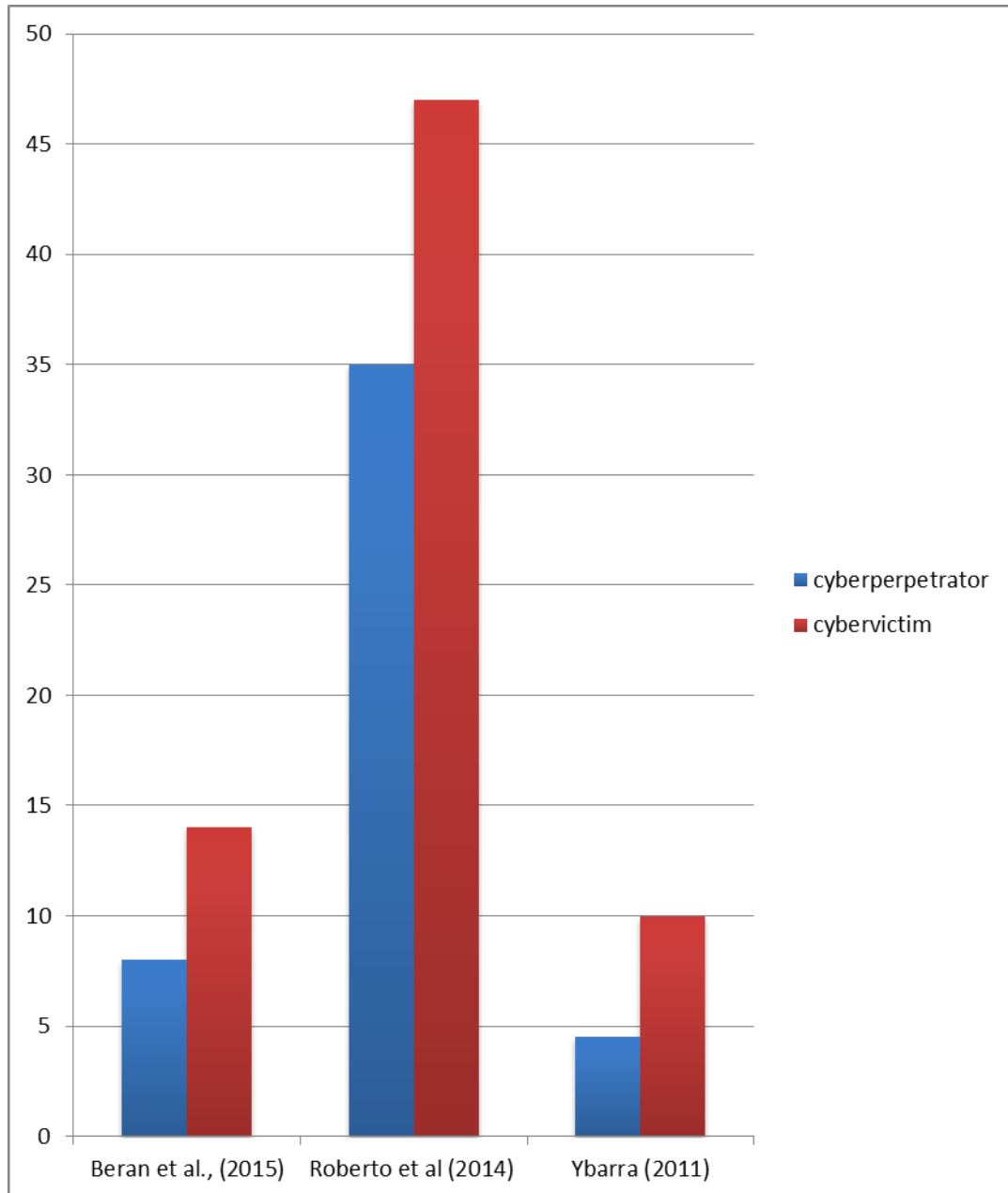


Figure 4. Research Articles that Describe Acts of Cyberbullying to Participants.

There is considerable inconsistency in the manner in which bullying is measured by researchers. These inconsistencies range from differences in terminology to differences in definitional components and actual behaviors measured by the surveys. While these inconsistencies may seem minor, they most likely explain the wide variation in cyberbullying prevalence rates obtained by researchers in the field. My findings further highlight the need for a consistent definition of cyberbullying, which has major implications for the measurement. Future research should focus on integrating a honed definition of cyberbullying into the development of new or improved measurement strategies so that cyberbullying can be more accurately and precisely assessed.

Of the nine studies included in this review, most were implemented in school settings. The most predominant method used to assess cyberbullying was self-report. While self-report has been the most widely used method in bullying research, many have suggested that challenges exist in using this method as the sole strategy to collect information on an individual's behavior (Mitchell & Ybarra, 2007).

Almost all of the measures in this review captured both victimization and perpetration of cyberbullying. With increasing evidence that youth are often both victims and perpetrators, it is important to continue to capture both behaviors in measurement. These individuals are also referred to as bully/victims.

Almost all of the included measures provided Likert-type response options, only two research used binary response options (e.g., yes/no, true/ false) or open-ended questions. The variation in response options likely impacts not only overall prevalence rates, but also the kind of information being reported. For instance,

responses to open-ended questions may acquire more or less detail about cyberbullying behaviors. Again, based on the various response options used in different measurement strategies, comparing prevalence rates of cyberbullying overall, or even specific components of cyberbullying behavior, becomes nearly impossible, as there is no clear way to draw parallels between behaviors that occur. For instance, “frequently” as judged by a 5-point Likert-type response option to those that have occurred at least once as judged by a “yes” response to a binary item.

Conclusion

To conclude, my systematic literature review on cyberbullying revealed that although there are similarities between some researchers and how they define cyberbullying, no universal language or definition was found between studies. More research is needed to understand the dynamics related to cyberbullying.

Limitations of research

There were some limitations to this systematic review. First, the overall search did not explore publications prior to 2004 and not after 2016. These dates were chosen in conjunction with the launch of popular social media in 2004 (Facebook). However social media existed prior to 2004, as did text messaging and emailing. Not expanding the search could have limited early literature in the area of cyberbullying. Second, key terms used when conducting the systematic review could have limited the search results. Terminology in the area of cyberbully is not universal; terms such as internet harassment or electronic bullying are used by some researchers in place of the term cyberbullying. Excluding synonymies for cyberbullying could have impacted the results of this systematic review, limiting the number of definitions of cyberbullying obtained.

Canadian Legislation

Cyberbullying can have tragic and fatal consequences. Often media coverage highlights these tragedies. Public pressure has led to the introduction of new legislation in Canada. To date, seven Canadian cities have legislation to address

cyberbullying. In Nova Scotia, Rehtaeh Parsons' home province, new anti-cyberbullying legislation was passed four months after Parson's death. The failure of this legislation brought forth the quandary of free speech, highlighting the difficulties of defining cyberbullying. A number of Canadian municipalities have also legislated by-laws in efforts to combat cyberbullying.

Regina, Saskatchewan has instituted by-laws prohibiting bullying, and cyberbullying in public places. In Regina, bullying is punishable by fines of up to \$2,000 and 90 days in jail. Blackfalds, Alberta also passed a by-law permitting fines of up to \$10,000 for repeat bully offenders. Hanna, Alberta too passed a by-law in which bullying is punishable by a 6-month jail term (Walton, 2012). However, critics have argued that these by-laws are largely symbolic and have reported that tickets are rarely issued (Walton, 2012). These by-laws have been put in place largely to address behaviours not covered under the Criminal Code, such as gossiping and often used as warnings to offenders.

Public pressure has equally influenced school boards to create policies to address cyberbullying throughout Canadian schools. In light of cyberbullying related tragedies, several provinces have attempted to address cyberbullying by amending their perspective Education Acts. After the suicide of Rehtaeh Parson's it became evident the school board did not know how to deal with cyberbullying, as it did not occur at school, and the police had no legal authority to stop the cyberbullying.

The province of Saskatchewan took steps to address cyberbullying by amending its legislation on bullying. The purpose of the amended Education Act

was to help school officials both identify and prevent cyberbullying, in addition to giving them tools to investigate and respond to bullying behaviour. The following definition was updated in the Education Act,

Bullying is a relationship issue where one person or group repeatedly uses power and aggression to control or intentionally hurt, harm or intimidate another person or group. It is often based on another person's appearance, abilities, culture, race, religion, ethnicity, sexual orientation or gender identity. Bullying can take many forms; physical, emotional, verbal, psychological or social. It can occur in person or through electronic communication. (Saskatchewan. Ministry of Education, 2013, p. 1)

In 2012, Alberta revised its Education Act, updating their definition of bullying as;

Repeated and hostile or demeaning behaviour by an individual in the school community where the behaviour is intended to cause harm, fear or distress to one or more other individuals in the school community, including psychological harm or harm to an individual's reputation. Bullying can take different forms: Physical – pushing, hitting, verbal – name calling, threats, social – exclusion, rumors, cyber – using the computer or other technology to harass or threaten. (Alberta Ministry of Education, 2012, p. 13)

In 2012, the Ontario Education Act, Bill 14 was too amended defining bullying as;

the severe or repeated use by one or more pupils of a written, verbal, electronic or other form of expression, a physical act or gesture or any combination of them if it is directed at another pupil and if it has the effect of or is reasonably intended to have the effect of, causing physical or emotional harm to the other pupil or damage to the other pupil's property, placing the other pupil in reasonable fear of harm to himself or herself or damage to his or her property, creating a hostile environment at school for the other pupil, infringing on the legal rights of the other pupil at school, or materially and substantially disrupting the education process or the orderly operation of a school; ("intimidation"). (Ontario Ministry of Education, 2012, p. 2)

In addition, The Education Acts of Ontario accosted cyberbullying through the method someone is bullied expanding their definition to include examples in which cyberbullies may victimize their victims. The following was added to the definition;

Without limiting the generality of the definition of "bullying" in subsection (1), bullying includes bullying, known as cyber-bullying, that is done through any form of electronic means using any technique, including creating a web page or a blog in which the creator assumes the identity of another person; impersonating another person as the author of posted content or messages; and communicating material to more than one person or posting material

on an electronic medium that may be accessed by one or more persons. (Ontario Ministry of Education, 2012, p. 4)

Recommendations for Future Legislation

Research and legislation share similar setbacks with definitional issues. Provincial Legislation has attempted to combine all facets of cyberbullying observed in my analysis. However the question remains, should hurting someone's feelings become a criminal matter? I believe bill C-13 was the most effective law implemented to address the severe cases of cyberbullying -the non-consensual distribution of intimate images. However, if a citizen posts a bad review of a restaurant and this hurts the restaurant owner's feelings or reputation, does this constitute free speech or is it considered cyberbullying? The Cyber Safety Act used language that was subjective. Harming someone's self-esteem, for example, was punitive and should not require legal intervention. Bill C-13 focused on identifying what constitutes cyberbullying behaviour in a broader sense, which provided clear legal guidelines without over defining it. Leaving flexibility allows for the legislation to adapt to potential new ways behaviours may evolve with technology. If the law prohibits the non-consensual distribution of intimate images today, and a new form of technology presents a new opportunity to distribute that intimate image, the law will remain relevant.

Future legislation should negate how a person may feel as a result of the cyberbullying, but what the intention was of the cyberbully. Criminal harassment through electronic communication tools should be the primary focus of future

legislation. Bill C-273 did not create any new distinct offences but brought sections of the Criminal Code into the 21st century by ensuring that the language of the Criminal Code reflects current realities. Future legislation should incorporate aspects of bill C-273 making offences such as harassment or slander, an already legal offence, prosecutable even if conducted through telecommunication devices. New legislation should also consider the element of intention in relation to direct and indirect cyberbullying creating a test for Judges to legally identify cyberbullying, uniformly. For example, direct cyberbullying requires the cyberbully to engage in a sequence of actions that fulfil the criterion of repetition. The repetitive conduct, in turn, illustrates an intention to harm, as it would not be an unintentional or isolated incident. This implicates the perpetrator as having intention to harm their victim. Meeting the criteria of this test allows judges to identify the action in question as cyberbullying and will allow the test, and potential law, to evolve with technology, social media and their advancements.

Recommendations for Future Research

This analysis was able to identify three ways researchers define cyberbullying. First, researchers either presented cyberbullying as bullying through electronic communications, without actually defining bullying. Second, cyberbullying was defined using the definitional characteristics of bullying (Intention to Harm, Repetition and Power in Definition). Third, researchers presented a way or methods that describe the act of cyberbullying. These three methods are predominating, primarily because there is no common understanding of what comprises the act of cyberbullying. Through my analysis, it appears legislation

incorporated all three of these methods when defining cyberbullying. Combining all facets of cyberbullying revealed in research studies in turn resulted in a definition that was too broad.

In this review, authors used several terms to discuss cyberbullying behaviours, including peer victimization and peer aggression. The use of inconsistent terminology is problematic for several reasons. First, specific to peer victimization and peer aggression, the term “peer” suggests someone of equal status, age, or grade. However, one of the debatable concepts of the cyberbullying definition, as mentioned earlier, is the presence of a power differential or imbalance in the relationship between the victim and the perpetrator. Thus, this terminology is in direct conflict with the construct of cyberbullying. In contrast, the individual who is cyberbullying does not have to be bigger than or more powerful than the victim due to anonymity. Power imbalance can take many forms, including psychological and social. Cyberbullies can be anonymous and therefore they could be younger, or even an adult. Suggesting it is always a peer can lead to false assumptions.

Another term researchers use in their definitions of cyberbullying is the repetition aspect of being cyberbullied. A single act of cyberbullying often creates repeated harm. A single act can be forwarded to hundreds or thousands of people over a period of time. From a victim’s perspective, he or she may feel repeatedly bullied. Even though there may have been only one initial act, it may have been perpetrated through many people and over time. The terminology can mislead participants and add to the inconsistent prevalence rates. Future research should

focus on examples of cyberbullying. This allows participants to identify with statements without attempting to interpret them.

Studying cyberbullying began as an emotional knowledge-seeking venture that began with media coverage on cyberbullying cases right here in Nova Scotia. When the Cyber Safety Act was dismantled I could not understand how this could be, as bullycide was a serious consequence of cyberbullying that should be prevented at all costs. Research revealed the degrees and varied methods to become a victim of cyberbullying. Cyberbullying isn't just texting someone something mean, or forwarding pictures of someone you don't like. Defining cyberbullying seems to be problematic for researchers and legislators due to the infinite methods and varying degrees of cyberbullying. Through my analysis it became clear that cyberbullying can have different meaning to different people. It is difficult to conceptualize and for this very reason it is difficult to define.

APPENDIX

Summary of studies measuring cyberbullying included in analysis

Study and definition	Participants	Instrument	Psychometric properties	Roles	Prevalence
Bayraktar (2015) Cyberbullying as misusing the Internet or mobile phone to purposefully and repeatedly harm or harass another person who cannot easily defend himself or herself.	n=2,092 aged 12 to 18	Interview	asked dichotomous questions, description was illustrated with examples of cyberbullying, such as sending offensive and vulgar e-mails, SMS, or IM messages, whether or not they had ever experienced anything similar and whether they had done something similar to someone else	cybervictims, cyberbullies, and cyberbully-victims	16.8% victimization 3.6% perpetration 4.8 % cyberbully-victims
Storm, 2012 define cyberbullies as persons who rely on cell phones, instant messaging, texting, chat rooms, or e-mail to cause humiliation, worry, and helplessness in victims.	Grade 5-7 n=2006	Online Poll	first eight items on the poll allow for multiple responses that students feel apply to them. For example, Item 5 states, "If someone tried to cyberbully me, I would (a) tell a teacher or parent, (b) ignore it, (c) tell the bully to stop, (d) change my screen name, (e) block the message, and (f) other" remaining 18 items required selection of only one among several options	Cybervictims	Bully reliance on cell phones and text messaging were reported significantly more often by students in junior high (68%)
Li, 2007 "cyberbullying" refers to bullying via electronic communication tools (p. 1789).	Grade seven students n=177	Self-Report: Cyberbullying Survey	13 items in total less than 4 times 4-10 times Over 10 times	Cyber victimization, perpetration and bully/victim	24.9% Victimization 14.5% perpetration 53.7 bully-victim
Beran, Mishna, McInroy, and Shari (2015) Definition of bullying: There are lots of ways to hurt someone. A person who bullies wants to hurt the other person. A person who bullies does it because they can. They may be older, stronger, bigger, or have other students on their side. There are different kinds of bullying: 1. physical, such as, hitting, or spitting; 2. verbal, such as, name-calling, or mocking; 3. social, such as, leaving someone out, or gossiping. 4. electronic, such as, Face- book, or email; 5. racial, such as, saying hurtful things about someone whose skin is a different colour; 6. sexual, such as, grabbing, or saying something sexual; and 7. sexual preference, such as, teasing someone for being gay whether they are or not. Pepler, Craig, Ziegler, & Charach, 1993, as cited in Beran et al's., 2015, p. 49)	ages 10 to 17 years n=1,001	Online survey	16 questions Likert-type scale from 1 = no to 5 = several times a week subsequent section included eight scales that examine the cognitive, psychological, and behavioural impact of bullying. 37 items were rated on a Likert-type scale: 1 = never, 2 = only once or twice, 3 = sometimes, 4 = about once a week, and 5 = several times a week	Cybervictims	13.99 % victimization 8% perpetration

Cyberbullying: Defining our future norms

Study and definition	Participants	Instrument	Psychometric properties	Roles	Prevalence
Cappadocia, Craig, Pepler (2006) Participants were provided with a standard definition of bullying including three main components: intention to harm, repetition, and power differential. They were then asked to report how often they were involved in cyberbullying and cyber-victimization	Grade 9-11/10-12 n= 1972	Two Questionnaires	(a) "I bullied another student(s) using a computer or e-mail messages or pictures" and (b) "I bullied another student(s) using a mobile phone." Two statements were also given regarding cybervictimization: (a) "I was bullied using a computer or e-mail messages or pictures" and (b) "I was bullied using a mobile phone." For each statement, students were provided with five response options: never, once or twice, two or three times a month, about once a week, and several times a week.	Cyber victimization, perpetration and bully/victim	Time 1: 4.9% cyberbullying 5.1%Cyber victimization 1.4%Bully/victim Time 2: 4.7% cyberbullying 6.5%Cyber victimization 2.7%Bully/victim
Roberto et al (2014) opted to describe and focus on the specific behaviors of interest, without actually using the term "cyberbullying."	High school freshman n=1,606	survey	Yes or no questions about the specific behaviour. Example Please answer "yes" (1) if you sent such messages directly to another person, (2) if you posted such messages about another person in public places, (3) if you sent such messages about a person to other people, or (4) if you used communication technology in some other way hurt or embarrass another person.	Cyber victimization, perpetration and bully/victim	47% victimization, 35% perpetration
Wade & Beran (2011) Describe cyberbullying as bullying that occurs online	Ages 10, 11, 12 , 13 &15 n=529	Self-Report Questionnaire	140 Questions 8sections	cyberbullying: cybervictims, cyberbullies	21.9% victimization, 29.7% perpetration
Calvete et al. (2010). cyberbullying defined as "an aggressive and deliberate behavior that is frequently repeated over time, carried out by a group or an individual using electronics and aimed at a victim who cannot defend him- or herself easily" (Smith, 2006), "deliberate and repeated harm performed with some kind of electronic text" (Patchin & Hinduja, 2006), "by means of cell phone, electronic mail, Internet chats, and online spaces such as MySpace, Facebook, and personal blogs" (Smith, 2006, as cited in Cavete et. al., 2010, p. 161)	Ages 12-17 years n=1431	Cyberbullying Questionnaire	16-item Cyberbullying Questionnaire describe 16 forms of cyberbullying Scale 0=never 1=sometimes 2=often	Perpetration Victimization	44.1% perpetration: 30.1% victimization:

Cyberbullying: Defining our future norms

Study and definition	Participants	Instrument	Psychometric properties	Roles	Prevalence
Ybarra, Boyd, Korchmaros, Openheim (2011) We are not talking about times when two young people of about the same strength fight or tease each other. We are asking about things that: Are repeated (happen more than once) Happen over time (more than just 1 day) Are between people of different power or strength—this might be physically stronger, socially more popular, or some other type of strength. These things can happen anywhere, like at school, online, via text messaging, at home, or other places young people hang out. In the last 12 months, how often have others bullied you by doing or saying the following things to you? (p. 55)	Ages 6-17 n=1,200	Two “mini-surveys” conducted online January 2010 & March 2010	four different forms of the survey The definition+word “bully” form The definition-only form The “bully”-only form final form presented neither the definition nor the word:	cybervictims	10% victimization
We say a young person is being bullied when someone repeatedly says or does mean or nasty things to them. Examples include being teased repeatedly or having nasty or cruel things said; being hit, kicked, or pushed around; being excluded or left out; or having rumors spread.(p. 55)					
In the last 12 months, how often have others bullied you by doing or saying the following things to you?” These things can happen anywhere, like at school, online, via text messaging, at home, or other places young people hang out. (p. 55)					
“In the last 12 months, how often have others done or said the following things to you? These things can happen anywhere, like at school, online, via text messaging, at home, or other places young people hang out. (p. 55)					

References

- Aboujaoude, E. (2011). *Virtually you: The dangerous powers of the e-personality*. New York, NY: W.W. Norton.
- American Psychological Association. (2004, July). APA resolution on bullying among children and youth. Washington, DC: American Psychological Association.
- Bayraktar, F., Machackova, H., Dedkova, L., Cerna, A., & Ševčíková, A. (2015). Cyberbullying. *Journal of Interpersonal Violence*, 30(18), 3192-3216. doi:10.1177/0886260514555006
- Beckerman, L., & Nocero, J. (2003). High-tech student hate mail. *The Education Digest*, 68(6), 37-40.
- Belsey, B. (2007). Cyberbullying: A real and growing threat. *ATA Magazine*, 88(1), 14-18, 20-21. Retrieved from <https://www.teachers.ab.ca/Publications/ATA%20Magazine/Volume%2088/Number%201/Articles/Pages/Cyberbullying.aspx>
- Beran, T., & Li, Q. (2005). Cyber-harassment: A study of new method for an old behavior. *Journal of Educational Computing Research*, 32, 265-277. Retrieved from <https://doi.org/10.2190/8YQM-B04H-PG4D-BLLH>
- Bullying and Cyberbullying (2016, June 16). Retrieved from <http://www.rcmp-grc.gc.ca/cycp-cpcj/bull-inti/index-eng.htm>

- Canada Department of Justice. (2013). *Government Introduces Legislation to Crack Down on Cyberbullying* [Online]. Retrieved from www.justice.gc.ca/eng/news-nouv/nr-cp/2013/doc_32994.html
- Cappadocia, M. C., Craig, W. M., & Pepler, D. (2013). Cyberbullying. *Canadian Journal of School Psychology, 28*(2), 171-192.
doi:10.1177/0829573513491212
- Calvete, E., Orue, I., Estevez, A., Villardon, L., & Padilla, P. (2010). Cyberbullying in adolescents: Modalities and aggressors' profile. *Computers in Human Behavior, 26*(5), 1128-1135. doi:10.1016/j.chb.2010.03.017
- Espelage, D. L., Low, S., & Rue, D. L. (2012). Relations between peer victimization subtypes, family violence, and psychological outcomes during early adolescence. *Psychology of Violence, 2*(4), 313-324. doi:10.1037/a0027386
- Furlong M.J, Sharkey J.D, Bates M.P, Smith D.C. (2004). An examination of the reliability, data screening procedures, and extreme response patterns for the Youth Risk Behavior Surveillance Survey. *Journal of School Violence, 3*, 109–130. Retrieved from http://dx.doi.org/10.1300/J202v03n02_07
- Government of Alberta. (2012). “Bill 3: Education Act.” Retrieved March 29, 2017 from http://www.assembly.ab.ca/ISYS/LADDAR_files/docs/bills/bill/legislature_28/session_1/20120523_bill-003.pdf

- Government of Ontario. (2012). "Bill 13: An Act to Amend the Education Act with Respect to Bullying and Other Matters." Retrieved March 28, 2017 from <http://www.ontla.on.ca>
- Heirman, W., & Walrave, M. (2008). Assessing concerns and issues about the mediation of technology in cyberbullying. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 2(2), article 1. Retrieved from <http://cyberpsychology.eu/view.php?cisloclanku=2008111401&article=1>
- Hinduja, S., & Patchin, J. W. (2007). Offline consequences of Online Victimization: School violence and delinquency. *Journal of School Violence*, 6, 89–112. doi:10.1300/J202v06n03_06
- Hinduja, S., & Patchin, J. W. (2009). *Bullying beyond the schoolyard: Preventing and responding to cyberbullying*. Thousand Oaks, CA: Corwin Press.
- Hinduja, S., & Patchin, J. (2010). Bullying, cyberbullying, and suicide. *Archives of Suicide Research*, 14(3), 206-221. doi:10.1080/13811118.2010.494133
- Hinduja, S., & Patchin, J. W. (2013, January). *State cyberbullying laws: A brief review of state cyberbullying laws and policies*. Retrieved from http://www.cyberbullying.us/Bullying_and_Cyberbullying_Laws.pdf
- Li, Q. (2007). New bottle but old wine: A research of cyberbullying in schools. *Computers in Human Behavior*, 23(4), 1777-1791. doi:10.1016/j.chb.2005.10.005

- Juvonen, J., & Gross, E. F. (2008). Extending the school grounds?: Bullying experiences in cyberspace. *Journal of School Health, 78*(9), 496-505.
doi:10.1111/j.1746-1561.2008.00335.x
- Kimura, M., Hjelmberg, J. V. B., Gardner, J. P., Bathum, L., Brimacombe, M., Lu, X. B. and Christensen, K. (2008). Telomere length and mortality: A study of leukocytes in elderly Danish twins. *American Journal of Epidemiology, 167*, 799–806.
- Kowalski, R. M., Limber, S. P., & Agatston, P. W. (2008). What is cyber bullying? In *Cyber Bullying: The new moral frontier* (pp. 41-66).
doi: 10.1002/9780470694176.ch3
- Kowalski, R. M., & Limber, S. P. (2007). Electronic bullying among middle school students. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine, 41*(6), 22.
- Liu, J., & Graves, N. (2011). Childhood bullying: A review of constructs, concepts, and nursing implications. *Public Health Nursing, 28*(6), 556-568.
doi:10.1111/j.1525-1446.2011.00972.x
- MacKay, A. W. (2012). Respectful and responsible relationships: There's no app for that. In Nova Scotia Task Force on Bullying and Cyberbullying (Ed.), *The report on the Nova Scotia Task Force on bullying and cyberbullying*.
Halifax, NS: Government of Nova Scotia.

- Marr, N., & Field, T. (2001). *Bullycide: Death at playtime*. Didcot, Oxfordshire: Success Unlimited.
- Mitchell, K. J., & Ybarra, M. L. (2007). Online behavior of youth who engage in self-harm provides clues for preventive intervention. *Preventive Medicine*, 45(5), 392.
- Mitchell, P. J. (2012). *The limits of anti-bullying legislation a cross-Canada assessment of what legislation can--and can't--do*. Ottawa, ON: Institute of Marriage and Family Canada. Retrieved from <https://www.imfcanada.org/sites/default/files/IMFCPublicationMay2012FINAL-WEB.pdf>
- Morris, M. C., Compas, B. E., & Garber, J. (2012). Relations among posttraumatic stress disorder, comorbid major depression, and HPA function: A systematic review and meta-analysis. *Clinical Psychology Review*, 32(4), 301. doi:10.1016/j.cpr.2012.02.002
- Nova Scotia. (2013). *CyberScan Investigation Unit*. Halifax, NS: Department of Justice.
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Oxford, UK; Cambridge, USA: Oxford, UK: Blackwell.

- Olweus, D. (2005). A useful evaluation design, and effects of the Olweus bullying prevention program. *Psychology, Crime & Law*, 11(4), 389-402.
doi:10.1080/10683160500255471
- Patchin, J. W., & Hinduja, S. (2006). Bullies move beyond the schoolyard: A preliminary look and cyberbullying. *Youth Violence and Juvenile Justice*, 4, 148–169. doi:10.1177/1541204006286288
- Patchin, J. W., & Hinduja, S. (2010). Cyberbullying and self-esteem. *Journal of School Health*, 80(12), 614-621. doi:10.1111/j.1746-1561.2010.00548.x
- Pepler, D.J., Craig, W.M., Ziegler, S. & Charach, A. (1993). A school-based antibullying intervention: Preliminary evaluation. In D. Tattum (Ed.), *Understanding and managing bullying* (pp. 76-91). London, UK: Heinemann.
- Reid, P., Monsen, J., & Rivers, I. (2004). Psychology's contribution to understanding and managing bullying within schools. *Educational Psychology in Practice*, 20(3), 241-258. doi:10.1080/0266736042000251817
- Roberto, A. J., Eden, J., Savage, M. W., Ramos-Salazar, L., & Deiss, D. M. (2014). Prevalence and predictors of cyberbullying perpetration by high school seniors. *Communication Quarterly*, 62(1), 97-114.
doi:10.1080/01463373.2013.860906

- Saskatchewan Ministry of Education. (2013). Anti-Bullying. Retrieved from <http://www.education.gov.sk.ca/Anti-Bullying>.
- Shaw, F. (2016). “Bitch I said hi”: The bye Felipe campaign and discursive activism in mobile dating apps. *Social Media + Society*, 2(4).
doi:10.1177/2056305116672889
- Smith, P. K., Del Barrio., C., Tokunaga, R. S. (2013). Definitions of bullying and cyberbullying: How useful are the terms. In S. Bauman, D. Cross & J. I. Walker (Eds.), *Principles of cyberbullying research: Definitions, measures and methodology* (pp. 26–40). New York, NY: Routledge.
- Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S., & Tippett, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *Journal of Child Psychology and Psychiatry*, 49(4), 376-385. doi:10.1111/j.1469-7610.2007.01846.x
- Smith, P. K., Mahdavi, J., Carvalho, M., & Tippett, N. (2006). An investigation into cyberbullying, its forms, awareness and impact, and the relationship between age and gender in cyberbullying. *Research Brief No. RBX03-06*. London, UK: Department of Education.
- Smith, P. (2012). Cyberbullying: Challenges and opportunities for a research program: A response to Olweus. *European Journal of Developmental Psychology*, 9(5), 553-558. doi:10.1080/17405629.2012.689821

- Solberg, M. E., & Olweus, D. (2003). Prevalence estimation of school bullying with the Olweus bully victim questionnaire. *Aggressive Behavior, 29*(3), 239-268. doi:10.1002/ab.10047
- Steeves, V. (2014). MediaSmarts, Issuing body, & Canadian Electronic Library, distributor. *Sexuality and romantic relationships in the digital age (Young Canadians in a wired world; phase III)*. Ottawa, ON: MediaSmarts.
- Strom, P. S., Strom, R. D., Wingate, J. J., Kraska, M. F., & Beckert, T. E. (2012). Cyberbullying: Assessment of student experience for continuous improvement planning. *NASSP Bulletin, 96*(2), 137-153. doi:10.1177/0192636512443281
- Sullivan, K., Cleary, M., & Sullivan, G. (2005). *Bullying in secondary schools: What it looks like and how to manage it*. London, UK: SAGE Publications Ltd. doi: 10.4135/9781446215296
- Teicher, M., Samson, J., Sheu, Y., Polcari, A., & Mcgreenery, C. (2010). Hurtful words: Association of exposure to peer verbal abuse with elevated psychiatric symptom scores and corpus callosum abnormalities. *The American Journal of Psychiatry, 167*(12), 1464-71. doi:10.1176/appi.ajp.2010.10010030.
- Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior, 26*, 277-287.

- Van der Harst, P., de Boer, R. A., Samani, N. J., Wong, L.S., Huizen, J., Codd, V. and van Veldhuisen, D. J. (2010). Telomere length and outcome in heart failure. *Annals of Medicine*, 42, 36–44.
- Vaillancourt, T., Hymel, S., & McDougall, P. (2013). The biological underpinnings of peer victimization: Understanding why and how the effects of bullying can last a lifetime. *Theory into Practice*, 52(4), 241-248.
doi:10.1080/00405841.2013.829726
- Walton., D. (2012, December 12). Anti-bullying laws becoming part of community standards. *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/news/national/anti-bullying-laws-becoming-part-of-community-standards/article6289116/#dashboard/follows/>
- Wade, A., & Beran, T. (2011). Cyberbullying: The new era of bullying. *Canadian Journal of School Psychology*, 26(1), 44-61. doi:10.1177/0829573510396318
- West, C. L., & Canadian, E. L. (2014). *#CyberMisogyny: Using and strengthening Canadian legal responses to gendered hate and harassment online*. Vancouver, BC: West Coast LEAF.
- Willard, N. (2006). Cyberbullying. *Education Week*, 25(30), 41.
- Williams, K. R., & Guerra, N. G. (2007). Prevalence and predictors of internet bullying. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, 41(6), 14-21.

- Wysocki, D., & Childers, C. (2011). "Let my fingers do the talking": Sexting and infidelity in cyberspace. *Sexuality & Culture: An Interdisciplinary Quarterly*, 15(3), 217-239. doi:10.1007/s12119-011-9091-4
- Ybarra, M. L., Boyd, D., Korchmaros, J. D., & Oppenheim, J. K. (2012). Defining and measuring cyberbullying within the larger context of bullying victimization. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, 51(1), 53.
doi:10.1016/j.jadohealth.2011.12.031
- Ybarra, M. L., & Mitchell, K. J. (2004). Online aggressor/targets, aggressors, and targets: A comparison of associated youth characteristics. *Journal of Child Psychology and Psychiatry*, 45(7), 1308-1316. doi:10.1111/j.1469-7610.2004.00328.x
- Zacchilli, T., & Valerio, C. (2011). The knowledge and prevalence of cyberbullying in a college sample. *Journal of Scientific Psychology*, 5, 12-23.