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Cyber-Bullying Prevention:
Program Assessment and Implications

BY

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Cyber-Bullying Prevention:
Program Assessment and Implications

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Abstract

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Alexander Olivas

Youth cyber-bullying is not a phenomenon exclusive to the school environment. Students engage in this behavior 24 hours a day/7 days a week in various forms of technology creating harm with unlimited boundaries. Prevention programs to combat cyber-bullying are needed in order to reduce this harm given the steady rise of technology use among youth. The purpose of this study is to conduct a systematic search and qualitative analysis of current evidence-based or researched informed programs in the United States aimed to address youth cyber-bullying. A predetermined inclusion and exclusion criteria was used to identify relevant programs. Program information and evaluation findings from secondary data were collected and analyzed using a qualitative analysis procedure. Overall, a total of nine programs met the inclusion/exclusion criteria of this study. All nine of the identified programs were classified as traditional bullying programs with cyber-bullying content. Five promising programs were also identified in the study. Overviews of the programs are discussed as well as findings about their overall effectiveness. Implications for future research and recommendations for programming are provided with the intent of bridging the gap between science and practice in the field of cyber-bullying prevention.

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Table of Contents

Chapter 1: Introduction

Introduction 1
Prevalence 3
Problem Statement 4
Purpose Statement 5
Significance Statement 6
Conclusion 6

Chapter 2: Review of the Literature

Introduction 8
Definition of Key Terms 9
Traditional Bullying Context 10
Cyber-Bullying Context 11
Risk Factors for Bullying and Cyber-Bullying 13
Health Consequences – Connection between Traditional Bullying and Cyber Bullying 16
Traditional Bullying – Health Impact on Victims 16
Traditional Bullying – Health Impact on Perpetrators 18
Traditional Bullying – Health Impact on Bully-Victims 19
Traditional Bullying – School Attendance and Performance 19
Conclusion 20

Chapter 3: Methods

Introduction 22
Search 22
Inclusion Criteria 24
Exclusion Criteria 24
Data Analysis 27
- Part 1: General Overview 27
- Part 2: Program Effectiveness 29

Chapter 4: Findings

Introduction 31
Program Description 31
Promising Programs 60
Results Summary 68
Research Questions 70
Program Effectiveness 74
Conclusion 78

Chapter 5: Discussion

Introduction 79
Summary of Study 80
Recommendations 83
Implications for Public Health 87
Conclusion 89

References 90

List of Tables

Table 1: Search Terms 23
Table 2: Inclusion/Exclusion Criteria 25
Table 3: Search Summary 26
Table 4: Program Characteristics 33
Table 5: Evaluation Summaries 37
Table 6: Promising Programs 61
Table 7: Summary of Intervention Effectiveness by Research Design 74
Table 8: Summary of Intervention Effectiveness by School Level Implementation 75
Table 9: Summary of Intervention Effectiveness by Prevention Approach 76

Chapter 1: Introduction

Bullying among youth is a major public health issue across the globe, particularly in the US. Millions of children participate or witness bullying every day ("Bullying Statistics 2010," 2010). Most researchers and practitioners agree that “a person is bullied when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other persons, and he or she has difficulty defending him or herself.” (D Olweus, 1993).

Although bullying is often viewed as an inevitable part of growing up, it has only become a growing public health issue in the US in recent years. In a 2001 study conducted by the Kaiser Family Foundation regarding youth ages 8-15 years of age, a majority of the respondents indicated that they consider bullying as a greater problem than racism, peer pressure to have sex, or pressure to use alcohol or other drugs (CNN, 2001). That same year the Centers for Disease Control and Prevention (CDC) along with Kaiser Permanente published a study on how adverse childhood experiences affect the health of adults. The study concluded that observing all kinds of abuse and violence in childhood was linked to other risky behaviors and outcomes such as smoking, alcohol abuse, depression, and generally poorer heath in adulthood. The study’s findings further expanded upon the work of Kempe and colleagues (1962) who studied children that exhibited evidence of possible trauma and/or neglect. In their study, they concluded that “battered children become battered adults” (Kempe, Silverman, Steele, Droegemueller, & Silver, 1962) and recognized the fact that some people are battered far worse than others. Capturing this reality in current times, there

exists the need for public health to intervene and help “neutralize this battering” (Forge, 2010).

In recent years, a new form of bullying has emerged placing the subject of bullying in the forefront of media attention and legislative assemblies. Cyber-bullying, defined as the “willful and repeated harm inflicted through the medium of electronic text…” (Patchin & Hinduja, 2006) has become a prevalent form of youth bullying. Cyber-bullying, also known as electronic aggression includes any type of harassment or bullying that occurs through some form of technology used by youth today. This broad definition of cyber-bullying will be the definition used in this thesis as it includes communication through email, chat rooms, listservs and instant messaging transmitted on computers, cell phones, and other electronic devices. In addition, cyber-bullying can occur in public domain websites where children can post harmful pictures or videos. (Hertz & David-Ferdon, 2008). With the advent of new communication technologies being practiced by today’s youth, this new form of aggression, abuse, and harassment has become a serious issue. Considering the fact that 93% of teens today in the US are active users of the Internet and 75% own a cell phone (Lenhart, 2011), there definitely exists fertile ground in which harm can be inflicted in the electronic environment through cyber-bullying.

As cyber-bullying has become a very dangerous form of bullying, its unique characteristics make it a challenging problem to measure and address through programming. Not only is the behavior often overlooked but it is not reported and addressed in a timely manner resulting in many unfortunate situations like teen suicide that involve victims of the bullying act (Juvonen & Gross, 2008). Technology users are

able to send quick and anonymous messages and post disturbing images to potentially large audiences, all of which can be extremely cruel and hurtful. Once transmitted, these messages are permanent and often cannot be removed. Recently, cyber-bullying has played a role in several high profile suicides, particularly among Lesbian, Gay, Bisexual, and Transgender ("LGBT") youth. These devastating outcomes have forced our schools and communities to look for solutions to prevent bullying not only within the physical school environment, but the online environment as well. As communications technology continues to ramp up, there becomes a dire need to develop and implement prevention programs to address cyber-bullying. Accordingly, proactive efforts are needed to prevent cyber-bullying with the intent of protecting the health of today's youth.

Prevalence

A significant amount of children in the US experience bullying of some sort as a victim, a bully, or a bully-victim (children who have bullied others and been bullied themselves). A review of 17 school-based bullying studies from 1999 to 2006 in the US found that, on average, 18% of students reported bullying another child and 22% reported being bullied (Cook, Willilmas, Guerra, Kim, & Sadek, 2010). These frequencies coincide with national data recently compiled in a survey conducted by CDC which indicated that approximately 20% of high school students reported being bullied on school property during a 12 month period prior to taking the survey (Centers for Disease Control and Prevention, 2010).

Estimates of the prevalence of cyber bullying, on the other hand, are inconsistent. For example, in one national study 6% of youth in grades 6-12 reported that they were cyber bullied during the 2008-2009 school year. Among those reporting

to have been cyber-bullied, 43% were harassed online by known peers and 57% by people they met online and did not know in person (National Center for Education Statistics, 2011). On the other hand, other prevalence studies of cyber-bullying youth victimization yielded estimates as high as 30% in a 2006 study covering 12,000 adolescents from over 80 schools (Patchin & Hinduja, 2006). While the percentage of youth reporting to be victims of cyber-bullying doubled between the periods of 2000 to 2005 (Ybarra, Mitchell, Wolak, & Finkelhor, 2006), these statistics can be misleading because the availability and use of the Internet among youth has become more widespread during that specific time period. Adding to the variability of the rates, Dooley and peers indicated that such differences may be largely due to a lack of theoretical clarification, standardized definition and measurement of the cyber-bullying (Dooley, Pyżalski, & Cross, 2009). Despite the variation in statistics about cyber-bullying prevalence, it is clear that this is an issue of great importance to the well-being of today's youth as the use of electronic devices remain a constant and significant part of their day to day lives.

Problem Statement

In the US alone, there have been documented efforts to address bullying on school campuses. Some of the programs like the Olewus Bullying Prevention Program (D Olweus, 1991) have had some positive effects on preventing bullying behaviors in school settings, mostly in international settings. Most bullying prevention programs, however, have not achieved such positive results. Further, with regards to cyber-bullying, there is a lack of evidence on what works to prevent youth from bullying others in the electronic environment. Many of the reasons for this lack of evidence is the fact

that cyber-bullying is not only a new phenomenon but a complex one at that. What currently exist in the literature are studies about various efforts to understand cyber-bullying but none bring all of the information into one unified source. Programming information to prevent such behavior is also a challenge to find. Practitioners not only find it difficult to identify such programs, but may also find it difficult to compare them for purposes of possible implementation within their own schools and communities. Therefore, it is essential to develop and evaluate cyber-bullying prevention programs in order to determine their effect in changing children's online behavior.

Purpose Statement

The purpose of this thesis is to provide an overview of current cyber-bullying programs to critically examine the evidence supporting the effectiveness, or lack thereof, of these programs. Results from this thesis will provide recommendations for best practices and future steps for cyber-bullying prevention. In an effort to identify effective bullying prevention methods, this thesis will consist of a literature review of various cyber-bullying prevention programs with the goal of addressing the following research questions:

- What are the evidenced-based and research-informed programs currently being implemented to prevent cyber-bullying?
- Where (schools, communities, youth groups, etc...) are such programs being practiced?
- What program components do they share that makes them effective to prevent cyber-bullying?

Significance Statement

Program development for anti-bullying initiatives parallels national political directions. As attention towards the problem becomes more widespread, states are enacting laws to address bullying. Currently, 50 states have instituted anti-bullying legislation. Additionally, 36 states have provisions that prohibit cyber bullying, and 13 states grant schools the authority to address off-campus bullying or aggressive behavior that can lead to hostile school environments (Education, 2011). Recognizing the fact that many schools and communities are taking bullying prevention efforts into their own hands, it is ever more important to identify effective anti-bullying programs. Cyber-bullying in particular has emerged to be a new and particularly complex form of bullying in recent years. Media coverage of sensational cases involving youth to youth cyber-bullying has caused great concern among the US. This reality has led to the conclusion that bullying prevention programs must address this behavior, if they are to be directly relevant to children's lives. Identification of effective programs that address cyber-bullying will enable parents, schools, and communities to create effective and sustainable prevention approaches that may lead to positive online behavior among school aged children in the US.

Conclusion

Technology use among youth in developed countries like the US is at an all-time high. Children routinely use cell phones, computers, and other digital devices in order to learn, communicate, and play. This trend toward technology use among youth has unfortunately led to cyber-bullying. Although prevalence of youth cyber-bullying is

uncertain at this time, there is no denying that prevention efforts are needed in order to reduce its harm. In recent decades, prevention of traditional bullying has been addressed in the US through a combination of programs and legislation. Attempts to address cyber-bullying, on the other hand, are at an early stage as programs, in particular, have been difficult to identify and compare. While infancy of this phenomenon is acknowledged, it is certainly not indicative of the grim effects it can produce on today's youth. Accordingly, clear and concise ways to prevent cyber-bullying are needed. Answers to the research questions of this thesis will hopefully reveal insight into various programs' impact on cyber-bullying prevention and lead to discussion about next steps to undertake in the field.

Chapter 2: Review of the Literature

Introduction

Cyber-bullying among youth is a growing public health issue as youth continue to use technology tools to communicate with one another. Literature on the subject of cyber-bullying is relatively new and the issue has been exacerbated due to the emergence of social media outlets such as Facebook, MySpace, and Twitter. Hinduja and Patchin (2008) acknowledge that cyber-bullying is receiving less attention and research then traditional forms of bullying, however this may be due to the unique context in which it occurs.(Hinduja & Patchin, 2008). What exists in terms of published research are cyber- bullying studies from Europe, Australia, North America and Asia (Ang & Goh, 2010). As the complexities of this problem are revealed, it is important to better understand ways to reduce and prevent cyber-bullying before it occurs. Accordingly, the development and evaluation of effective prevention programs are needed in order to build a better evidence-base within the field. Furthermore, successful dissemination and implementation of these evidence-based or research-informed programs are necessary in order to combat the harmful effects of cyber-bullying on a larger scale.

This chapter will provide definitions of key terminology that will be used throughout this thesis as well as go into discussion about the connection between bullying/cyber-bullying and public health. Findings from literature in these areas will be provided to highlight the similarities and differences between the two as well as demonstrate the difficulties associated with establishing cyber-bullying programs.

Definition of Key Terms

The following section provides an orientation to common terminology in the field of bullying and cyber-bullying prevention. These terms will be used throughout the thesis.

- *Bullying:* Although various definitions of bullying exist in the scientific literature, the definition that will be used will be the one provided by bullying prevention pioneer Dan Olweus from Norway. According to Olweus, "a student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other students." These negative actions include aggressive behavior or intentional harm characterized by an imbalance of power (D. Olweus, 1996).
- *Cyber-bullying:* Any type of harassment or bullying that occurs through some form of technology used by youth today.
- *Direct bullying:* Physical or verbal acts which can include hitting, pushing, and name calling that occurs directly in front of a child (Services[3], 2010).
- *Indirect bullying*: Socially aggressive yet less apparent behaviors such as social exclusion or rumor spreading (Services[3], 2010).
- *Bullies:* A youth or a group of youths who bullies or perpetrates others perceived to be of lesser power.
- *Bully-Victims:* People who are bullied and also participate in bullying others.
- *Victims*: People who are harmed (physically, emotionally, socially), injured, or killed as a result of bullying.

- *Bystanders*: People who are present during bullying incidences - they include students, teachers, parents, and other individuals.
- *Rigorously evaluated:* Evidence of deterrent effect with a strong research design, sustained effect, and multiple site replication (Boulder, 2011).
- *Researched informed*: Distinction given to programs developed using science and theory.
- *Evidence based:* Distinction given to programs whose evaluations were peer reviewed by experts in the field and whose findings yielded the intended positive results of the program where such results were attributable to the programs and not other extraneous factors or events (Cooney, Huser, Small, & O'Connor, 2007).
- *Universal*: Prevention strategies offered to full populations (O'Connell ME, Boat, & Warner, 2009).
- *Indicated*: Prevention strategies offered to individuals who are identified as being marginally at risk but not officially diagnosed (O'Connell ME, et al., 2009).
- *Selective:* Prevention strategies offered to individuals who are identified and diagnosed as being high risk (O'Connell ME, et al., 2009).

Traditional Bullying Context

While traditional and cyber-bullying differ by means and context, there is significant overlap in the effects on youth. Victims, perpetrators, bully-victims and bystanders report similar negative outcomes related to bullying incidents. Research focused specifically on bullying perpetrators has looked at how they function socially among their peers. Several studies conclude that youth who bully others are often seen

as being socially connected especially when compared to victims who often have limited social interactions and only a small circle of few friends. These studies suggest that perpetrators often have high self-esteem and report ease in making friends (Nudo, 2004) and contradicts studies which indicate that bullies sometimes have lower self-esteem (O'Moore & Kirkham, 2001) and are unpopular (Rodkin & Berger, 2008). Accordingly, it is difficult to predict bullying patterns in youth whom should receive targeted interventions, so often the focus on victim empowerment is viewed as the key to prevent such behavior. Salmivalli and colleagues (1996), however, concluded differently. In a study involving 573 sixth-grade Finnish children, they determined that bullying can be regarded as a group phenomenon in which most children have a defined participant role in the act whether it is a bully, a reinforcer, an assistant, a defender, or an outsider. This finding suggests that interventions should not only be directed toward bullies and victims but towards the whole group instead (Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996).

Cyber-Bullying Context

The distinct characteristics of cyber-bullying make it a very challenging problem to address. As indicated earlier, cyber-bullying occurs through technology tools which include the Internet, computers, cell phones, and other electronic mediums. Specifically, cyber-bullying occurs in various forms including emails, text messages, chat room messages, and harmful posts posted online via social media, gaming and voting sites. These mediums make it extremely difficult to identify when cyber-bullying occurs and by whom. Perceived online anonymity plus the safety and security of being behind a computer screen allows children to act aggressively toward one another

through these mediums. In addition, the use of fictitious email accounts has also made it difficult to identify cyber-bullying offenders (Hinduja & Patchin, 2008). Accordingly, the quick and anonymous spreading of messages and images to potentially large audiences makes cyber-bullying extremely hurtful inflicting a harmful exposure not typically inflicted by traditional bullying. Furthermore, cyber-bullying is difficult to measure. Inflicted harm can be huge understanding the fact that online messages can be posted over a long time and exposed to a large audience over a short period of time. Victims, in turn, may experience a prolonged sense of helplessness by revisiting cyber-bullying incidents over time (K. Brown, Jackson, & Casidy, 2006). Another problem with measurements is that children who experience cyber-bullying often do not report it for fear of having their computers or cell phones taken away from them (Qing Li, 2006). In a 2009 study, 50% of youth indicated that they would not report cyber-bullying to school personnel and only 74% to friends and 57% to their parents, respectively (Cassidy, Jackson, & Brown, 2009). All of these characteristics of cyber-bullying make it challenging to address through prevention programs.

Cyber bullying typically occurs outside of school (Agatston, Kowalski, & Limber, 2007) making it difficult to determine who - schools, communities, parents - should have oversight of addressing such behaviors. The window of time in which cyber-bullying can occur is larger than traditional bullying as children can have access to technological tools 24 hours a day, seven days a week. *USA Today* writer Greg Toppo writes "vulnerable children have virtually no refuge from harassment. It's a non-stop type of harassment and it creates a sense of helplessness." (Toppo, 2006). This makes supervision of the behavior a big challenge to undertake. Compounding the problem

even further is the fact that there is not a consistent risk-profile for cyber-bullying victimization and perpetration. A youth who engages in cyber-bullying may be a student leader or conversely an isolated loner. This youth may also be known or unknown to the victim and either liked or disliked by his/her peer groups. The motivations to bully online may vary from child to child as they may include the need for peer acceptance, jealousy, revenge, and entertainment (Sanders, Smith, & Antoniuis).

Risk Factors for Bullying and Cyber-Bullying

Children exhibit certain signs and symptoms that often make them vulnerable to bullying victimization and perpetration. Studies have shown that the risk factors associated with victimization include psychosomatic complaints, anxiety and depression, as well as lowered self-esteem, loneliness isolation, impaired concentration, fear of going to school and truancy among primary and secondary school children (Kaltiala-Heino, RimpelÄ, Rantanen, & RimpelÄ, 2000). It is unclear about the directionality of these factors as it relates to bullying but there is definite linkage between these variables based upon a number of studies.

Risk factors associated with cyber-bullying have been studied in recent years by Drs. Sameer Hinjuja, Justin Patchin, Michelle Ybarra, and Illene Berson, all of whom have conducted a number of studies involving the subject of cyber-bullying and youth. Findings from Hinjuja and Patchin (2008) highlight the risk factors specifically associated with cyber-bullying. They found a significant link between cyber-bullying and traditional bullying in that youth who report victimization and perpetration of traditional bullying are also more likely to report victimization and perpetration of cyber-bullying. In adjusted logical regression models, youth who reported perpetration of traditional

bullying were more than five times as likely to perpetrate cyber-bullying as those who did not perpetrate bullying in either context.

As for the risk factors associated with cyber-bullying, this study found that youth who were executing the victimization online were also more likely to be older, spend more time online, have behavior problems at school, get into physical fights with peers, and use substances more often than youth who report no cyber-bullying victimization. With the exception of age, perpetrators of cyber-bullying shared the same risk factors as victims. Interesting, and unlike traditional bullying, Hinduja and Patchin found that gender was not a significant predictor of cyber-bullying victimization and perpetration. The gender finding from the study contradicts the prior literature that indicates that boys are more likely than girls to be involved in traditional bullying (Kumpulainen & Räsänen, 2000). Additionally, it contradicts the prior literature that supports the notion that girls are more likely to participate in indirect bullying (Baldry, 2007) compared to boys.

Ybarra and colleagues (2006) surveyed 1,500 Internet-using youth between the ages of 10 and 17 years old. The findings revealed similar results to Hinduja and Patchin (2008) in that youth who perpetrated cyber-bullying were more than three times as likely to also report cyber-bullying victimization. In addition, being a victim of youth violence, having social problems, and participating in online activities such as blogging, instant messaging, and chat room use increased the odds of children being cyber-bullied. Such risk factors bring to light specific psychosocial characteristics and online behaviors that lead to cyber bullying victimization.

Berson and colleagues conducted an online study in the US in 1999 that assessed the level of Internet use and involvement in varied at-risk online behaviors by

adolescent girls between the ages 12 and 18 (Berson & Berson, 2002). The behaviors that were identified in the study included filling out questionnaires or forms online and giving out personal information to unknown sources. Additionally, revealing similar information to others they have met online and sharing pictures of themselves to such individuals were also reported as risky behaviors in the study. Finally, the study found a correlation between the amount of time spent on cyber-space and the respondents' probability of engaging in risky online behaviors. All of these behaviors contribute to cyber-bullying victimization.

Other studies pertaining to cyber-bullying risk factors have focused on dysfunctional attributes of both victims and perpetrators. In 2008, a research study conducted in Finland among 2,215 teens aged 13-16 years found that cyber-bullying victims were often children from broken homes and have emotional and behavior problems. In addition, cyber-bullying victimization was associated with having psychosomatic problems such as headaches, recurring abdominal pain, and sleeping problems. Finally, the study revealed that cyber-bullying victims often did not feel safe at school and felt uncared for by their teachers (Sourander et al., 2010). On the other hand, the same Finnish study also indicated that cyber-bullies often reported to have the same emotional and behavioral problems as victims. Like the victims in the study, perpetrators also experienced a high level of headaches and felt unsafe and uncared for in school. What differentiated cyber-bullying perpetrators from victims is that often perpetrators exhibited a high level of conduct problems, hyperactivity, frequent smoking, drunkenness, and low pro-social behavior traits including low affective empathy traits (Sourander, et al., 2010) (D. Farrington & Baldry, 2010).

Health Consequences – Connections between Traditional Bullying and Cyber-Bullying

Literature on the health consequences of cyber-bullying among youth is emerging as researchers are just beginning to address this very complicated problem. While it is unknown if traditional bullying and cyber-bullying share the same health consequences, there is emerging evidence (see Hiduja & Patchin 2008) that these behaviors co-occur among youth perpetrators. Thus, the health consequences associated with traditional bullying may also be linked to the health consequences of cyber-bullying. Perpetrators, victims, and bully-victims often report a number of behavioral, emotional, and physical problems. Additionally, these problems lead to specific behavior patterns and poor school performance that contributes to adverse health conditions for all those exposed whether as victims, bullies, or bully-victims. These health conditions and behavior trends are discussed in the following sections.

Traditional Bullying - Health Impacts on Victims

There exists a robust amount of literature regarding the impact of traditional bullying on the overall well-being of victims. Studies show that traditional bullying is linked to victims' short and long term health outcomes that extend beyond youth and well into adulthood (Kim, Catalano, Haggerty, & Abbott, 2011). In fact, victims often report a higher risk of mental and emotional ailments including depression and anxiety, than their non-bullied peers. Studies have also shown that victims have more thoughts of suicide (Limber, 2002; D Olweus, 1993). More recently, Kim and Leventhal revealed that there are positive associations between all bullying types and suicidal risks among

children, with strongest risks in bully-victims, both in general populations and in populations with special needs – children with behavioral problems or of LGBT sexual orientation (Kim Young & Leventhal, 2008). These findings demonstrate a need to provide immediate counseling and mental health assistance to victims of bullying so that they can better cope with internalizing disorders such as anxiety and depression. Among female victims, there is evidence of linkage between victimization and internalizing disorders such as anxiety and depression that may contribute to the development of eating disorders. This evidence supports the notion that repetitive bullying victimization often precludes anxiety or depression especially among adolescent girls. (Bond, Carlin, Thomas, Rubin, & Patton, 2001).

Victims are also impacted emotionally from bullying. Particularly victims often suffer from low self-esteem and feel unwell (Limber, 2002). These problems are believed to be associated to insecurities that surface over time (D Olweus, 1993). Consequently, their relationships with others become strained as they tend to avoid new social situations and experience difficulty in trusting people (Dombeck, 2007). Physical health is also impacted by bullying. Victims report to have more health complaints than their non-bullied peers (Ferguson, 2007) as they have unexplained injuries, and often complain of headaches and stomach aches. At times, victims also report to have trouble sleeping (Services[1], 2011).

Traditional Bullying – Health Impacts on Perpetrators

Often, victims of bullying are targeted for health-related services; however, it is important to note that the health statuses of bullies are negatively impacted as well. The mental health and related behaviors of bullies reveal some disturbing findings.

Earlier studies report that bullying victims report feelings of depression and poor self esteem (Salmon, James, & Smith, 1998) while interpersonal relationships have also been reported to be affected in the long term by the act of bullying as a result of bullies' tendencies to have antisocial behavior (Pellegrini, Bartini, & Brooks, 1999). Later studies have shown that perpetrators have more specific negative mental disorders, most notably attention-deficit disorder, depression, and oppositional conduct disorder than their counterparts. Specifically, individuals who were bullied at elementary school exhibited such symptoms (Kumpulainen & Räsänen, 2000). Related studies contribute to the by-products of these findings as Weir concluded that bullies are indiscriminately aggressive toward teachers, parents, siblings, and peers. In addition, they dislike school, possess poor impulse control, and wish to dominate. Bullies are also physically and emotionally strong, crave social prestige, and are often insensitive to the feelings of others (Weir, 2001). Finally, with regards to related behavior problems, prior studies have indicated that bullies engage in frequent excessive drinking and other substance use more often than victims or bully-victims (Kaltiala-Heino, et al., 2000). Most recently, it has been reported that higher incidences of criminal convictions in adulthood are also associated with bullying perpetration during adolescence (D. P. Farrington & Ttofi, 2011; Services[4], 2010).

Traditional Bullying – Health Impact on Bully-Victims

Literature on bully-victims indicates that they are at most at risk of suffering from adverse health conditions among the groups involved in bullying. Research has shown that bully-victims, when compared to bullies or victims, have the greatest risk of depressive symptoms, anxiety, psychosomatic symptoms, eating disorders, and

recurring mental health problems (Kaltiala-Heino, et al., 2000). Specifically, bully-victims are reported to often have low self-esteem and have negative self image. One study found that bully-victims often perceive themselves as more troublesome, less intellectual, less physically attractive, more anxious, less popular, and unhappier than youth who only perpetrate bullying (O'Moore & Kirkham, 2001). Finally, similar to bullies, bully-victims are also more likely to be diagnosed by test administrators with attention-deficit disorder, depression, and oppositional conduct disorder (Kumpulainen & Räsänen, 2000). These health impacts that bullying and cyber-bullying have on children trickle to specific classroom outcomes that are discussed below.

Traditional Bullying - School Attendance and Performance

While there are limited studies currently describing the effects of cyber-bullying on school attendance and performance, there is documented evidence that these two forms of bullying overlap. Accordingly, the effects of school attendance and performance as it relates to traditional bullying would hold true for cyber-bullying if the later were measured. Literature surrounding the subject of traditional bullying with school attendance and performance indicates that victims of bullying often suffer from chronic absenteeism and reduced academic performance (Beale & Scott, 2001). Victims report that they at times stay home instead of going to school at least one day a month because of bullying (Foltz-Gray, 1996) and while at school they often avoid public areas such as restrooms for fear of being bullied (Hazler & Oliver, 1992). The chronic absenteeism contributes to victims not achieving their academic potential when compared to their non-bullied peers (McNamara B & F, 1997). Victims also report carrying weapons (i.e. guns or knives) to school more often than their non-bullied peers

(Brockenbough, Cornell, & Loper, 2002). These data support the notion - in terms of victimization - that fear for one's safety in school may result in skipping school, avoiding areas of school, or engaging in risky and illegal behaviors. Perpetrators, on the other hand, suffer academically as well for different reasons. Their behavior often leads to disciplinary actions such as suspension or expulsion, resulting in disruption of learning and subsequently reduced academic performance (Glew, Fan, Katon, Rivara, & Kernic, 2005). All of these outcomes regarding school attendance and performance can be possibly traced to cyber-bullying if the amount of cyber-bullying can be accurately measured.

Conclusion

There are many similarities and subtle differences between traditional bullying and cyber-bullying as similar risk factors, health outcomes, and related behaviors can be traced to both acts of violence. Although the subject of cyber-bullying is relatively new compared to traditional bullying, its seriousness is evidenced by a number of different factors. These factors include the potential harm that it can produce to today's youth and the difficulties in establishing the risk factors and motivators of both the perpetrators and the victims. Programs to address cyber-bullying need to be identified and further developed so that solutions in the short and long term can be provided to protect the health of today's youth. This thesis will build on the existing literature by examining the existing programs in the US that are aimed to provide these solutions. Findings from this thesis will be a synthesis of information that will hopefully guide practitioners to best practices in cyber-bullying prevention and shed light in identifying gaps needed to develop more effective programs.

Chapter 3: Methods

Introduction

The researcher conducted a systematic search for information about existing research-informed or evidence-based prevention programs that impact cyber-bullying behaviors and experiences. Various scholarly databases including PubMed, Medline, PsycInfo, ERIC, and Google Scholar were utilized to find articles containing information on cyber-bullying prevention programs in whole or in part (in connection with existing traditional bullying prevention programs). The researcher identified the programs either through peer reviewed journal articles or by reviewing the contents of systematic review articles looking for program details and evaluation findings.

Search

In order to conduct the search, the researcher utilized a number of steps. First, journal articles that described cyber-bullying prevention programs were sought for this search. A list of keywords was generated to include in the primary search terms of the search. These terms were then combined with secondary keywords considered 'evaluation based' to initiate the systematic search for cyber-bullying programs for this thesis. For example, the term "cyber-bullying" and "prevention" were entered simultaneously in order to retrieve articles relevant to the subject of cyber-bullying prevention. The list of the comprehensive set of the primary and secondary search terms used to find such cyber-bullying programs is provided in **Table 1** below:

Table 1: Search Terms

Primary Search Terms	Secondary Search Terms
Bully*	Program*
Bulli*	Prevention
Cyberbully*	Curriculum*
Cyberbulli*	Policy*
Electronic*	Intervention*
Violence	
Violent	
Aggress*	
Harass*	

***Note**: * represents the open truncation symbol used to retrieve words in articles that begin with the noted search terms. For example "bulli" can retrieve articles that contain the words "bullies" and "bullied" and "program*" can retrieve articles that contain the words "programming" or "programs".*

Second, the researcher retrieved and reviewed abstracts in order to determine if the articles met the inclusion/exclusion criteria specified below. If the articles met the inclusion/exclusion criteria below, the researcher then reviewed them further to determine if relevant information could be pulled from such articles to include as findings for this thesis. These findings included identified programs developed for schools, after-school programs, faith-based organizations, and other youth groups such as the YMCA, 4-H, Hi-Y and Boys/Girls Scouts of America. In addition, "promising

programs" were also discovered in the search and retrieved. These programs were determined to have been evaluated but information about their individual evaluations did not fully meet the criteria standards of the thesis.

Inclusion Criteria

The researcher reviewed and retained the study articles only if the study articles (a) evaluated an intervention presently intended to prevent cyber-bullying among youth or reported about an intervention presently intended to prevent cyber-bullying among youth (i.e. contains a cyber-bullying component); (b) reported about an intervention that was conducted in the US and written in English; and (c) reported about an intervention that completed after the year 2000. The researcher included these last inclusion criteria in order to identify current programs. All of the programs were retrieved from various scholarly databases and listed as either journal articles found in academic journals or published dissertations.

Exclusion Criteria

Journal articles that only described cyber-bullying risks or protective factors were excluded. In other words, journal articles that did not lend itself to an intervention of any sort were not made part of the review. Also, only peer reviewed journal articles or published dissertations were sought primarily due to the focus of the research was to assemble a dataset of the highest quality regarding cyber-bullying prevention programs. The inclusion/exclusion criteria are illustrated in **Table 2** below:

Table 2: Inclusion/Exclusion Criteria

	Inclusion Criteria	Exclusion Criteria
Articles	• Written in English • Discuss intervention studies pertaining to bullying and/or cyber-bullying • Discuss an intervention that was completed after the year 2000 • Discuss an intervention conducted in the US • Evaluate an intervention currently intended to prevent cyber-bullying among youth (i.e. contains a cyber-bullying component) • Retrieved in peer-reviewed journals	• Not written in English • Discuss bullying and/or cyber-bullying risk or protective factors (non intervention) • Discuss an intervention that was completed prior to the year 2000 • Discuss an intervention conducted outside of the US • Evaluate an intervention that does not include a cyber-bullying component • Retrieved on sites other than peer-reviewed journals

A summary of the results of the search methods is provided in **Table 3** below:

Table 3: Search Summary

Database	Total Articles Reviewed	Intervention	Others	# of Programs	Program Names
Pub Med	854	3	1	2	Olweus, KiVA
Medline	18	4	0	4	Olweus, PBIS, KiVA, BEST
PsycInfo	20	2	0	2	Olweus, PBIS
ERIC	110	3	0	3	PBIS, Bully Busters, Olweus
Google & Google Scholars	67	12	2	12	Steps to Respect, PBIS, Olweus, Bully Busters, Bully Free Classroom, Bully-Proofing Your School, BullySafe USA, CASS, Positive Action, Safe Schools, Ambassadors, KiVA, Cyber-ALLY, MARC
Totals	**1,069**			**23**	

Note: *Nine of these programs appeared in more than one database, totaling **14** total programs (9 programs + 5 promising programs).*

Data Analysis

Part 1: General Overview

Data analysis for this study consisted of two parts. Part 1 was to provide an overview of the current cyber-bullying programs identified in this study. The researcher began this process with 14 programs, consisting of nine programs that met the inclusion/exclusion criteria and five promising programs. In performing this overview, the researcher focused on the nine programs that met the inclusion/exclusion criteria because they captured the focal findings of this thesis. In order to prepare the information for data analysis, the researcher performed a qualitative analysis by reading the articles of these programs thoroughly and summarizing the information. The researcher utilized a prescribed listing of specific data to extract from each program. Chosen data from the articles was extracted and entered into an excel table. Data was collected over a period of four months: November, 2012 thru February, 2013. In order to get an understanding of the programs listed in the studies, the researcher extracted both program information and evaluation findings. In cases where additional information was needed to better understand cyber-bullying content, the researcher visited various programs' websites as well as online resources. In addition, the researcher attempted to contact developers of the various programs via email in order to obtain the desired information.

All of the data described above were examined. The researcher collected the following information: program name, program description, cyber-bullying content, sample description, intervention location, research design, measurement tools used,

and specific outcome findings. As such data was collected; the researcher reread the data sources which included various journal articles and documents in order to summarize the components of the programs to answer research questions 1 and 2 of this thesis noted below:

- What are the evidence-based and research-informed programs currently being implemented to prevent cyber-bullying?
- Where (schools, communities, youth groups, etc…) are such programs being practiced?

The researcher compiled a second excel data table by categorizing program components into common themes identified to prevent cyber-bullying. This summary was compiled by rereading the information about the programs and clearly marking their specific program components under various prevention strategies as identified by Li and colleagues (Q. Li, Cross, & Smith, 2012). The researcher determined that this source was the most comprehensive source to identify such strategies after reviewing several journal articles, systematic reviews, online articles, and books about cyber-bullying prevention. The prevention strategies that were identified included the following: development of school wide anti-bullying policies that encourage and reward students for respecting each other; activating peer influence through supporting and reporting roles; development of specific cyber-bullying policies; oversight of computer use; blocking access to particular websites; development of adult/parent education; implementation of technology integration; encouraging child to adult discussions; development of classroom lesson plans and activities; one on one coaching; and active community involvement (Q. Li, et al., 2012). The researcher utilized these strategies to

translate them into effective cyber-bullying components in order to answer research question 3 of this thesis noted below:

- What program components do they share that makes them effective to prevent cyber-bullying?

Part 2: Program Effectiveness

Part 2 of the data analysis was to critically examine the effectiveness of the identified programs in the study. The researcher began this process by synthesizing the evaluation data of the programs in the following groups: study research designs, cyber-bullying component, targeted population, delivery, and effectiveness. Once the information was compiled, studies were categorized by school level implementation (elementary, middle school, high, and other) and prevention approach (universal; universal and indicated or selected; universal, indicated and targeted) as these were the groupings that the researcher was most interested in assessing the programs' overall effectiveness. Findings from each level of category were summarized utilizing a qualitative analysis method that measured the program's effectiveness in terms of students' knowledge, attitudes, and behavior. The researcher employed this qualitative analysis by reading the study articles pertaining to the programs and listing the significant intervention effects of the program based upon the studies' findings. Findings were categorized as either reporting effectiveness or not reporting effectiveness with respect to changing students' knowledge, attitudes and behavior. Such findings were used to imply potential ways to effectively implement current and future cyber-bullying programs.

Chapter 4: Findings

Introduction

Program, evaluation, and effectiveness findings are presented in this chapter. The researcher reviewed a total of 1,069 potential articles to identify such information. After reviewing such articles, there were a total of 14 programs identified as current bullying programs with cyber-bullying content or promising bullying programs that were either cyber-bullying programs or traditional bullying programs with cyber-bullying content. Twelve of the fourteen total programs identified were traditional bullying programs with cyber-bullying content. Only two programs (CyberCool Curriculum, CyberAlly) were identified as stand-alone cyber-bullying programs that have been recently launched.

Program Descriptions

The programs listed in this thesis all contain cyber-bullying content; however, not all of the programs were evaluated for cyber-bullying effectiveness. Inquiry into the study participants' use, knowledge, and attitudes about emails, text messages, online games, social networking sites, and chat rooms were not found among the measurement tools used to evaluate these programs. Accordingly, the programs' findings cannot definitively conclude that they will prevent and/or decrease cyber-bullying victimization and/or perpetration. Research as described in the literature review of this thesis indicates that there is a significant overlap between traditional bullying and cyber-bullying participants. Accordingly, the intent of listing traditional bullying programs

as findings for this thesis is based upon the assumption that “interventions to reduce traditional school based bullying may be also be useful to reduce cyber-bullying” (Q. Li, et al., 2012). In other words, information known to prevent and manage traditional bullying may also be relevant in affecting cyber-bullying behavior among youth.

A table describing traditional bullying programs with cyber-bullying content is provided in the **Table 4**, below, outlining specific detail about the identified programs and their specific evaluation designs:

Table 4: Program Characteristics

Program Name	Bully Busters (BB) (1)	Bully Busters (BB) (2)	Bullying Eliminated from Schools Together (BEST)	Bully Free Classroom (BFC)	Bully-Proofing Your School
Activities	X	X	X	X	X
Lessons	X	X	X	X	X
Other (specify)	X - smartphone app (Word Bully)	X - smartphone app (WordBully)			
Website	www.bullybusterusa.org	www.bullybusterusa.org		http://www.bullyfree.com/	
Invention: Evaluation Citations	Newman-Carlson, Horne (2004)	Bell, Raczynski, Horne (2010)	Kaiser-Ulrey (2003)	Davis (2011)	Menard, Grotpeter, Gianola, O'Neal (2008)
Study Period	2003	2005-2006	2001-2002	2010 (40 weeks)	2001-2006
Intervention Description	BB intervention involving staff development training in the form of 7 modules taught in classroom format over 3 weeks; Supervision Team Meetings over 8 weeks	Abbreviated BB version (one year) teacher training, teacher support groups	Educational intervention adapting and modifying New Zealand's Kia Kaha program over 12 weeks, twice/week, 30 minute sessions	Educational intervention involving 6 of the 33 BFC lesson plans designed for elementary school aged students	Educational intervention to students, teachers, and staff
Sample Description: N (baseline) N1 (follow-up)	N = 17 public middle school teachers N1 = 15 public middle school teachers	N = 52 middle school teachers; 488 middle school students - one school	N = 125 (7th grade) students; 4 7th grade teachers in charter school (grades K-12)	N=21 5th grade students in one elementary school	N = 200 teachers, administrators, paraprofessionals, and students
Study Locale	Southeastern US	Southeastern US (suburban/rural)	Tallahassee, Florida	Western Kentucky (rural)	Colorado
Study Design	Quasi-experimental	Quasi-experimental	Quasi-Experimental	Quasi-experimental	Single subject observational
Intervention Results	1) Knowledge of intervention skills increased 2) Use of intervention skills increased 3) Efficacy to teach certain types of students increased 4) Disciplinary referrals decreased 5) No effects reported on cyber-bullying	1) Efficacy to effect students increased 2) Use of intervention skills increased 3) Awareness of bullying problems or classroom climate perceptions not changed 4) Bullying behavior did not change 5) No effects reported on cyber-bullying	1) Significant increase in social skills among students 2) Teacher difficulty in implementing program 3) Teacher overall satisfaction of program 4) Teacher bullying awareness increased 5) No effects reported on cyber-bullying	1) Bullying behavior and other negative behaviors decreased 2)Bullying knowledge increased 3) Teachers' perceptions of school climate improved 4) No effects reported on cyber-bullying	1) Elementary school aged children adopted program objectives 2) Mixed results with middle school students 3) No effects on high school students 4) No effects reported on cyber-bullying
Measurement Tools	Teacher surveys (TISK, TES, TEAM, OAS)	TES, TEEM, SPP-T, MVPP, & TCC surveys (teachers) & climate surveys (students)	Olweus Bully/Victim Questionnaire (students); Social Skills Rating System Student Form (students); Family Crisis Oriented Personal Evaluation Scales (families); Pierces Harris Children's Self-Concept Scale (students); Reaction questionnaires (students) teacher focus groups (researcher)	Student Quizzes, Student Surveys, Teacher Surveys, Office related reports of bullying	Focus group and individual interviews

Table 4: Program Characteristics *(Cont'd)*

Program Name	Olweus Bullying Prevention Program (OBPP) (1)	Olweus Bullying Prevention Program (OBPP) (2)	Olweus Bullying Prevention Program (OBPP) (3)	Olweus Bullying Prevention Program (OBPP) (4)	Olweus Bullying Prevention Program (OBPP) (5)
Activities	X	X	X	X	X
Lessons	X	X	X	X	X
Other (specify)					
Website	http://www.violencepreventionworks.org/public/bullying.page	http://www.violencepreventionworks.org/public/bullying.page	http://www.violencepreventionworks.org/public/bullying.page	http://www.violencepreventionworks.org/public/bullying.page	http://www.violencepreventionworks.org/public/bullying.page
Invention: Evaluation Citations	Limber et al (2004)	Bauer, Lozano, Rivara (2006)	Bowllan (2011)	Black, Jackson (2007)	Schroeder, et. al (2011)
Study Period	1993-1995	2003-2005	1 year study (year not disclosed)	4 year study (years not disclosed)	2007-2009
Intervention Description	Two group comparison of OBPP implementation vs. less formalized bullying prevention programs	OBPP implementation vs. no intervention	OBPP curriculum exposure comparison vs. non OBPP curriculum exposure	OBPP implementation to high risk groups identified via lunch and recess observations	OBPP comparison between district wide implementation (HALT!) vs. building level implementation (PA CARES)
Sample Description: N (baseline) N1 (follow-up)	N = 18 middle schools in 6 school districts (high % African American, predominately low-income)	N = 10 middle schools (7 treatment, 3 control)	N= 158 students; 17 teachers (Catholic middle school) N1 = 112 students	N = 6 public elementary and middle schools (67% predominately low income, African -American/Latino races)	N = 56,137 students (elementary, middle, high school)
Study Locale	South Carolina (rural)	Washington	Northeastern US	Pennsylvania (Philadelphia)	Pennsylvania (western and central)
Study Design	Randomized Control	Nonrandomized Control	Quasi-experimental	Cohort Observational	Selection Cohort
Intervention Results	1) Decreased bullying - group 1 2) increased bystander engagement - group 1 3) adult responsiveness - group 1 4) no significant effects - group 2 5) No effects reported on cyber-bullying	1) No overall effect on bullying behavior however when stratified by race, white students reported less relational and physical bullying 2) Increased attitudes to intervene; 3) 6th graders more victim empathetic 4) No effects reported on cyber-bullying	1) 7th grade females bullied less 2) 7th grade females less socially excluded; 3) 7th grade males - more teacher engagement 4) 8th grade girls - increased bullying 5) 8th grade males - no effects 6) No effects reported on cyber-bullying	1) Program implementation varied across schools 2) Bullying behavior increased 3) Bullying intensity decreased 4) Pro-social activities and policy changes most effective in reducing bullying behavior 5) No effects reported on cyber-bullying	1) Yr 1 implementation: Both groups -> decreased bullying, increased perceptions about adult perceptions toward bullying and positive school climate 2) Yr. 2 implementation: Similar effects from year 1 with higher levels being reported 3) No effects reported on cyber-bullying.
Measurement Tools	Olweus Bully/Victim Questionnaire (students)	Olweus Bully/Victim Questionnaire (students); Student Climate Surveys (students); key informant interviews (primary investigator at each school)	Olweus Bully/Victim Questionnaire (students); questionnaire (teachers)	Direct observation utilizing bullying behavior checklist (evaluator)	Olweus Bullying Questionnaire (students)

Table 4: Program Characteristics *(Cont'd)*

Program Name	Positive Action	Positive Behaviors Interventions and Supports (PBIS) (1)	Positive Behaviors Interventions and Supports (PBIS) (2)	Safe Schools Ambassadors (SSA) (1)	Safe Schools Ambassadors (SSA) (2)
Activities	X	X	X		
Lessons	X			X	X
Other (specify)				School policy reviews, policy development, parent workshops	School policy reviews, policy development, parent workshops
Website	http://www.positiveaction.net/programs/index.asp?ID1=1&ID2=14	http://www.pbis.org/school/bully_prevention.aspx	http://www.pbis.org/school/bully_prevention.aspx	http://community-matters.org/programs-and-services/safe-school-ambassadors	http://community-matters.org/programs-and-services/safe-school-ambassadors
Invention: Evaluation Citations	Li, et. al (2011)	Waasdorp, Bradshaw, Leaf (2012)	Ross, Horner (2009)	Pack, White, Racqnski, Wang (2011)	Pack, White, Racqnski, Wang (2011)
Study Period	2004-2007	2003-2007	2007	2 years (years not disclosed)	Not disclosed
Intervention Description	Educational intervention (K-8 curriculum) to staff, students, and key players	5-6 person school team training/ onsite support and technical assistance, continuous training	1 hr. workshop to school staff; 1/2 hour training for playground supervisors, training to behavior challenged students	Educational intervention to designated school leaders; focus groups among students and adults	High fidelity implementation schools compared to similar demographic schools
Sample Description: N (baseline) N1 (follow-up)	N = 590 third grade students N1 = 510 fifth grade students	N= 12,344 public elementary children N1 = 11,738 public elementary children	N = 3 elementary schools (2 behavior challenged students per school for direct observation)	N = 1300 6th, 7th and 8th grade students among 5 middle schools, 3,300 others (others, adults)	19 elementary, middle, and high schools in urban, suburban, and rural areas
Study Locale	Illinois (Chicago)	Maryland	Oregon	Texas (central)	New York, Texas, Colorado, California
Study Design	Matched Pair Randomized Control	Randomized Control	Single subject multiple baseline	Quasi Experimental /Process Evaluation	Randomized Control
Intervention Results	1) Reduction in substance abuse 2) Reduction in violent behavior 3) Reduction in buying behavior 4) Reduction in disruptive behavior 5) No effects reported on cyber-bullying	1) Decreased bullying behavior; 2) Decreased peer rejection 3) No effects reported on cyber-bullying	1) Decline in problem behavior in general 2) Decline in problem behavior among targeted students 3) No effects reported on cyber-bullying; 4) No effects reported on cyber-bullying	1) No significant effect on bullying attitudes 2) No significant effect on school connectivity 3) Male participants more apt to intervene in bullying 4) No effects reported on bullying behavior 5) No effects on cyber-bullying	1) Program had positive impact on school discipline, social climate, staff morale, school budget/finances; and learning 2) No effects reported on bullying behavior 3) No effects reported on cyber-bullying
Measurement Tools	Unit Implementation Report (teachers); substance abuse surveys (students); bullying surveys (students)	Teacher checklists of student behavior	Student surveys, handheld computers utilizing MOOSES software, staff self adherence surveys	Student surveys, document review, focus groups, individual interviews with principals and adults	Administrators' surveys on program impact

Table 4: Program Characteristics *(Cont'd)*

Program Name	Steps to Respect (1)	Steps to Respect (2)
Activities		
Lessons	X	X
Other (specify)		
Website	http://www.cfchildren.org/steps-to-respect.aspx	http://www.cfchildren.org/steps-to-respect.aspx
Invention: **Evaluation Citations**	Frey, et. al (2005)	Brown, Low, Smith, Haggerty (2011)
Study Period	2001-2002	2008-2009
Intervention Description	Educational intervention involving students and teachers	Educational intervention (classroom lessons and staff training) involving students and teachers
Sample Description: **N (baseline)** **N1 (follow-up)**	N = 1,126 students (grades 3,4,5,6); 72 teachers	N=3,119 students; 128 teachers in 33 elementary schools N1 = 2,940 students; 128 teachers in 33 elementary schools
Study Locale	Washington	California (North Central)
Study Design	Randomized Control	Randomized Control
Intervention Results	1) Reduced bullying in playgrounds 2) Increased attitudes and social interaction skills 3) Attitudes to intervene improved 4) No effects reported on cyber-bullying	1) Increase in anti-bullying policies 2) Improved student and staff climate 3) Increase in bullying intervention 4) Increase in bullying behavior 5) No effects reported on cyber-bullying
Measurement Tools	Teacher ratings, student surveys, observational coding (program staff)	Student environment survey (staff); Teacher Assessment of Student Behavior surveys (teachers), student surveys (students)

A table describing traditional bullying programs with cyber-bullying content is provided in **Table 5** below outlining specific evaluation findings about their programs:

Table 5: Evaluation Summaries

	Positive Outcomes				
Program Name	**Behavior**	**Knowledge**	**Attitude**	**Cyber**	**Other**
Bully Busters **(BB)** (1)	Youth reported bullying perpetration decreased	Teacher report of knowledge of intervention skills increased	Noted stated	Not stated	Confidence to effectively deliver program material increased (teachers)
Bully Busters **(BB)** (2)	Not stated	Not stated	Confidence to effectively deliver program material increased (teachers)	Not stated	Increased bystander interventions (students)
Bullying Eliminated from Schools Together **(BEST)**	Not stated	Teachers' reported knowledge of bullying increased Student reported social skills enhanced	Noted stated	Not stated	Self esteem increased (students) program overall satisfaction (teachers)
Bully Free Classroom **(BFC)**	Youth reported bullying perpetration and victimization decreased	Youth reported bullying knowledge increased	Not stated	Not stated	Student climate perceptions increased (teachers)
Olweus Bullying Prevention Program **(OBPP**) (1)	Male youth reported bullying perpetration and victimization	Not stated	Not stated	Not stated	Increased bystander engagement (students), Anti-social behavior slowed

Table 5: Evaluation Summaries *(Cont'd)*

	Positive Outcomes				
Program Name	**Behavior**	**Knowledge**	**Attitude**	**Cyber**	**Other**
Olweus Bullying Prevention Program **(OBPP**) (3)	Relational bullying victimization decreased (7th grade females)	Noted stated	Noted stated	Noted stated	Teacher to peer conversations about bullying others increased
Olweus Bullying Prevention Program **(OBPP**) (4)	Bullying victimization increased (students)	Noted stated	Noted stated	Noted stated	Bullying density (incidents/student hours) decreased; fidelity
Olweus Bullying Prevention Program **(OBPP**) (5)	Bullying perpetration decreased (students)	Noted stated	Noted stated	Noted stated	Positive perceptions to address bullying by adults increased (students, teachers)
Positive Action	Decreased bullying perpetration	Noted stated	Noted stated	Noted stated	
Positive Behaviors Interventions and Supports **(PBIS)** (1)	Bullying aggression and victimization decreased (students)	Noted stated	Noted stated	Noted stated	
Positive Behaviors Interventions and Supports **(PBIS)** (2)	Bullying aggression decreased (students and student subjects)	Noted stated	Noted stated	Noted stated	Increased bystander interventions (students)

Table 5: Evaluation Summaries *(Cont'd)*

	Positive Outcomes				
Program Name	**Behavior**	**Knowledge**	**Attitude**	**Cyber**	**Other**
Safe Schools Ambassadors **(SSA**) (2)					Positive school effects (school administrators)
Steps to Respect (1)	Reduced victimization overall but younger students experienced higher victimization than older students		Attitudes to accept bullying behavior decreased (students)		
Steps to Respect (2)	Perpetration (students) increased but to a smaller scale among the intervention schools				Student climate perceptions increased (students)

A narrative description of each of the programs is provided below and includes a description of the program, evaluation method(s), findings, and a summary of each of the programs.

Bully Busters (BB)

Program description: Bully Busters (BB) is an anti-bullying program that emphasizes both "control and prevention" of the bullying behavior. The program aims to achieve this goal by increasing teachers' awareness, knowledge, and intervention skills. Such information is transferred subsequently to students in a classroom environment. The program is taught through a teacher's manual, a student book, and a CD. The curriculum includes seven modules and taught to children in grades K-8 (Newman-Carlson & Horne, 2004).

Cyber-bullying Content: BB also extends beyond the classroom by providing advice for parents and the community about bullying detection and prevention via social media and its own website: bullybusterusa.org. In addition, workshops for parents about cyber-bullying detection and prevention are provided by BB in venues like the Boy Scouts of America. Recently, Bully Busters partnered with Iconosys, Inc., to launch Word Bully, a paid application that can be downloaded on a smart phone. This application is used to monitor "words, bulli-cons, and phrases" potentially considered threatening and vulgar to recipients. WordBully represents a unique approach to combat cyber-bullying by engaging parents to install these applications on their children's cell phones. By doing this, parents are able to access filtered words on the cell phones through the use of a password they set up specifically for this application.

Otherwise, children are not able to delete or hide messages containing such content (BullyBusterUSA.org, 2013).

Evaluation Method #1: Bully Busters has been evaluated several times in the US with the first study being conducted among 42 middle school teachers in a school district in the southeastern US in 2003(Newman-Carlson & Horne, 2004).

Results #1: Findings from this quasi-experimental study indicated that the program was an effective intervention for increasing teachers' knowledge and use of bullying intervention skills. The study also found that the teachers' confidence in educating their students increased with respect to working with specific types (specifically average, disruptive, and learning disordered students) of children. Finally, disciplinary referrals decreased as a result of the BB program Outcomes for this study were measured through a variety of teacher surveys designed to measure teachers' knowledge and efficacy as well as student disciplinary offenses (Newman-Carlson & Horne, 2004).

Evaluation Method #2: A later quasi-experimental study of the Bully Busters program was conducted in 2005-2006 in Southeastern US which utilized an abbreviated group-based version of BB on 52 middle school teachers and 488 middle-school students. The study's duration was seven months which was less than the recommended one year intervention contained in the program's official teacher's manual, thus calling the intervention an abbreviated version of the program (Bell, Raczynski, & Horne, 2010).

Results #2: Findings from this study reinforced the prior 2004 study indicating that BB can have positive effects on teacher reports of efficacy in intervening with

bullying behavior. No impact with respect to bullying victimization or classroom climate from the teachers and students' perspectives were observed. (Bell, et al., 2010).

Summary – Bully Busters: BB is an anti-bullying program that addresses cyber-bullying from a universal approach in various components including classroom lessons, student activities, parent workshops, youth group presentations, website support, social media and more recently Smartphone application development. The program is delivered at schools, youth groups, and through their own website. The program approaches bullying from a universal approach in the sense that all students, teachers, and parents are provided program information. Evaluation outcomes from the Bully Busters program have been positive with respect to students' behavior to perpetuate and intervene. In addition, Bully Busters in general increased teachers' efficacy to disseminate information to certain types of students. Students with challenging behaviors such as attention deficit and conduct disorders, however, were found to be most difficult to teach such program (Bell, et al., 2010).

Bullying Eliminated from Schools Together (BEST)

Program description: BEST is an anti-bullying program based upon on the Kia-Kaha Bullying Program that was developed by the New Zealand Police Department's Youth Education Service in 1992. The program is implemented in 7th grade classrooms and emphasizes social problem solving techniques, bullying awareness, and rules against bullying. Students are exposed to the program in two 45-minute sessions per week for 12 weeks. The program is implemented by educating the existing teachers about the program prior to classroom delivery. (Kaiser-Ulrey, 2003).

Cyber-bullying content: Teacher made scenarios/stories about bullying/cyber-bullying are built into the content of the Kia-Kaha program. These scenarios are developed after the teachers review the BEST classroom curriculum. For example, students review specific profiles to question identities of unknown individuals trying to communicate with them online. In addition, appropriate online behavior is taught through BEST. (Kaiser-Ulrey, 2003).

Evaluation Methods: In the years 2001-2002, a quasi-experimental research study on BEST was conducted with 125 7th grade participants at a K-12 charter school in Tallahassee, Florida. The purpose of the study was to test the effectiveness of BEST with respect to bullying behavior and to assess social skills and problem solving techniques learned from the program. The potential development of peer to peer support systems was also studied (Kaiser-Ulrey, 2003).

Results: Findings revealed that students reported increased social skills from the program. Teacher overall satisfaction and awareness about bullying also increased despite implementation being difficult in the initial phases of the program. Measurement tools included various student questionnaires, teacher focus groups, and family surveys (Kaiser-Ulrey, 2003).

Summary – Bullying Eliminated from Schools Together – BEST is essentially the New Zealand's Kia Kaha anti-bullying program customized in the US. The program is provided at schools and utilizes a universal cyber-bullying prevention approach via classroom curricula and activities taught by teachers. Positive outcomes with regards to its effectiveness resulted in its lone study in the US to date but problems with regards to

its initial implementation were reported. There is no website support for this program (Kaiser-Ulrey, 2003).

Bully Free Classroom (BFC)

Program description: The Bully Free Classroom Program is a comprehensive school-wide anti-bullying program designed for students in grades K-12. A coordinating committee from each school called the Bully Free Program Team is formed to ensure full implementation of the program. In addition, teachers, school counselors, parents and students are provided various resources including presentations and workshops about the program. No formal training is needed to launch the program. School staff can begin implementing the program once kits are purchased and made available to use. Separate instructional kits (containing 30 lesson plans each) are made available for each level of the program depending upon students' grades: Preschool, elementary, middle school, and high school (Systems, 2013).

Cyber-bullying content: Cyber-bullying is built into the lesson plans for elementary and middle school students. The instructional kits for these students define cyber-bullying, illustrates actual practices of cyber-bullying, and asks students if they practice such behavior (Beane & Beane, 2008).

Evaluation Method: In 2010, the Bully Free Program was evaluated in a quasi-experimental study involving one rural elementary school in Western Kentucky. Student outcomes were measured through quizzes, surveys, and documentation reports. Teacher outcomes were also measured in this study through teacher surveys (Davis, 2011).

Results: Findings from this 40-week study indicated that bullying behavior decreased and knowledge among students increased significantly as a result of program delivery. Improved teachers' perceptions of the' school climate and increased awareness of students' bullying behaviors were observed through such measurements. (Davis, 2011).

Summary-Bully Free Classroom: The BFC program is an anti-bullying program delivered in schools through classroom lesson plans and activities. BFC is delivered under a universal approach and is reinforced through school coordinating committees. These committees engage school staff as well as the entire community in preventing youth bullying by coordinating meetings, workshops, and presentations. Evaluation outcomes of the Bully-Free Classroom include reduced bullying behavior and increased bullying knowledge among the students. Teachers reported improved school climate perceptions and heightened awareness of the bullying behavior. There is no website support provided by this program (Davis, 2011).

Bully-Proofing Your School (BPYS)

Program description: The Bully-Proofing Your School Program is a comprehensive bullying prevention program targeted toward elementary, middle, and high school students. The focus area of the program is centered on victims and bystanders of bullying, specifically "teaching students to deal with and defuse bullies who threaten them, or are threatening someone else." This in turn converts the students from a "silent majority to a caring majority." Formal training through this program is provided by school personnel who in turn provide the educational material to students.

A targeted prevention approach to bullying is also part of the program in dealing specifically with anti-social students (NCSE, 2012).

Bully-Proofing Your School Program contains separate curriculum kits for different groups of students from pre-school to high school age. The instructional sets contain both a standard school set consisting of posters, booklets, a teacher's manual, administrators' guide, parents' guide and a supplemental set consisting of additional lesson plans that teachers can implement in their classrooms. Students are taught lesson plans on bullying basics, sexual harassment, strategies to avoid victimization, empathy and inclusion, cyber-bullying, and leadership. Parent, faculty, and bus driver programs are also part of BPYS (Bonds & Stroker, 2012) (NCSE, 2012).

Cyber-bullying content: Student lesson plans regarding cyber-bullying are part of the BPYS program. However despite attempts to obtain specific information about such content from the program developer, no additional material was able to be retrieved (NCSE, 2012).

Evaluation Method: A single subject observational study conducted between 2001 and 2006 in Colorado was performed on the Bully-Proofing Your School Program. Two hundred individuals (teachers, students, administrators, paraprofessionals) participated in the study and were interviewed over two years (Mernard, Grotpeter, Gianola, & O'Neal, 2008).

Results: Elementary school aged students reported favorable outcomes from the program by showing increased awareness of adults' discouragement of bullying, reduced bullying behaviors, and increased perceptions of school safety based upon responses received through student surveys Middle-school aged students, however,

reported mixed results based upon student surveys. These students felt the program did contribute to creating an atmosphere where bullying was discouraged. However, bullying behavior and perceptions of overall school safety was not achieved by the program. There were no significant effects reported on high school students who underwent the study.(Mernard, et al., 2008).

Summary – Bully Proofing Your School: BPYS approaches bullying prevention from both universal and targeted perspectives. The program is delivered in schools is primarily school classrooms by trained teachers who attend training workshops off-site. Parent, school faculty, and bus driver programs are also available. Cyber-bullying lessons are part of the teachers training and student curricula taught at BPYS. Evaluation findings from BPYS indicated favorable results regarding student behavior and attitude among elementary school aged children. However, moderate and no effects with respect to middle school aged and high school aged students respectively were reported (Mernard, et al., 2008; NCSE, 2012).

Olweus Bullying Prevention Program (OBPP)

Program description: The Olweus Bullying Prevention Program (OBPP) is a universal, school based anti-bullying program designed for students in elementary, middle, junior high or high schools. OBPP provides interventions at the school, classroom, individual, and community levels. Cultural adjustments can be implemented within the interventions to allow for material to resonate with its intended audiences. Core components of the program include “rules against bullying, a bullying awareness day, improving supervision, parent involvement, class councils, a working system of

positive and negative consequences and interventional interventions" (Black & Jackson, 2007).

Cyber-bullying component: Designed initially in Norway, OBPP endorses two cyber-bullying curriculums: 1) Cyber-Bullying for Grades 3-5 and 2) Cyber Bullying for Grades 6-12. These curricula focus on utilizing appropriate cyber technology use and ways students can assist victims including themselves when being cyber bullied. (Hazelden Foundation, 2012). The curriculum is taught in nine lessons plans covering such topics as respect and responsibility; what is cyber-bullying, cyber-bullying across devices and services; cyber-bullying impacts and consequences; cyber-bullying techniques and scenarios; what to do if you're being cyber-bullied; what to do if you're a bully; standing up for others; and serious about getting help (Schools, 2012).

Evaluation Method #1: The first US evaluation was conducted in 1995 involving 18 middle schools in six predominately low-income school districts in South Carolina. This two-year randomized controlled study separated the students into two groups with the first group being exposed to the OBPP in the first year of the study while the second group exposed to the program in the second year of the study(Limber, Nation, Tracy, Melton, & Flerx, 2004).

Results #1: Findings from the evaluation, as reported by student surveys, found positive outcomes for the first group of students exposed to the OBPP. These students reported decreased bullying behavior and increased rates of bystander engagement as well as adult responsiveness to bullying. The second group did report any significant changes as a result of OBPP implementation. It was speculated however that this

outcome may have been attributable to the program not being implemented to a high fidelity among such schools. (Limber, et al., 2004).

Evaluation Method #2: In 2004, a nonrandomized control study involving ten middle schools in the Seattle, Washington was performed.

Results #2: Findings from the study revealed that the OBPP has no overall impact on bullying behavior among students exposed to the program (Bauer, Lozano, & Rivara, 2007). The study however did find that white students who were part of the study reported reduced physical and relational bullying. These students also exhibited increased attitudes in wanting to intervene in bullying incidents. The study also revealed that 6th grade students were the cluster of students that most empathizes with victims of bullying. This finding suggested that students in this grade were more sensitive to the feelings of their peers suggesting this age as an optimal time to deliver the OBPP and sustain its intended effects. (Bauer, et al., 2007).

Evaluation Method #3: Black and Johnson (2007) conducted a cohort observational study on OBPP in a four year study involving six public elementary and middle schools in Philadelphia, Pennsylvania. This study involved the use of an independent evaluator to observe predominately low-income students during lunch and recess hours to witness behaviors demonstrated by study participants (Black & Jackson, 2007).

Results #3: The findings indicated that although bullying behavior increased among the schools after implementation of the OBPP, bullying intensity decreased. In addition, qualitative outcomes from the study revealed that pro-social skills learned from

the OBPP and school policy revision/enforcement were the most effective methods to reduce bullying among the schools. (Black & Jackson, 2007).

Evaluation Method #4: Another study utilizing a quasi-experimental design was conducted on the OBPP in 2007 that involved 7th and 8th grade middle school Catholic students in Northeastern US (Bowllan, 2011).

Results #4: Findings from the study suggested a positive impact of the OBPP on 7th grade students. For females in this grade, study findings revealed that such subjects were less socially excluded from others and bullied less after program delivery. Positive outcomes were also observed with 7th grade male students. These students experienced increased communication initiated by their own teachers with respect to bullying others. With regards to 8th grade students, the findings were not so positive. 8th grade females reported increases in physical and verbal bullying. 8th grade males, however, showed no significant differences. (Bowllan, 2011).

Evaluation Method #5: Schroeder and colleagues evaluated the OBPP in a two-year selection cohort design study involving over 56,000 elementary, middle, and high school students in western and central Pennsylvania in the years 2007-2009. The objective of the study was to compare the effectiveness of OBPP from a district wide implementation to a building level implementation. Comparative data was collected at year one and year two of the study (Schroeder et al., 2012).

Results #5: Findings from this study in year one indicated decreased bullying from baseline data collected and increased adult perceptions toward bullying and school climate. Year two findings yielded similar outcomes with higher levels being reported (Schroeder, et al., 2012).

Summary – Olweus Bullying Prevention Program – OBPP is an anti-bullying prevention program that utilizes both universal and indicated approaches toward bullying prevention. The program is implemented within schools and communities. Meetings with specific bystanders as well as victims and bullies are also part of OBPP. Cyber-bullying prevention is taught at the classroom level engaging students in variety of discussion topics, activities, and homework assignments. OBPP has been tested numerous times in the US resulting in favorable findings with respect to traditional bullying outcomes (Black & Jackson, 2007).

Positive Action

Program Description: Positive Action is an anti-bullying and violence program that aims to teach individuals and groups about achieving positive physical, intellectual, social, and emotional outcomes in their lives. The program essentially contains five components: PreK-12 curriculum, a climate development kit, a counselor kit, a family kit, and a community kit. Information contained in these kits are disseminated to classrooms, schools, and communities (Positive Action, 2012).

Cyber-bullying content: A bullying supplement kit within the Positive Action Program contains 21 45 minute lesson plans and materials that includes information about the prevention and severity of cyber-bullying (Positive Action, 2012). Additional detail about such content was pursued. Unfortunately, no additional information was obtained.

Evaluation Methods: A three-year matched pair randomized control study within the years 2004-2007 was conducted on the effectiveness of the Positive Action

program. Study subjects included 590 third students in Chicago public schools who were followed over the study period (K.-K. Li et al., 2011).

Results: Teacher reports and student surveys revealed that participants undergoing the program exhibited reduced substance abuse, reduced violent behavior, reduced disruptive behavior, and reduced bullying behavior. (K.-K. Li, et al., 2011).

Summary – Positive Action: Positive Action is an anti-bullying prevention program that contains program components of a student curriculum in addition to separate kits made available to school counselors, families, and communities. It utilizes both a universal approach towards bullying by teaching students to promote pro social and avoid anti-social behaviors. An indicated approach toward bullying is captured through the programs counseling kits where troubled youth receive assistance from school counselors. Cyber-bullying is built into the classroom curricula of Positive Action. Reduced bullying behavior among students has been attributed to the Positive Action program (Positive Action, 2012).

Positive Behavior Interventions and Supports (PBIS)

Program description: The Positive Behavior Interventions and Supports (PBIS) is a school wide anti-bullying program designed to teach lessons to elementary school aged children in Grades K-5 about positive behaviors with respect to responding to disrespectful behavior. The six lesson plans of the program are taught by teachers. Four of the six lesson plans in PBIS contain over two hours of classroom materials. The remaining two lesson plans deal specifically with group sessions incorporating skills learned from the prior lesson plans. These lesson plans pertain to cyber-bullying and supervising others' behaviors (Education and Community Supports, 2012).

In PBIS, teachers are trained about strategies to employ when incidences of disrespectful behavior are reported to them. Teachers train students on how to utilize the “Stop/Walk/Talk” social responsibility skills to deal with such behavior. “Stop” deals with putting an end to disrespectful behavior while “walk” employs bystander disengagement in witnessing such behavior. Finally, “talk” deals with skills used in verbally addressing disrespectful behavior either directly or reporting such behavior to adults (Education and Community Supports, 2012). A unique aspect of the program is the term “bully” is not taught to students as it conjures negative perceptions. Instead, focus on respectful behavior is highlighted and reiterated throughout staff training and student lesson plans (Ross & Horner, 2009).

A three tier model approach captures the essence of this program. This model provides a continuum of school-wide instructional wide systems to assist a variety of students, based upon their responsiveness to interventions. The first tier is designed to create a positive social and learning environment for all students. The second tier is designed for aggressors and potential victims of aggressive behavior in which the first tier does not provide enough support. This includes specialized group sessions for at-risk behavior students. A third tier of the program is intended for aggressors who do not respond to the interventions delivered in either the first or second tiers of the program. These are individualized one-on-one sessions for students with high risk behavior (Office of Special Education Programs, 2013) (Ross & Horner, 2009).

Cyber-bullying content: In PBIS, a lesson plan is taught to students about disrespectful behavior using technology tools. Students are taught how to employ the “Stop, Walk, Talk” skills in situations that involve offensive, rude, or insulting emails, text

messages, and online postings. The lesson plan is complemented with two group practices that engage students to pass pieces of paper among them to simulate digital media messages. Students practice the “Stop, Walk, Talk” skills among them in these group practices with the goal of hopefully carrying those skills to real life situation when communicating with one another online or through mobile devices (Office of Special Education Programs, 2013).

Evaluation Method #1: The first evaluation of PBIS was conducted between the years 2003-2007 involving 12,344 elementary public school children in Maryland. The randomized control study involved teacher checklists to assess student behavior over the study period. Teams of 5-6 teachers were trained at each treatment school and they were provided continuous training throughout the year. In addition, technical onsite support and technical assistance from program consultants was provided to each school participating in the study (Waasdorp Te, 2012).

Results #1: Results of the study revealed decreased bullying perpetration and victimization among students exposed to the program (Waasdorp Te, 2012).

Evaluation Method #2: In 2007, a single subject multiple baseline study was conducted on three Oregon elementary schools. The study involved both students and staff. In addition, six students were nominated by their respective principals to be directly observed by program evaluators. Such students were selected to undergo the program based upon their physical and verbal aggression toward peers. Data was collected at baseline, acquisition (after staff received their formal training), and at full program implementation (Ross & Horner, 2009).

Results #2: Results of this study indicated a decline in overall problem behavior among the schools upon full program intervention. Student subjects chosen for direct observation also showed a decline in problem behavior. Prior to full program implementation, the selected student subjects exhibited different incidents of bullying behavior among them ranging from one to ten incidents per day. At the end of the study, these students exhibited a more consistent number (1-2) of bullying incidents among them (Ross & Horner, 2009) (Office of Special Education Programs, 2013).

Summary – Positive Behaviors in Supports – PBIS is an anti-bullying program that implements all three – universal, selective and indicated – approaches to bullying prevention and delivered in schools. Implementation of the program can be executed in part or in whole. When executed in part, most schools choose to implement the universal approach of the program. Program components include a professional training, on-site coaching, and materials to assist school staff in developing a positive and proactive school-wide discipline plan. Classroom curricula incorporating the "Stop, Walk, Talk" strategies are taught in classrooms and such strategies are also presented in a cyber-bullying context to students. Program evaluations of PBIS has resulted in positive findings among students behavior with respect to traditional bullying perpetration and victimization (Ross & Horner, 2009) (Office of Special Education Programs, 2013).

Safe School Ambassadors

Program description: This program is an anti-bullying program that relies on student leaders who are "socially influential" in being the primary agents that create positive learning and social environments for their peers. It is designed for students in

elementary, middle, and high school. The program is different from other anti-bullying programs in that the approach to bullying relies on internal resources (as oppose to external ones) to create social norms to mitigate aggressive behaviors such as bullying. Designated student leaders undergo a two-day training worship where they are taught communication, intervention, and conflict resolution skills that deal with peer-to-peer mistreatment. Regularly scheduled meetings with trusted adult mentors are also part of the program allowing the students leaders to “discuss their interventions, practice their skills and receive support for their efforts” (Community Matters, 2013; Pack, 2011).

Cyber-bullying content: Safe Schools Ambassadors allows school districts and schools to have their individual policies and practices related to cyber-bullying reviewed and analyzed for possible improvements. The program also provides student training to their chosen ambassador participants and parent workshops that deal specifically with the issue of cyber-bullying. These training workshops include steps to both steps to identify, prevent and report cyber-bullying (Community Matters, 2013).

Evaluation Method #1: In 2010, five middle schools (three treatment groups, two control groups) in central Texas participated in a two – year study of the Safe Schools Ambassadors program as part 1 of an overall two-part evaluation of the program. The study centered on determining if the program had any effects in the attitudes, behaviors, and the overall peer relationships of the chosen leaders and their closest peers (Pack, 2011).

Results #1: Findings from this study revealed no significant differences were observed with respect to attitudes toward bully intervention. Also, there was no significant difference observed with respect to peer relationships. In other words,

students did not feel that their fellow students were able to assist them in times of need. The program however did yield increased rates of bullying intervention among its male Ambassadors after program delivery (Pack, 2011).

Evaluation Method #2: The second part of the evaluation involved the impact assessment of the program by key administrators (principals, deans, counselors, and teachers) of 19 elementary, middle, and high schools in New York, Texas, Colorado, and California who have implemented the Safe School Ambassadors program to a high fidelity phase (Pack, 2011).

Results #2: Findings from this part of the evaluation indicated that the program had a positive impact on the identified schools' discipline social climate, staff morale, and learning/achievement benchmarks. In addition, costs for vandalism and suspension processing were also reduced and attributed to SSA (Pack, 2011).

Summary – Safe Schools Ambassadors: SSA is an anti-bullying program that relies on students to take the lead in promoting positive social climates to combat bullying. The universal-approached program is delivered in schools and its main component is student/adult meetings to discuss bullying incidences and intervention developments. Policy review and update with respect to bullying is also offered in the program(Community Matters, 2013). Moderate outcomes with respect to intervention and positive school climate were reported with respect to this program (Pack, 2011).

Steps to Respect

Program description: The Steps to Respect Program is an anti- bullying prevention program designed to target elementary school children in grades 3-6. The program engages school staff, students, and parents to be part of the program. This

program aims to tackle bullying by “a) increasing staff awareness, b) fostering socially responsible beliefs, and c) teaching social-emotions skills to promote healthy relationships” (Frey et al., 2005). The program provides an overview presentation to the entire school staff and a “blueprint for developing school-wide policy and procedures” with respect to bullying. Classroom materials and instruction are provided to the teachers in grades 3-6 who are responsible for disseminating the classroom curriculum (Committee for Children, 2012; Frey, et al., 2005).

Cyber-bullying component: The cyber-bullying prevention content presented in the classroom curriculum of this program consists of five lesson plans which consist of an introduction of cyber-bullying and the three R’s (recognize, refuse, and report) principles (Children, 2010). Additional information about these principles was not able to be retrieved online.

Evaluation Method #1: This program aims has been evaluated twice in the US. The first evaluation was a two-year randomized control study conducted during the school years 2001 and 2002 in the state of Washington (Frey, et al., 2005).

Results #1: The study revealed that the program decreased bullying behavior, destructive bystander behavior, and bully-victim aggression among participants in the program. Outcomes were measured by variety of tools - teacher ratings, student surveys, and observational coding by a trained coder utilizing naturalistic observational techniques in the playground and recording them on personal digital assistant devices (Frey, et al., 2005).

Evaluation Method #2: A more recent study used to test the effectiveness of the Steps to Respect Program was conducted in 2008-2009 at north central California among 32 elementary schools (E. Brown, Low, S, & K, 2011).

Results #2: Findings from this randomized control study yielded more anti-bullying policies being developed by schools after program implementation. Schools in the program reported increased morale among the students in how they interacted with one another. In addition, the students increased their trust with school staff Outcomes were measured through various student surveys and teacher surveys assessing student behavior (E. Brown, et al., 2011).

Summary – Steps to Respect: Steps to Respect is anti-bullying program that includes the components of staff training, classroom curricula, and parent engagement materials. The program is delivered from a universal approach and primarily delivered at schools. Evaluation findings for the Steps to Respect program include positive outcomes with respect to student behavior, school morale, and trust (E. Brown, et al., 2011; Committee for Children, 2012; Frey, et al., 2005).

Promising Programs

In the course of searching for applicable programs to include in this thesis, the following promising programs (KiVA, BullySafe USA, CyberCool Curriculum, CyberAlly, and Massachusetts Aggression Reduction Center) were generated in the search. These programs fall under one of the following categories: (a) not formally evaluated in the US at the time of data collection; (b) not formally published in peer reviewed literature in the form of a journal article or dissertation; or (c) classified as cyber-bullying programs recently launched. Despite these programs not meeting the inclusion/criteria standards

established in this thesis, these programs are nonetheless considered promising. These promising programs are summarized in **Table 6** and described below:

Table 6: Promising Programs

Program Name	Activities	Lessons	Other Specify	Intervention: Evaluation Citation	Study Period	Intervention Description	Study Locale	Intervention Effects
KiVA (currently being evaluated in US)	X	X	X - book	Salmivalli, Karna, Poskiparta (2011)	2007-2008	1 year intervention to 35,000 Finish children	Finland, pending evaluations in Kansas & Delaware	Victimization decreased among all forms of bullying including cyber-bullying victimization
BullySafe USA *(not formally evaluated)*	X	X	X - book	Terranova (2006)	2003-2004	Educational intervention in the form of classroom discussions/activities to students over a 1 year period	Louisiana, Florida, Missouri (low socioeconomic schools)	1) Information learned from intervention; 2) Attitudes to intervene increased; 3) Actions to intervene increased; 4) Reductions in victimization in LA & FL; 5) No effects reported on cyber-bullying
CyberCool Curriculum *(not evaluated)*	X	X		n/a	n/a	n/a	n/a	n/a
CyberALLY *(not formally evaluated)*	X	X		Anti-Defamation League (2012)	2011-2012	Exposure to 6 hour CyberALLY workshop	Georgia (Atlanta)	Fidelity checklists (teachers);
Massuchessetts Aggression Reduction Center *(not formally evaluated)*	X	X		MARC (2012)	2011-2012	Exposure to MARC curricula	Massachusetts	n/a

KiVA

Program description: KiVA is an anti-bullying program developed in 2006 in Finland that is targeted to both primary and secondary school students. Its unique name stems from the Finish word Kiusamista Bastaan which stands for "against bullying." The primary focus of this anti-bullying program is to support victims of bullying by teaching students to be emphatic and stand up for their victimized peers The program has three versions designed specifically for different age groups (Grades 1-3, 4-6, and 7-9) providing a total of 20 hours of instructional material among all of these groups via lesson plans. The program utilizes specific activities such as group discussions, films, role playing exercises, and computer games to complement the lesson plans provided by trained teachers (Karna, Little, Voeten, & Poskiparta, 2011).

KiVA utilizes parents' guides and symbol recognition (i.e. bright vests for school recess supervisors) to remind students and school personnel about the school's commitment to reinforce the principles of the program. Two-day teacher trainings are provided to program leaders prior to program implementation and small network support groups called KiVA teams are formed to address specific problems related to bullying issues witnessed or reported in the schools Bullies and victims are singled out in this program and are provided individual one on one or group discussions with a KiVA team. Children who are challenged to assist bullying victims are also provided discussions (Karna, et al., 2011).

Cyber-bullying content: The parents' guide to the KiVA program provides information about recognition of cyber-bullying as a new form of bullying and its danger

and ease of transmission. It also guides parents in what to do if their children are bullied online or through their cell phones (Karna, et al., 2011).

Evaluation Methods/Results: KiVA was evaluated numerous times in Finland. One of the studies was two-part randomized control study conducted during the years 2007-2008 involving 5,651 4th to 6th grade students in phase I and over 35,000 students in Grades 1-3 and Grades 7-9. The study utilized web based student questionnaires to determine the effectiveness of the program including its content on cyber-bullying. The study reported positive effects on all forms of bullying victimization among its program participants including verbal, physical, and cyber-bullying (Salmivalli, Kärnä, & Poskiparta, 2011). KiVA is currently being implemented in Kansas during the 2012-2013 school years with the intent to expand it nationwide if deemed successful at such schools (Lynch, 2011). KiVA is also currently being evaluated in the state of Delaware (Rubin, 2012).

Summary – KiVA: The KiVA bullying program is an anti-bullying program that utilizes both universal and indicated approaches toward bullying prevention. Universal approach options include student lessons, themes, and computer games designed to reinforce information learned from the program. Indicated approach options include individual discussions with specific bullies and victims as well as those challenged to support victims. A parents' guide is also part of the program. Its effectiveness in Europe has shown positive results among large samples of students. KiVA is the only program in this thesis to have measured cyber-bullying and is currently being tested in the US (Karna, et al., 2011; Salmivalli, et al., 2011). The researcher categorized this

program as a promising program due to the fact that its evaluation findings in the US have not been published as of the date of data collection.

BullySafe USA

Program description: The BullySafe USA program is a school based anti-bullying program targeted toward children in grades K-12. Students learn the about the different kinds of bullying from trained teachers who attend training institutes instructed by the program developer. The teachers in turn train their students about the material they learn from the training institutes. These materials include a curriculum that reinforces empathy building and peer to peer abuse recognition through student empowerment sessions. The student empowerment sessions discuss the different types of bullying including cyber-bullying.

Cyber-bullying content: Students learn the different types of cyber-bullying and discuss the roles in which schools, parents, and students can respond responsibly to such behaviors. An activities guide accompanies the lesson plans providing students the opportunity to participate in discussion sessions about cyber-bullying. In addition, staff training and parent seminars are offered to complement the cyber-information that students learn in the classroom. Finally, the book that complements the program contains a chapter on cyber-bullying titled “Cyber bullying, Unimagined Cruelty” (Fried, 2012; Terranova, 2006b).

Evaluation Method: In 2003, a quasi-experimental study was conducted on the effectiveness of the BullySafe USA program. This study involved over 1,000 elementary and middle school children in Louisiana, Missouri, and Florida. Teachers and students who participated in the study and underwent classroom curriculum

discussed their knowledge, attitudes, and observations about bullying during the study period (Terranova, 2006a).

Results: An evaluation of this study was not been published in a peer reviewed journal. Instead, its findings are found in the program's website. Findings from the program's study suggested that the BullySafe USA program was successful in students learning the skills and information from the lesson plans. BullySafe USA also improved students and teachers' attitudes and actions to intervene with bullying incidents. Reductions in traditional bullying victimization were also reported in two of the three states, Louisiana and Florida (Terranova, 2006a).

CyberCool Curriculum

Program description: CyberCool Curriculum is an anti-bullying program that is part of the Ophelia Project which is a youth group organization designed to assist middle school girls with relational aggression. Gossip, threats to end friendship, and socially excluding others are all examples of relational aggression. Relational aggression often is a form of cyber-bullying. The CyberCool Curriculum is intended for female students in middle school and high school. The program is delivered after school through classroom small group format.

Cyber-bullying Component: Students explore such topics as positive norms and attitudes about online behavior, consequences of cyber-bullying, and empowerment strategies that specifically deal with cyber-victimization and cyber-bystanders. In addition, the program informs students in ways in which they can access safe online environments to blog, tweet, and share digital files with one another.

Evaluation Method/Results: There has been no published evaluation conducted on the CyberCool Curriculum to date.

CyberALLY

Program Description/Cyber-bullying content: CyberALLY is an interactive cyber-bullying prevention program for middle and high school students. Half-day or full day training are available to assist students in dealing with cyber-bullying either as the aggressor or as the victim. Online forums are also discussed in the program with emphasis on social cruelty.

Evaluation Methods/Results: In the school years 2011-2012, a mixed method evaluation was performed on Cyber-ALLY involving 411 secondary students in the Atlanta, Georgia area. Findings from the study collected through focus groups and participant surveys revealed that the goals of the program are being met with students learning the skills from the program and applying them in their daily lives. Participants were learning how to assist others who were cyber-bullied in addition to preventing themselves from being targets of such behavior (Anti-Defamation League, 2012).

Massachusetts Aggression Reduction Center (MARC)

Program description: MARC is an academic center at Bridgewater State University developed in 2004. The center conducts research, hosts conferences and workshops, and educates youth and adults about the topics of bullying and cyber-bullying (The Massachusetts Aggression Reducation Center, 2012b).

Cyber-bullying content: MARC has developed a separate bullying and cyber curriculum for K-5 and high school students. The K-5 curriculum contains ten lesson

plans for each grade addressing topics such as general knowledge, peer abuse, and common myths about online interactions. Paired up or "buddy classes" are built into the lesson plans by placing younger student classes with older student classes to reinforce peer modeling, positive behaviors, and social relationships among the age groups. The high school curriculum contains ten lessons each for grades 9 and 10, and 5 lessons each for grades 11 and 12 covering topics such as writing prompts, educational readings, survey of opinions and thoughts and class discussions. In addition, the high school curriculum contains four brief videos lasting less than seven minutes each about cyber-bullying (The Massachusetts Aggression Reduction Center, 2012a, 2012b).

Evaluation Results: Outcome data for the first three years of the MARC program indicate that the following recommended practices and observations of the program were identified as the most important (Englander & Muldowney, 2010):

- Use research informed practice for the most part;
- Provide motivation to both the bullies and victims to resolve their conflict;
- Teacher use of the internet differs from youth;
- Address obstacles in learning gaps and technology evolution;
- Engage the entire community
- Academic settings (vs. traditional "for profit" entities) represent an efficient way to launch and sustain bullying programs;

Results Summary

A summary of the qualitative data is provided below categorized by study setting, research design, targeted population, program delivery, and program intervention

effectiveness. The summary pertains to the nine traditional bullying programs with cyber-bullying content that have been formally evaluated for traditional bullying effectiveness in the US between the years 2001-2010.

Study Research Design: Three (Olweus, Positive Action, and Steps to Respect) of the nine programs utilized randomized control designs to evaluate program effectiveness. Four (Bully Busters, BEST, Bully Free Classroom, and Safe Schools Ambassadors) programs employed a quasi-experimental research design, while two (Bully Proofing Your School, Positive Behaviors in Supports) programs utilized multiple site or single site observational designs in evaluating their respective programs.

Program Cyber-Bullying Content: In almost of all the programs with the exception of one (Safe Schools Ambassadors), formal classroom lessons involving cyber-bullying information are delivered. Student activities in the form of discussion groups and role playing exercises were also found prevalent cyber-bullying material covered in the programs. Such material appeared in all of the programs except for three programs (Positive Behaviors Interventions and Supports, Safe School Ambassadors, and Steps to Respect). Despite attempts to retrieve detailed cyber-bullying content in some of the programs, specific information was not able to be obtained.

Targeted Population: Student outcome measures regarding traditional bullying behavior, knowledge, and attitude were observed and measured among subjects in grade levels from 1-12. Only two of the programs (Olweus, Bully-Proofing Your School) measured program impact in students within that entire grade range of 1-12. Two of the programs (Bully Busters, BEST) focused on middle school children (grades 6, 7, and 8)

exclusively. The remaining five programs focused on elementary to middle school-aged children (grades 1 – 8).

Program Delivery: Universal classroom cyber-bullying curricula were the prevalent approach in which program information was disseminated. This approach was present in eight of the nine programs that have been formally evaluated. The Safe Schools Ambassadors Program was the only program that did not utilize this type of implementation method as it did not utilize formal classroom format lectures to deliver its program. Universal school wide support of the programs with respect to newsletters, assemblies, and various school projects devoted toward bullying and cyber-bullying prevention was also present in most of the programs with the exception of the Bully Free Classroom Program. Only three (Bully Proofing Your School, Olweus, Positive Behaviors in Supports) of the programs implemented a targeted approach towards bullying/cyber-bullying. Five (Bully Busters, Bully Free Classroom, Olweus, Safe School Ambassadors, and Positive Action) of the nine programs provided program information outside of schools by providing workshops to parents, youth group organizations, and communities about traditional and cyber-bullying prevention.

Program Effectiveness (Traditional Bullying) – Program effectiveness was categorized into three categories – behaviors, attitudes, and knowledge.

Program Effectiveness (Cyber-Bullying) –Among the nine programs, none were tested for cyber-bullying effectiveness. One (KiVA) of the promising programs, however, was formally tested for cyber-bullying effectiveness. Although such evaluation was conducted outside of the US, its findings overseas yielded significantly reduced rates of victimization reported by its student participants.

Research Questions

Three research questions were identified for this study that relate to the general overview of the identified programs in this study. The questions are answered below after a review of the findings from the identified programs that passed the inclusion/exclusion criteria**.**

Q1: What are the evidenced-based or research-informed programs currently being implemented to prevent cyber-bullying*?*

All nine programs that passed the inclusion/exclusion criteria of this thesis are classified as either evidenced based or research informed. It is important to note that these distinctions were based upon the programs' effectiveness to reduce or prevent traditional bullying as cyber-bullying effectiveness was not tested in any of these nine programs. Despite best attempts to obtain reliable data on cyber-bullying effectiveness, the researcher concluded that the information is simply not there. Accordingly, it cannot be stated that such programs would also be effective in reducing or preventing cyber-bullying among youth.

Q2: Where (schools, communities, youth groups, etc...) are such programs being practiced?

All of the programs identified in this study are being practiced on school grounds. These locations appear to be logical places to launch such programs being that they represent areas where a majority of children physically congregate every day. As cyber-bullying is becoming more widespread, programs are implementing additional program material to address this phenomenon. Study evaluations of the programs in

this study were also conducted on school grounds with none of the programs reporting findings that were collected outside of such environment.

Personal homes are also being targeted as environments where programs are being practiced. At the time of data collection, only three of the nine programs are providing such information in the form of family and parent kits where children can interact with their parents and guardians about cyber-bullying. Parents and guardians are also being targeted in other ways through formal workshops that teach cyber-bullying reporting and supervision skills. This strategy was found in four other programs. Finally, five of the nine programs are being practiced in communities via community events, workshops, and presentations where cyber-bullying awareness and support are taught. None of the programs are being practiced in youth groups such as Boy's and Girl Scouts or 4-H.

Q3: What components of these programs do they share?

Common Components:

The researcher found many shared similar components among the programs. Eight of the nine programs utilized either classroom lesson plans and activities or school-wide events to provide cyber-bullying content to students These topics included bullying awareness, friendship maintenance, assertiveness, emotional management, empathy, and resource assistance. These components aimed to achieve positive social climates that lead to attitudes that encourage appropriate online behavior. Such behavior subsequently resulted in feelings of safety among students where the learning experiences of students are enhanced.

Another component shared among four of the programs was the adoption of school-wide-anti-bullying policies promoted by the programs that encourage and reward students for respecting each other. These policies not only provide recommended guidelines on behavior but outlines appropriate usage of digital devices and computers in schools. As computer and cell phone use in schools continue to rise, social norms with regards to their usage needs to be communicated, reinforced, and formalized. Finally, adult education and community involvement were also other components shared among six of the nine programs. These components were executed through formal workshops, events, and projects designed to bring awareness and attention to bullying and cyber-bullying. Specific topics included restricting Internet-use, saving evidence, and learning how to identify and report cyber-bullies.

Missing Components

The researcher found a lack of lesson plans or workshops that deal with hands on training to prevent cyber-bullying. For example, lesson plans that deal specifically with navigating safely on the Internet and how to block offensive intruders requires the use of actual computers and digital devices. These types of lesson plans were not found in any of the programs that actually provided detailed information about their curricula. Finally, although the researcher found community involvement components present in many of the programs, the depth of involvement by the community partners appeared to be very limited in scope. Workshops, presentations, and events were commonalities found in the programs but only one (Bully Busters) of the programs actually had partnerships established with specific Internet providers, cell phone carriers, and website developers.

Program Effectiveness

Table 7 summarizes the effectiveness of the programs based upon school level implementation. School level implementation was divided into four groups: Elementary Schools (Grades 1-6), Middle Schools (Grades 7-9) High Schools (Grades 10-12), and Comprehensive (Grades 1-12):

Table 7: Data Analysis – Summary of Intervention Effectiveness by School Level Delivery

School Level Delivery	Elementary School (Grades 1-6) n (%)	Middle School (Grades 7,8,9) n (%)	High School (Grades 10-12) n (%)	Comprehensive (Grades 1-12) n (%)	Total n (%)
Knowledge					
Reporting Effectiveness	0 (0%)	2 (25%)	0 (0%)	0 (0%)	2 (0%)
Not Reporting Effectiveness	6 (100%)	6 (75%)	0 (0%)	3 (100%)	15 (100%)
Attitudes					
Reporting Effectiveness	1 (17%)	0 (0%)	0 (0%)	0 (100%)	1 (6%)
Not Reporting Effectiveness	5 (83%)	8 (100%)	0 (0%)	0 (0%)	16 (94%)
Behavior					
Reporting Effectiveness	6 (100%)	6 (75%)	0 (0%)	1 (33%)	13 (76%)
Not Reporting Effectiveness	0 (0%)	2 (25%)	0 (0%)	2 (67%)	4 (24%)

The construct of knowledge and attitude reported to not being affected by the programs. However, the researcher concluded, that such findings were the result of the programs not pursuing to measure these constructs among the studies. 100% of the programs delivered to exclusively elementary school aged children reported positive outcomes with respect to behavior changes as a result of program delivery.

Table 8 summarizes the effectiveness of the programs based upon prevention approach. Prevention approach was divided into three groups: 1) Universal Only; 2) Universal and Targeted or Indicated; and 3) Universal, Targeted, Indicated:

Table 8: Data Analysis - Summary of Intervention Effectiveness by Prevention Approach

Prevention Approach	Universal Only n (%)	Universal & Targeted or Indicated n (%)	Universal, Targeted, Indicated n (%)	Total n (%)
Knowledge				
Reporting Effectiveness	3 (38%)	1 (14%)	0 (0%)	4 (23%)
Not Reporting Effectiveness	5(62%)	6 (86%)	2 (100%)	13 (77%)
Attitudes				
Reporting Effectiveness	1 (13%)	0 (0%)	0 (0%)	1 (6%)
Not Reporting Effectiveness	7(87%)	7 (100%)	2 (100%)	16 (94%)
Behavior				
Reporting Effectiveness	4 (57%)	7 (100%)	1 (50%)	12 (70%)
Not Reporting Efectiveness	3 (43%)	0 (0%)	1 (50%)	4 (30%)

70% of the studies reveal behavior change among all of the programs suggesting overall effectiveness. The combination prevention approach involving at least two prevention approaches appeared to be most effective way to implement prevention approaches as 100% of the studies pertaining to such programs yielded positive outcomes with respect to the behavior construct. Knowledge appears to not have been affected by the programs but like the prior table, this is a result of such construct not being measured by programs' studies.

Conclusion

Findings from the search strategy revealed nine traditional bullying programs with cyber-bullying content and five promising programs yet to be formally evaluated in the US. Universal prevention incorporating classroom and whole school initiatives was the prevalent prevention approach of most of the programs with only three programs (Bully Proofing Your School, Olweus, and Positive Behaviors Interventions and Supports) implementing indicated or targeted approaches in addition to the universal approach. Although cyber-bullying effectiveness was not measured in most of the programs, outcomes to reduce and prevent traditional bullying were documented and analyzed across several constructs to assess their overall effectiveness. Findings revealed that programs being implemented in the elementary were most effective when assessing program impact of the programs. Programs implementing either targeted or indicated prevention approaches in addition to universal whole school approaches were also deemed most effective. While it is uncertain that these programs with cyber-bullying content will reduce or prevent cyber-bullying, their current evaluation data is worthy of review with the intent that they can be also be replicated in the cyber-bullying context. Promising programs indentified in this study captured new insight into the field and provided early outcomes that shed light in planning future programming efforts to prevent cyber-bullying. A discussion of these results in provided in the following chapter.

Chapter 5: Discussion

Introduction

Bullying among youth has been present in the US for decades. Its negative impact on the public health of today's youth has been observed and studied by both researchers and practitioners alike. These negative effects include lowered self-esteem, psychosomatic symptoms, depression, and relationship distrust issues (Kim, et al., 2011; Limber, 2002; D Olweus, 1993). Such negative effects on children have made the subject of bullying a public health issue in recent years. As a result of these outcomes, schools and communities have been addressing bullying in part by implementing various programs. These programs have been implemented and tested in the US with mixed results (Baldry, 2007).

In recent years, a new form of bullying among youth has emerged creating concerns among parents, teachers, school staff, and the community. Increased usage of mobile phones, computers, and other technological devices has allowed this new form of bullying called cyber-bullying to surface. Cyber-bullying occurs whenever children abuse such technological tools to purposely inflict harm to one another. More specifically, cyber-bullying can occur through emails, text messages, pictures, and instant messages among various online sites that include social networking sites like Facebook and Twitter, chat rooms, polling booths and game sites. Negative effects of cyber-bullying is emerging but early evidence shows that similar negative effects that appear in traditional bullying participants also appear among those involved in the

cyber-bullying (Hinduja & Patchin, 2008). These effects include self-esteem, loneliness, depression, and psychosomatic symptoms among both cyber-bullies and cyber-victims.

Despite a number of sensational cases of cyber-bullying being covered widely in the media in recent years, there are no current national efforts being made to reduce this behavior. Bullying programs continue to be taught in schools and communities throughout the US but their effectiveness in reducing youth online perpetration and victimization is unknown given the growing trend of technology use among today's youth. Prevention programs are difficult to develop with respect to cyber-bullying. It has very specific characteristics that set it apart from traditional bullying. Issues surrounding its environment, timing and interpretation make it challenging to identify let alone measure and combat. In addition, case management may be difficult to quantify due to the likelihood that children often fear losing use of their cell phones or computers if they report cyber-bullying behavior. Nonetheless, the negative impacts of youth cyber-bullying on the well being and academic performance of its participants is documented and continues to concern many parents, school staff, and community members. Effective programming to address cyber-bullying is needed in order to protect the physical, mental, and emotional well being of today's youth and is the main theme of this thesis.

Summary of Study

As access to technology becomes less costly, more efficient, and easily accessible, the likelihood of cyber-bullying behavior among youth will continue to occur. In order to prevent or reduce the growth of cyber-bullying, existing programs need to be identified and new programs need to be developed. Questions regarding the availability

of current programs, where and how they are being implemented, as well as their shared components need to be explored in order to assess the current status of the field. Answers to these questions and analysis of such programs will hopefully lead to further programming and evaluation efforts, advancing the field of youth cyber-bullying prevention in the US.

The researcher conducted a systematic search to identify existing evidence-base or research informed youth cyber-bullying prevention programs in order to seek answers to these questions. This search involved utilizing precise search terms among various scholarly databases to yield information about current youth cyber-bullying programs in the US. The researcher found programs either in the form of peer reviewed journal articles and systematic review articles about bullying and/or cyber-bullying. Once identified, the researcher applied rigorous inclusion/exclusion criteria among the programs in the articles to yield findings for this thesis.

The researcher's findings included nine traditional bullying programs with cyber-bullying content that passed the study's inclusion/exclusion criteria. In addition, the researcher identified five promising programs that have not been formally evaluated in the US but recently launched. The researcher analyzed the data among the nine programs that passed the inclusion/exclusion criteria and identified common themes that were present in the design of such programs. These themes included the lesson plans and activities, school wide policies that specifically deal with bullying and cyber-bullying, adult education, and community involvement. The researcher found a relatively low number of programs that utilized actual technology in their curricula. The researcher also found that the community components present in the programs

currently lack partnerships with partners who are able to make an impact in the cyber-bullying arena. These community organizations include Internet providers, social networking, gaming, and search engine site developers.

Although not considered evidenced-based or researched informed at this time, the researcher found the emergence of stand-alone cyber-bullying programs such as CyberCool Curriculum and CyberAlly to be promising examples of breakthrough programs. These programs currently provide the urgency and importance of addressing the problem of cyber-bullying in its own programming context. Their evolution paves the path toward additional programs that will hopefully be classified as evidenced-based or research-informed cyber-bullying programs in the future. KiVA, another promising program, was the only program to actually produce cyber-bullying effectiveness. However, its effectiveness was tested overseas thus excluding it from the list of programs that passed the inclusion/exclusion criteria of this study. The researcher found it encouraging that such a program was finally being launched in the US with formal evaluation findings to be released in the near future.

The researcher also attempted to assess the overall effectiveness of the nine traditional bullying programs with cyber-bullying content that passed the inclusion/exclusion criteria of this study. Findings revealed that programs targeting elementary and middle school students were most effective in changing bullying behaviors. Findings also revealed that a minimum combination of universal prevention approach coupled with either a targeted or indicated prevention approach was deemed to be most effective in changing bullying or bullying related behavior.

Recommendations

Findings from this study is cautioned to be also applicable in the cyber-bullying context given the fact that cyber-bullying effectiveness was not tested in any of the programs that passed the inclusion/exclusion criteria used in this thesis. Therefore, it was important that the researcher compare the data with cyber-bullying literature in order to generate sound recommendations. Accordingly, the recommendations below reflect a thorough analysis of this study's data in addition to the background literature review.

Develop and implement a uniform definition of cyber-bullying

Literature alludes to this recommendation; however, the importance of establishing these definitions is illuminated even more by this study's lack of conclusive data. There are no clear and universally accepted definitions as to what constitutes cyber-bullying – the act, its frequency, intensity, or produced harm. Complexity about the subject continues to be a burden for researchers and practitioners to shoulder. Unlike traditional bullying – cyber-bullying can be very subjective. Clear, comprehensive, and accepted definitions of the behavior would move the field of cyber-bullying prevention forward. Positive outcomes from such standardization would include cyber-bullying outcomes being measured in programs that currently contain cyber-bullying content. A more precise definition would also establish having more consistent data reporting among researchers in the field. As this study indicates, the field does not provide this precise comprehensive definition at the present time. Accordingly, the field of public health should not be content with the assumption that the same strategies

with traditional bullying can also apply to cyber-bullying. Establishing comprehensive definitions about cyber-bullying and obtaining consensus from field experts would enable researchers to not only measure the activity but ultimately design effective programs to combat the phenomenon.

Measure cyber-bullying behaviors in program evaluation

The programs that were identified in this study did not measure the impact of the programs on the students' knowledge, attitudes, or behavior toward cyber-bullying. Therefore, it cannot be concluded that they are effective programs to combat cyber-bullying. The researcher speculated that the reason why cyber-bullying effectiveness has not been tested in these programs is the assumption that these programs were evaluated prior to adopting cyber-bullying content. Consequently, what are missing in the field of research are program evaluations that actually measure cyber-bullying prevention effectiveness. Effective programs are needed to address cyber-bullying even if they have to be delivered under the umbrella of traditional bullying programs. Without such evaluations, effective programs will not be able to be identified.

In planning out future evaluations of cyber-bullying programs, it is important to replicate efforts of prior evaluations that tested for traditional bullying effectiveness utilizing large sample sizes, different demographic groups, and various sites. Program implementation and dissemination of future cyber-bullying programs should be implemented as early as elementary schools to order to engage children to act responsibly in the digital world. Data from this study reveals strong evidence supporting the appropriateness of this program delivery timing. As technology continues to be provided to children at younger ages, it is important to launch effective cyber-bullying

programs during these younger years in which they are first exposed to such technology.

Integrate more cyber-bullying specific components into programs (i.e., digital applications)

Given the nature of cyber-bullying, it seems appropriate to teach cyber-bullying prevention lessons on-line or through digital devices. Success of the research informed KiVA program supports this approach and it is recommended that other programs follow suit. Another example of such innovation is the recent launch of BullyBusters' WordBully Smartphone application. Such application engages parents to be part of the cyber-bullying prevention process. This recommendation is built around the assumption that children will be able to resonate to programs that teach them on how to behave in actual real life settings. Parents can also benefit from such innovations so that they can learn the material at their own pace and at the convenience of their homes. This is an important conclusion to consider in the cyber-bullying context given the assumption that cyber-bullying occurs mostly in children's home. Supervision of children's online behavior is a key in preventing cyber-bullying as parents and guardians need to know what websites their children are visiting and who they are interacting with. Parents and guardians need to embrace technology in order to not create a digital divide between them and their children. Without home supervision and oversight, children will continue to experience cyber-bullying. Without technology integration being launched in prevention programs, such oversight will not be achieved.

Utilize more selective and indicated prevention approaches to cyber-bullying.

Based upon this study's program data, there are currently three programs that implement selective or indicated approaches in dealing with cyber-bullying. However, data arising from the programs that do implement these prevention approaches report 100% positive outcomes with respect to changing students' behaviors about traditional bullying. The lack of programs implementing these approaches is a disturbing reality in the face of several stories about cyber-bullying victims covered in the media involving cyber-victims who are different - LGBT, foreign, transfer students, or disabled. Other groups of students are victimized as well. In addition, bully-victims have also shown to be at strong risk group towards suicide. Systems to support such youth within programs could provide the needed support and encouragement that they need to cope with cyber-bullying. Cyber-bullies also need to be singled out and provided assistance. They need help in understanding why they actually act aggressively online or choose to visit certain websites to target other individuals. One on one counseling sessions with such individuals could greatly reduce the amount of cyber-bullying activity among youth.

Develop and implement more programs outside the school environment

Data from this study indicates that programs are not being implemented often outside of the school environment. Given this fact, youth groups and communities need to feel empowered to tackle the reality that cyber-bullying occurs 24 hours a day and seven days a week and most often outside of schools. Furthermore, the permanence of its damage can be felt long-term as messages can be posted for long periods of time delivering harmful effects to victims. Therefore it is very important to have cyber-bullying programs be also implemented outside of schools in order to properly monitor children's

online behaviors and report such behaviors when they arise. Youth groups can provide opportunities for learning about cyber-bullying prevention apart from the classroom. For example, children may be naturally inclined to ignore or block cyber-bullies, but they may not necessarily know how to remove harmful websites or participate in safe online environments. These strategies may require additional time to what is typically offered in classroom settings. Community venues like public libraries and faith-based organizations would be ideal settings to launch such initiatives as computers, cell phones, and other digital devices are being utilized heavily in these locations. Additionally, these opportunities could also benefit children who are not provided such information at their own schools.

Implications for Public Health

In order to address cyber-bullying effectively in today's times, the concerted effort of researchers and community members is needed to work together to identify and find new ways to prevent and mitigate the problem. Providing prevention programs is one of the most effective ways such problem can be addressed. In order for cyber-bullying programs to be effective, processes must be undertaken in order to sustain the intended effects of the programs. Without such processes, sustainability of effectiveness will be difficult to achieve. Cyber-bullying programs need to be planned, delivered, and evaluated on a routine basis in order to keep pace with the ever changing technology world. As bullying programs with cyber-bullying content currently exists, the need to refine and perhaps refocus such programs may need to be undertaken.

Planning involves careful design of programs that are built upon research on risk factors and outcomes of cyber-bullies and cyber-victims. Program design should also

be a two-way continuum that involves both experts in research design as well as practitioners and intended recipients. This type of collaboration is the optimal way to determine best practices to prevent cyber-bullying apart from traditional bullying yet few employ it due to various reasons including resource constraints. It would be encouraging to see more programs adopt this combined top - down, bottom- up designs in the future.

Routine evaluations of cyber-bullying programs that employ evidence-based or research informed designs utilizing large sample sizes, longer term follow up, and different demographics are needed to ensure that positive impact can be created across different populations. These evaluations need to reach beyond school premises and be replicated in various sites such as youth group and faith based organizations. In addition to measuring students' outcomes, evaluations need to reflect feedback from students, parents and community partners who have a vested interest in the prevention of cyber-bullying. Community engagement and active participation is definitely the key to cyber-bullying prevention and is what is needed to combat the complexities of this very phenomenon. Any effort short of it will only lead to the continuity of cyber-bullying behavior and its related negative impacts on youth. In summary, sustainability of prevention efforts in schools and at homes cannot be achieved without the long term commitment of community partners who are also key players in the prevention process.

Conclusion

As technology use among youth in the US continues to rise, programs are needed to prevent cyber-bullying. There are only a few cyber-bullying programs currently in place in the US and what currently exist are programs that either: (a) never

been evaluated; (b) evaluated informally or (c) formally evaluated for traditional bullying effectiveness but not evaluated for cyber-bullying effectiveness. Program effectiveness is important to achieve but given the complexity of cyber-bullying, it is even more important to step back and determine how to effectively design or redesign these programs. Efforts to standardize the definition of cyber-bullying are warranted first and foremost. Thereafter, the field for research and development is wide and clear for more work to be done in order to mitigate the harmful effects of this phenomenon. Findings arising from this thesis recommend more technology integration, individualized focused interventions, and a more comprehensive community involvement in order to effectively combat cyber-bullying in the years to come. These recommendations will hopefully provide appropriate directions that practitioners can use that are both clear and concise. Opportunities to expand, create, and test existing and new programs provide exciting challenges for researchers and practitioners to build upon in the future.

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