

Assessment of bullying in the primary care setting : a literature review and recommendation

Julie Ann Rego

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A literature review and recommendation

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Dedication

I dedicate this paper to all those affected by bullying. It is my hope that this paper will help open the eyes of all primary care providers to take a stand and help prevent the negative consequences that accompanying the acts of bullying.

I especially dedicate this paper to the Pyles family. Watching you grow over the years has inspired me to take action and strive to develop a tool to help children affected by bullying. To Brendyn, Sydney, Jolie, and Addison, I love you so much and it is my hope that you can one day read this paper and feel proud to have been the fuel for this fire.

Acknowledgements

I would like to thank my advisor, Dr. Kimberly Burkhart for making this project possible. It is through her hard work and dedication that the bones for this paper came to life. It is with her effort, commitment, and hours of editing that we were able to portray the negativity that is bullying and develop a potential instrument for utilization in the field today. Thank you for all of your help and for all that you have done for me this year. I look forward to taking this project a step further in the future because of you.

Table of Contents

Introduction.....	1
Methods.....	3
Literature Review.....	5
Public Health Aspect of Bullying	5
Target Populations of Bullying.....	8
Manifestations of Bullying	13
Methods for Assessing Bullying.....	15
Assessment Tools Available for Bullying	17
Assessment in the Primary Care Setting.....	28
Discussion.....	32
Conclusion	37
Reference List.....	38
Abstract.....	50

Introduction

Bullying has been regarded as an evolving and pervasive public health concern that requires the attention of clinicians (i.e., healthcare practitioner), parents, educators, and the community (Fekkes, Pijpers, & Verloove-Vanhorick, 2004; Robers, Zhang, Morgan, & Musu-Gillette, 2015; Vivolo, Holt, & Massetti, 2011; Wang, Iannotti, & Nansel, 2009). In addition to being able to identify victims of bullying and to facilitate discussion about signs and symptoms, clinicians must also be able to detect when an external referral to outpatient behavioral health is warranted. The practicality and usefulness of relying on primary care practitioners to utilize effective and reliable measures in assessing for victimization is undeniable. Thus, the objective of this review is not only to outline the current protocols in place for primary care practitioners to identify victims of bullying, but to also review the literature speaking to the effectiveness of those measures. Specifically, this review begins with assessing the public health approach and increasing prevalence of bullying today, the key targets of such violence, and both the short and long-term consequences that bullying has on its victims. Current assessment measures are also reviewed to determine clinical utility in primary care. Through the integration of all relevant topics, this review concludes with a final recommendation regarding victimization assessment in the primary care setting.

Although some difference remains in how bullying is defined across cultures and professions, the term is generally outlined as any threatened or actual unwanted and aggressive behavior that may cause distress or harm and which involves a disparity of power between the perpetrator and victim (Arora, 1996; Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014). Moreover, such actions must be repetitively initiated between youths who are not siblings and who are not intimate partners (Arora, 1996; Gladden et al., 2014). Bullying is defined as either

direct or indirect and classified as being physical, verbal, relational, and/or taking the form of cyberbullying (Gladden et al., 2014). Specifically, direct bullying occurs in the presence of the victim through face-to-face interactions, whereas indirect forms of bullying can be defined as behaviors not openly perpetrated in the presence of the victim (e.g., spreading rumors or cyberbullying; Gladden et al., 2014). Physical bullying can include acts of hitting, pushing, tripping, or spitting on another person, while verbal bullying includes both written and oral statements directed against a targeted individual (e.g., name calling, threats, hand gestures, offensive notes, or sexual remarks; Gladden et al., 2014). Relational forms of bullying include a mixture of direct and indirect behaviors that are completed with the sole intention of damaging another's character (e.g., directly isolating or ignoring them or indirectly spreading rumors; Gladden et al., 2014). The term cyberbullying refers to the use of computers, phones, and any other electronic devices to intentionally tease or degrade another (e.g., harassing or hurtful text messages, harmful posts on social media including videos and photographs; Gladden et al., 2014; Hinduja & Patchin, 2014).

Students across the nation have identified acts of bullying as occurring on a daily basis and being carried out the majority of the time on school property (Robers et al., 2015). With the increased prevalence of bullying in the nation today, researchers have focused much of their effort in developing programs to educate students and stop bullying at school. This review, however focuses on the identification of victims of bullying by healthcare practitioners in hopes of intervention.

Methods

The articles reviewed include governmental documents, peer-reviewed journal articles, press releases, national reports, and research articles. Such articles include qualitative research, quantitative research, meta-analyses, systematic reviews, and studies involving experimental designs. Also included were cohort studies, case studies, surveys, studies using empirical evidence, case control and cross sectional studies.

The databases that were searched include Academic Search Complete, Business Search Complete, CINAHL Plus with Full Text, Criminal Justice Abstracts with Full Text, Education Full Text, Education Research Complete, ERIC, Gender Studies Database, JSTOR Journals, MEDLINE, National Criminal Justice Reference Service Abstracts, PsycINFO, Professional Development Collection, Psychology & Behavioral Sciences Collection, PubMed Central, SAGE Journals, ScienceDirect, Social Work Abstracts, SocINDEX with Full Text, and Wiley Online Library.

The following search terms were used both separately and in various combinations: “adjustment”, “aggression”, “analysis”, “anxiety”, “assessment”, “bullying”, “consequences”, “cyberbullying”, “definition”, “depression”, “direct”, “epidemiology”, “evaluation”, “healthcare”, “identify”, “indirect”, “internalizing”, “manifestation”, “measurement”, “measures”, “meta-analysis”, “prevalence”, “primary care”, “psychiatric”, “psychosocial”, “public health”, “questionnaire”, “screening”, “statistic”, “symptom”, “victimization”, “victim”, and “youth”.

Publication dates were limited to 2004 to 2015 to obtain the most current statistics, while background and definitional information were included from publication dates ranging from 1986 to 2015. Inclusion criteria for statistical measures include children (aged 0 to 18 years)

living in the United States, individuals of all racial/ethnic backgrounds and socioeconomic statuses, as well as direct, indirect, cyber, physical, verbal, and relational types of bullying. As this review focuses on the primary care setting, the report measures that were evaluated include parent, child, and teacher report. Criteria that were excluded from the search include bullying in the workplace, articles evaluating the efficacy of specific prevention/intervention programs implemented in the school setting, and dating or intimate partner violence.

Literature Review

Public Health Aspect of Bullying

Bullying is a public health problem due to its frequency and harmful effects on victims. As inconsistencies exist in outlined definitions and measurement techniques of bullying, reported data and prevalence rates vary among different sources (Vivolo et al., 2011). Although some variation exists in the parameters and terminology used for national estimates, available evaluations have consistently suggested bullying to be a pervasive problem for our youth. Children have reported bullying experiences as early as 5-years-old, largely reaching its peak in elementary school and decreasing in prevalence thereafter (Fekkes et al., 2004).

Biennially since 1999, the Bureau of Justice Statistics conducts a National Crime Victimization Survey (NCVS) of a sample of 90,380 households across all 50 states and publishes the School Crime Supplement (SCS) after compiling data regarding student and school characteristics of victimization (Lessne & Harmalkar, 2013). The 2011 SCS included 5,739 students of U.S. public and private school and indicated that 27.8% of students aged 12 to 18 reported being bullied at some point over the last three years (Lessne & Harmalkar, 2013).

Annually, the Center for Disease Control (CDC) publishes the Youth Risk Behavior Surveillance System (YRBSS) reporting statistics from national and state surveys regarding health-risk behaviors contributing to youth morbidity and mortality (Kann et al., 2014). As for the 2012 – 2013 academic year, the YRBSS reported that 19.6% of 9th to 12th grade students were bullied at school at least once (Kann et al., 2014). Bullying is defined in this study as one or more students repeatedly teasing, spreading rumors, threatening, shoving, hitting, or hurting another student (Kann et al., 2014).

The National Center for Education Statistics (NCES), the Bureau of Justice Statistics (BJS), and the Institute of Education Sciences (IES) collectively publish an annual survey of the most recent data regarding school crime and student safety, named the “Indicators of School Crime and Safety” (Robers et al., 2015). These reports are composed of annual statistics from the NCVS, YRBSS, and various other reports as sponsored by the U.S. Department of Education and the Federal Bureau of Investigation (Robers et al., 2015). From the perspectives of students, teachers, and school administration, 23% of public school sources indicated that unwanted aggressive behaviors occurred either daily or weekly during the 2009 – 2010 school year (Robers et al., 2015). The 17th annual Indicators of School Crime and Safety report found 22% of students aged 12 to 18 were bullied on school property during the 2012 – 2013 academic year, with 33% indicating a frequency of at least once a month (Robers et al., 2015). With this, 14% reported being made fun of, called names, or insulted, 13% were the subject of rumors and 6% were either pushed, shoved, tripped or spit on (Robers et al., 2015). As 7% of students were the victims of cyberbullying at some point during the same school year, 27% indicated being cyberbullied at least once a month (Robers et al., 2015).

The World Health Organization (WHO) sponsored the Health Behavior in School-Aged Children (HBSC) Survey, which illustrated that 20.8% of 6th to 10th grade students reported being physically bullied and 53.6% of students indicated they had been verbally bullied during the 2005 – 2006 school year (Wang et al., 2009). In that same study, 51.4% of those aged 11 to 16 reported being socially bullied while 13.6% of students were victims of cyberbullying (Wang et al., 2009). In a 7-year study conducted by Hinduja and Patchin (2014), it was reported that nearly 25% of 10,000 randomly-selected 11 to 18 year-olds had been victimized by cyberbullying and approximately 17% of that same sample admitted to cyberbullying a peer at some point in their

life. Similarly, the CDC found in recent studies that 14.8% of students reported being the victims of cyberbullying either through text messages, e-mails or social media sites (Kann et al., 2014).

Overall, reported victimization ranges from 19% to 28% for students in 6th to 11th grade as prevalence of bullying in 12th grade remains at 14% (Robers et al., 2015). While there is some debate in determining whether girls or boys are more often the victims of bullying (Kumpulainen et al., 1998; Rigby & Slee, 1991), differences regarding specific gender involvement in certain bullying practices are consistent and notable (Craig, 1998; Kann et al., 2014). It has been reported that males are more often involved in direct forms of bullying (e.g., physical fights, tripping, hitting, or spitting) while females engage more in indirect bullying (e.g., spreading rumors, social exclusion, or cyberbullying; Craig, 1998; Kann et al., 2014). Such statistics illustrate that bullying is a widespread national issue that has captured the attention of public health officials. The persisting prevalence of bullying suggests that a more successful and multidimensional approach to recognizing and treating the mental and physical health implications of bullying should be adopted.

The consequences of bullying are pervasive, not only affecting direct victims, but also disrupting families, schools, and members of society as a whole. As bullying can occur in many forms and within several contexts, there are numerous physical, psychological, social, and educational implications. Extensive research shows that bullying can result in physical wounds or pain, feelings of distress or anxiety, damage to one's reputation or relationships, and/or restrictions to educational opportunities due to poor academic performance, absenteeism, and difficulties concentrating (Arseneault et al., 2006; Bear et al., 2015; Brighi, Guarini, Melotti, Galli, & Genta, 2012; Gladden et al., 2014; Hertz, Donato, & Wright, 2013; Hinduja & Patchin,

2014; Mishna, Cook, Gadalla, Daciuk, & Solomon, 2010; Nishina, Juvonen, & Witkow, 2005; Vivolo et al., 2011).

Victims of bullying are more likely to perform poorly at school and report feelings of low self-esteem and loneliness as compared to those who are not bullied (Brighi et al., 2012; Gladden et al., 2014; Hawker & Boulton, 2000; Hinduja & Patchin, 2014; Nansel et al., 2001; Vivolo et al., 2011). It has been reported that children who are bullied are more likely to have negative mental health outcomes like depression, anxiety, anger, and suicidal ideation (Bear et al., 2015; Cook, Williams, Guerra, Kim, & Sadek, 2010; Fekkes et al., 2004; Gladden et al., 2014; Hawker & Boulton, 2000; Hinduja & Patchin, 2014; Klomek, Marrocco, Kleinman, Schonfeld, & Gould, 2007). A cross-sectional study of 2766 elementary school children aged 9 to 12 also indicated that bullied children were at a higher risk of depression (Fekkes et al., 2004).

It is not uncommon that victims of bullying have been found to be too embarrassed or afraid to go to school due to being victimized (Cook et al., 2010; Hertz et al., 2013; Hinduja & Patchin, 2014). Some studies suggest the negative consequences of bullying can last into adulthood, with those that were victimized as children showing higher rates of anxiety, unemployment, illicit drug use, and criminal conduct (Cook et al., 2010; Gladstone, Parker, & Malhi, 2006; Nansel et al., 2001; Vivolo et al., 2011). While some would argue that peer conflict and provocation are typical interactions for children, the serious sequela of bullying indicates a significant danger to healthy emotional, social, and physical development (Fekkes et al., 2004).

Target Populations of Bullying

Studies show that nearly anyone can be a target of victimization. However, Guerra, Williams, and Sadek (2011) found, after surveying 2,678 elementary, middle, and high school

youth from 59 schools across the United States, that a victim of bullying is often identified as being perceived as weak, annoying, different, or even too perfect. Research has shown that specific groups of children endure higher rates of bullying than others. Such populations identified as being at higher risk for victimization include children with disabilities such as Autism Spectrum Disorder (ASD) and Attention Deficit/Hyperactivity Disorder (ADHD), those of the lesbian, gay, bisexual, transgender, queer (LGBTQ) community, youth of a relatively lower socioeconomic status, and those who are relatively overweight (Baumeister, Storch, & Geffken, 2008; Bear et al., 2015; Kaltiala-Heino, Lankinen, Marttunen, Lindberg, & Fröjd, 2016; Kolstrein & Jofré, 2013; Little, 2002; Lumeng et al., 2010).

Children with disabilities are also at a much higher risk of being victimized (Bear et al., 2015). To better determine the prevalence rate of bullying within a specific population, the Delaware Department of Education surveyed 12,527 parents and guardians of students with and without disabilities (i.e., ASD, emotional disturbances, ADHD, conduct disorder, learning disabilities, and/or visual, hearing, or speech impairments) in kindergarten through fifth grade across 74 elementary schools. The parent-report surveys indicated that 41.1% of children with disabilities were physically bullied, 62% were verbally bullied, and 44.8% were relationally bullied at least once a month over the last 6 months. This is in comparison to 36% of children without disabilities experiencing physical bullying, 56.3% experiencing verbal bullying, and 34.9% having been relationally bullied at least once over the last 6 months. When the general term “bullied” was used instead of specifically asking about physical, verbal or relational types of bullying, parents reported a prevalence of 29.8% for children with disabilities and 22.3% for children without disabilities (Bear et al., 2015).

To conduct a more focused victimization study, Little (2002) anonymously surveyed 411 youth aged 4 to 17 who have ASD and nonverbal learning disorders (NLD), which is characterized as having low social aptitude, difficulties with academic performance, and problems with motor coordination and spatial visualization ability (Kupferman-Meik, Burris-Warmoth, Rapaport, Roychoudhury, & Javier, 2013). A yearly prevalence rate of 75% was reported for bullying within this population, with 73% of parents reporting their child being physically assaulted and 31% almost always being chosen last for group activities over the last year (Little, 2002).

Kolstrein and Jofré (2013) explained that those who bully tend to focus their attention on victims they feel can be easily manipulated or dominated, have limited social competency or who are incapable of defending themselves. Based on this criteria, children with disabilities who demonstrate low levels of confidence and often struggle to identify potentially dangerous situations have a high risk of being bullied (Kolstrein & Jofré, 2013). Children with ASD, ADHD, and NLD often have difficulty identifying dangerous situations and ambiguous social cues making them easier targets for bullying.

Another group at higher risk of bullying includes those of the LGBTQ community (Berlan, Corliss, Field, Goodman, & Bryn Austin, 2010; Kupferman-Meik et al., 2013). In the 2009 biennial national study, the Gay, Lesbian and Straight Education Network surveyed the prevalence of victimization among 7,261 LGBT youth in grades 6 to 12 (Kosciw, Greytak, Diaz, & Bartkiewicz, 2010). In the past year, 52.9% of students were harassed through text messages, emails, instant messages or social media posts, 18.8% were punched, kicked or otherwise physically injured, and 40.1% reported being pushed, shoved or otherwise physically harassed at school because of their sexual orientation (Kosciw et al., 2010). Approximately 72% of students

heard homophobic comments (e.g., dyke, faggot) directed towards them regularly at school and 29.1% reported school absences at least once in the past month due to fears elicited by bullying incidents (Kosciw et al., 2010).

D'Augelli, Pilkington, and Hershberger (2002) surveyed 350 LGB youth aged 14 to 21 investigating targeted victimization experienced in high school and 59% reported being verbally abused as 54% of those respondents noted three or more specific instances during their high school career (D'Augelli et al., 2002). As bullying rates are higher among those that were open about their sexual orientation, 20% recalled being threatened with disclosure of their sexual orientation, while 11% reported being physically abused and 5% were sexually assaulted by their peers (D'Augelli et al., 2002). Overall, male respondents more often reported having objects thrown at them and receiving threats of physical violence due to their sexual orientation than females (D'Augelli et al., 2002).

Several studies demonstrate a relationship between socioeconomic inequalities and the prevalence of bullying (Due et al., 2009; Elgar, Craig, Boyce, Morgan, & Vella-Zarb, 2009; Kolstrein & Jofré, 2013). Tippett and Wolke (2014) conducted a meta-analysis of studies conducted from 1970 to 2012. These studies indicated a positive correlation between bullying and low socioeconomic status (SES) and a negative correlation between bullying and high SES. The analysis also indicated that of the sampled 4- to 18-year-olds, victims and bully-victims (i.e., one who perpetrates and experiences bullying) were most often from a background of lower SES than were those who were not involved in bullying (Gladden et al., 2014; Tippett & Wolke, 2014). For many youth who come from a lower SES than the majority of their peers, looking different and not being able to afford the same quality clothing, technology and other

commodities than other students is a reality and unfortunately notable risk factor for victimization (Tippett & Wolke, 2014).

As bullying and childhood obesity individually illustrate prominent public health topics, their relationship remains a prevalent issue for youth today (Lumeng et al., 2010). Overweight and obese children are often perceived as visibly different and undesirable by their normal-weight peers, placing them at a higher risk of being victimized (Bear et al., 2015; Hayden-Wade et al., 2005; Kaltiala-Heino et al., 2016). Using information from a longitudinal study conducted by the National Institute of Child Health and Human Development (NICHD), Lumeng and colleagues (2010) reported, from a sample of 821 children in the third, fifth, and sixth grade, that obese children, independent of gender, race, SES, social skills or academic performance, were more likely to be bullied than their peers. Overall, youth who are overweight are regularly the victims of more intense and malicious bullying than are their non-overweight peers (Kaltiala-Heino et al., 2016; Lumeng et al., 2010).

It is important for healthcare providers to recognize specific populations targeted by bullying and to identify the various risk factors involved. The tactical position of healthcare professionals allows for the opportunity to identify, intervene, and coordinate care for those who require additional support (Berlan et al., 2010; Little, 2002). Clinicians need to be aware that children with disabilities, those of the LGBTQ community, children from lower SES backgrounds, and those who are overweight are at a higher risk of being bullied than their peers. With nearly 30% of children within these specific populations affected by bullying, the necessity of screening the younger population for the effects of victimization is clearer than ever.

Manifestations of Bullying

In conjunction with reports of low self-esteem and poor academic performance, other consequences of bullying may include psychosomatic symptoms such as stomachaches, headaches, bed wetting, and an inability to sleep along with various other mental health presentations such as depression, suicidal ideation, and anxiety (Fekkes et al., 2004; Gladden et al., 2014; Kumpulainen et al., 1998; Reijntjes, Kamphuis, Prinzie, & Telch, 2010; Williams, Chambers, Logan, & Robinson, 1996). Due to the aforementioned substantial mental and physical health implications, healthcare provider detection is critical (Fekkes et al., 2004). Healthcare practitioners should be prepared to identify children and adolescents that might be suffering from the mental and physical correlates of bullying (Klein, Myhre, & Ahrendt, 2013). Victims of bullying are 2.4 to 3.6 times more likely to report issues with sleeping, 3.6 to 5.6 times more likely to feel unhappy, 1.7 to 2.9 times more likely to experience enuresis, and 2.4 to 3.2 times more likely to report head and stomach aches than children who are not victimized (Fekkes et al., 2004; Williams et al., 1996).

Eisenberger, Lieberman, and Williams (2003) depicted how physical symptomology relates to bullying experiences on a cellular and anatomic level. The centers of the brain that are activated during social exclusion (the dorsal anterior cingulate cortex and right ventral prefrontal cortex) are similarly stimulated in the presence of physical pain, suggesting a correlation between physical symptoms and individual involvement with victimization (Eisenberger et al., 2003).

Baldry (2004) also discussed the notable history of victims displaying an overall withdrawn demeanor, various internalizing symptoms like anxiety and depression, and somatic complaints requiring medical intervention like headaches, stomachaches, lethargy, and malaise.

In contrast to those findings, there is no clear evidence that shows bullying as having an effect on the perpetrator's physical wellbeing (Baldry, 2004).

Symptomology has been specified in terms of student involvement and/or role in the act of bullying (i.e., the victim, bully-victim, or the bully; Cook et al., 2010, Kumpulainen et al., 1998). In a meta-analytic review of 153 studies conducted from 1970 to 2006, Cook and colleagues (2010) reported that bullies tend to exhibit uncontrolled or externalizing behaviors (i.e., truancy, aggression, recklessness), have a negative view of self and others, and have difficulties in resolving conflict with peers. They also found that victims typically exhibit more over-controlled or internalizing symptoms (i.e., depression, anxiety, withdrawal), lack skills related to social interaction, and have negative views of the self (Cook et al., 2010). This is in contrast to students identified as being both a bully and a victim (i.e., bully-victim) who tend to display a compilation of externalizing and internalizing behaviors, exhibit inadequate social skills, and are both commonly rejected and negatively influenced by their peers (Cook et al., 2010; Kumpulainen et al., 1998).

Specific manifestations of victimization can vary by individual, which is why it is imperative to note that different variations of bullying (i.e., frequency, type, etc.) and specific risk and protective factors involved (i.e., the environment in which it occurs, the amount of support exhibited to the victim, etc.) can alter the clinical picture of the effects of bullying (Kupferman-Meik et al., 2013). Research has shown that exposure to constant victimization is commonly manifested as declining physical and mental health (Baldry, 2004; Cook et al., 2010). Therefore, it is not unusual for healthcare professionals to encounter children presenting with specific indicators of victimization (Kupferman-Meik et al., 2013). Children involved in bullying are at a higher risk for psychosocial disturbance, making it important for healthcare practitioners

to be aware of the possible manifestations and complications of bullying in order to better utilize the treatments and resources available to address and treat negative physical health, internalizing symptoms, and somatic complaints (Kumpulainen et al., 1998). With an evolution of bullying from a solely physical, direct context to now involving relational, indirect perspectives, primary care providers remain pivotal in identifying internalizing symptoms and externalizing behaviors that may be associated with victimization (Mishna et al., 2010; Waasdorp & Bradshaw, 2015).

Methods for Assessing Bullying

Multiple different methods exist to assess for and interpret bullying behaviors including observations, interviews, peer, parent, teacher, and self-reported questionnaires, and surveys (Crothers & Levinson, 2004). Direct observation of students is relatively inexpensive when completed by staff, but physical observations are difficult to achieve without modification in peer interactions occurring in the presence of an adult especially in locations like bathrooms, locker rooms, or busses (Crothers & Levinson, 2004; Felix, Sharkey, Green, Furlong, & Tanigawa, 2011). Interviews allow for a very detailed assessment of bullying behaviors, but require a large amount of time to complete and interpret (Crothers & Levinson, 2004). Validity of interviews also varies based on reporter accuracy and willingness to and comfort with sharing emotional information (e.g., disclosing to school administration versus an unknown adult; Crothers & Levinson, 2004). However, research suggests that no difference in response validity exists when subjects report sensitive information anonymously with their identity never being recorded or known (e.g., via questionnaire or survey) versus reporting confidentially with their identity only being known by the supervisor (e.g., via direct observation or interview; Chan, Myron, & Crawshaw, 2005; Lee & Cornell, 2010; O'Malley, Johnston, Bachman, &

Schulenberg, 2000). Questionnaires and surveys have the ability to gather a substantial amount of information from a large number of participants over a short period of time (Crothers & Levinson, 2004). Although they might not evaluate for all aspects of the bullying spectrum or permit the respondent to elaborate on his or her answers, the design allows for ease of distribution and interpretation (Crothers & Levinson, 2004; Lee & Cornell, 2010).

One of the most widely used forms of bullying assessment is that of a peer-nomination or sociometric process (Crothers & Levinson, 2004; Lee & Cornell, 2010). Using this technique, classmates are asked to evaluate each of their peers on a variety of different topics such as individual's actions, personalities, social status, or bully or victim status depending on the measurement's overall objective (Crothers & Levinson, 2004; Lee & Cornell, 2010). Peer surveys can be utilized as economically sound and efficient measurements of the bullying process, but potentially significant information regarding context and cause of such events is overlooked (Crothers & Levinson, 2004; Lee & Cornell, 2010).

When evaluating a child's social behaviors, parents and teachers can offer different perspectives on important information based on situation and setting (Doctoroff & Arnold, 2004; Mattison, Bagnato, & Strickler, 1987; Ruffalo & Elliott, 1997). Parent-report measures are only useful in assessing for bullying when respondents are informed by their children of the events occurring in and out of school (Newgent et al., 2009). Teachers are situated in an ideal location to identify bullying behaviors in the classroom and are capable of assessing large groups of students in a short amount of time, but bias and unintentional underestimations allow teacher-reporting measurements to be more accurately interpreted when used in conjunction with information extracted using other strategies (Crothers & Levinson, 2004). However outright and noticeable physical and verbal bullying can be, neither teachers nor parents are in an ideal

position to observe indirect bullying and cyberbullying. Different situations yield different actions by children, thus interpretation of data by multiple informants regarding a multitude of information is important and necessary especially when the development of intervention and management strategies is ultimately considered (Doctoroff & Arnold, 2004; Mattison et al., 1987; Ruffalo & Elliott, 1997).

Most instruments used today are self-report as they do not require a lot of time to complete, can be relatively inexpensive, and allow for the evaluation of behaviors that are not particularly straightforward or observable (Crothers & Levinson, 2004; Felix et al., 2011; Lee & Cornell, 2010; Solberg & Olweus, 2003; Vivolo-Kantor, Martell, Holland, & Westby, 2014). However, the legitimacy of self-reported values remains difficult to determine as the threshold for defining victimization, bias based on personal involvement, and general understanding of the concept of bullying might be skewed (Crothers & Levinson, 2004; Felix et al., 2011; Lee & Cornell, 2010; Vivolo-Kantor et al., 2014). Similarly, the victim's interpretation and perception of bullying also influences the presence of and severity of mental and physical health outcomes. In sum, a variety of techniques need to be used to ensure overall accuracy of bullying measurement as reporter hesitancy, honesty, and reliability can significantly influence the results (Doctoroff & Arnold, 2004; Felix et al., 2011; Lee & Cornell, 2010; Vivolo-Kantor et al., 2014).

Assessment Tools Available for Bullying

In order to determine what tools are available, Vivolo-Kantor et al. (2014) completed a comprehensive systematic review and content analysis of all the bullying assessment tools published between 1985 and 2012. The review consisted of 41 measures that were administered in English, assessed physical, verbal, relational, and cyberbullying behaviors, were administered

to subjects aged 12 to 20 years, along with parents, teachers, and peers, and had published psychometric data (i.e., reliability and validity) available for analysis (Vivolo-Kantor et al., 2014). Of the 41 measures involved in the study, some of the more notable and well-known measures include the Multidimensional Peer Victimization Scale (MPVS), Bullying Behaviour Scale (BBS), Peer Victimization Scale (PVS), California Bullying Victimization Scale (CBVS), Bully/Victim Questionnaire (BVQ), Modified Peer Nomination Inventory (MPNI), Victimization Scale (VS), and the Peer Relations Questionnaire (PRQ; Vivolo-Kantor et al., 2014).

Likely related to the difficulty in determining a universally accepted definition of bullying, research suggests instruments rarely use a comprehensive definition when assessing for victimization (Vivolo-Kantor et al., 2014). Of the 41 reviewed measures, 11 (26.8%) used a definition to describe acts of bullying and only 4 (36.4%) of those specifically outlined all five components (intent, infliction of harm, aggression, repetition, and imbalance of power) as recommended by experts in the field (Gladden et al., 2014; Vivolo-Kantor et al., 2014). Irrespective of the use of a distinct definition, various statements or response options are used to implicitly measure the five aspects (Vivolo-Kantor et al., 2014). Thirty-nine (95.1%) measures assess for aggressive behavior by asking about physical acts of violence, drug, and weapon use (Vivolo-Kantor et al., 2014). Repetition is evaluated by 32 (78%) tools with the use of a timeframe (e.g., never, sometimes, often, a specific number of occurrences, etc.), while 26 (63.4%) gauge intent of the bullying actions (Vivolo-Kantor et al., 2014). Sixteen (39%) evaluate for the presence of harm by measuring injury and harassment, while nine (22%) tools consider presence of an imbalance of power by considering the relationship between the victim and the bully (e.g., more than, less than or the same physical strength, intelligence, popularity, etc.; Vivolo-Kantor et al., 2014).

Regarding the various types of bullying, 82.9% (n=34) of tools assess for whether children are made fun of, embarrassed, teased, called names or receive rude comments, gestures or threats (verbal bullying), 70.7% (n=29) evaluate for children being pushed, kicked, hit, harassed or having their property stolen or damaged (physical bullying), and 53.7% (n=22) of available tools consider if children have been the victims of rumors or social exclusion (relational bullying; Vivolo-Kantor et al., 2014). While none of the measures integrate all three types of bullying (verbal, physical, and relational), 70.7% (n=29) include both physical and verbal forms (Vivolo-Kantor et al., 2014). Of the 41 reviewed self, teacher, and parent-report measures, 30 (73.2%) address bullying completed in a direct manner, 17 (41.5%) evaluate for indirect bullying, and 7 (17.1%) consider the presence of cyberbullying behaviors (Vivolo-Kantor et al., 2014).

In considering measures with less than 30 total items, the most consistent and reliable ($\alpha \geq 0.70$) tools available to evaluate for victimization include the Peer Victimization Scale ($\alpha = 0.82$), Modified Peer Nomination Inventory ($\alpha = 0.96$), Multidimensional Peer Victimization Scale ($\alpha = 0.73 - 0.85$), Peer Relations Questionnaire ($\alpha = 0.78 - 0.86$), and the Victimization Scale ($\alpha = 0.86$; Austin & Joseph, 1996; Crothers & Levinson, 2004; Felix et al., 2011; Kusel, Perry, & Perry, 1988; Mynard & Joseph, 2000; Neary & Joseph, 1994; Orpinas, Horne, & Staniszewski, 2003; Rigby and Slee, 1993; Vivolo-Kantor et al., 2014). The particular limitations involved in Vivolo-Kantor and colleagues' (2014) research is the exclusion of various validity/reliability measures in published literature and overall deficient amount of tools for measuring cyberbullying and its prevalence (Vivolo-Kantor et al., 2014). Despite these limitations, the research provided still allows for a general outline of the current tools available for the measurement of bullying (Vivolo-Kantor et al., 2014). A further review of the literature

also included mention of other notable and reliable tools not previously addressed, including the Peer Beliefs Inventory ($\alpha=0.82 - 0.93$), Name Calling Survey ($\alpha=0.88 - 0.89$), and the Pediatric Symptom Checklist ($\alpha=0.67 - 0.89$; Borowsky, Mozayeny, & Ireland, 2003; Borowsky, Mozayeny, Stuenkel, & Ireland, 2004; Caudle & Runyon, 2013; Crothers & Levinson, 2004; Dennis & Satcher, 1999; Embry & Luzzo, 1996; Gardner et al., 1999; Rabiner, Keane, & MacKinnon-Lewis, 1993).

One of the most influential instruments in bullying prevention was developed in Scandinavia and is commonly used in the United States (Kim & Kim, 2013; Vessey, Strout, DiFazio, & Walker, 2014). For the last 35 years, the Olweus Bullying Prevention Program (OBPP) has been globally evaluated and utilized (Kim & Kim, 2013). Developed in 1983 and revised again in 1996, the Olweus's Bully/Victim Questionnaire (BVQ) is modeled after the concepts in the OBPP and is the most widely used and assessed self-report measure of bullying available today (Lee & Cornell, 2010; Nansel et al., 2001). The 36-item BVQ is a definition-based assessment of the frequency of different types of bullying, the location and perpetrator of the events, the frequency of reporting and type of administrative response, if any, to these occurrences (Crothers & Levinson, 2004; Solberg & Olweus, 2003). This school-based tool displays statistically significant reliability in evaluating for bullying victimization ($\alpha=0.88$) and perpetration ($\alpha=0.87$) along with its individualized ability to evaluate the effectiveness of bullying prevention and intervention programs (Kyriakides, Kaloyirou, & Lindsay, 2006; Lee & Cornell, 2010; Solberg & Olweus, 2003; Vessey et al., 2014). However, several limitations have been noted as particularly related to the BVQ's self-reporting nature (Kyriakides et al., 2006; Lee & Cornell, 2010). As there are no specific standards to evaluate the precision of self-reported values, such tools yield higher validity measures when used in conjunction with peer-

nominations and teacher or parent-reports (Kyriakides et al., 2006; Lee & Cornell, 2010). As would be expected, administration and accuracy of a bullying assessment tool in the school setting relies on the institution's own willingness to participate and ability to implement it successfully (Kyriakides et al., 2006; Lee & Cornell, 2010).

With this in mind, Kusel and colleagues modified Wiggins and Winder's 1961 Peer Nomination Inventory (PNI) and developed the Modified Peer Nomination Inventory (MPNI) in 1988 (Crothers & Levinson, 2004). This 26-item peer-nomination tool administered in the school setting consists of 7 statements relating to physical and verbal victimization, 7 items referring to aggressive behaviors and 12 filler items (Crothers & Levinson, 2004; Kusel et al., 1988). With a list of same-sex classmates located at the top of the instrument, males are asked to identify their male classmates and females are asked to evaluate female peers who fit the picture depicted by each of the 26 statements (Crothers & Levinson, 2004; Kusel et al., 1988). Research suggests exemplary reliability ($\alpha=0.96$) for the seven-item victimization scale and moderate validity when compared to victimization reported by teachers and self (Crothers & Levinson, 2004; Kusel et al., 1988; Vivolo-Kantor et al., 2014). Asking children to only evaluate peers of the same sex involves particular thoughtfulness when interpreting similarities and differences of victimization based on gender (Kusel et al., 1988). When identifying validity of the MPNI, Kusel et al. (1988) noted significant differences in teacher report values, perhaps attributed to inconsistencies in what each individual considers victimization (Crothers & Levinson, 2004). For this reason, using multiple individuals who know their students well will help stabilize validity of teacher report measures (Crothers & Levinson, 2004; Kusel et al., 1988).

After a few years of continued research and data regarding other measurement tools, Rigby and Slee (1993) developed the Peer Relations Questionnaire (PRQ) in the early 1990's.

This self-report, school-administered measure consists of six items representing propensity to bully others (Bully Scale), six items assessing tendency to be victimized (Victim Scale), four items quantifying prosocial behaviors (Pro-Social Scale), and four filler items (Crothers & Levinson, 2004; Rigby & Slee, 1993). Respondents answer each statement on a 4-point scale (i.e., never, once in a while, pretty often, often) based on how often the statements are personally true for them (Crothers & Levinson, 2004; Rigby & Slee, 1993). The PRQ subscales illustrate extensive internal consistency reliability in evaluating for bullying victimization ($\alpha=0.78 - 0.86$), bullying perpetration ($\alpha=0.75 - 0.78$), and prosocial behaviors ($\alpha=0.71 - 0.74$; Crothers & Levinson, 2004; Rigby & Slee, 1993; Vivolo-Kantor et al., 2014). The PRQ is a useful tool in supporting the correlation between the presence of prosocial behaviors (i.e., helping others, enjoyment in making friends, and sharing) and reported psychosocial welfare as measured by generalized happiness, appreciation for one's school community and overall self-esteem (Rigby & Slee, 1993). Nevertheless, it is suggested that tendency to be bullied by others, to bully others, and to display pro-social characteristics are independent measures that affect an individual's physical and emotional health differently (Crothers & Levinson, 2004; Rigby & Slee, 1993). Results of the PRQ show higher levels of happiness, enjoyment of school, and self-esteem being related to higher levels of prosocial behaviors, while lower levels of happiness are reported for both bullies and victims (Crothers & Levinson, 2004; Rigby & Slee, 1993). Based only on self-reported measures, adequate measures of the validity of the PRQ require the use of a combination of measurement forms including teacher-report and student observation (Crothers & Levinson, 2004; Rigby & Slee, 1993; Vivolo-Kantor et al., 2014).

Similarly, the 12-question, self-reported Peer Beliefs Inventory (PBI) intended for use in schools, asks children to signify their views about their peers in general as opposed to thoughts

related to specific events of victimization (Crothers & Levinson, 2004; Rabiner et al., 1993). The PBI uses six questions relating to pro-social attitudes of their peers in general (i.e., peers' ability to share, be friendly, caring, helping, fair, trustworthy) and six questions regarding various anti-social characteristics (i.e., frequency of peers to initiate fights, tease others, show off, be mean, boss others around, lie; Crothers & Levinson, 2004; Rabiner et al., 1993). Based on respondents' answers, higher scores indicate children with more positive beliefs about their peers as lower scores imply the opposite (Crothers & Levinson, 2004; Embry & Luzzo, 1996; Rabiner et al., 1993). Both the construct validity and internal consistency ($\alpha=0.82 - 0.93$) of the PBI to assess peer beliefs is sufficient and suitable (Crothers & Levinson, 2004; Rabiner et al., 1993). Evidence suggests that persistent rejection leads to increasingly negative views of one's peers, but social exclusion is only one potential act of bullying and a more comprehensive assessment of the other acts is necessary (Crothers & Levinson, 2004; Embry & Luzzo, 1996; Rabiner et al., 1993).

Thus, Neary and Joseph developed the simplified Peer Victimization Scale (PVS) in 1994 to be included as part of the 36-item Self-Perception Profile for Children (SPPC) that evaluates the self-worth of children aged 8 to 11 years (Austin & Joseph, 1996; Crothers & Levinson, 2004). The PVS, a self and peer-report measure used in the classroom, includes a total of six negative behaviors associated with bullying—three statements referring to physical victimization and three items indicating victimization by verbal means (Austin & Joseph, 1996; Crothers & Levinson, 2004; Neary & Joseph, 1994). According to Austin and Joseph (1996), internal consistency for victimization ($\alpha=0.82$) was found to be exemplary for the PVS, illustrating usefulness of the scale's ability to screen large quantities of people for experiences with bullying (Crothers & Levinson, 2004; Vivolo-Kantor et al., 2014). With this scale, boys and girls who

exhibited lower levels of self-worth also displayed higher levels of depression, demonstrating the construct validity of the PVS (Austin & Joseph, 1996; Crothers & Levinson, 2004).

Similar to the PVS, Austin and Joseph (1996) designed the self-report Bullying Behavior Scale (BBS). The six-question BBS was designed to be included in the previously developed Self-Perception Profile for Children (SPPC) that evaluates views of self-worth (Austin & Joseph, 1996; Crothers & Levinson, 2004). Designed to be used in conjunction with the PVS, the BBS assesses for perpetration of both physical and verbal school bullying behaviors using a points system, with higher scores indicating higher risk of displaying bullying behaviors and lower scores indicating lower risk (Austin & Joseph, 1996; Crothers & Levinson, 2004). Reports regarding validity of the tools have not been documented, but Austin and Joseph (1996) described exemplary internal reliability of the BBS when evaluating for bullying perpetration ($\alpha=0.83$; Crothers & Levinson, 2004; Vivolo-Kantor et al., 2014). As the PVS and BBS are designed to evaluate children between the ages of 8 and 11, they should not be used to assess for bullying in older or younger populations (Austin & Joseph, 1996). Similarly, neither tool measures indirect acts of bullying and neither should be used for specific measurement of the frequency of bullying experiences (Austin & Joseph, 1996).

In later years, Mynard and Joseph expanded the PVS in 2000 to the 16-item Multidimensional Peer Victimization Scale (MPVS) to better quantify various forms of bullying including verbal and physical victimization, social manipulation, and destruction of property (Crothers & Levinson, 2004; Vivolo-Kantor et al., 2014). Like the PVS, the MPVS is intended to be administered anonymously in the school setting (Crothers & Levinson, 2004; Mynard & Joseph, 2000). Including a specific definition of bullying, the MPVS is regarded as one of the first self-report measures in the literature to also include a subscale to evaluate property

destruction, thus further research of its validity in assessment of bullying is necessary (Crothers & Levinson, 2004; Mynard & Joseph, 2000). The internal consistency reliability is significant for each subscale included in the MPVS, reporting $\alpha=0.75$ for verbal bullying, $\alpha=0.85$ for physical, $\alpha=0.77$ for social manipulation, and $\alpha=0.73$ for the destruction of property (Crothers & Levinson, 2004; Mynard & Joseph, 2000; Vivolo-Kantor et al., 2014). Literature supporting the MPVS indicates the usefulness of a multidimensional approach to this topic, particularly by separating the various types of bullying in order to better assess for presence of victimization overall (Mynard & Joseph, 2000).

Similarly, as verbal abuse is regarded as a public health concern, the Name Calling Survey (NCS) was developed to evaluate the frequency of children being called derogatory names by their peers at school (Crothers & Levinson, 2004; Embry & Luzzo, 1996). The NCS uses 35 broad name-calling categories in which respondents are to answer yes or no based on their experiences with each (Crothers & Levinson, 2004; Embry & Luzzo, 1996). The total number of yes responses is scored. Higher scores signify children who are more often called names when compared to those with lower total scores (Crothers & Levinson, 2004; Embry & Luzzo, 1996). Moderate-to-high internal consistency ($\alpha=0.88$ to 0.89) has been reported for the NCS, while validity has yet to be extensively evaluated (Crothers & Levinson, 2004; Dennis & Satcher, 1999; Embry & Luzzo, 1996). Keeping in mind its negative implications on wellbeing, name calling is still only one aspect of bullying and a broader assessment of the remaining related topics is necessary (Dennis & Satcher, 1999; Embry & Luzzo, 1996).

As can be seen by the development of the Aggression (AS) and Victimization Scale (VS), Orpinas and Frankowski (2001) expressed the importance of a separate assessment of the bully and the bullied. The self-reported AS was specifically developed for students in grades 6th to 8th

and consists of 11 items gauging the frequency of self-reported physically and verbally aggressive behaviors like becoming easily angered, fighting and encouraging others to fight, teasing, name calling, kicking, hitting, pushing, shoving, slapping and threatening other students (Orpinas & Frankowski, 2001). Reporters are asked to respond to each item as to how frequently they engaged in such behaviors ranging from “zero times” to “6 or more times” within the last 7 days (Orpinas & Frankowski, 2001; Orpinas et al., 2003). Thus, it is scored on a scale of zero to 66 points with higher scores demonstrating a higher propensity to perpetrate aggressive behaviors (Orpinas & Frankowski, 2001; Orpinas et al., 2003). Internal consistency is reported as moderate-to-high ($\alpha=0.87-0.90$) and unchanged based on gender (Orpinas & Frankowski, 2001; Orpinas et al., 2003; Vivolo-Kantor et al., 2014). The self-reported VS, developed based on the AS, measures frequency of being the victim rather than the perpetrator of aggressive acts (Orpinas et al., 2003). Mirroring the same actions as described above, the VS is a 10-item scale that identifies the frequency of being victimized within the last week (Orpinas & Frankowski, 2001; Orpinas et al., 2003). Higher total scores indicate increased incidence of victimization and have been reported to have moderate-to-high internal consistency ($\alpha=0.86$) as based on various studies (Orpinas & Frankowski, 2001; Orpinas et al., 2003; Vivolo-Kantor et al., 2014). Both scales are short and practical tools that use overt actions considered to be easily understood by the intended audience (Orpinas & Frankowski, 2001).

Due to its sensitive implications, requiring adolescents to label themselves as bullies or victims has been thought to influence their ability to adequately recall personal experiences with victimization (Felix et al., 2011). Thus, Felix and colleagues (2011) developed the California Bullying Victimization Scale (CBVS) to measure bullying by avoiding using the term directly.

The CBVS was designed as a self-report, school-based measure to assess for victimization as seen by the victim as opposed to the thoughts and views of the perpetrator (Felix et al., 2011).

With the potential to underestimate the pervasiveness of bullying, Felix and colleagues (2011) designed the CBVS to measure prevalence based on the reporter's natural understanding of the topic using seven specific bullying behaviors (i.e., teasing, spreading rumors, hitting, social exclusion, threatening, stealing/destroying property, sexually harassing) as opposed to an outlined definition. The CBVS evaluates for repetition, intention, and power imbalance of the intended theme of bullying by first assessing for frequency on a scale of zero (never) to four (several times a week; Felix et al., 2011). After gauging incidence, the CBVS evaluates for intent (i.e., if behaviors were deliberate) and power imbalance by asking the respondent to compare the perpetrator to himself/herself in regards to popularity, intelligence, and physical strength (Felix et al., 2011).

Over a 2-week period, the CBVS shows good test-retest reliability for all seven measures ($\kappa=0.46$ to 0.64) and bully versus victim classification ($\kappa=0.71$; Felix et al., 2011; Vivolo-Kantor et al., 2014). The CBVS is solely a self-reported tool, but literature would suggest that the use of various measures of bullying (i.e., self, teacher, and parent-report, peer-nomination, and direct observation) allows for a more comprehensive, reliable, and exact measurement of victimization (Felix et al., 2011; Vivolo-Kantor et al., 2014).

With the knowledge of the many manifestations of bullying, various studies have been conducted to evaluate the reliability of the parent-report Pediatric Symptom Checklist (PSC-17) questionnaire (Borowsky et al., 2003; Borowsky et al., 2004; Caudle & Runyon, 2013; Gardner et al., 1999). The PSC-17 includes 17 screening questions divided into three subscales regarding the presence of internalizing, externalizing, and inattentive-type symptoms as they might relate

to victimization (Borowsky et al., 2003; Borowsky et al., 2004; Caudle & Runyon, 2013; Gardner et al., 1999). The goal of the PSC-17 is to quickly identify children who are at risk of being bullied (i.e., displaying more internalizing symptoms) or becoming a bully (i.e., displaying more externalizing symptoms) using a points-based system (Caudle & Runyon, 2013; Gardner et al., 1999).

The internalizing subscale includes five associated symptoms including the child feeling sad, hopeless, down on self, seeming to be having less fun, and worrying a lot, while the externalizing subscale assesses for seven different symptoms such as the child refusing to share, not understanding others' feelings, fighting with others, blaming others for one's troubles, not listening to rules, teasing others, and taking items that do not belong to him or her (Gardner et al., 1999). Specifically, the attention subscale assesses for the presence of five separate symptoms including the child daydreaming often, having trouble concentrating, acting as if driven by a motor, being distracted easily, and being fidgety (Gardner et al., 1999).

The reported overall internal consistency reliability for the PSC-17 is $\alpha=0.67$ to 0.89 with specific internalizing subscale reliability as $\alpha=0.72$ to 0.79 , externalizing as $\alpha=0.82$ to 0.83 , and attention symptom subscale reliability as $\alpha=0.71$ to 0.83 (Borowsky et al., 2003; Gardner et al., 1999). Clinician understanding of the results of the PSC-17 as a means of identifying those who need further evaluation of psychological effects of bullying and not as a tool for diagnosis is imperative to its success and usefulness (Gardner et al., 1999).

Assessment in the Primary Care Setting

The above measures have been developed and evaluated to comprehensively assess bullying in the educational and behavioral health settings. However, no measure to date has been

developed for use in the primary care setting and none of the aforementioned measures have been modified for use in the healthcare setting. Despite this, the American Academy of Pediatrics (AAP) advocates for the dissemination of anticipatory guidance about bullying to be given according to specific visit-by-visit recommendations (Hagan, Shaw, & Duncan, 2008). Such recommendations and priorities are laid out in their Bright Futures Guidelines pamphlets and are intended to inspire conversations so clinicians can collect important information, address individual needs and concerns, and build trusting partnerships with their patients and their families (Hagan et al., 2008). Specifically, the AAP advises starting the conversations about bullying with patients and parents beginning at the 5-year-old well-child visit and continuing through young adulthood (Hagan et al., 2008). Thus, the AAP has maintained their belief of bullying as a public health concern that is critical to address within the primary care setting as demonstrated by their development of the Connected Kids: Safe, Strong, Secure protocol (Kim & Kim, 2013). This protocol was established in conjunction with the Department of Justice in 2005 and designed as a violence prevention tool for primary care physicians to use during routine health maintenance and preventative care office visits (Borowsky et al., 2004; Kim & Kim, 2013).

During the Connected Kids 3-year developmental stage, input from over 100 medical professionals, parents, and children was considered to finalize the tool that is used extensively in the field today (Kim & Kim, 2013). The protocol includes a user guide for the clinicians, accompanying instructional materials and 21 informational pamphlets for patients and parents (Kim & Kim, 2013). Bullying, dating violence, firearm exposure and other public health topics are the focus of this instrument as the AAP regards primary care practitioners as advocates for fundamental maintenance and preventative healthcare (Kim & Kim, 2013; Spivak et al., 1999).

Connected Kids supports bullying evaluation, education, and prevention in the healthcare field, which helps to successfully identify appropriate candidates for treatment referrals (Kim & Kim, 2013). During the final phase of development, focus groups of parents and teenagers displayed high approval for the Connected Kids' materials (i.e., brochures) they were given (Sege et al., 2005).

During field trials, 33 AAP members volunteered to implement the Connected Kids program for 1 month with influential final evaluations (Sege et al., 2005). Most members felt that it allowed them to address sensitive topics with patients and their parents more easily as 82% regarded the program as being straightforward and easy to carry out (Sege et al., 2005). Although the program is thorough and inclusive, the AAP requires the Connected Kids pamphlets and materials to be purchased in order for it to be utilized (Sege et al., 2005). Similarly, healthcare practitioners are even required to purchase the in depth booklets for the Bright Futures Guidelines (Hagan et al., 2008). Thus, a free assessment measure is needed to reach more practices and patients.

In evaluating clinical use of screening tools, Borowsky and Ireland (1999) randomly surveyed 373 board certified pediatricians and 182 pediatric residents across the United States regarding the topics of adolescent violence, family and community abuse, and exposure to weapons. Sixty-seven percent of the practicing pediatricians and 56% of the residents surveyed in 1999 indicated they rarely ask about their patients' involvement in physical altercations with their peers (Borowsky & Ireland, 1999). Frequency of screening is closely related to how comfortable clinicians feel in assessing and providing the necessary counseling and education to appropriate patients (Borowsky & Ireland, 1999). Only 24% of residents and 17% of pediatricians feel adequately prepared to counsel their patients regarding the aforementioned

topics using their preparation from medical school, residency, and continuing education training (Borowsky & Ireland, 1999). Of those who received training through one of those channels, continuing medical education was regarded as the principal source (Borowsky & Ireland, 1999). Clinicians rarely screen for adolescent exposure to violence and research indicates that increasing formal education and training for such will expand clinical use of both screening and educational tools (Borowsky & Ireland, 1999).

As advocates of care, clinicians are situated perfectly in the care continuum to assess for the negative effects of bullying behaviors and to refer those patients to the appropriate specialists for management of the physical and psychological correlates of bullying (Caudle & Runyon, 2013; Costello, 1986; Kim & Kim, 2013; Spivak et al., 1999). As discussed above, most assessment measures used in the educational setting have been regarded as reliable and valid. Usefulness of the individual screening tools is only reached when completed in the correct setting and for the appropriate measure of concern—a phenomenon in which efforts to develop uniformity have not been successfully devoted (Vessey et al., 2014).

The quality of preventative and responsive healthcare depends on the clinician's ability to successfully assess for, counsel, and manage every aspect of their patient (Caudle & Runyon, 2013; Costello, 1986; Kim & Kim, 2013). The intensity of the negative effects of bullying indicate that it can no longer be treated as a temporary incident (Kumpulainen et al., 1998). For this reason, a short, cost-effective and easily administered and measured tool should be developed for healthcare professionals to uniformly and successfully assess for the presence of bullying and its correlates (Jellinek, Murphy, & Burns, 1986).

Discussion

With the ever-growing prevalence of youth violence and the consequences of such, conversations about exposure are both useful and necessary (Caudle & Runyon, 2013; Eisenberg & Aalsma, 2005; Kim & Kim, 2013; Spivak et al., 1999). Pediatricians have proven their effectiveness in offering preventative healthcare and identifying and treating mental and physical illnesses as they are situated at an ideal location to reach the most at-risk populations (Caudle & Runyon, 2013; Dale, Russell, & Wolke, 2014; Spivak et al., 1999). The assessment of victimization requires a precise, multidimensional, and methodical approach by a team of specialists, including administrators, teachers, behavioral health specialists and physicians (Crothers & Levinson, 2004).

Annual well-child checks could offer the opportunity to discuss experiences with bullying (Caudle & Runyon, 2013; Dale et al., 2014). A child might feel shameful or fear retaliation by their peers if they are forthright about their experiences with bullying, so it is not uncommon for children to deny that bullying is occurring (Caudle & Runyon, 2013). Many believe children might feel more secure and willing to answer honestly about their experiences when conversations about bullying are an expected part of routine office visits and are structured as discussions using both quantitative and qualitative discussion (Caudle & Runyon, 2013; Lamb, Pepler, & Craig, 2009; Lyznicki, McCaffree, & Robinowitz, 2004). Caudle and Runyon (2013) suggest directly asking about bullying and assessing for physical and psychological symptoms that might indicate a child's involvement with bullying. Lyznicki and colleagues (2004) also highlighted the importance of asking children about their relationships, conflict resolution strategies, and if they ever feel threatened by their peers. It has been recommended to

use both patient and parent screening tools using both open-ended and follow-up questions as they pertain to bullying (Lyznicki et al., 2004).

Research shows that routine, ongoing assessments provide specialists with the most accurate and thorough information available (Crothers & Levinson, 2004; Lamb et al., 2009; Pellegrini & Bartini, 2000). Just as age recommendations exist for screening for anemia, osteoporosis, breast cancer, colon cancer, and other medical ailments, research indicates the need for an established timeframe for the screening of bullying (Crothers & Levinson, 2004; Lamb et al., 2009; Pellegrini & Bartini, 2000). The AAP has continually summarized the importance and ability of clinicians to prevent and screen for any potential high-risk situations and refer their patients to specialized follow-up appointments when necessary (De Vos, Spivak, Hatmaker-Flanigan, & Sege, 2006; Spivak et al., 1999). Spivak and colleagues (1999) explicitly outlined interventions regarding nurturing, limit setting, screening, and treatment as they pertained to different developmentally-appropriate age-groups (i.e., infancy 0 to 2 years, preschool 3 to 5 years, school age 6 to 12 years, early adolescence 13 to 16 years, late adolescence 16+ years). Similarly, De Vos and colleagues (2006) developed a document delineating screening topics as they pertain to different age-groups (i.e., infant 0 to 1 year, toddler 1 to 4 years, school age 5 to 11 years, adolescent 12+ years, all ages) using evidence from 50 national violence-prevention experts. While screening for safety in patients of infancy and toddler/preschool years mainly concerns the assessment of family support, disciplinary practices, behavior modeling, and conflict resolution in the home, both Spivak and colleagues (1999) and De Vos and associated researcher (2006) recommend evaluating for peer victimization, gang involvement, and substance abuse starting when a child begins school. However, the treatment and referral practice recommendations (i.e., referral to a specialist when a patient is suspected to have been the victim

of bullying, has witnessed violence, or is markedly aggressive) are the same for all ages (Spivak et al., 1999). Thus, the suggestion made by both publications is for the establishment of age-specific measures to assess for high-risk situations and behaviors in order to successfully utilize the referral and treatment process (De Vos et al., 2006; Spivak et al., 1999). In sum, the development of a multidisciplinary tool for victimization that is utilized at set intervals is both necessary and beneficial.

As no single picture exists for bullying, clinicians should be familiar with associated risk factors and symptomology in order to distinguish which of their patients are at an increased risk of having been victimized by their peers (Caudle & Runyon, 2013; Eisenberg & Aalsma, 2005; Kim & Kim, 2013; Lamb et al., 2009; Lyznicki et al., 2004). Such recognition allows for a more streamlined identification, referral, and treatment process (Caudle & Runyon, 2013; Eisenberg & Aalsma, 2005; Kim & Kim, 2013). The Society for Adolescent Medicine (SAM) promotes advocacy through the early identification of victims, discussion of possible interventions, and referrals for management of potential sequelae (Caudle & Runyon, 2013; Eisenberg & Aalsma, 2005; Kim & Kim, 2013).

In order to efficiently and effectively serve as advocates for their patients, clinicians must be proficient and comfortable with all aspects surrounding the subject of bullying, including risk factors, consequences, strategies for prevention and education, tools for screening, and outlets for referral (Eisenberg & Aalsma, 2005; Kim & Kim, 2013; Lamb et al., 2009; Spivak et al., 1999). With access to the majority of the adolescent population and the potential for the victim's close contacts to also be affected, it is crucial that pediatricians clearly define their role and develop the appropriate skills to address this threat successfully (Crothers & Levinson, 2004; Dale et al., 2014; Kim & Kim, 2013).

The reliability of identification through assessment tools dramatically improves when views from multiple respondents are considered and several contexts are involved (Crothers & Levinson, 2004). However, medical professionals often do not have time to spend on lengthy, recurrent discussions or complicated scoring processes. Moreover, healthcare facilities might not have the money to invest in multiple instruments for patients, parents, teachers, and faculty members. Consequently, the most efficient and complete approach to screening for victimization is surveying both the patient and their parent with a standardized questionnaire with a simplified scoring process to allow for the timely onset of the treatment process when necessary.

Assessment is one of the first steps in prevention (Crothers & Levinson, 2004). There is an overwhelming amount of assessment tools available for bullying in the educational setting as discussed previously, but no one tool has been developed or endorsed for primary care. In the absence of clear evidence to support the use of one screening tool concerning all dimensions of victimization, inconsistent findings are the ultimate result (Vessey et al., 2014).

Having used the above review to reflect and consider all aspects of bullying, the recommended initial version of the tool to be piloted and potentially used for the standardized assessment of victimization as a result of bullying in children ages seven and above in the primary care setting is provided below. All questions are scored with three options of “never”, “sometimes”, and “often”.

Primary Care Bullying Screening Tool for Child

In the last 2 months, how often have you...

Been bullied or picked on by a classmate or friend?

Been pushed, hit, kicked, tripped, or spit on by a classmate or friend?

Been called names or made fun of by a classmate or friend?

Been threatened by or felt unsafe around a classmate or friend?

Been touched by a classmate or friend in a way that made you feel uncomfortable?

Been left out of or not included in activities by a classmate or friend?
 Had a rumor started about you by a classmate or friend?
 Received hurtful text messages, emails, or notes from a classmate or friend?
 Been hurt by words, pictures, or videos that a classmate or friend posted about you online or on social media (e.g., Twitter, Instagram, Facebook, Pinterest, Musical.ly, blogs, vlogs, etc.)?

If yes to any of the above questions...

Have you felt sad, mad, worried, or scared because of the way a classmate or friend has treated you?

Do you have problems falling asleep or staying asleep because of the way you are being treated by a classmate or friend?

Have you recently had more headaches or stomachaches than usual?

Have you recently tried drugs or alcohol?

Have you ever thought of hurting yourself?

Have you ever thought of hurting others?

Primary Care Bullying Screening Tool for Caregiver

In the last 2 months, how often do you know or believe your child has...

Been bullied or picked on by one or more of his/her peers?

Been pushed, hit, kicked, tripped, or spit on by one or more of his/her peers?

Been called names or made fun of by one or more of his/her peers?

Been threatened by or felt unsafe around one or more of his/her peers?

Been sexually harassed or touched inappropriately by one or more of his/her peers?

Been isolated from, left out of, or not included in activities by one or more of his/her peers?

Had a rumor started about him/her by one or more of his/her peers?

Received hurtful text messages, emails, or notes from one or more of his/her peers?

Been hurt by words, pictures, or videos that one or more of his/her peers posted about him/her online or on social media (e.g., Twitter, Instagram, Facebook, Pinterest, Musical.ly, blogs, vlogs, etc.)?

If yes to any of the above questions...

Have you noticed your child feeling sad, mad, worried, or scared because of the way one or more of his/her peers has treated him/her?

Has your child recently experienced difficulties falling asleep or staying asleep?

Has your child recently experienced more headaches or stomachaches than usual?

Has your child recently tried drugs or alcohol?

Has your child ever thought of hurting himself/herself?

Has your child ever thought of hurting others?

Conclusion

The impact bullying has on its victims is substantial, but the most serious of consequences can be avoided with early detection through a common understanding, strategic planning, and systematic utilization of successful resources. With no single resource being used to screen for bullying in the primary care setting, changes regarding screening protocols must be made. Thus, the information provided in this review discovered the deficiency of current protocols for the use of screening tools in the primary care setting concerning bullying and helped shape the preliminary development of one such instrument to combat this growing threat. With the recent push toward preventative versus reactive medicine, identification of the early manifestations of victimization can save both time and money when the long-term effects of bullying are considered. The final recommendation this review makes is for the development of the tool outlined above to be validated and endorsed for systematic use by all healthcare practitioners in the assessment of bullying of all children 7 years of age and older.

Suggestions for future research include determination of the reliability and validity of the suggested instrument as it pertains to the assessment of child and adolescent victimization. Other research to be considered would be to establish the intervals in which a mandated screening tool be used (i.e., annually, biannually, etc.). Pertaining specifically to the recommended questionnaire, determination of when referrals should be made to behavior health would need to be determined.

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Abstract

Objective: As no tool has been established for use in the primary care setting to identify victims of bullying, this literature review acknowledges bullying as a public health concern, highlights targeted populations, recognizes associated physical and mental health implications, and outlines screening tools as a basis for creating a measure to be implemented by clinicians.

Methods: Databases searched include Academic Search Complete, CINAHL, MEDLINE, PsycINFO, PubMed, ScienceDirect, and SocINDEX, among others.

Results: The literature reviewed focuses on studies providing the reliability and validity of parent, child, and teacher report measures used to assess for all types of bullying. Qualitative and quantitative research, meta-analyses, systematic reviews, and studies involving experimental designs published from 1986 to 2015 are reviewed, while governmental documents, peer-reviewed journal articles, press releases, national reports, and research articles are also included.

Conclusion: This review culminated in the development of the only bullying screening tool created solely for clinician identification of victims aged seven years and older.