



Understanding weaknesses in bullying research: How school personnel can help strengthen bullying research and practice[☆]



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ABSTRACT

School personnel (teachers, administrators, counselors, staff, and social workers) would greatly benefit from a stronger understanding of bullying dynamics. In order to heighten their understanding, we must strengthen bullying research. Despite more than 40 years of bullying research, a number of methodological weaknesses continue to plague the field of bullying. First, there is a lack of a common definition of bullying, making it difficult to compare results across studies. Second, some researchers use one-item measures of bullying, a practice that lacks content validity and fails to assess the entire scope of the bullying dynamic. Third, many measures fail to assess all forms of bullying. Fourth, researchers often fail to provide a definition of bullying or to even include the word “bullying” in their measures, thus conflating the measurement of bullying and aggression. Finally, most scales measure the prevalence of bullying and fail to assess the motivations for bullying or reasons why youth are bullied or bully others. The current article provides an overview of these five weaknesses present in bullying research, presents possible solutions, and discusses implications for school personnel.

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1. Introduction: Why school personnel need to understand bullying research

School bullying is one of the most pressing issues affecting children and adolescents and is therefore of central concern for school personnel including teachers, administrators, staff, counselors, and social workers. More than one fourth (27.8%) of U.S. students in Grades 6 through 10 were victims of bullying (School Crime Supplement; [Robers, Kemp, & Truman, 2013](#)), however rates of specific forms of bullying victimization are higher. For example, 41.0% of students reported relational bullying victimization and 36.5% reported verbal bullying victimization ([Wang, Iannotti, & Nansel, 2009](#)). Other estimates indicate that between 70% and 85% of U.S. students are involved in bullying as a victim, perpetrator, or bystander sometime during their school career ([Mental Health Services Oversight and Accountability Commission, 2013](#)). Clearly, a substantial number of U.S. children and adolescents are at risk of suffering from the negative consequences of bullying involvement, including poor mental health (e.g., depression, anxiety), aggression, negative

perceptions of school, and poor peer relationships ([Bagwell & Schmidt, 2011](#); [Camodeca & Goossens, 2005](#); [Harel-Fisch et al., 2011](#); [Lester, Cross, & Shaw, 2012](#); [Menesini, Modena, & Tani, 2009](#)). Given the large number of youth involved in bullying and the adverse effects of this involvement, it is vital that schools attempt to limit bullying by implementing effective interventions and also by intervening in individual episodes of bullying. A crucial step in the creation of successful interventions is the collection of accurate and complete data, however, there are many weaknesses in current bullying research methodology that impact the quality of the data that is collected. School personnel should become familiar with these limitations in the event that they want to assess the problem of bullying in their schools.

Despite more than 40 years of bullying research and widespread recognition of the serious nature of bullying, current research continues to be plagued by a number of methodological weaknesses. The majority of these weaknesses stem from inconsistent methods and measures used to assess bullying ([Swearer, Siebecker, Johnsen-Frerichs, & Wang, 2010](#)). First, the lack of consensus on a definition of bullying has resulted in a variety of measures used to assess varying aspects of bullying, making comparisons across studies difficult. Second, some researchers have used one-item measures to assess bullying, a practice that lacks content validity. Third, by and large, existing bullying measures fail to assess all forms of bullying (i.e., physical, verbal, relational, property damage, electronic), thus yielding an incomplete picture of bullying behavior. Fourth, other so-called measures of bullying do not use the word

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bullying and/or do not provide a definition, and thus, are better considered as measures of aggression. Finally, most scales measure just the prevalence of bullying, leaving a critical void around scales that examine the motivations for bullying or assess reasons why youth are bullied or bully others. These measurement limitations have a direct impact on schools as bullying data are often collected in schools and are used to improve the school climate. The current paper provides an overview of the aforementioned weaknesses in bullying research and, following the best-practice guidelines for the measurement of bullying set forth by the Centers for Disease Control and Prevention (CDC; Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014), suggests possible remedies.

2. The need for a standardized definition of bullying

A central weakness of bullying research is the absence of a standardized, consistent definition of bullying. The definition of bullying established by Olweus (1993), which includes intent to harm, repetition, and power imbalance, is widely accepted by the bullying research community (Gladden et al., 2014; Ybarra, Boyd, Korchmaros, & Oppenheim, 2012). Indeed, the Olweus Bullying/Victimization Questionnaire, which presents this definition (Olweus, 1996), has been used worldwide by schools and researchers and appears in over 100 published bullying studies. This measure has been modified by the World Health Organization for use in U.S. national and international studies (Green, Felix, Sharkey, Furlong, & Kras, 2013). As noted above, while many definitions of bullying used in research include the three components established by Olweus, the variation of definitions across studies make cross-study comparisons difficult. For example, the School Crime Supplement (SCS; *School Crime Supplement*, 2011) describes bullying as "...what students do at school that makes you feel bad or are hurtful to you." This definition fails to include the elements of power imbalance or repetition, and therefore, describes aggressive behavior generally and not bullying specifically. The Youth Risk Behavior Surveillance System (YRBSS; CDC, 2013a) defines bullying as,

Bullying is when 1 or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not bullying when 2 students of the same strength or power argue or fight or tease each other in a friendly way. (p.6).

A more comprehensive definition that includes bullying by exclusion is provided to survey respondents in the Health Behavior in School-Aged Children survey (HBSC; Iannotti, 2012):

We say a student is being bullied when another student or group of students say or do nasty and unpleasant things to him or her. It is also bullying when a student is teased repeatedly in a way he or she does not like or when he or she is deliberately left out of things. But it is not bullying when two students of about the same strength or power argue or fight. It is also not bullying when a student is teased in a friendly and playful way (p.10).

Although the YRBSS and HBSC provide definitions that are comprehensive and include information about repetition and power imbalance, they include examples of bullying behavior that could invoke varying responses from participants. Because researchers have used inconsistent definitions of bullying, studies have yielded estimates of prevalence rates that differ widely and make comparisons across studies difficult (Gladden et al., 2014). In addition, inconsistent definitions exist in other measures of bullying and often surveys and questionnaires neglect to include a definition of bullying. The CDC created a compendium of 33 "psychometrically sound bullying assessment tools" (Hamburger, Basile, & Vivolo, 2011, p. 2); however, only five of the tools included a definition of bullying and those definitions vary widely (Gladden et al., 2014).

Clearly, an urgent need exists for a standardized definition of bullying, and bullying measures should provide this standardized definition to research participants (Gladden et al., 2014); however, researchers often disagree as to whether study participants should be provided a definition of bullying. One side has argued that youth might be reluctant to label their behaviors as bullying (i.e., social desirability) and providing a definition could produce reactivity with the potential to deter honest disclosure (Bosworth, Espleage, & Simon, 1999; Espelage & Holt, 2001). On the other side of the argument, researchers have argued a definition of bullying is needed because, in the absence of a definition, youth must subjectively interpret the concept of bullying (Solberg & Olweus, 2003).

In response to this ongoing debate, the CDC has established fundamental components to be included in any definition of bullying provided on a bullying measure. The CDC expanded the definition put forth by Olweus and outlines a comprehensive definition of bullying as one that includes the following five elements:

- Unwanted aggressive behavior;
- Observed or perceived power imbalance;
- Repeated multiple times or has a high likelihood of being repeated;
- Causes physical, psychological, social, or educational harm; and
- Occurs between youth who are not siblings or dating partners (Gladden et al., 2014).

Use of a definition of bullying that includes the elements outlined by the CDC will help ensure that school personnel are assessing the same construct. The common definition provides a foundation for school personnel and students to discuss bullying using the same language and ideas. Without this commonality, it is difficult to identify what is bullying, making it harder for school disciplinary practices and program targeting to respond to bullying dynamics. Further, school personnel can use bullying measures to assess the prevalence of bullying in their schools, but in order to obtain an accurate assessment of the problem, a comprehensive definition of bullying should be used. Consulting the CDC's compendium of bullying measures (Hamburger et al., 2011) would allow school personnel to select an empirically tested measure that they could then modify based on the suggestions put forth in this article. We urge school personnel to adopt a common definition of bullying, discuss it among the faculty, and proceed on to assess the level of bullying within their school. This is the first step in raising consciousness about a particularly toxic student concern that impacts the entire environment of the school.

Some of the defining features of bullying are ambiguous and difficult to assess. Within the definition of bullying, power imbalance refers to physical attributes or social power, but these constructs might not align. The notion of power imbalance is fundamental to the definition of bullying, yet it is fraught with ambiguity, making the imbalance difficult to identify. For example, even when an imbalance is easily observed, the construct controlling that imbalance might not be easily discerned: "If a stronger but less popular girl repeatedly intimidates a weaker but popular boy, is the controlling dimension popularity, gender or physical strength?" (Finkelhor, Turner, & Hamby, 2012, p. 272). Further, once aggression has begun, those observing and analyzing such behavior (such as school social workers, counselors, or teachers) might have difficulty ascertaining whether the power imbalance was a pre-existing condition or a result of the aggression. That is, when someone is victimized, he or she feels less powerful and that state creates a power differential; however, the aggressive act might have caused this power differential or might have exacerbated an existing power differential (Finkelhor et al., 2012). The difficulty with the concept of power differential is that the differential exists in the perception of the victim. In the above example from Finkelhor and colleagues, if the girl's physical strength intimidated a physically weaker boy and caused him to feel powerless and afraid, then the boy perceived the girl to have more

power and might perceive her constant harassment as bullying. Conversely, if the boy was sufficiently popular among classmates that he would be supported by a cadre of friends, then the boy might not be daunted by the girl's physical strength, in which case the boy would perceive his social power as more salient than the girls' physical power and would likely perceive her taunting as meaningless. If the boy feels no imbalance exists, he would be unlikely to define his experience with the girl as bullying. School personnel should be aware of the subjective nature of power imbalance and pay particular attention to this defining feature of bullying when observing and intervening in students' conflicts. Understanding how students' view the distribution of power can help school personnel intervene more effectively in bullying dynamics. One method for ascertaining how students view the distribution of social and physical power is to talk with them about it. Armed with the knowledge that power imbalance is a defining feature of bullying and having witnessed negative social interactions between students, school personnel should debrief after an incident with the students individually to assess how they view the distribution of power. It might also be important to train school personnel on the nuances of bullying, including power imbalance, to help them structure these conversations. Indeed, power imbalance may be the critical link between the bullying experiences and negative mental health consequences for victims (e.g., anxiety, depression, low self-esteem). Bullying victimization often does not hurt as much physically as psychologically, resulting in victims feeling powerless and insignificant. This is a key area for school social workers and counselors to explore with victims of bullying. Correspondingly, school personnel can decrease the impact of bullying victimization by finding small ways to empower victims, making them feel valued, and bolstering their self-esteem. Serving in a useful role in class or on a team or having a special relationship with one teacher or counselor can counter the negative effects of bullying. However, most of the bullying literature does not include a discussion of the complexities of the concept of power imbalance, indicating the need for additional research in this area that can help guide school interventions. Given that a power imbalance is a defining feature of bullying, it is vital that researchers continue to grapple with the intricacies of this construct and school personnel find ways to defuse the power imbalance with their support for victims.

One component missing from the CDC's definition of bullying is an element that considers the intensity versus the duration of bullying behavior. Although the CDC acknowledges single episodes of aggression might be considered bullying (Gladden et al., 2014), the existing definition does not leave room to interpret one-time events as bullying. This inconsistency is problematic given that a single, intense event can be considered as bullying (Finkelhor et al., 2012). For example, during the 2012 U.S. Presidential race, it was disclosed that during his senior year at a private high school, Republican candidate Mitt Romney incited a group of five friends to help him forcibly hold down underclassman John Lauber while Romney chopped off Lauber's hair, despite Lauber's struggling and yelling for help. Decades later, Lauber reported he was still haunted by this traumatic incident (Horowitz, 2012) while Romney claimed to have no memory of the incident (Bazelon, 2012). Although a seemingly single event, the intensity of this event went beyond an act of aggression, and therefore, should be labeled as bullying. Evidence from neuroscience on how the brain encodes traumatic memories supports the contention that a single intense event can be as damaging as repeated bullying episodes. Dayton (2015) explains that during traumatic stress the brain's prefrontal cortex shuts down, limiting sophisticated higher level thinking, while the limbic system gets flooded with stress hormones, heightening the "fight-flight-or-freeze response." This helps to explain how vivid sensory memories of traumatic events become emblazoned in long-term memory, just as in the example above. By intervening in the power imbalance, school personnel have the ability to decrease the possibility of long-lasting traumatic memory development.

It is also important to consider cyberbullying in the discussion of repetition. The single act of posting a hurtful comment or photo on a social media site can have far reaching consequences as hundreds of people can access the comment or photo, which can then remain in cyberspace indefinitely (Langos, 2012). Further, each time the comment or photo is accessed could count as an episode of cyberbullying, indicating repetition is present (Slonje & Smith, 2008) and suggesting that the single act of posting a harmful comment or photo can actually be considered cyberbullying. However, labeling a single act as bullying or cyberbullying violates the repeated nature of bullying outlined as a standard element of bullying definitions, thus pointing to the need to expand the definition of bullying to consider the intensity of the event. This point is vital for school personnel to consider: a single, vicious act can and should be considered bullying and should therefore be taken seriously.

Conversely, a one-time event in which a person taunts or makes fun of another does not constitute bullying, but the event can be labeled as verbal aggression. However, if a child taunts or makes fun of the same child every day, the constant low-level aggression is cumulative, and therefore, this action is considered as bullying. These labels are arbitrary. However, it is clear that a high intensity, one-time event, especially coupled with public humiliation, can be as deleterious as a lower intensity consistent pattern of ongoing victimization. Either experience can profoundly impact the victim. Thus, when defining events as bullying, it is vitally important to consider both the duration and the intensity of the event. School personnel should intervene immediately and provide emotional support for the victim and appropriate consequences for the perpetrator to prevent future aggressive acts.

3. The downsides of using one-item bullying measures

One-item measures of bullying are inadequate given the complexity of bullying behavior and the multiple dimensions bullying measures must assess. However, researchers often attempt to assess bullying and victimization with one-item measures. The most typical one-item measure is adapted from the Olweus Victim/Bully Questionnaire (i.e., "How often have you been bullied/bullied others at school in the past couple of months?"; Solberg & Olweus, 2003). Single item measures are inadequate because they assess a limited portion of the construct of interest and including additional items allows for a more in depth assessment of the construct's domains (Bringle & Hatcher, 2000). The inadequacy of single-item measures (Bringle & Hatcher, 2000) to assess complex behaviors is recognized in research on other deviant youth behaviors that rarely use single-item measures. For example, a single-item measure of delinquency (e.g., How often have you engaged in delinquent behavior over the past few months?) would clearly be inadequate to capture the multiple dimensions of truancy, theft, or substance use, and to assess the nuances of delinquent behavior. Similarly, bullying behavior varies widely from physical hitting and kicking to sending hurtful messages via e-mail or text. Without assessing each form of bullying, it is impossible to ascertain the prevalence of each behavior and the associated risk factors; each form of bullying cannot be assessed with a one-item measure. Further, because single-item measures are unable to assess the multiple facets of a measured construct, single-item measures lack content validity (Rubin & Babbie, 2008). In general, longer scales tend to be more reliable because it is possible to determine how well the scale items are measuring the construct of interest (DeVellis, 2003). With a one-item measure, it is difficult to ascertain if it is measuring the intended construct.

Further, if a one-item measure is used without providing a definition of bullying (e.g., Centers for Disease Control and Prevention, 2013b; Joronen, Konu, Rankin, & Astedt-Kurki, 2011), school personnel must rely on youths' subjective understanding of the word bullying and it is possible that youth might conflate aggression and bullying. Youth and researchers often define bullying differently (Boulton, Bucci, & Hawker, 1999; Smith, Cowie, Olafsson, & Liefvooghe, 2002). For example,

youth do not always believe that intent, power imbalance, or repetition need to be present for a behavior to be considered bullying (Guerin & Hennessy, 2002; Monks & Smith, 2006; Smith & Levan, 1995). Thus, if a one-item measure is used without a definition, it is impossible to determine whether the construct of bullying is interpreted consistently across participants and in the manner that researchers intended. The result of using one item is having an endorsement that the adolescent responding to the item considers herself or himself to have been bullied, without knowing any more than that. We urge school personnel to move beyond that simple endorsement in their assessments and discussions with students; finding out more provides much better information and has more explanatory power.

Despite these drawbacks, some bullying researchers have continued to use one-item measures as the sole means of data collection or in data analysis. A recent systematic review of 12 databases identified 32 controlled trial studies of bullying interventions conducted between 2009 and 2013 (Evans, Fraser, & Cotter, 2014). Three of these studies used single-item measures to assess bullying and/or victimization and three evaluations of the KiVa program for middle schools used more comprehensive measures for data collection, but analyzed the data using only a one-item measure (Evans, Smokowski, & Cotter, 2014). Further, the CDC's national survey of youth behavior (i.e., YRBSS) uses a one-item bullying measure. The reliance on one-item measures is particularly problematic in intervention research because it prevents an in depth evaluation of how interventions differentially impact various forms of bullying. For example, an intervention could significantly reduce one form of bullying (e.g., physical bullying), but not affect other forms of bullying (e.g., relational or verbal bullying) and a one-item measure would not detect these nuanced changes. Similarly, gathering national data using a one-item measure provides no information on the prevalence rates of various forms of bullying. In addition, bullying measures are often used in school settings to gain an understanding of how often, where, and why students are being bullied. Simply asking youth if they were bullied provides no information on the frequency, location, or method of bullying and provides little useful information for school personnel. Therefore, when assessing the scope of bullying in a school, school personnel should opt to use an extensive bullying measure and not simply a one-item measure. Armed with the information in this article, school personnel can make a case to the principal, school board, or other convening authority about the importance of using a comprehensive bullying measure rather than a single item measure.

Given the inherent weaknesses of one-item bullying measures, the CDC asserted adequate assessments of bullying should include five core elements (Gladden et al., 2014), of which one element is the presence of items that assess the frequency of all five forms of bullying behavior (i.e., physical, verbal, relational, property damage, and electronic). Although the CDC does not explicitly state that one-item bullying measures are inadequate, the inclusion of this core element indicates one-item measures of bullying as inadequate, indicating one-item measures should be replaced with measurement tools that are more comprehensive and include all five forms of bullying behavior.

4. The need to assess all forms of bullying behavior

In line with guidelines put forth by the CDC (Gladden et al., 2014), measuring the five forms of bullying behavior (i.e., physical, verbal, relational, property damage, and electronic) is important. First, school personnel cannot rigorously test the effects of interventions if the intervention's impact on each form of bullying is not assessed. Second, if only limited data are collected, it is impossible to gain a comprehensive understanding of prevalence rates of each form of bullying or to examine the risk and protective factors associated with each form of bullying. Third, it is useful for school personnel to have an understanding of what forms of bullying are most prevalent in their schools. It is possible that verbal and relational bullying are rampant, but due to

the often unobtrusive nature of these forms of bullying, teachers, administrators, staff, and social workers might be unaware of the presence of these covert forms of bullying. Therefore, it is necessary to collect data on all forms of bullying to give school personnel a complete picture of bullying in their school, however, few existing bullying measures assess all five forms of bullying behavior. Of the 33 bullying assessment tools included in the CDC compendium (Hamburger et al., 2011), Olweus's Bullying Questionnaire (Solberg & Olweus, 2003) was the only measure that assessed all five forms of bullying behavior. Although six other measures assess multiple forms of bullying, only the Olweus Bullying Questionnaire assessed five forms. Therefore, it might be necessary for school personnel to modify existing bullying measures by adding items to ensure that all forms of bullying are assessed.

Even measures used in national surveys of bullying do not assess all forms of bullying. The HBSC survey (Iannotti, 2012) assesses physical, verbal, relational, and electronic bullying, but does not assess property damage. The SCS survey (School Crime Supplement, 2011) assesses physical, verbal, relational, and property damage, but does not assess electronic bullying. Further, of the 32 controlled trial studies included in the systematic review conducted by Evans, Fraser, & Cotter (2014) and Evans, Smokowski, & Cotter, 2014, none used measures that assessed all five forms of bullying. Given that the vast majority of existing bullying measures inadequately assess the breadth of bullying behaviors, researchers examining bullying should focus on creating a bullying measure that includes the CDC's core components of bullying, assesses all forms of bullying, and considers the intensity and duration of the bullying event. Such a measure would be particularly useful in the school setting to help school personnel gauge the presence of bullying and the most common forms of bullying.

5. The importance of distinguishing between bullying and aggression

Bullying is a form of aggression, but it is crucial to distinguish between the two constructs. Repetition and power imbalance differentiate bullying from routine aggression, and research has suggested these two elements make bullying victimization more harmful than victimization by aggressive means (Hunter, Boyle, & Warden, 2007; Solberg & Olweus, 2003). For example, youth who were bullied (e.g., perceived that the aggressor had more power) reported higher rates of depressive symptoms and perceived they were under more threat than youth who were victimized by routine aggression (e.g., did not perceive a power imbalance; Hunter et al., 2007). In addition, as compared with youth who were not bullied or were victimized through routine aggression once or twice, youth who reported being bullied frequently (i.e., 2 or 3 times a month, once a week or more) also reported lower levels of self-esteem and increased levels of depression (Solberg & Olweus, 2003). The more severe impact of bullying on mental health may be due to the powerlessness and social humiliation that comes with bullying victimization. Aggression victimization is sometimes more physically damaging, but lacks the psychological pain caused by repetition and power imbalance. It is particularly important for school personnel to be aware of the differences between aggressive behavior and bullying. Although adult intervention might be necessary during an act of aggression, aggressive acts are typically time limited and as noted above, are less harmful than ongoing bullying. Adult intervention is always needed in episodes of bullying, thus it is vital for school personnel to pay close attention to acts of aggression because ongoing, repeated acts of aggression, often with a targeted social component, constitute bullying.

As compared with youth who have been victims of others' aggressive behaviors, youth who have been bullied experience poorer outcomes; therefore, measures must distinguish between these two constructs if researchers and school personnel are to accurately assess prevalence rates and associated risk factors. Further, because programs targeting aggression might not prevent bullying and vice versa, each of these behaviors require specific prevention programs (Gladden et al.,

2014). Thus, adequate measures of bullying and aggression are needed to determine which interventions are most suited to specific school settings. Although some measures have bullying in the title and reportedly measure bullying, these measures have little to distinguish them from measures of aggression. For example, the University of Illinois Bullying/Victimization Scale (Espelage & Holt, 2001) does not provide a definition of bullying nor does it include the word bullying within the questions. The Colorado Trust Bullying Prevention Initiative Survey provides no definition and mentions the word bullying only twice in relation to teacher responses to bullying (Csuti, 2008). On balance, the items in these scales are comprised of measures for various forms of aggressive behavior.

Although ensuring that measures of aggression and bullying are distinct and that bullying measures assess for repetition and power imbalance, it is incumbent upon researchers and school personnel to select appropriate bullying measures when they set out to assess bullying. However, school personnel might need to add to an existing bullying measure in order to ensure that it provides a definition of bullying, uses the word bullying, and assesses all forms of bullying; then the measure will clearly assess bullying and not routine aggression. In the existing bullying research, researchers often use measures of aggression or peer relationships to assess bullying and do not provide a definition of bullying or include the word bullying in items (e.g., Battey, 2009; Domino, 2011; Elledge, Cavell, Ogle, & Newgent, 2010; Frey, Hirschstein, Edstrom, & Snell, 2009; Giesbrecht, Leadbeater, & Macdonald, 2011; Hoglund, Hosan, & Leadbeater, 2012; Leadbeater & Sukhawathanakul, 2011; Li et al., 2011; Waasdorp, Bradshaw, & Leaf, 2012; Wong, Cheng, Ngan, & Ma, 2011; Wright, Bailey, & Bergin, 2012). Appendix A contains bullying victimization and perpetration items from the School Success Profile-Plus (to be discussed later) and offers an example of a rigorous bullying measure. Although creating measures that more adequately distinguish bullying from aggression is a vital first step in improving bullying research, researchers and school personnel must also opt to use these more rigorous measures. Assessing bullying behavior with a measure of aggression or peer relationships undermines bullying research because bullying and aggression are related but distinct concepts that require unique measurement strategies.

6. Expanding bullying measures to include reasons for being bullied

Another limitation in bullying research is the lack of assessment of what motivates youth to bully others and why victims perceive that they are targeted by bullies. This information is particularly salient for counselors, school social workers, and other school personnel so that they may provide support for youth who feel that they are bullied due to personal characteristics (e.g., sexual orientation, race, religion). Despite the high prevalence rates of bullying, research on harassment among youth has rarely focused on the causes of the harassment (Russell, Sinclair, Poteat, & Koenig, 2012). Certain characteristics (e.g., sexual orientation, race/ethnicity, disability status) put youth at risk for bullying and it is vital to track if and how these groups are being targeted (Farmer et al., 2012; Rose, Espelage, & Monda-Amaya, 2009; Russell, Franz, & Driscoll, 2001) so that school personnel may intervene and protect them. Although it should be common practice for bullying measures to assess if youth perceive they are being bullied because of their race/ethnicity, religion, gender identity, sexual orientation, disability status, or special education status, assessments of perceived reasons for bullying are rarely included on bullying measures.

The Olweus Bullying Questionnaire (Solberg & Olweus, 2003) asks if youth were bullied with mean comments about their race or with mean comments or gestures with a sexual meaning; however, the survey does not assess if youth perceive they were bullied because of their race or sexual orientation (actual or perceived). Further, this questionnaire does not include any items that assess how religion, gender identity, disability status, or special education status impact bullying experiences.

Further, most bullying surveys collect data on demographic variables only (e.g., age, grade, gender, and race/ethnicity), and do not collect data on these other variables (e.g., religion, gender identity, disability status, and special needs status) that might illuminate the factors that motivate bullies to target a particular victim.

It is necessary to collect data on perceptions of why bullying behavior occurs; one core element of bullying measures identified by the CDC is a more comprehensive collection of demographic data. These comprehensive demographic data would include gender, race/ethnicity, age, grade, disability status, special education classification, English proficiency, religion, sexual orientation, and transgender status. Although these demographic data would be useful in better understanding the factors involved in the bullying dynamic, these data are inadequate without also collecting data on why youth think they are bullied. For example, research results have been mixed regarding whether youth of certain races/ethnicities are more likely to be involved in bullying (Bettencourt & Farrell, 2013; Lovegrove, Henry, & Slater, 2012) and collecting demographic data on race/ethnicity would indicate only if a certain racial group was more likely to be victimized. Youth are bullied for numerous reasons; just because a higher percentage of youth from a certain racial/ethnic group are bullied does not mean those youth *perceive* they are bullied because of their race/ethnicity. Thus, it is necessary to assess whether youth perceive they are being targeted because of their race/ethnicity or other personal factors. For example, it is likely that different interventions would be needed in a school where many youth thought they were bullied because of their sexual orientation as compared with a school where youth thought they were bullied because of their religion. Collecting information on youths' perceptions of why they are bullied can help guide school personnel in focusing their support on the specific student populations most at risk for bullying.

In addition to assessing whether youth believe they are bullied due to demographic characteristics, other possible reasons for being bullied should be assessed as well. For example, bullying often occurs in a group setting and groups are more likely to bully than individuals (Glover, Gough, Johnson, & Cartwright, 2000). Social belonging is a basic and fundamental human need (Baumeister & Leary, 1995) and individuals often alter their behavior in order to conform to group norms, thus avoiding ostracism and social isolation. It is possible that youth perceive that they are bullied because their classmates want to fit in and avoid being ostracized. Further, bullying can result in social power and popularity (Cillessen & Mayeux, 2004; Prinstein & Cillessen, 2003) and bullying others could be a means of obtaining social status. Therefore, bullying measures should assess both if victims perceive that their bullies are seeking social acceptance and popularity and if bullies report that they are in fact perpetrating in an effort to maintain group membership and gain social standing.

7. Implications for school personnel

A central job of school social workers in particular, and school personnel in general, is ensuring that students are safe and well adjusted. Bullying has the potential to erode the social cohesion of a school and disrupt students' feelings of safety, thus school personnel are often called upon to intervene in individual episodes of bullying and also to administer school wide anti-bullying initiatives. A vital first step to decreasing bullying in schools is gaining an accurate and comprehensive understanding of the scope of the problem in a particular school; in order to do this, a quality bullying measure is needed. Current bullying measures often lack a standard definition of bullying, neglect to assess all forms of bullying behavior, do not assess the power imbalance and repetition that distinguishes bullying from routine aggression, and fail to assess why youth perceive that they are bullied. Armed with this information, school personnel are now equipped to review bullying measures for adequacy or to create their own bullying measures in order to assess the magnitude and scope of the problem in their respective

schools. School personnel could use the CDC's compendium (<https://www.cdc.gov/violenceprevention/pdf/bullycompendium-a.pdf>; Hamburger et al., 2011) of bullying measures to select an existing measure and could then tailor that measure based on the information provided in this article. School personnel are encouraged to pay close attention to negative interactions among students to assess for power imbalance and to gauge the impact the interaction has on the participants. Further, ongoing negative interactions among the same students likely indicate a problem of bullying and warrant adult intervention.

In Appendix A, we provide an example of how the authors have aggregated different bullying measures over the past six years. We strive to follow best practices and move forward the recommendations in this article. In our initial work with two rural school districts in North Carolina, we used single item measures for the first year of our needs assessment. Although the results were helpful in describing the extent of bullying problems in the 38 participating schools, we quickly discovered how limited the single item measures were in guiding our next phase of prevention program work. Consequently, we added items and refined our approach over the next five years working with the schools. The measures in Appendix A show our best attempt at providing our school partners with the highest quality, most informative assessment of bullying dynamics in their school environments. These items are embedded in a longer needs assessment called the School Success Profile-Plus (e.g., Smokowski, Guo, Cotter, Evans, & Rose, 2015) that includes measures of: adolescent health, mental health, and substance use; social support from parents, teachers, peers, and neighbors; school satisfaction, future optimism, academic relevance and rigor; parent-child conflict, peer rejection, delinquent friendships; and many other risk and protective factors that are commonly associated with bullying (Evans & Smokowski, in press; Evans & Smokowski, 2015; Evans, Smokowski, & Cotter, 2014; Smokowski, Evans, & Cotter, 2014; Smokowski, Cotter, Robertson, & Guo, 2013). This needs assessment is completed annually by more than 6500 students in 38 rural schools. Every year, our research team compiles results into a graphic summary so that principals and school personnel can easily see changes in their school environments, areas where policies and programs have brought progress, and areas where more attention is needed. This monitoring system is the result of a close collaboration between researchers and school personnel and serves as a clear example of how university-community partnerships can move the field forward.

8. Conclusion

In summary, the measures used to assess bullying should follow the guidelines established by the CDC. Standardizing bullying measurements by providing a common definition of bullying would help distinguish measurements of aggression from measurements of bullying. Further, establishing best practices for measuring bullying would ensure use of multi-item measures that provide a comprehensive evaluation of the bullying dynamic such as assessing all forms of bullying and evaluating reasons youth perceive they are bullied. Given the high number of youth affected by bullying, it is incumbent upon researchers and school personnel to implement programs that decrease bullying. However, measurement practices must be improved in order to better assess the impact of bullying interventions on bullying behavior.

Appendix A. School success profile-plus bullying items

Definition of bullying: 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. Bullying often occurs in situations where there is a power or status difference. Bullying includes actions like threatening, teasing, name-calling, ignoring, rumor spreading, sending hurtful emails and text messages, and leaving someone out on purpose. When we talk about bullying, these things happen more than just once, and it is difficult for the student being bullied to defend himself/herself. We do not call it

bullying when the teasing is done in a friendly and playful way. Also, it is not bullying when two students of about equal strength or power argue or fight.

During the past 12 months, have you ever been bullied on school property?

- A. Yes
- B. No

During the past 12 months, have you bullied someone weaker than you?

- A. Yes
- B. No

Definition of electronic bullying: Electronic bullying involves posting or sending electronic messages (text, pictures, or video) that result in a person feeling hurt, humiliated, or like a victim.

During the past 12 months, have you ever been electronically bullied? (Include being bullied through e-mail, chat rooms, instant messaging, Web sites, or texting.)

- A. Yes
- B. No

During the past 12 months, have you electronically bullied someone? (Include bullying through e-mail, chat rooms, instant messaging, Web sites, or texting.)

- A. Yes
- B. No

Bullying victimization items

1. Someone at school insulted you.
2. Someone at school ignored you when you asked a question.
3. Someone at school excluded you from an activity in which you wanted to participate.
4. Someone at school yelled a racial slur or racial insult at you.
5. Someone at school "made fun of" or "picked on" you.
6. Someone at school threatened to harm you physically.
7. Someone at school pushed, shoved, or hit you.
8. Someone at school told lies or spread rumors about me.
9. Someone at school stole my money or positions or damages something I own.
10. Someone at school said comments or made rude gestures with a sexual meaning about me.
11. Someone at school sent me mean messages or pictures on my cell phone or over the internet.

Scoring: Never
Once or twice
More than twice

Bullying perpetration items

1. I hit or kicked someone.
2. I pushed or shoved someone.
3. I damaged or destroyed things that belonged to someone else.
4. I used physical force to get others to do what you want.
5. I called another student mean names, made fun of, or teased him/her.
6. I told lies or spread rumors about another student.
7. I sent another student mean messages or pictures on his/her cell phone or over the internet.

Scoring: Never
Once
Sometimes

Often

Reasons for being bullied

Why were you bullied?

1. I was bullied because of my race/ethnicity.
2. I was bullied because of my religion.
3. I was bullied because people think I'm gay.
4. I was bullied because I have a disability.
5. I was bullied because I am overweight.
6. I was bullied because of something else about my body.
7. I was bullied because of the way I dress.
8. I was bullied because I do well in school.
9. I was bullied because I do not do well in school.
10. I was bullied for some other reason: Explain _____

Scoring: Never

Once

Sometimes

Often

Reasons for bullying others

Why did you bully someone?

1. I bullied someone because of their race/ethnicity.
2. I bullied someone because of their religion.
3. I bullied someone because they are gay.
4. I bullied someone because they had a disability.
5. I bullied someone because they are overweight.
6. I bullied someone because of something else about their body.
7. I bullied someone because of the way they dress.
8. I bullied someone because they do well in school.
9. I bullied someone because they do not do well in school.
10. I bullied someone for some other reason: Explain _____

Scoring: Never

Once

Sometimes

Often

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