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Bully/Victim Power Inventory: Measuring the Power Imbalance in the Bully/Victim Relationship

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BULLY/VICTIM POWER INVENTORY:

MEASURING THE POWER IMBALANCE IN THE BULLY/VICTIM RELATIONSHIP

A Dissertation

Presented to

the Faculty of the Morgridge College of Education

University of Denver

In Partial Fulfillment

of the Requirements

for the Degree

Doctorate of Philosophy

by

Marybeth Plonkey-Lehto

June 2012

Advisor: Dr. Kathy Green
Abstract

The empirical study of the power imbalance in the bully/victim relationship has impeded research synthesis, and the need for a quantitative measure of this key component has been well established in the literature. Lack of differentiation between victimization with and without power imbalance has been cited as a possible cause for imprecise measurement. Increased precision in bully victimization measurement is needed to accurately inform research investigating psychosocial health, treatment and positive outcomes, in addition to prevention and intervention programs. Therefore, the purpose of this dissertation was the initial development and validation of the Bully/Victim Power Inventory aimed at differentiating perceived power in a bully/victim relationship in a two-study four-phase structure.

Phase I consisted of a literature review, construct determination, and target group identification. Data collected from focus groups, content expert reviews, and cognitive interviews determined domain definitions, and quantitative scale construction in Phase II. Phase III comprised quantitative evaluation of pilot and field administration data, by item analysis, factor analysis, principal components analysis of residuals, Rasch modeling, and Phase IV tested instrument validity. Internal consistency reliability, and construct and content validity was examined across students in grades 9-12 in an urban high school in
the Rocky Mountain region of the U.S. Results supported the dimensionality, response scale use, internal consistency reliability, and validity of the BVPI. Low but acceptable person-separation reliability was found in each of the subscales. Suggestions for improvement, implications for use and future research are discussed.
Acknowledgements

This project would not have been possible without the help of many people kind in criticism and generous with their time. They have my profound gratitude. I am certain I will neglect to mention a few who have been of great help, but please know this is a reflection of my poor memory and not of my appreciation for your help: the students who so honestly and seriously participated in this study, their teachers and parents who facilitated their participation, the high school principal for her unending interest and encouragement, my mentor, Dr. Kathy Green, for her wisdom, guidance, and affirmation, and my family and friends for their tolerance, sustainability, and devotion.
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CHAPTER 1: INTRODUCTION

“It is a fundamental democratic right for a child to feel safe in school and to be spared the oppression and repeated, intentional humiliation implied in bullying” (Olweus, 1999, p. 21).

Bully/victim relationships are a commonplace and recurrent occurrence in childhood and adolescence, and defined as verbal or physical aggression toward another person, characterized by an imbalance of power and intent to harm (Espelage & Holt, 2001; Felix, Sharkey, Green, Furlong, & Tanigawa, 2011; Olweus, 1995). However, bullying is socially deplorable within the philosophy of a democracy, and is understood to contribute to its demise, as referenced allegorically in Nobel Prize-winner William Golding’s 1954 novel, *The Lord of the Flies*. This novel portrays a group of British schoolboys stranded on a deserted island who attempt to govern themselves, ending in chaos and catastrophe. The boys erratically bully, gang up, and turn on one another in a constant effort to gain power. The predominant theme is the “will to power” dominance hierarchy (Nietzsche, 1989), with few compulsions toward democratic civility—to live by rules, in harmony and peace.

Dan Olweus is inarguably the most often-cited researcher on bullying. His quotation above is a petition for victims’ rights, and the United Nations Convention on the Rights of the Child regards protection from abuse as an essential criterion for the quality of life which children have the right to expect (United Nations, 1991). The United
States National Education Goals Panel of 1993 established two objectives; that the school environment was to be conducive to learning, and every school in America would be free of violence (Johnston, O’Malley, & Bachman, 1993). In policy, progress has been made over the past three decades. However, handling bullying effectively is difficult. Power relationships are inescapable in human groups, and a position of power can be, and most often is, managed without abuse. Yet, it is quite often likely to be advantageous for a person to exploit power, and the temptation to do so repetitively to the anguish of a less powerful victim would be expected if this is the case (Smith & Brain, 2000).

**Problem Statement**

The accurate assessment of bullying is critical to prevention and intervention planning and evaluation, and long-standing concerns about its measurement have been reported (Cornell et al., 2006; Furlong et al., 2010). Worldwide, researchers have struggled to find ways to accurately estimate prevalence rates and measure bullying to facilitate cross-national comparisons (Smith et al., 2002). Questions of measurement imprecision have arisen from considerable differences of prevalence rates across studies (Smith et al., 2002). Measurement concerns consist of: (a) whether or not to include an *a priori* bullying definition to participants (Espelage & Swearer, 2003), (b) variations in definitions and time frames used (Swearer et al., 2010), (c) choice of self-report, peer nomination, or teacher-report methods (Cornell et al., 2006; Solberg & Olweus, 2003), and (d) whether existing measures actually assess the peer victimization intended to be captured by the bullying definition (Greif & Furlong, 2006).
The literature noted below was reviewed in order to establish background for a bully/victim power imbalance instrument and to establish the need for a quantitative measure. Although there is extensive literature on bullying and cyberbullying as noted above, general agreement that bullying involves a power imbalance, an extensive array of instruments which measure bullying and victimization, as well as treatments to reduce bullying in schools, it is notable that the empirical study of the imbalance of power in the bully/victim relationship is in its infancy.

Increased precision in bully victimization measurement is needed to accurately inform research investigating psychosocial health, treatment and positive outcomes, in addition to prevention and intervention programs. Recent studies attempting to use power imbalance data have shown promise in creating bully, victim, and non-victim status classifications (Felix et al., 2011; You et al., 2008). Lack of differentiation between victimization with and without power imbalance has been cited as a cause for a possible confound between victimization frequency and reporting a power differential (Felix et al., 2011; Furlong et al., 2010). However, You et al. (2008) reported the usefulness of power imbalance data to differentiate the impact of bullying based on victimization experience, and recommended the development and validation of bullying differentiation measures. Bennett (2008) called for the development of quantitative scales which measure mediating factors of the three thematic needs of bullied students: caring adults, a place of refuge, and a sense of future. Specifically focusing on power imbalance to discriminate impacts of bully/victim experiences would allow for intensified precision in bully
victimization measurement; imperative to examination of psychological health, bullying prevention and intervention (You et al., 2008). Currently, most bully victimization measures are based on chronicity and some include intentionality but few address power imbalance (Crothers & Levinson, 2004). Lack of differentiation between victimization with and without power imbalance has impeded research synthesis (Furlong et al., 2010). Before power imbalance can be fully synthesized and measured, it needs to be understood from the lived experience of adolescents who see and experience it and so characterized in their words.

**Purpose**

The purpose of this study is to explore the power imbalance component in the bully/victim relationship in an attempt to define it, determine how it might be measured, create a measure of power imbalance in the bully/victim relationship, provide initial validation of that measure, and thereby develop fuller understanding of a bully/victim behaviors continuum, and the power imbalance inherent in bully/victim relationships. By nature, the bully/victim relationship is a dynamic relationship based on the degree of power the bully has over another (the victim). It has been understood that the bully possesses and utilizes a majority of power, where the victim possesses little or no power.

Bullying can be expressed in many ways, and the forms of aggression change throughout the developmental stages, becoming progressively more indirect through pubescence and adolescence (Craig, & Pepler, 2003; Craig, Pepler, & Atlas, 2000). Bullies acquire power over their victims in numerous ways: through physical size and
strength, by pinpointing the target’s vulnerabilities, by eroding peer group standing, or by enlisting cooperation from other children, effectively intimidating and socially alienating the victim (Craig, Pepler, & Atlas, 2000; National Crime Prevention Council, 1997). When bullying is repeated over time, control over the victim becomes entrenched, resulting in the victim feeling increased distress and fear. The bully’s power continues to increase and the victim continues to lose power, creating an ever-widening power differential (Craig & Pepler, 2003).

The instrument was constructed to assess the power differential in a bully/victim relationship, where “power differential” is the construct to be measured, and the target group is adolescents (high school students). The construct “power differential” is operationally defined as a score on the scale to be constructed, with a composition of the following factors: intimidation, social alienation, and repetition over time. The power differential, a numeric measure of the perceived power imbalance in a bully/victim relationship, is a concept which if measurable, could potentially be used to positively change the dynamics of the relationship, and thereby positively change the outcome of the effects of victimization.

Research Questions
After the Bully/Victim Power Inventory (BVPI) measure was developed, the following research questions were addressed: 1] Does the Bully/Victim Power Inventory reflect the three identified domains (i.e. verbal indicators, behavior indicators, and cyberspace indicators) and factor appropriately into the three domains?
2] Is the response scale use appropriate for the Bully/Victim Power Inventory?

3] Does the Bully/Victim Power Inventory evidence adequate reliability?

4] Does the Bully/Victim Power Inventory evidence adequate content and construct validity?

Definitions Used in Current Study:

Bully/victim Relationship: Bullying is when one student intimidates or alienates another student(s), repeatedly and over time, and the student(s) being bullied finds it difficult to defend him or herself. A student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more students. The victim of the negative actions finds it difficult to defend him or herself. (Craig, Henderson, and Murphy (2000); Elinoff, Chafouleas, & Sassu 2004; Olweus, 1997).

Cyberbullying: Harassment, impersonation, defamation, threats, and/or stalking victims through cell phone text messaging, instant messaging, e-mail, and assorted other forms of technological communication (Willard, 2006a).

Power: Power in the bully/victim relationship is defined as the ability to control one’s own outcomes and also the outcomes of the other person; things they think, do, or say. This definition is a rearticulation of descriptions provided by Anderson and Berdahl (2002), Dunbar and Burgoon (2005), Emerson (1962), French and Raven (1959), and Keltner, Gruenfeld, and Anderson (2003).

Power Imbalance: For the purpose of this study, power imbalance is operationally defined as discrepancies in perceived loci of control in the bully/victim relationship.
Power Differential: Power differential is operationally defined for the purpose of this study as a numeric measure of the perceived power imbalance in a bully/victim relationship.

Overview of Dissertation

This dissertation comprises five chapters. Chapter 1 provides the study framework, Chapter 2 reviews the literature. The planning and construction of the instrument are described in Chapter 3, with the quantitative evaluation and validation presented in Chapter 4. Finally, the findings, limitations, and suggestions for future research are discussed in Chapter 5.

Delimitations

Convenience sampling across discipline and level at the urban high school in the study may allow for limited generalizability to the overall school population. However, without broadening the study to populations beyond the selected urban high school, there is no assurance that the results would generalize to the population of high school students as a whole.

Study results may also be confounded by how bullying is measured (Crothers & Levinson, 2004; Espelage & Swearer, 2003). There is some conflict in the literature regarding whether or not definitions should be included in the instructions, whether the measure should be self-report or other-report, and if self-report whether it should be anonymous or non-anonymous. In this study, definitions, and self-report were included.
CHAPTER 2: LITERATURE REVIEW

Definition of Bullying

The study of bullying in schools has expanded considerably, has included cyberbullying, and has a transnational dimension (Smith et al., 1999; Smith et al., 2008). International comparative research on bullying used the English word ‘bullying’ and the Olweus (1999) definition described below to illuminate the importance of the establishment of a standardized definition. For instance, the Japanese term ‘ijime’ differs from ‘bullying’, by placing a greater emphasis on social manipulation and female types of aggressive behavior as defined in western cultures (Ucanok, Smith, & Karasoy, 2011). ‘Ijime’ has a less physically-violent connotation, whereas the Italian words ‘violenza’ and ‘prepotenza’ imply more physical, violent actions (Smith, Kanetsuna, & Koo, 2007).

Smith, Cowie, Olafsson, and Liefooghe (2002) investigated the meanings of terms to illustrate the types of situational meanings attributed to each term. Terms from three Asian and 10 Indo-European languages were assessed by using a set of 25 stick-figure cartoons, encompassing a variety of social situations between peers designed by the authors. Major types of terms utilized were categorized into six groups: bullying (all types), verbal only, verbal plus physical, social exclusion, general physical aggression, and physical aggression exclusively. Another study conducted with a UK sample, examined age differences in students’ and parents’ definitions of the term ‘bullying’, and
reasons for those differences (Monks & Smith, 2006). A study of three specific Turkish words which most closely match the English definition of “bullying” found an expanded version cartoon methodology proved useful in investigating student understanding of bullying and related terms, by focusing on actual behaviors often observed by students (Ucanok, Smith, & Karasoy, 2011). Results did not support the theory that students’ definitions of bullying are strongly influenced by experience as a bully or victim. These examples provide evidence for the importance of comparability of term definition for accurate interpretation of cross-study findings. Therefore, a succinct definition of bullying and the bully/victim relationship was essential for development of the Bully/Victim Power Inventory (BVPI) study.

Olweus (1997) offered the following definition of the bully/victim relationship: “A student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more students. The victim of the negative actions finds it difficult to defend him or herself.” (p. 496). This definition of power and the core characteristics of bullying described below have been universally accepted and widely used for the past three decades, and remains steadfast in the current literature. Felix, Sharkey, Green, Furlong, and Tanigawa (2011) eloquently summarize it as a “three-part definition” (p. 234) which includes “all components of the definition of bullying (chronicity, intentionality, and imbalance of power)” (p. 234).

Olweus (1995), proceeded to describe a negative action as an act of aggression in which someone intentionally inflicts (or attempts to inflict) injury or discomfort on
another. Negative actions can consist of making faces or dirty gestures, intentional exclusion from a group, hurtful words, and physical contact. As defined by Craig, Henderson, and Murphy (2000) and consistent with the perspective of Elinoff, Chafouleas, and Sassu (2004), bullying behaviors may be physical and verbal, and also may include social alienation. Both direct behaviors (physical attack, name-calling) as well as indirect behaviors (spreading rumors) constitute acts of bullying.

Olweus (1997) goes on to describe three core characteristics of bullying: (a) aggressive behavior that (b) occurs over time and (c) involves a power imbalance. Power imbalance is defined by Olweus (1995) as an imbalance in strength, or an asymmetric power relationship. Bullies tend to play on the psychological states of victims and feel more control, whereas victims fear the power of others’ actions and feel a lack of control.

Thus, power imbalance is a prerequisite criterion in confirming the presence of a bully/victim relationship according to transnational acceptance of the key elements of bully/victim relationships (Felix et al., 2011; Monks & Smith, 2006; Olweus 1995; Smith, Kanetsuna, & Koo, 2007; Ucanok, Smith, & Karasoy, 2011; You et al., 2008).

**Power Imbalance in Relationships**

Power imbalance, power distance, and power difference are synonymous terms used, in both broad and narrow forms, in the extant literature to describe discrepancies in perceived loci of control in a variety of interpersonal relationships. Studies regarding power distance were found in employer-employee relationships which discusses effect of power distance and cultural differences in personnel hierarchy on job satisfaction, in-role
productivity, organizational commitment, and intention to stay in business organizations (Adler, 1997; Francesco & Chen, 2007; Francesco & Gold, 1998; Gomez, Kirkman, & Shapiro, 1999; Guillén, 1994), procedural justice and the decision making process (Brockner et al., 2001), and the use of feedback channels and the learning environment (Hwang & Francesco, 2006; Hwang & Francesco, 2010). A power shift in interviews is described in a study by Alex and Hammarstrom (2008). Power imbalance in interpersonal and bully/victim relationships are explored and defined though not measured by Wang et al. (2006), Henderson (2004), and Chan (2009).

Definition of Power in Interpersonal Relationships

*Power* in interpersonal relationships has been defined as the influence one has over others by controlling resources or by administering rewards and punishments (Anderson & Berdahl, 2002; Emerson, 1962; French & Raven, 1959; Keltner, Gruenfeld, & Anderson, 2003). Dunbar and Burgoon (2005) described power as “the capacity to produce intended effects, and in particular, the ability to influence the behavior of another person” (p. 208). The most common factor in the various definitions of power is the ability to control one’s own outcomes and also the outcomes of others.

Power differentiates persons in control in the relationship from persons not in control. Bullies are in control and subdue other people. They possess a strong need for dominance and power, and may obtain satisfaction by imposing torment and injury upon others. Bullies use coercion to gain things of value (e.g., money, alcohol, cigarettes), and
can be rewarded with status or prestige (Olweus, 1995; Quiroz, Arnette, & Stephens, 2006).

Two constructs which apply to childhood and adolescent bullies appear to exhibit power are reactive and proactive aggression (Dodge & Coie, 1987; Dodge, Lochman, Harnish, Bates, & Pettit, 1997). Reactive aggression is defensive and borne out of frustration: the person reacts to that which is perceived as harmful with no concern for self-control or consequence of actions (Dodge & Coie, 1987; Dodge, Lochman, Harnish, Bates, & Pettit, 1997). Ambiguous events are misinterpreted to have hostile intent, wherein the individual aggressively retaliates. For instance, the adolescent inadvertently bumped in the hallway by a schoolmate impulsively pummels the person (Crick & Dodge, 1996). Reactive aggression is exhibited by a burst of anger coupled by an inability to decrease the intensity or gain control of emotions (Crick & Dodge, 1996). Bullies often misinterpret hostility in the intention of others which causes their anger to flare and they lash out verbally or physically. In effect, they lose control (Eisenberg, Fabes, Nyman, Bernzweig, & Pinuelas, 1994). In contrast, proactive aggression crescendos over time and is nearly Machiavellian in manipulation as a means to gain that which is desired (Dodge & Coie, 1987; Dodge, Lochman, Harnish, Bates, & Pettit, 1997).

Proactively aggressive bullies evaluate a situation and decide on a characteristic to exploit. A workplace example would be when a subordinate is well-liked by the supervisor’s boss, so the supervisor scrutinizes the employee’s character, determines a characteristic of strength such as integrity, then assigns the employee a task or situation
which compromises that sense of integrity to a point of public embarrassment, humiliation, or degradation. These bullies are not quick to anger, instead their malevolence slowly burns from their anger, allowing them to make deliberate, calculated decisions regarding retaliation. This dysfunction originates from a capacity for using a means to an end (Sutton, Smith, & Swettenham, 2001). Both types of aggression occur in a social context. Bullies display greater deficits in social information processing, and respond with more emotion than nonbullies (Crick & Dodge, 1994; Camodeca & Goossens, 2005). Such findings suggest that some bullies use social skills for personal gain but antisocial ends (Waters, 2011).

In addition to proactive and reactive verbal and physical aggression, social alienation is another form of bullying. In May 2010, *The Washington Post* ran a story about a ninth-grade boy who attended Concord High School in New Hampshire, and was tattooed against his will by a group of four or five older adolescent males (Strauss, 2010). The four older young men coerced the 14-year old into allowing the bullies to tattoo obscenities on his buttocks upon threat of being beaten up. To capitalize on their alliance and sense of power, the bullies repeatedly manipulated, and caused fear and humiliation in the victim to force him into a torturous compromise for his safety (Waters, 2011).

Bullying is a subset of aggression that is characteristically categorized as physical, verbal, or relational (Shore, 2005). Menesini, Modina, and Tani (2009) reported depression was most prevalent in adolescents with a history of victimization, whereas those who bully as a result of being bullied were at greater risk of suicidal thoughts and
serious psychosomatic disorder. Hunter et al. (2007) found greater rates of depressive symptoms among participants meeting all criteria elements, intentionality, chronicity, and power imbalance, of the bullying definition. Likewise, greater internalizing and externalizing problems were associated with frequent victimization (Solberg & Olweus, 2003).

**Scope of the Problem**

Disconcertingly, there is long-standing theoretical evidence which indicates that bully/victim relationships are commonplace. This has been most convincingly established in the school setting. Smith et al. (1999) verified its existence in 16 European countries, Canada, the United States (US), Australia, New Zealand, and Japan with remarkably comparable structural characteristics, as well as offering indications of analogous phenomena in the developing world. Extant research indicates, with reasonable generalization, that any school can expect the occurrence of bullying, with differing degrees of severity (Smith & Brain, 2000). In fact, Schuster (1999) found some evidence that nearly all classes in German schools had an identifiable victim. Presently, international awareness of the existence and prevalence of bullying in schools has allowed schools to acknowledge the problem without prejudice and has motivated parent groups, schools, education authorities, and policy-makers to play an active role in intervention programs in an effort to reduce occurrences and their effects.
This study’s purpose is to clarify, characterize, and measure one vital component of the bully/victim relationship which has yet to be studied thoroughly: the imbalance of power.

**Prevalence of Bullying.**

Batsche (1997) reported nearly 15% - 20% of school-aged children have experienced bullying during elementary, middle, and/or high school years in the US. Other US research suggests that 10%-30% of children and adolescents are involved in bullying; however, prevalence rates differ significantly as a function of measurement methodology (Nansel et al., 2001; Solberg & Olweus, 2003). An increase in bullying is found throughout middle school age as students enter adolescence (Hazler, 1996; Rios-Ellis, Bellamy, & Shoji, 2000). Wagner (2008) reported that in 2006, 43% of US teenagers surveyed by Harris Interactive reported experiencing some form of cyberbullying in the previous year, and 23% of surveyed Canadian middle-school children had been bullied via email, 41% by cell phone text messages, and 35% in chat rooms with 41% unable to identify the perpetrators.

Worldwide bullying incidence rates range from 5% - 23% (Stephenson & Smith, 1989; Whitney & Smith, 1993). Higher rates, ranging from 10% - 75%, have been reported in US studies of youth who reported being bullied at least once during their school year (Hoover, Oliver, & Hazler, 1992; Perry, Kusel, & Perry, 1988). In addition, according to data from the United States Centers for Disease Control and Prevention Youth Risk Behavior Surveillance survey, 4% of American students missed school within
the last 30 days due to fear of intimidation or bullying, and 7.4% were wounded or threatened with a weapon on school grounds one or more times within the past year (Kann, Kinchen, Williams, Ross, Lowry, Hill, Grunbaum, Blumson, Collins, & Kolbe, 1998). Olweus and Alsaker (1991) suggested that present day bullying is more frequent and lethal than in the prior two decades.

**Settings and Relationships.**

While the majority of bullying takes place in the school setting, bullying can occur in a variety of settings including cyberspace, and in adult life. There is a large body of literature on these topics (Hershcovis, 2007; Malinowsky-Rummell & Hansen, 1993; Spaccerelli, 1994; Turner, 2010). Cyberbullying, or harassment via electronic devices, is the newest and perhaps most prevalent form of bullying in the 21st century (Auerbach, 2009; Blair, 2003; Crawford, 2002; NCES, 2009; Waters, 2011). Similarities to the definition and characteristics of traditional bullying were found, and a general definition describes cyberbullying as the utilization of technologies such as e-mails, cell phones, or text messaging with the intention of causing harm to others (Chibbaro, 2007; Smith et al., 2008). Cyberbullies harass, impersonate, defame, threaten, and stalk their victims through cell phone text messaging, instant messaging, tweeting, e-mail, and assorted other forms of technological communication (Willard, 2006a). Anonymity, increase of physical distance between bully and victim, absence of body language and vocal intonation and inflection contribute to the amplification of adolescent vindictiveness on the part of the
bully, and feelings of isolation and helplessness on the part of the victim. (McKenna, 2007; National Crime Prevention Council, 2010; Wagner, 2008).

There is a plethora of research on bullying in family homes, the workplace, prisons, and nursing homes (Mathison et al., 2011; TTOFI, 2011; Turner, 2010). The term “abuse” appears to be used in the family home, especially in regard to parent-child relationships, whereas in sibling relationships, “bullying” is more commonly used (Smith & Brain, 2000). This literature clearly shows family relationships can be linked to a child’s bully and/or victimization involvement in school (Smith & Myron-Wilson, 1998).

Workplace bullying has been studied in the past 20 years, and has some methodological and literature overlap with school bullying (Hershcovis, 2007; Rayner, 1997). Bullying in prisons has also been systematically researched (Ireland, 1999; Turner, 2011).

**Historical and International Perspectives.**

Over the past 35 years, a cumulative knowledge of the nature and effects of bullying, as well as an emergent understanding of a variety of intervention strategies used in schools, has arisen internationally. Research on school bullying began in 1978 in Scandinavia with the pioneer publication of the book *Aggression in the Schools: Bullies and Whipping Boys* (Olweus, 1978). Throughout Sweden and Norway, the study of bullying continued and bore out the initial model of a national anti-bullying intervention campaign in 1980. Olweus (1993) described this and related works, and Roland (2000) conveyed more recent developments in that continuing program. Undoubtedly, this
extensive work served as a catalyst and inspired subsequent bully/victim research and intervention movements in Europe, Finland, the UK, and Ireland (Smith & Brain, 2000).

Concurrently, the Japanese developed a somewhat different research practice. A distinctive Japanese word, *ijime*, closely parallels the English term *bullying*. In the 1980s in Japan, it was believed *ijime* was a problem unique to the Japanese. Surveys on the frequency and nature of *ijime* were administered, and results based on teachers’ reports suggested a decline in the dilemma, thereby decreasing public concern and research activity for a time. However, a series of suicides triggered by school bullying between 1993 and 1995 produced a subsequent phase of joint research activity and publications based on the exchange of work between Japanese and western researchers (Morita, Soeda, H., Soeda, K., & Taki, 1999a; Morita, Smith, Junger-Tas, Olweus, Catalano, 1999b; Smith et al., 1999).

*Childhood Aggression.*

In North America, a long tradition of childhood aggression behavior research has transected European research to produce a body of evidence regarding victimization with research strands on childhood social skills and socioeconomic status (e.g., Crick & Dodge, 1994; Dodge, 1986). Crick, and others, have tracked issues of relational aggression as well as its effects (e.g., Crick & Grotpeter, 1995). Ross (1996) reviewed European and North American research on bullying and on teasing, while Hodges et al. (1997) reported on risk factors involved in being victimized, and Pepler and colleagues
published research directly regarding bully/victim relationships in Canada which has been widely used for citation purposes throughout the literature (e.g. Pepler et al., 1998).

In Finland, notable work regarding direct and indirect aggression revealed that for females, indirect aggression is more evident, including bullying (Björkqvist et al., 1992; Rivers & Smith, 1994). Indirect bullying, also referred to as relational victimization in the literature, is described as the manipulation of friendships or relationships to inflict emotional pain on the other person, e.g. a group of peers ignoring someone for retaliation (Crothers & Levinson, 2004). This broached essential issues in interpreting gender differences in bullying, and reducing indirect aggression, such as social exclusion and rumor-mongering, in which identification and dissuasion is more complex (Smith & Brain, 2000).

**Participant Roles.**

Olweus (1978) initially described three major participant roles: bully, victim, and bully-victim. A bully-victim is a child who resorts to bullying as a result of having been victimized. Later research in Sweden differentiated between those who partially cause the bullying (provocative victims), and those who are “picked on” without provocation (classic victims) (Pikas, 1989). Another important advance in the definitions of distinct participant roles in the bully/victim relationship described roles as those who instigate the bullying (ringleader bullies), those who then become involved (follower bullies), those who laugh at the victim or encourage the bully (reinforcers), those who assist the victim (defenders), those who do not get involved (bystanders), and the victims themselves...
(Salmivalli et al., 1996). These specifications allow for detailed study of the characteristics of the participants, and the dynamics of the bully/victim relationship.

**Potential Short-term, Long-term, and Overall Effects.**

School bullying is a critical social problem with profound short-term repercussions for the psychological and physical health of children and adolescents, as well as long-term effects on their future psychosocial adjustment as adults (Farrington & Ttofi, 2008; Ttofi & Farrington, 2011). Ample evidence has demonstrated many forms of victimization may have potentially profound effects on the physical and psychological health of their targets (Cook et al., 2010). Clear links to the development of psychosomatic illness, battles with low self-esteem, dropping out of school, depression, and low empathy have been made in a variety of studies for a number of years (Brain, 1997; Gini, 2009; Jolliffe, 2006; Roland, 2002; Waters, 2011). Problematic outcomes, both psychological and behavioral, are well documented in the literature across the three major bully/victim participant roles, bully, victim, and bully-victim (Cook et al., 2010).

Bullying prevalence amplifies concerns regarding the effects of bullying on the psychological adjustment of children and adolescents. Adolescence is a period of cognitive, physical, and social change, which can be emotionally perilous in its own right, but bullying increases the stress which adolescents experience (Waters, 2011). Short-term problems may include difficulty concentrating, school phobia, and physical and psychological distress (Bernstein & Watson, 1997). Fear of being bullied can cause victims to be truant or drop out of school, providing a catalyst for a downward spiral of
hardship. Chronic victimization may cause long-term difficulties such as higher levels of depression, more negative self-concept, and an inability to initiate and sustain successful romantic relationships (Craig & Pepler, 2003; Gilmartin, 1987; Olweus, 1993).

Accumulated effects of intentional and chronic victimization by a peer, and recurrent unsuccessful attempts to assertively redirect undeserved attacks may make the effort to stop the bullying seem too overwhelming. As a result, a victim’s belief that he or she can prevent future confrontations may be adversely affected. As subsequent failure is suffered, hope may fade causing the bullied adolescent to lose trust in peers, thereby challenging the formation and maintenance of peer connections (You et al., 2008).

Additional findings indicated bullies seem to be at increased risk for substance abuse and psychiatric problems (Cook et al., 2010). Perhaps surprisingly, the risk of adversity for bully/victims has been found to be higher than for either victims or bullies, including depression, anxiety, persistent hostility and violence toward others, carrying weapons, and incarceration (Cook et al., 2010; Nansel et al., 2001; Swearer, Song, Cary, Eagle, & Mickelson, 2001).

Bullies are significantly more likely to be convicted of a criminal offense in adulthood than their uninvolved peers (Cook et al., 2010; Olweus, 1997). Major longitudinal studies in criminology have underscored the developmental associations between early childhood behavioral and emotional problems and adolescent or early adulthood criminality (Loeber, 1996). School bullying and offending share many risk factors (Lösel & Bliesener, 2003).
Bullying has been identified as a significant, pervasive type of school violence, which has a deleterious effect on current and future functioning for both victims and bullies (Crothers & Levinson, 2004). Frequently, victims of bullying endure long-term psychological problems, such as diminished self-esteem, psychosomatic conditions, loneliness, and depression, as well as increased risk of suicidal ideations, and suicide attempts (Waters, 2011). In adulthood, victims bullied during their school years often become victims of workplace bullying (Cook, Williams, Guerra, Kim, & Sadek, 2010). Some victims experience extreme reactions, as was the case in Norway in 1983 when three adolescents committed suicide after experiencing severe bullying. Another incident is vividly documented along with the moral implications for people employed in schools (O’Moore, 2000). “Bulicide” is the current colloquial expression used to describe the deaths of persons who commit suicide following bullying (Waters, 2011). Fortunately, not all victims of bullying take their own lives, yet experience lingering consequences (Waters, 2011).

**Target Population.**

Bullying is a pervasive experience in American secondary schools. In its most recent available data, the National Center for Education Statistics (NCES) found in 2007 nearly one-third of 12- to 18-year-olds reported being bullied during the academic year (NCES, 2009). Moreover, bullying or the claim of it is increasing; a 1999 NCES study showed only 5% of middle and high school students reported being bullied on campus, where in 2005, 28% did (NCES, 2001, 2007). In a separate study of approximately
80,000 students, 31.5% proclaimed bully-victim involvement with 11.4% as bully, 12.7% as victim, and 7.4% both (Carlyle & Steinman, 2007).

Bullies are much more often male than female (Baldry & Farrington, 2000; Carlyle & Steinman, 2007; Nansel, Overpeck, Pilla, Ruan, Simons-Morton, & Scheidt, 2001; Viding, Simmonds, Petrides, & Frederickson, 2009). Juvonen, Graham and Schuster (2003) found boys were at least twice as likely as girls to be a victim or a bully, and three times as likely to be a bully-victim.

However, in the realm of cyberbullying, nearly 50% of all teens in the U.S. have been affected, and girls are more likely to be victimized due to more time spent on message boards, instant messaging (IM), or in chat rooms (Wagner, 2008). Almost 75% of girls aged 12 to 18 reported spending more time online than doing homework (Shariff & Johnny, 2008).

**Bullying Measures**

Structural models of the characteristics of children and adolescents involved in bully/victim relationships have been developed for a wide range of school-aged children. The frequency and nature of these relationships undergo distinct transformations, emerging at 5-6 years old when definitive bully/victim relationships become evident, are modified during the elementary and middle school years, and even throughout adolescence. The quest for understanding the thoughts and attributes of bullies and victims has been measured both qualitatively and quantitatively and is a common theme in most of the literature. The following section provides a comprehensive review of
bullying methods and instruments including observations, interviews, questionnaires, surveys, teacher rating scales, sociometric measures, and self-report measures. Measures of all age ranges were included to provide evidence of the absence of scales which target high school age, as well as power imbalance specific to the purpose the current study.

**Observations and Interviews.**

Strengths and weaknesses in observational assessment were reported by Crothers and Levinson (2004). Direct observation is inexpensive and provides unbiased analyses of focal participant behavior in specific situations. However without clearly articulated definitions and established interrater reliability, objectivity is questionable. Also, observational measures do not correlate well over time, and may not measure true magnitude and prevalence due to the covert nature of bullying behavior (Crothers & Levinson, 2004). Direct and teacher observations represent the observer’s perspective and cannot be conducted in private settings where bullying tends to occur, such as locker rooms or restrooms, thereby threatening validity and reliability.

Interviews have been used to ascertain the prevalence of bullying behavior, and its bearing on student development, as well as the efficacy of antibullying interventions. Drawbacks to interviews include the possibilities that students may not reveal sensitive information, discuss student motivation of those demonstrating antisocial behavior, or efficacy of intervention strategies to school personnel, leading to compromised validity (Crothers & Levinson, 2004). Limitations for all qualitative assessment include interrater
reliability, interviewer bias, and the substantial time investment required to sample the entire student population.

**Peer Ratings.**

Peer victimization information can also be obtained by investigating social status among peers. Several researchers have documented assessment of social status within classrooms using a variety of sociometric procedures. According to Crothers and Levinson (2004), peer assessment measures and sociometric procedures are most conducive to whole class intervention planning. Assessment tools of this type range from children choosing another student’s photo and matching it to behavioral descriptors to embedded bully/victim questionnaires in self-perception scales. Student surveys have long been touted as the best method of investigating bullying prevalence (Colvin et al., 1998; Olweus, 1993). Disadvantages of questionnaires and surveys include cost and considerable time investment.

**Teacher Ratings.**

When data need to be gathered rapidly and easily, it is recommended that teacher rating scales be used. Teachers can quickly assess large numbers of students, responses can easily be compared between and among teachers at minimal cost. However, teacher identification accuracy is debated, therefore Crothers and Levinson (2004) suggest the use of teacher ratings in conjunction with interviews and observations, or other sociometric devices.
Self Ratings.

Self-report measures question the actual participant of bully/victim conflicts, and do not require large amounts of time, manpower or expense. Some caution has been mentioned in the literature with regard to the use of self-ratings when there is a divergence between self-perception and the perception of others (Perry et al., 1988). Also, self-reports of peer aggression are often under-reported, nevertheless, self-ratings and peer ratings should be similar when assessing observable behavior (Pellegrini & Bartini, 2000). The use of self-report measures is considered reasonable and widely accepted (Crothers & Levinson, 2004; Felix et al., 2011)

Instruments.

Following a comprehensive search for appropriate quantitative bully/victimization instruments, numerous measures matching search criteria were found after many iterations of electronic filters and manual synthesis were applied. Published psychometric studies and meta-analyses were identified by electronic search using GoogleScholar and EBSCOhost with all databases selected at various times. Limiters included peer-reviewed, date range of 1978-2011, and articles published in English. Search terms included all combinations and variations of bullying, fighting, victimization, peer victimization, general aggression, peer aggression, peer harassment, relational aggression, interpersonal aggression, anger, relations, social relations, social behavior, adolescent(s), youth, teenagers, peers, high school, secondary school, violence, school violence, cyberbully, cybervictim, questionnaire, scale, measure, inventory, and
battery. The researcher scanned the result list records for appropriate keywords, read article abstracts and scanned the full text of each article which appeared to include any type of measure regarding the search terms above. Articles of promise were saved and reviewed multiple times for pertinent information. Quantitative instruments which even slightly pertained to childhood or adolescent aggression, bullying, victimization, bully/victimization, or cyberbullying were studied and relevant information was documented in rough descriptive narrative. Next, qualitative and quantitative data were entered into an Excel spreadsheet and organized in a manner similar to the tables described below and presented henceforth. Data were continually added to and deleted from the comprehensive narrative and Excel file for a total of three and a half years. The files were finally scaled down and edited over the course of approximately one month to produce the tables and descriptions provided here.

Tables 1 to 3 display a summary of bullying, victimization, and physical aggression measures available to this study’s completion date. The crosstab format organizes instruments by topic and essential information such as instrument title, date, purpose, constructs measured, population for which the measure was designed, number of items, reliability, and validity statistics. Unavailable data are represented by the abbreviation (NA). Table 1 includes instruments which cross-reference bullying with general aggression or victimization with no power imbalance measure, Table 2 provides instruments specific to bullying or bully victimization with no power imbalance measure, and Table 3 includes one measure of cyberbullying and three measures of Bullying or
Bullying/Victimization with power imbalance items. Tables 1 to 3 are organized with entries in chronological order with a textual description of listed instruments provided following each table.

Table 1. Bully/Victimization Measures – Scales Specific to General Aggression or Victimization with No Power Imbalance Measure

<table>
<thead>
<tr>
<th>Instrument Title</th>
<th>Date</th>
<th>Purpose</th>
<th>Construct(s) Measured</th>
<th>Population for which Designed</th>
<th>Number of Items</th>
<th>Reliability</th>
<th>Validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Nomination Inventory (PIN)</td>
<td>1971</td>
<td>Measures child aggression by peer nomination. Score represents number of times child was nominated by peers on scale items.</td>
<td>Aggression, Hyperactivity, Victimization</td>
<td>Grades 1-6</td>
<td>26</td>
<td>α = 0.75-0.97</td>
<td>NA</td>
</tr>
<tr>
<td>Social Behavior Questionnaire (SBQ)</td>
<td>1991</td>
<td>Assesses a child’s physical aggression via items concerning fights with other children.</td>
<td>Conduct problems 6-14 years old</td>
<td>Grades 1-8</td>
<td>44</td>
<td>α = 0.60-0.93</td>
<td>Acceptable criterion</td>
</tr>
<tr>
<td>Peer Relations Questionnaire (PRQ)</td>
<td>1994</td>
<td>To identify children who are bullied.</td>
<td>Victimization</td>
<td>8-12 years old</td>
<td>6</td>
<td>α = 0.83</td>
<td>NA</td>
</tr>
<tr>
<td>Peer Victimization Scale (PVS)</td>
<td>1994</td>
<td>Identifies children who are being bullied based on perceptions of self-worth and competence in a variety of specific domains.</td>
<td>Victimization</td>
<td>8-12 years old</td>
<td>6</td>
<td>α = 0.83</td>
<td>NA</td>
</tr>
<tr>
<td>Social Experience Questionnaire - Self-Report (SEQ-SR)</td>
<td>1996</td>
<td>Self-report measure of relational victimization, overt victimization, and receipt of prosocial acts.</td>
<td>Victimization</td>
<td>Grades 3-6</td>
<td>15</td>
<td>α = 0.77-0.80</td>
<td>NA</td>
</tr>
<tr>
<td>Self-Rating Questionnaire on Aggressive Behavior (SQAB)</td>
<td>2002</td>
<td>Measures interpersonal conflict conditions common to adolescent experiences.</td>
<td>Overt &amp; Indirect Aggression</td>
<td>Adolescents</td>
<td>10</td>
<td>α = 0.65-0.88</td>
<td>Acceptable construct</td>
</tr>
<tr>
<td>Peer Beliefs Inventory (PBI)</td>
<td>2004</td>
<td>Assesses children’s general beliefs about their school peers.</td>
<td>Beliefs about unfamiliar peers</td>
<td>Grades 3-6</td>
<td>12</td>
<td>α = 0.83</td>
<td>Acceptable construct</td>
</tr>
<tr>
<td>School Violence Inventory (SVI)</td>
<td>2008</td>
<td>Developed to widen the study of Emotional Behavioral Disorders to include students not formally identified.</td>
<td>Aggression, Victimization</td>
<td>Grades 7-12</td>
<td>NA</td>
<td>α = 0.72-0.92</td>
<td>NA</td>
</tr>
</tbody>
</table>

Note: NA represents data not presented or published.
**Peer Beliefs Inventory (PBI).**

The PBI was designed to test children’s overall beliefs about their peers at school. In the 12-item measure, half the questions assess antisocial characteristics, and half assess prosocial characteristics (Rabiner, Keane, & MacKinnon-Lewis, 1993; Turkal, 2004). Antisocial items are reverse scored, overall scores range from 12 to 60 with lower scores indicating more negative beliefs about peers (Embry & Luzzo, 1996; Turkal, 2004). Adequate construct validity, as measured by factor analysis, and internal consistency reliability were reported (Embry, 1995; Rabiner et al., 1993; Turkal, 2004). Rabiner et al. reported similar beliefs about peers with moderately stable ratings over time.

**Social Behavior Questionnaire (SBQ).**

The SBQ measures the construct of conduct problems and is completed by a parent or teacher. It measures a child’s physical aggression in regard to fights with other children. Items refer to hitting, kicking, biting, intimidating or bullying. The complete instrument is formed from a total of 44 items with Likert response scales from these subscales: Disruptiveness, Physical Aggression, Anxiety, Inattention, Hyperactivity, Opposition, and Prosociality.

The measure was tested on 1,161 French-Canadian boys between the ages of 6-12 years at the end of the school year, assessed by their mothers and teachers. Demographic information described the sample as caucasian ethnicity and low socio-economic status. Reliability estimates were provided for the subscales and ranged from 0.61 to 0.93. Criterion validity was found to be acceptable.
This instrument does not discriminate between general physical aggression and bullying, and it does not include victimization nor power imbalance.

**Self-Rating Questionnaire on Aggressive Behavior (SQAB).**

The SQAB (Lindeman, Harakka, & Keltikangas-Jarvinen, 1997) measures two interpersonal conflict conditions common to adolescent experiences; overt and indirect aggression. In early studies of this instrument, three factors were established in research offering problem-solving alternatives for each scenario: Prosocial Problem-Solving Strategies, Withdrawal Problem-Solving Strategies, and Aggressive Problem-Solving Strategies (Lindeman et al., 1997).

In a subsequent study, students read the first conflict scenario referencing direct aggression, then were presented with an altered questionnaire in which seven items measured prosocial responses and seven items measure aggressive behavioral responses. Students then read the second scenario referencing indirect aggression, followed by three items which assessed prosocial responses, four items assessed aggressive behavioral responses with the inclusion of two withdrawal responses. Overall, four items measured indirect aggression, and three items measured direct aggression. The reported Cronbach’s alpha reliability was moderate for indirect aggression, and relatively strong for direct aggression, with moderate between-scale correlation (Crothers & Levinson, 2004; Pakaslahti & Keltikangas-Jarvinen, 2000).

The most recent study of the SQAB described four items which represented prosocial behavior, and six items characterize aggressive behavior. Behavioral decisions
by students were measured using a 5-point Likert scale with larger numbers indicating increased likelihood to engage in a certain behavior. Strong reliability was noted on the Aggressive Behavior domain and moderate reliability was reported for the Prosocial Behavior domain. No reliability estimate was reported on the Withdrawal Behavior domain (Keltikangas-Jarvinen, 2002). This measure is not suited for administration to younger children due to the formal operational cognitive level of development required.

**Peer Nomination Inventory (PNI).**

Wiggins and Winder (1961) designed the PNI to enable identification of classmates who match specific behavior descriptors. It was modified to 26 items overall, in which 7 measure aggression and 7 measure both verbal and physical victimization, in same-gender checklist form (Eron, Walder, & Lefkowitz, 1971; Perry et al., 1988; Perry, Williard, & Perry, 1990). On each item, participants mark an X under each classmate’s name, matching the described behavior with no limit to number of nominations. Scores on Victimization and Aggression for each child are computed by calculating then adding the percentage of checkmarks on each item (Eron, Walder, & Lefkowitz, 1971; Perry et al., 1988). On the Victimization subscale, high reliability was found, and correlation with self-ratings on victimization and teacher assessments on victimization were applied to establish validity (Eron, Walder, & Lefkowitz, 1971; Perry et al., 1988). High variance in teacher thresholds for victimization perception was identified, thereby confounding between teacher nomination comparisons. Instrument developers recommend the use of multiple raters to enhance stability (Eron, Walder, & Lefkowitz, 1971; Perry et al., 1988).
School Violence Inventory (SVI).

The SVI is a self-report measure of eight different modules: demographic information, sociometric status, physical, relational, and sexual violence victimization, as well as physical, relational, and sexual violence aggressiveness. It provides a comprehensive perspective of school violence encompassing a variety of behaviors, including those identified as emotional and behavioral disorders (EBD) (Gumpel, 2008). The SVI examines extreme school aggressors and their victims and was developed to widen the study of EBD to include students not formally identified. It was developed for and tested on middle and high school students in Israel (N = 10,383). Respondents are designated as pure aggressors, pure victims, aggressor-victims for direct physical, relational, and sexual aggression and victimization, or uninvolved.

This inventory measures constructs unrelated to power and power imbalance in a bully/victim relationship; instead it uses a purposeful sample of EBD students to map participant roles in six types of school aggression and victimization.

Peer Relations Questionnaire (PRQ).

The PRQ is used to assess bullying in the classroom and associated roles. It is a 20-item standardized instrument with four items measuring prosocial behavior, six items representing tendency to be victimized, six items measuring tendency to bully, and four items as filler. Internal consistency reliability and factorial distinction were established on all three scales (Rigby & Slee, 1993). The scales were later separated into three distinct measures, modified by including a number of items borrowed from the OBVQ to test for
validity (Rigby, 1993). Subsequent findings reported by Rigby and Slee (1995) revealed significant correlation between self-reports and peer nominations for the three domains which attested to instrument validity as declared by the authors. Crothers and Levinson (2004) call for self-report validation by inclusion of peer and/or teacher ratings.

**Peer-Victimization Scale (PVS).**

Also embedded in Harter’s (1985) SPPC is the PVS which was developed by Neary and Joseph (1994) for the purpose of item discrimination. It comprises six forced-choice items, three items measure verbal victimization and three measure physical victimization. Discrimination between bullied and non-bullied participants was determined by correlational analysis, and internal consistency reliability estimates were found in a later study (Austin & Joseph, 1996). High scores indicate low perceptions of competence and self-worth, and correlations with depression provide evidence for construct validity (Crothers & Levinson, 2004). The Multidimensional PVS was developed in a later study to evaluate multiple forms of bullying, and the following four factors were identified and found to have significant correlations with self-reports of being bullied: Verbal Victimization, Physical Victimization, Attacks on Property, and Social Manipulation (Mynard & Joseph, 2000). The ‘Attacks on Property’ factor had not been previously investigated or identified in extant bullying literature. The authors reported this type of victimization was common, especially among males (Mynard & Joseph, 2000). Crothers and Levinson (2004) call for further research for validation of this new construct.
Social Experience Questionnaire (SEQ).

The SEQ-Self Report and SEQ-Peer Report were developed by Crick and Grot Peters (1996) to differentiate relational aggression from other types of bullying. Both versions consist of three subscales of five items each, which assessed Relational Victimization, Overt Victimization, and Prosocial Attention. The Relational Victimization scale measured frequency of peer attempts or threats to damage peer relationship(s), the Overt Victimization measured frequency of peer threats to participant well-being, and the Prosocial Attention scale measured frequency of caring acts demonstrated by peers (Crick & Bigbee, 1998).

Using a 5-point Likert response scale, the self-report measure evaluated frequency of experienced behaviors. Higher numbers represented higher frequency of victimization and greater experience. In the peer-report, a class roster is given to participants along with descriptor items; participants nominate a maximum of three classmates regardless of gender, who match each item descriptor. Nominations are totaled and standardized within classrooms (Crick & Bigbee, 1998; Crick & Grot Peters, 1995). Both measures revealed moderate to high reliability estimates with significant correlation between self-report and peer reports of overt and relational victimization for both genders (Casey-Cannon et al., 2001; Crick & Bigbee, 1998).

The unique facility of the SEQ is its measurement of both overt and relational victimization. However, a disconcerting limitation is the combination of verbal and physical bullying in the Overt Victimization subscale, rather than separate assessment of
these two constructs. The SEQ may be preferable to use with females as there are few instruments which focus on types of victimization common to females (Crick & Bigbee, 1998).

Table 2. Bully/Victimization Measures – Scales Specific to Bullying or Bullying and Victimization with No Power Imbalance Measure

<table>
<thead>
<tr>
<th>Instrument Title</th>
<th>Date</th>
<th>Purpose</th>
<th>Construct(s) Measured</th>
<th>Population for which Designed</th>
<th>Number of Items</th>
<th>Reliability</th>
<th>Validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life in School booklet</td>
<td>1987</td>
<td>Children develop their own definition of bullying.</td>
<td>Bullying</td>
<td>High School</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Bullying-Behavior Scale (BBS)</td>
<td>1996</td>
<td>Measures perpetration of negative physical and verbal actions.</td>
<td>Bullying/victimization in school setting</td>
<td>8-11 years old</td>
<td>6</td>
<td>$\alpha = 0.82$</td>
<td>NA</td>
</tr>
<tr>
<td>Olweus Bully-Victim Questionnaire-Revised (OBVQ-R)</td>
<td>1996</td>
<td>Measures exposure to various physical, verbal, indirect, racial, or sexual forms of bullying, and extent to which peers, teachers, and parents are informed about and react to the bullying.</td>
<td>Bullying</td>
<td>8-16 years old</td>
<td>40</td>
<td>$\alpha = 0.80-0.90$</td>
<td>NA</td>
</tr>
<tr>
<td>Participant Role Questionnaire (PRQ)</td>
<td>1996</td>
<td>Peer evaluation of each classmate regarding how well each child in the class fits 50 descriptions of bullying situation behaviors.</td>
<td>Bullying, Bystander behaviors in bullying situations</td>
<td>10-14 years old</td>
<td>15</td>
<td>$\alpha = 0.81-0.93$</td>
<td>NA</td>
</tr>
<tr>
<td>Modified Aggression Scale (MAS)</td>
<td>1999</td>
<td>Composed of 4 subscales: fighting, bullying, anger, and cooperative/caring behavior.</td>
<td>Bullying, Anger</td>
<td>Grades 6-8</td>
<td>15</td>
<td>$\alpha = 0.60-0.93$</td>
<td>NA</td>
</tr>
<tr>
<td>Self-Reported Bullying, Fighting, and Victimization (SRBFV)</td>
<td>2001</td>
<td>Assesses bullying, fighting, and victimization.</td>
<td>Bullying, Victimization</td>
<td>Grades 6-8</td>
<td>18</td>
<td>$\alpha = 0.83-0.88$</td>
<td>Acceptable criterion</td>
</tr>
<tr>
<td>Reynolds Bully-Victimization Scales for Schools (RBVSS)</td>
<td>2003</td>
<td>Designed to evaluate ‘school-related violence and its impact on students.’</td>
<td>Bullying, Victimization</td>
<td>Grades 3-12</td>
<td>46</td>
<td>$\alpha = 0.93-0.96$</td>
<td>Excellent construct discriminant criterion</td>
</tr>
<tr>
<td>Name Calling Survey (NCS)</td>
<td>2004</td>
<td>Measures the extent to which children experience being called names.</td>
<td>Bullying</td>
<td>Grades 3-6</td>
<td>35</td>
<td>$\alpha = 0.82$</td>
<td>Acceptable criterion</td>
</tr>
</tbody>
</table>

Note: NA represents data not presented or published.

1- population, item number, reliability, & validity estimates were not presented in the 2007 study which included power imbalance items. Therefore, psychometric estimates reflect 2004b study results.
**Bullying Behavior Scale (BBS).**

The BBS was developed to indiscernibly assess direct bully/victim school occurrences by Austin and Joseph (1996). It was embedded within the Harter’s Self-Perception Profile for Children (SPPC). For a thorough discussion of the SPPC, see reviews by Harter (1985) and Granleese and Joseph (1993, 1994). The BBS is comprised of six forced-choice items, three portrayals of negative verbal actions, and three depictions of negative physical actions. Satisfactory internal consistency reliability was found, however, no validity data were reported. Girls scored lower than boys, which indicated analyses should be disaggregated by gender. Another limitation of this measure is that it does not assess relational victimization. Therefore, further research of this instrument’s convergent validity with self, peer, and teacher reports is needed.

**Life in School booklet.**

In the UK Arora and Thompson (1987) developed the *Life in School* booklet which allows children to develop their own bullying definition. Several revisions have been made to the original checklist designed for high school students to accommodate younger students. The authors recorded a definite benefit of the instrument is that the term bullying is never mentioned explicitly. At least 50% of the following six behaviors were identified as being consistent with bullying: ‘threatened to hurt me, demanded money from me, tried to break something that belonged to me, tried to hurt me, tried to hit me, and tried to kick me’. Unfortunately, validity and reliability estimates are not reported (Crothers & Levinson, 2004).
**Modified Aggression Scale (MAS).**

Four subscales comprise the Modified Aggression Scale: anger, bullying, fighting, and cooperative/caring behavior. Respondents indicate how many times they committed a subscale-related behavior in the last three days (Bosworth, Espelage, & Simon, 1999). The 15 item self-report scale was administered to 558 students in grades 6-8 in a major Midwestern metropolis with a socio-economically diverse population. Moderate to high reliability estimates were reported for subscales. Validity data was not published.

**Name Calling Survey (NCS).**

The purpose of the NCS is to measure the extent to which children experience being called names. It was first administered in northern Alabama to first through sixth graders at a public school, and more recently in Turkey to third through sixth grade public school students (Embry, 1995; Turkal, 2004). The final form includes 35 statements asking about names the participant has been called in school with dichotomous option responses of yes or no. Higher scores indicated being called names more often (Embry & Luzzo, 1996; Turkal, 2004). Moderate to high internal consistency reliability estimates were reported (Dennis, 1999; Turkal, 2004). Content validity was supported by expert review of practicing counselor educators and school counselors (Dennis, 1999).

**Olweus Bully/Victim Questionnaire (OBVQ).**

The most commonly used instruments to measure bully/victim conflicts are the OBVQ (1983) and the Revised Olweus Bully-Victim Questionnaire. The OBVQ and
OBVQ-R self-report instruments measure bullying and victimization by an ordered response format indicating type and frequency of bullying behaviors, thereby leading to classification as bully or victim, and possibly severity of bullying or victimization. It is an inventory designed to evaluate bully/victim problems specific to the school setting and begins with a definition of bullying. It examines types, prevalence, location, perpetrator, reporting frequency, and teacher intervention (Crothers & Levinson, 2004).

Austin and Joseph (1996) found the OBVQ to be one of the best instruments for establishing bullying prevalence in middle school and adolescent students. Strong psychometric properties for the OBVQ were reported by Pellegrini, Bartini, and Brooks (1999). These results were supported by Kyriakides, Kaloyirou, and Lindsay (2006). They used results from a sample of Greek Cypriot students and conducted an analysis of the revised OBVQ using the Rasch model to measure construct validity, reliability and conceptual design on two separate aspects of bullying, i.e. Bullying Others and Being Victimized. Each measure consisted of 8 items. Analysis revealed acceptable psychometric elements for each scale. Support was provided for prevalence of verbal, indirect, and physical bullying. Additionally, gender difference findings were congruent with those found in other countries, as well as overall generalizability. Limitations were too few difficult items for strong item targeting, lack of item phrasing specificity to enable exploration of the causes of indirect bullying, and only moderate correlation with peer nomination (Kyriakades et al., 2006; Ross, 1996).
**Participant Role Questionnaire (PRQ).**

The PRQ is administered to 10-14 year olds and comprises 15 items and five subscales: Bully Scale, Reinforcer Scale, Assistant, Scale, Defender Scale, and Outsider Scale. Intended to measure bullying and bystander behaviors in bullying situations, the questionnaire includes the names of all students in one classroom. Respondents are asked to think about what their classmates typically do in situations in which someone is being bullied. They then evaluate how well each student in their class fits 50 descriptions of bullying behavior situations. The PRQ was administered to 1,220 Finnish students in grades four through six, and 573 in grade six from 71 classes in 27 schools (Salmivalli, 1996). Moderate to high internal consistency estimates were reported, however no validity data were presented.

**Reynolds Bully-Victimization Scales for Schools (RBVSS).**

Paraphrasing the Mental Measurements Yearbook with Tests in Print (MMY), the RBVSS consists of three different self-report scales designed to measure victimization and bullying behavior in or near schools. The Bully Victimization Scale (BVS) evaluates victimization and bullying behavior among peers, the Bully-Victim Distress Scale (BVDS) measures psychological distress as a result of being bullied, and the School Violence Anxiety Scale (SVAS) assesses student anxiety about schools as intimidating or unsafe environments. The battery can be easily administered, scored, and interpreted in a reasonably short amount of time. Strengths of the instrument included a sufficiently large nationally stratified normative sample (N=2000), evidence of
moderately high to high test-retest reliability, and strong construct validity. Limitations comprised item over-representation for physical forms of victimization and bullying, and item under-representation for relational aspects of bullying. As reported in the MMY, it is likely this oversight under-identifies bullying and victimization involvement for girls. Nevertheless, the RBVSS is user friendly, highly reliable, and an effective tool for appraisal of student perceptions of school violence, victimization and bullying. However, there is no mention of whether power imbalance is integrated in the scales, thereby providing assumptive evidence of the use of chronicity and intentionality only in scale development. Omission of this key characteristic provides further evidence for the necessity of a power imbalance scale.

**Self-Reported Bullying, Fighting, and Victimization (SRBFV).**

As the name implies, the SRBFV is a self-report survey which assesses bullying, fighting, and victimization (Espelage & Holt, 2001). It was designed for students in grades six through eight, contains 18 items, and is administered in a group setting with a 40 minute completion time. It was originally tested on 422 students in a small Midwestern, predominantly Caucasian town and rural community with a significant number of low socio-economic status households. The SRBFV examined the association between peer dynamics and bullying behavior among early adolescents. Demographic questions, self and peer report measures of bullying and victimization, in addition to measures of other psychosocial variables comprise the full scale. Detailed statistics of
factor, item, between scales correlation analyses for all measures are included in Espelage and Holt (2001). Criterion validity was assessed and found to be acceptable.

The first section of the survey consisted of demographic self-report characteristics of gender, grade, and race. The second section consisted of a 21-item self-report measure which assessed bullying, fighting, and victimization, peer nomination tasks, and a sociometric item. Principal axis factoring analysis revealed three distinct factors on the self-report measure comprising 3 subscales. The bullying subscale was measured with 9 items related to name-calling, teasing, rumor spreading, and social exclusion. Respondents were to indicate the extent to which they engaged in each behavior in the last 30 days. Response options ranged from never through 7 or more times; this format was used on all three subscales in this section. Cronbach's alpha for this scale was 0.87. The fighting subscale consisted of 5 items, where students were asked to report the number of times in the last 30 days when they committed each behavior. Cronbach's alpha for this scale was 0.83. The victimization subscale was comprised of 4 items which referred to the frequency of being called names, picked on, made fun of, hit, or pushed in the last 30 days ($\alpha = 0.88$).

Peer nomination tasks and a sociometric item. Peer nominations of bullying had responders list names of students for two descriptors: students who often tease other students and students who are often teased by peers. Listed names were converted to numbers of participants. Number of nominations for each category was tallied to reflect responders. Friendship network data were collected on items where responders were
asked to list friends with whom they most often associate with stipulations of age similarity and maximum of eight friends. The sociometric item asked students to list the most popular boys and girls in their grade.

Section three comprised psychosocial measures drawn from a large violence prevention evaluation project (Bosworth, Espelage, & Simon, 1999; Bosworth, Espelage, Daytner, DuBay, & Karageorge, 2000). A detailed explanation of the development process of this instrument can be found in Bosworth et al. (1999).

No mention of bully/victim power imbalance was made for any of the subscales in the Self-Reported Bullying, Fighting, and Victimization measure.

Table 3. Bully/Victimization Measures – Scales Specific to Bullying including Power Imbalance Items

<table>
<thead>
<tr>
<th>Instrument Title</th>
<th>Date</th>
<th>Purpose</th>
<th>Construct(s) Measured</th>
<th>Population for which Designed</th>
<th>Number of Items</th>
<th>Reliability</th>
<th>Validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunter Boyle Warden Peer-victimization Bullying Questionnaire</td>
<td>2004b</td>
<td>Self-report 66-item questionnaire designed to collect general victimization, appraisal, emotion, coping, &amp; bullying (2004b). Power imbalance items were added in the 2007 version.</td>
<td>Peer Victimization vs Bullying with Power Imbalance (3 items)</td>
<td>9-14 years old</td>
<td>66</td>
<td>α = 0.56-0.75</td>
<td>NA</td>
</tr>
<tr>
<td>Sweearer Bullying Survey (SBS)</td>
<td>2008-2011</td>
<td>A four part survey which queries student's experiences, perceptions, and attitudes toward bullying. One item assesses power imbalance based on popular, smart, and strong characteristics of bully using dichotomous response scale.</td>
<td>Bullying, Victimization with Power Imbalance (1 item)</td>
<td>Grades 6-12</td>
<td>41</td>
<td>α = 0.71</td>
<td>NA</td>
</tr>
<tr>
<td>California Bully-Victimization Scale (CBVS)</td>
<td>2011-2013</td>
<td>Differentiates bullying from other forms of peer victimization with 3 items intended to measure power imbalance.</td>
<td>Bullying with Power Imbalance (3 items)</td>
<td>Grades 5-12</td>
<td>NA</td>
<td>κ = .71</td>
<td>Acceptable criterion</td>
</tr>
<tr>
<td>Questionnaire of Cyberbullying (QfCB)</td>
<td>2008-2013</td>
<td>Dichotomous measure of relevant behavioral and psychological cyberbullying</td>
<td>Cyberbullying: exposure to, engagement in &amp; coping strategies</td>
<td>Grades 6-10</td>
<td>21</td>
<td>NA</td>
<td>Acceptable content</td>
</tr>
</tbody>
</table>

Note: NA represents data not presented or published.
1: population, item number, reliability, & validity estimates were not presented in the 2007 study which included power imbalance items. Therefore, psychometric estimates reflect 2004b study results.
Hunter Boyle Warden Peer-Victimization and Bullying Questionnaire (HBWPVBQ).

Hunter, Boyle, and Warden (2004b) initially designed a self-report bullying questionnaire suitable for 9-14 year olds which included 66-items measuring appraisal, victimization, emotion, and demographic variables. The 2004b study’s purpose was to explore the effect of these variables on support seeking by victims of peer aggression and bullying, and student perception of social support efficiency. In addition, most bullying measures primarily used only the chronicity (frequency) characteristic (Greif & Furlong, 2006). The Hunter group research evolved to investigate empirical similarities in peer-victimization and bullying using a sample of 1,429 students 8-13 years old with 50.2% males who attended mainstream schools in Scotland (Hunter et al., 2007).

For the 2007 study, modifications were made to the 2004b instrument. As a foundation, the list of aggressive behaviors was used and one item to measure perceived intent: *Do you think the kid(s) were trying to upset you?* (yes, not, don’t know). Since no prior research had tested the effects of different types of power imbalance, the authors created three additional separate items (Hunter et al., 2007). Was the aggressor (1) *physically stronger*, (2) *more popular*, and (3) *in bigger groups* than the respondent? Response alternatives were *yes* or *no*, and respondent was allowed to tick as many as applied. *Don’t know* responses were not included for the power imbalance items due to authors’ reasoning that this option reports facts rather than perceptions (Hunter et al., 2007). Next, frequency items followed, with response data used to classify participants as
those experiencing peer-aggression, those experiencing peer-victimization, and non-victims. Students were classified as victims of bullying based on three things: (1) if they met peer-victimization criteria, (2) they indicated their aggressors intended to upset them, and (3) they chose at least one power imbalance option.

Additional items were used to measure threat appraisal, control appraisal, coping strategy use, and depressive symptomatology. Hunter et al (2007) suggested it is reasonable to expect these variables are associated with power imbalance attributions by logic; if a child experienced a situation in which (s)he is inferior in power, it is likely (s)he would also experience decreased hope of rectifying the situation in his/her favor. Decreased hope, pessimism and self-rated social competency are related to depression in youth (Hunter et al., 2007; Lewinsohn, Roberts, Seeley, Rohde, Gotlib, & Hops, 1994).

**Questionnaire of Cyberbullying (QoCB).**

The QoCB specifically measures cyberbullying experiences and does not reference power in the bully/victim relationship or traditional bullying in a school setting. A 21-item multiple choice survey was developed to measure germane psychological and behavioral constructs of general bullying behaviors experienced by respondents in cyberspace (Aricak, Siyahhan, Uzunhasanoglu, Saribeyoglu, Ciplak, Yilmaz, & Memmedov, 2008). Sample items included “*Have you ever come across an undesirable situation/behavior on the Internet?*” and “*Do you say things on the Internet that in the real world you would never say face to face?*” No items measured power in a bully/victim relationship.
Students were in grades 6-10, ages 12-19 (M=15.06, SD=1.51) evenly split by gender, from one private and three public schools in Istanbul, Turkey (N=269). Schools were randomly selected within distinct socioeconomic status (SES) districts; one low, two middle, and one high SES. Surveys were administered to volunteer participants in Spring 2006 after class hours by the authors, and required 15 minutes for completion.

Only nominal response options were allowed, therefore degree of perception cannot be analyzed, and only content validity could be established. Two reviewers from educational psychology departments at two separate universities checked for ambiguity and overall instrument quality. Review and revision of each item ensured an overall grade 6 reading level for middle and high school students prior to administration.

**Swearer Bullying Survey (SBS).**

The SBS is part of the Swearer Bully Survey System (Swearer, 2011) comprised of six equivalent scale versions which can be used for comparisons across students, teachers, and parents. Versions and number of items are as follows: (1) elementary (BYS-E; 42 items), (2) middle and high school (BYS-S; 41 items), (3) teacher (BYS-T; 28 items), (4) parent (BYS-P; 24 items), (5) retrospective (BYS-RV; 40 items) and (6) a short form (BYS-SHORT; 3 items). All versions can be administered by paper-pencil or electronically. The focus of this review is restricted to the middle and high school version (BYS-S; 41 items) to ensure alignment with the current study.

This survey queries students’ experiences, perceptions, and attitudes toward bullying. There are four parts to this survey as described in the instructions with a
respondent’s perspective: (1) When you were bullied by others, (2) When you saw other students getting bullied, (3) When you bullied others, and (4) Your thoughts about bullying (Swearer, 2011). Each part consists of approximately ten items with a variety of response options including but not limited to Likert scales, checklists, and comment boxes.

One example of a bullying item provided this definition: “Bullying happens when someone hurts or scares another person on purpose and the person being bullied has a hard time defending himself or herself. Usually, bullying happens over and over” (Swearer, 2011).

Examples of behavior included “teasing in a mean way, spreading bad rumors about people, keeping certain people out of a group, getting certain people to gang up on others, punching, shoving and other acts that hurt people physically” (Swearer). Then the respondent is asked whether or not (s)he has been victimized, and if so, how often: once in the past month, 2–3 times in the past month, once a week, several times a week.

One item of the 41 items assessed power imbalance based on popular, smart, and strong characteristics by self-comparison of the respondent to the bully using a dichotomous checklist response scale.

Response choices included: “older than me, younger than me, higher grade than me, lower grade than me, stronger than me, weaker than me, more powerful than me, not more powerful than me, many friends, not many friends, popular, not popular, smarter than me, not smarter than me” (Swearer).

In this zeitgeist of data-driven decision making, the Swearer Bully Survey System (Swearer, 2011) offers a broad-spectrum solution to the investigation of the character and magnitude of bullying and victimization for a school or school district.
California Bullying Victimization Scale (CBVS).

Felix et al. (2011) developed the all-inclusive self-report CBVS as a new measure of bullying victimization. It was designed to address some of the limitations in extant bullying instruments. Reported limitations were designated as insufficient psychometric information, utility of the emotionally suggestive term “bullying”, and inequitable to nonexistent assessment of all three key components in defining bullying (intentionality, chronicity, and power imbalance). Therefore, the CBVS was constructed as a self-report instrument appropriate for students in grades five through twelve, and which measured the three-part definition of bullying without using the term bully.

The secondary school version includes seven types of possible victimization experienced at school. A 5-point frequency rating scale was used (0 = Never, 1 = once in the past month, 2 = 2 or 3 times in the past month, 3 = about once a week, and 4 = several times a week). The next question asked students if the behaviors were carried out in a mean way and deliberately, using the following indicators: They were almost never mean (just joking), they were sometimes mean, they were almost always mean. Several additional questions designed to guide interventions were included in the CBVS, however were not discussed here due to brevity and specificity of study purpose.

Power imbalance was assessed next using three items with indicators and response choices similar to those used in the Swearer Bully Survey (Swearer, 2001). The CBVS uses a series of items which have respondents compare themselves to “the main person who did these things to you” on how popular, physically strong, and smart in
schoolwork (Felix et al., 2011; Swearer, 2011). The following 3-point response scale was provided: less than me, same as me, more than me.

Extant literature supports the claim that differentiation is important in the identification of students suffering the most severe negative peer experiences, however it is rarely studied (Felix et al., 2011; Hunter, Boyle, & Warden, 2007; Schäfer, Werner, & Crick, 2002). To ensure this differentiation, the CBVS authors made two strategic distinctions. First, was the purposeful omission of the term bully, and second, the specific measurement of not only bullying’s key elements of intentionality and chronicity, but decisively incorporated the neglected third element, power imbalance.

When the data were analyzed, students were classified as bullied victims, peer victims, and non-victims. Classification criteria was based on student perception of bully’s intention at least some of the time (intentionality), frequency of victimization experience (chronicity), and at least one form of power imbalance related to the primary bully (Felix et al., 2011)

The CBVS authors were mindful to intentionally include a measure of the power differential and reported that its assessment facilitated identification of bullied victims better than the sole examination of frequency.

**Summary of Reviewed Instruments.**

By definition, bullying is comprised of three key elements: intentionality, chronicity, and power imbalance. Current literature supports the claim that the vast majority of aggression, bullying, and victimization instruments use chronicity alone as a
measure; some add the intentionality component, and very few have managed to include power imbalance. In fact, to the best knowledge of this researcher, only three ventured into the realm of power imbalance measurement with few items incorporated into larger scales. Hunter, Boyle, and Warden (2007) were first to publish a study which used 3 out of 66 items to measure power imbalance. Swearer (2001, 2011) followed with 1 dichotomous checklist and a number of choices. Most recently, Felix et al. (2011) blended the categorical structure of the Hunter et al. (2007) measure with the substantive concepts of the Swearer (2001) measure. Only one quantitative measure of cyberbullying was found, which did not include the power imbalance component.

As illustrated in the broad literature review, and embodied in the tables and textual descriptions of the instruments provided above, a demonstrated gap exists between the core characteristics which define bullying and a psychometrically sound measure exclusive to the bully/victim power imbalance.

**Interpersonal Relationship Power Measures**

Power and power differential scales in interpersonal relationships range from those reflecting one-to-one relationships to relationships between individuals and a group, an organization, or a community. One relationship that reflects what is thought to be a power imbalance is the relationship between bullies and victims in the school setting (Chan, 2009; Frisén, Jonsson, & Persson, 2007; Salmivalli, & Nieminen, 2002). As a result of a thorough literature search, three types of power difference instruments were discovered: (1) interpersonal relationship power measures, (2) workplace power measures, and (3) the
bullying-victimization items embedded in larger scales mentioned in the *Instruments* section above.

**Relationship Power Scale (RPS)-Adolescent Females.**

The Relationship Power Scale (RPS) was developed to explore relationship power, specifically for female adolescents in heterosexual relationships (Wang et al., 2006). This measure’s power construct had a very narrow scope aimed at adolescent females in heterosexual relationships with no specified setting. Sample items include “I can persuade my boyfriend not to do the things I don’t want him to do” and “If my boyfriend has a certain expectation, I will show my obedience and respect to him in front of his friends.”

**Workplace Power Measures - Adults.**

*Power Distance (PD).*

A workplace power differential scale was developed by Earley and Erez (1997) to measure power distance between supervisors and subordinates within a specific workplace setting in the adult workforce. The original scale consisted of eight items. Sample items include “In work-related matters, managers have a right to expect obedience from their subordinates;” and “Employees should not express disagreements with their managers.” A one-to-five response option scale was used. No reliability or validity results were available. Several other workplace power difference scales were found in the Catalogue of Instruments for Measuring Culture; however, each aimed at assessing adult manager-subordinate relationships
These measures are clearly suitable for adults in the workforce nested in a specific workplace, but not appropriate for adolescents in a school setting (see Table 4).

Table 4. Workplace Power Distance Scales

<table>
<thead>
<tr>
<th>Measure</th>
<th>Scale</th>
<th>Author/Year</th>
<th>Item</th>
<th>Rating</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Values Scale</td>
<td>Power (POW)</td>
<td>Scott, 1965</td>
<td>5</td>
<td>NA</td>
<td>0.81</td>
</tr>
<tr>
<td>VSM-94</td>
<td>Power Distance (PD)</td>
<td>Hofstede, 1980, 2001</td>
<td>4</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Organizational Culture Inventory (OCI)</td>
<td>Power Distance (PD)</td>
<td>Cooke &amp; Lafferty, 1987</td>
<td>8</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>NA</td>
<td>Power Distance (PD)</td>
<td>Erez &amp; Earley, 1987</td>
<td>3</td>
<td>1-5</td>
<td>0.75</td>
</tr>
<tr>
<td>Power and Authority Distance</td>
<td>NA</td>
<td>Reiger, 1987</td>
<td></td>
<td>observations &amp; interviews</td>
<td>NA</td>
</tr>
<tr>
<td>NA</td>
<td>Power Distance (PD)</td>
<td>Dorfman &amp; Howell, 1988</td>
<td>6</td>
<td>1-5</td>
<td>0.57</td>
</tr>
<tr>
<td>Personal Management Philosophy</td>
<td>Power Distance (PD)</td>
<td>Baird, Lyles, &amp; Wharton, 1990</td>
<td>2</td>
<td>1-5</td>
<td>NA</td>
</tr>
<tr>
<td>Power Distance</td>
<td>NA</td>
<td>Bochner &amp; Hesketh, 1994</td>
<td>8</td>
<td>1-7</td>
<td>NA</td>
</tr>
<tr>
<td>CPQ4</td>
<td>Hierchical</td>
<td>Maznevski &amp; DiStefano, 1995</td>
<td>7</td>
<td>1-7</td>
<td>0.64</td>
</tr>
<tr>
<td>Power Distance</td>
<td>NA</td>
<td>Voich, 1995</td>
<td>5</td>
<td>1-5</td>
<td>NA</td>
</tr>
<tr>
<td>NA</td>
<td>Power Distance (PD)</td>
<td>S.-K. Yoo, 1996</td>
<td>7</td>
<td>1-9</td>
<td>NA</td>
</tr>
<tr>
<td>Power Distance</td>
<td>NA</td>
<td>Lind, Tyler &amp; Huo, 1997</td>
<td>4</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Work Opinion Survey</td>
<td>Power Distance (PD)</td>
<td>Aycan et al., 2000</td>
<td>4</td>
<td>1-6</td>
<td>NA</td>
</tr>
<tr>
<td>NA</td>
<td>Power Distance (PD)</td>
<td>Vitell, Paolillo &amp; Thomas, 2003</td>
<td>NA</td>
<td>1-7</td>
<td>0.61</td>
</tr>
<tr>
<td>GLOBE</td>
<td>Power Distance (PD)</td>
<td>House, Hanges, Javidan, Dorfman &amp; Gupta, 2004</td>
<td>8</td>
<td>1-7</td>
<td>0.80</td>
</tr>
<tr>
<td>NA</td>
<td>Power Distance (PD)</td>
<td>B. Yoo &amp; Donthu, 2005</td>
<td>5</td>
<td>1-5</td>
<td>0.91</td>
</tr>
<tr>
<td>NA</td>
<td>Power Distance (PD)</td>
<td>Srite &amp; Karahanna, 2006</td>
<td>7</td>
<td></td>
<td>0.74</td>
</tr>
</tbody>
</table>

Methodological Challenges

Swearer et al. (2010) state comparisons across studies and endeavors of evaluation in the bullying research field are made difficult by methodological issues. Dissimilar assessment approaches (observations, interviews, rating scales, surveys) and strategies may reveal contradictory findings (Cornell & Bandyopadhyay, 2010; Cornell & Brockenbrough, 2004; Furlong, Sharkey, Felix, Tanigawa, & Green, 2010; Swearer et al.
2010). However, a general consensus has been reached regarding the three key elements which characterize bullying: (1) intent to do harm, (2) repetitive aggressive behaviors, and (3) a power difference between victim and aggressor (Olweus, 1993).

The methodological issues identified below are in agreement with Swearer et al. (2010), and are addressed here in an effort to move forward toward capturing the elusive standard definition and common measurement metric, and to avoid possible confounding issues.

**Definition/No definition.**

Typically, a definition or label of the roles in a bully/victim relationship has been used in assessments. There has been some debate regarding this practice where one side contends it introduces bias by unintentionally influencing responses, while the opposing viewpoint maintains providing a definition is crucial in the interest of homogeneity and clarification (Cook et al., 2010; Solberg & Olweus, 2003). It is important to differentiate between bullying and other forms of peer aggression, yet differentiation cannot be assured without explicit reference to bullying (Cornell, Sheras, & Cole, 2006; Espelage, Holt, & Henkel, 2003). Previous research has revealed that only a small number of children include repetition and power imbalance in self-generated definitions of “bullying” thereby omitting two of the three key elements (Vaillancourt et al., 2008). Most definition-first measures embed a reference regarding power difference in the bullying description but fail to measure it, instead frequency of victimization is most
often measured (Felix et al., 2011). Therefore, a definition-first approach was used and definitions were provided in the BVPI.

**Self Report/Other Report.**

Self-report measures are advantageous because they require few personnel, little time, and are low cost. Pellegrini and Bartini (2000) found self-reports of aggression are typically underestimates of actual perpetrator behavior due to reluctance in implicating themselves or others. Perry, Kusel, and Perry (1988) reported a discrepancy between self-report and other-report perceptions for a small group of students in their study. Logic dictates that if students feel they are bullied, it is surely reasonable that they be targeted for intervention in dealing with this perception. Swearer et al. (2010) calls for multiple assessment approaches; however, when rating observable behavior, peer nominations and self-ratings are usually comparable according to Pellegrini and Bartini (2000). Self-report measures are most commonly utilized. Therefore, in support of the call for movement toward a standard measurement metric it was determined a self-report survey would be used in the development of the BVPI (Swearer et al.).

**Anonymous/Non-anonymous.**

Chan (2002, 2005, 2006) used the non-anonymous questionnaire, School Life Survey (SLS), to compare anonymous with non-anonymous questionnaires in bully/victim research. The relevant hypothesis of the study was to test statistical differences between self-reported rates of bullying and victimization in the anonymous condition (such as in the SLS), versus the non-anonymous condition (such as in the
OBVQ-R). Findings indicated no statistically significant differences in self-reported bullying rates between anonymous and non-anonymous conditions (Chan, 2002, 2005, 2006). Swearer et al. (2010) makes no mention of this issue as a methodological challenge; however, the primary investigator for this study felt compelled to address it. Based on the findings in the three Chan studies, as well as the mentioned reference in Swearer et al. (2010), the researcher favored anonymity in the BVPI.

Assigning Participants to Groups.

Felix et al. (2011) reported:

When applying the theoretical definition of bullying to assign groups, there is a possible confound between frequency of victimization and reporting a power differential….suggesting that assessing a power differential can more accurately identify bullied victims (p.17).

This statement both warns and supports the development of the BVPI. It supports the need for an instrument which measures power imbalance accurately while warning against the use of assigning participants to groups based on the theoretical definition as commonly employed (Swearer et al., 2010). Group assignment was not used in any of the development phases of the BVPI, thereby removing that possible confound.

Time Frame and Frequency Scale.

Time frame and frequency scale decisions were grounded in extant literature and supported by content expert review findings. To allow for comparison across studies, the BVPI uses the same time frame as the Swearer Bully Survey System for middle and high
schools, *in the past year* (Swearer, 2011). Likewise, the same frequency scale used in Olweus’ Questionnaire is used for the BVPI. The cut-point for victim classification using the Olweus frequency scale applies 2-3 times a month or more.

**Summary**

In summary, the bullying research for the past thirty-five years has examined a variety of issues ranging from bullying and individual factors, to school climate, peer group functioning, academic achievement, anti-bullying intervention and prevention programs, numerous measures of each, and most recently, a holistic social-ecological model of bullying. Early research focused on the physical perspective of the school environment, including population, student-teacher ratio, and budgets, yet revealed no conclusive understandings. Subsequent research was expanded to examine broader constructs such as peer group function, teacher attitudes, school climate, and school policy as predictors of problem and prosocial behaviors. Victimization risk factors included peer group exclusion, remedial education enrollment, developmental disabilities, sexual identity, and obesity.
CHAPTER 3: METHOD

Introduction

In this chapter, the procedures used in the development and validation of the Bully Victim Power Inventory (BVPI) are presented, beginning with an overview of the design. This is followed by a description of two studies containing the four phases employed in development of the scale. Study One, the qualitative strand is composed of Phase I: Planning and Phase II: Construction. Study Two, the quantitative strand, consists of Phase III: Quantitative Evaluation and Phase IV: Validation.

Study Design and Purpose

Creswell and Plano Clark (2011) describe the instrument development process as a variant of an exploratory sequential mixed methods design composed of two strands, the first being a qualitative study and the second a quantitative study. This design was used to explore participant views in the qualitative strand [Study One] with the intent of using this information to develop and test a survey measure in the quantitative strand [Study Two]. The first strand was a qualitative exploration of how power is defined by the words and actions of bullies and victims, both in the school setting and through cyberbullying, by collecting focus group data from a sample of 15-20 multi-ethnic students in grades 9-12 attending an urban high school in a large city in the Rocky Mountain region. Because no existing instruments were identified which exclusively
assess the power differential in a bully/victim relationship, an instrument based on the qualitative views of participants was needed. Statements and/or quotes from these qualitative data were then developed into an instrument about the power imbalance in a bully/victim relationship. This design is standard protocol and incorporates best practices in instrument development and fits nicely with the four phase development process mentioned above (Benson & Clark, 1982; Bond & Fox, 2007; DeVellis, 2003).

There are a number of scales which assess bullying and victimization in children and adolescents. However, no existing scale has been developed and tested exclusively for the key element of power imbalance, which sets bullying apart from other forms of peer aggression. In the current study, the Bully Victim Power Inventory (BVPI) is an assessment aimed at differentiating perceived power in a bully/victim relationship. There are two purposes of this study: (1) to develop a scale consisting of three domains which assess the power imbalance in high school students between the ninth and twelfth grades, and (2) to test the scale’s psychometric properties using factor analysis, and Rasch modeling.

The BVPI assesses the following domains: verbal indicators, behavior indicators, and cyberspace indicators. The BVPI pilot scale was intended to measure these three domains of power imbalance between bully and victim. Applying the scale development procedure created by Benson and Clark (1982) and DeVellis (2003), and supported by Creswell and Plano Clark (2011), the BVPI was constructed in the two-study four-phase
structure. Table 5 provides an overview of the scale development procedure for the BVPI. Detailed descriptions are provided under the specific heading for each phase.

**Table 5. Instrument Development Process**

<table>
<thead>
<tr>
<th>Development Phase</th>
<th>Instrument Development Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Study 1 Qualitative Strand</strong></td>
<td></td>
</tr>
<tr>
<td>Phase I: Planning</td>
<td>Determine construct to be measured as perceived power imbalance in a bully-victim relationship</td>
</tr>
<tr>
<td></td>
<td>Identify target group as adolescents in school setting</td>
</tr>
<tr>
<td></td>
<td>Conduct literature review</td>
</tr>
<tr>
<td>Phase II: Construction</td>
<td>Construct qualitative measure open-ended questions based on literature to administer to focus groups</td>
</tr>
<tr>
<td></td>
<td>Determine focus groups based on literature review and convenience sampling</td>
</tr>
<tr>
<td></td>
<td>Administer qualitative questions to focus groups</td>
</tr>
<tr>
<td></td>
<td>Analyze focus group responses by thematic coding</td>
</tr>
<tr>
<td></td>
<td>Generate quantitative measure item pool including redundant items</td>
</tr>
<tr>
<td></td>
<td>Write 3 times the number of items intended for use</td>
</tr>
<tr>
<td></td>
<td>Select Likert scale response format</td>
</tr>
<tr>
<td></td>
<td>Design content review item protocol - crosstab specifications table &amp; item difficulty rating</td>
</tr>
<tr>
<td></td>
<td>Conduct content expert reviews</td>
</tr>
<tr>
<td></td>
<td>Analyze content review response data</td>
</tr>
<tr>
<td></td>
<td>Reduce item pool based on expert review construct validation data</td>
</tr>
<tr>
<td></td>
<td>Conduct cognitive interviews with representative target group sample</td>
</tr>
<tr>
<td></td>
<td>Reduce and revise quantitative items based on cognitive interview data-item and directions clarity, timing, quality overall</td>
</tr>
<tr>
<td><strong>Study 2 Quantitative Strand</strong></td>
<td></td>
</tr>
<tr>
<td>Phase III: Quantitative Evaluation</td>
<td>Conduct reliability test and item analysis on pilot items</td>
</tr>
<tr>
<td></td>
<td>Reduce and/or revise items based on reliability and item analyses results</td>
</tr>
<tr>
<td></td>
<td>Administer items to development sample</td>
</tr>
<tr>
<td></td>
<td>Conduct exploratory factor analysis</td>
</tr>
<tr>
<td></td>
<td>Derive subscales based on exploratory factor analysis results if warranted</td>
</tr>
<tr>
<td></td>
<td>Assess concordance of subscale(s) with original measure purpose. Adapt where necessary.</td>
</tr>
<tr>
<td></td>
<td>Conduct item analysis of subscale items</td>
</tr>
<tr>
<td></td>
<td>Assess reliability using Rasch modeling</td>
</tr>
<tr>
<td></td>
<td>Assess respondent use of response scale using Rasch modeling</td>
</tr>
<tr>
<td></td>
<td>Optimize scale length</td>
</tr>
<tr>
<td>Phase IV: Validation</td>
<td>Assess convergent validity</td>
</tr>
<tr>
<td></td>
<td>Assess relationship between experts and respondents</td>
</tr>
<tr>
<td></td>
<td>Interpret items based on difficulty ratings</td>
</tr>
</tbody>
</table>
**Study One**

Study One had two purposes; (1) to qualitatively explore how power was defined by the words and actions of bullies and victims, both in the school setting and through cyberbullying, and (2) construct a quantitative measure of bully/victim power imbalance for pilot administration. Phase I: Planning and Phase II: Construction were conducted in Study One.

**Phase I: Planning.**

Following the literature review in Chapter One, the current study was designed to construct a quantitative instrument where perceived power imbalance in a bully/victim relationship was the construct to be measured, thereby identifying individual characteristics of powerfulness and powerlessness. The target group is adolescents in a school setting. Results were intended to define and identify verbal expressions, behaviors, and situations specific to bullying, in which the respondent might feel powerful or powerless in the relationship. These data could then be utilized to develop positive behavior interventions overall, or with specificity by individual. The two purposes of this study were (1) to fill a gap in the extant literature by creating a self-report quantitative measure of the perceived power imbalance in a bully/victim relationship, and (2) to examine the instrument’s psychometric properties by conducting an item analysis, a factor analysis, and Rasch model analysis.
Phase II: Construction.

Phase II consisted of the construction of the BVPI and was grounded in the literature review in Chapter One. This section describes the process for determining the domains based on focus group results, instrument item generation, and item modification or elimination based on expert review and cognitive interview. The seven subsections of this phase include: focus groups and content expert review of thematic structure, domain definition, item pool generation, item format, instructions, content expert review of quantitative instrument, cognitive interviews, and scale development.

Focus Groups and Expert Review of Thematic Structure.

Participants.

Table 6 provides a summary of focus group participant demographics. A purposive sample of 18 adolescents, 66.7% males and 33.3% females with equal representation in grades nine, eleven, and twelve (27.8%), and 16.7% in grade ten (M=10.56) participated in this study. Ethnic distribution reasonably reflected the accessible population with 11.1% Asian, 16.7% Black or African American, 33.3% Hispanic/Latino, and 38.9% White.

Content experts included one middle school psychologist, one high school psychologist, one high school assistant principal, one middle school assistant principal, one social worker, one mixed methods researcher, and one university mixed methods professor. Of the one male and six females the following ethnicities were represented: Asian (14.3%), Black or African-American (28.7%), and White (57%).
Table 6. Focus Group Sample Size and Percentage of Sample by Demographic Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Participants</th>
<th>Experts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>12</td>
<td>66.7</td>
</tr>
<tr>
<td>Female</td>
<td>6</td>
<td>33.3</td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>27.8</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td>11</td>
<td>5</td>
<td>27.8</td>
</tr>
<tr>
<td>12</td>
<td>5</td>
<td>27.8</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>6</td>
<td>33.3</td>
</tr>
<tr>
<td>Asian</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Black or African American</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td>White</td>
<td>7</td>
<td>38.9</td>
</tr>
</tbody>
</table>

Note: Federal standards were used for ethnicity classification.

*Instruments.*

*Students.*

A three-page (single sided) open-ended interview protocol, grounded in theory, addressed the perceived power imbalance between bullies and victims. A simple definition of bullying, victim identification, and cyberbullying was provided. Instructions
to write thoughts, opinions, or beliefs about how the respondent knows when a bully has power over a victim were given, with clarifier, “What do you see, hear, or read?” The 10-item questionnaire comprised three items referring to behaviors indicating perceived power in the specific role of bully or victim, two items indicating perceived power of a cyberbully, and two items indicating perceived lack of power of a cybervictim. One example is “The words a victim uses that show less power in cyberspace are…” The complete protocol can be found in Appendix A.

_Experts._

No systematic expert review form was used. Instead, field notes were taken by the researcher to record expert feedback obtained at six meetings of experts. (More details are provided in the Procedure section below.)

_Procedure._

University and school district Institutional Review Boards approval was requested and granted to conduct this study.

_Students._

Potential focus group participants were selected from randomized class rosters using systematic sampling. The selection process began with the fourth student on the list followed by the selection of every seventh student thereafter, until 20 students total were selected. The researcher met with potential participants, explained the study purpose and handed out consent forms. Students were instructed to return consent forms within one week if they wanted to participate, at which time questionnaires were administered to
participants outside school hours in a regular classroom. Response time to the open-ended questions on the survey was 20 minutes, followed by 10 minutes of informal discussion where the researcher took field notes.

Experts.

The expert review panel convened on six occasions in a classroom at a local research university. At each meeting, participants were provided with topic-specific information, and asked to study the data, and discuss strengths and revisions at will. The researcher asked clarification questions, recorded feedback, then made revisions as described below. This iterative process occurred throughout the duration of meetings. On the first two occasions, the panel reviewed the study’s purpose, research questions, methodological approach, and sampling strategies. Study design, data interaction, weighting, timing and mixing were discussed, and study purpose was revisited and refined at the third meeting. Question development was critiqued, and administration to focus groups were decided at the fourth meeting, including setting, time of day, expected response time, and format and time length of follow-up discussion. On the fifth occasion, administration logistics were debriefed, and data analysis techniques were presented, discussed, and cognitive ideas were integrated in the evolution of formulated meanings and thematic coding. At the final meeting, themes were discussed and confirmed.

Data Analysis.

Questionnaire responses were entered into an Excel spreadsheet verbatim, and read several times to gain a general understanding. Significant statements directly
pertaining to lived experiences of bullying and victimization were identified and used to formulate meanings which were clustered into themes. This allowed for emergence of themes common to all participants’ responses. Significant statements and themes were used to write descriptions of participant experiences, and how participants experienced bullying and victimization. Finally, a composite description of power imbalance in the adolescent bully/victim relationship was written.

Methodological rigor was maintained by verification, validation, and validity (Meadows & Morse, 2001). Verification was obtained by comprehensive literature review, adherence to IPA methodology, bracketed questions and interview process, adequate sampling, field notes, data saturation, triangulation of sources and theories, researcher bias clarification, and thick description. Validation was achieved by triangulation across sources: comprehensive literature searches, written interviews of focus group participants, and review by seven field experts, data analysis and coding by an experienced researcher, and participant checks.

Results – Theme Clusters.

From 18 verbatim transcripts, 165 significant statements were extracted (Table 7). Organization into clusters revealed dichotomous supercategories, ‘Powerful’ and ‘Powerless’, and three cross-indexed themes: Verbal Indicators, Behavior Indicators, Social Exclusion Indicators, and Cyberspace Indicators. Verbal and behavior experiences occurred in person, cyberspace experiences reflected virtual reality. Table 8 illustrates two examples of emergent theme clusters and associated meanings.
Theme 1: POWERFUL Verbal Indicators.

For nearly every student, name-calling, and the use of degrading remarks were verbal representations of how a bully exhibits more power than a victim. Slightly less prevalent representations were when the bully curses at the victim or refers to the victim’s physical size or strength. This was followed by threats of physical harm and words intended to isolate or exclude the victim. Some student responses were very graphic and detailed, as displayed in Table 7, whereas other declarations were broader. One ninth grade boy described the way he could tell a bully has power over a victim is when he or she uses words like “swears (bitch), racial slurs, insulting appearance (fat, ugly), insulting intelligence, insulting or questioning sexual orientation (calling someone gay, faggot), insulting friends or family, insults ‘manliness’ (pussy)”. 
Table 7. Selected Examples of High School Students’ Significant Statements of Power Imbalance Indicators and Associated Formulated Meanings

<table>
<thead>
<tr>
<th>Significant Statement</th>
<th>Formulated Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretending like the bully doesn't exist. Being submissive. Avoiding the bully at all costs, trying to be around teachers/adults/people with power to keep them safe. Not telling others about it.</td>
<td>Less power traditionally demonstrated by behavior in person is illustrated by multiple avoidance behaviors.</td>
</tr>
<tr>
<td>You’re my fucking Bitch, I will kill you, white ass, cracker, nerd, whore, gay, I will beat the crap out of you, I will run you over in my truck, failed, shut up, suck it, bow down, you can't beat me, worthless, weak, pussy.</td>
<td>More power is traditionally demonstrated verbally by using curse words, racial slurs, sexual identity degradation, social standing degradation, self-image degradation, and threats to physical safety.</td>
</tr>
<tr>
<td>The way I can tell a victim has less power than a bully in cyberspace is…they arnt fighting back (sic).</td>
<td>Less power in cyberspace is ascertained by inactivity or the elimination of &quot;their page&quot;.</td>
</tr>
<tr>
<td>The way I can tell a bully has power over a victim in cyberspace is…rude, personally degrading messages--Gains support through Friends that send horrible messages or openly post degrading comments.</td>
<td>More power in cyberspace is determined by publicly posting rude, degrading messages. Bullying dominance is increased by implied recruitment of others in an effort to isolate the victim.</td>
</tr>
</tbody>
</table>

**Theme 2: POWERFUL Behavior Indicators.**

People easily explained the actions of a bully, focusing on body language which portrays dominance, arrogance, physical aggression, and “mean-spiritedness” to define power over a victim by behavior. Students said the bully behaves differently with the victim than with friends as a show of power. The bully shows no vulnerability, leers at the victim, makes physical contact until the victim acquiesces. The following quotes
present a clear picture: “meen [sic]”, “bumps into them”, “pushes them”, “looks at them nasty”, “hitting them”, “walk up close to you”,

A 9th grade Hispanic male explains, “they own the person. They can call them whatever they want and do whatever want to them without remorse.” An 11th grade African-American female put it this way, “The victim lets the bully talk to him/her in any tone. The bully treats the victim as a slave. The victim acts/looks intimidated whenever the bully is around.”

Theme 3: POWERFUL Cyberspace Indicators.

Students said the sway of power went toward the bully in cyberspace when they read aggressive words depicting violence. This was threatening or degrading, and caused worry and emotional pain in the victim and sympathetic readers. Degradation was by far the most prevalent impression used to describe powerfulness. Illustrations included, “He threatens them, insults them, slanderizes them in front of peers (like on facebook), puts downs, tells them what to do,” and “When a bully sends horrible and demeaning things and the victim doesn't immediately stop them or erase what they wrote.” Some comments were frightening, “Then posting on their wall, I wouldn't go to school tomorrow, you're a piece of trash, you show up and your going to wish you hadn't.”

One 12th grader described cyberbully power as “mean posts or comments, blogs, messages, texts, threatening phone calls, phone prank calls; violent, cold hearted, hurtful, controlling, aggressive.” An 11th grader shared, “when everybody knows --they make indirect remarks on their page --they directly attack the victim on their page --
pictures/texts are forwarded.” A 9th grader wrote, “rude, personally degrading messages--
Gains support through Friends that send horrible messages or openly post degrading
comments.”

Theme 4: POWERLESS Verbal Indicators.

The most recurring word patterns to show a victim has less power than a bully
indicated fear and not feeling safe at school. Victims plead with, apologize to, or agree
with the bully. Victims’ phrases signify being forced into something they would not
normally say or do. Defense strategies included preference to agree with bully even
though they truly did not agree, not speaking to the bully, and avoidance.

A Hispanic 11th grade young man’s observations were brief and insightful, “none;
stays quiet; is shy; gives the bully power; sorry; laugh a lot; try and seem not scared.” A
sense of defeat and degradation nearing exhaustion was evident in a White 11th grade
girl’s descriptions, “I'm sorry." "Can't you leave me alone?" "I'm not going to fight you." "Can't I just have my stuff back?" "Can you stop?" "Please don't…" "I'm going to tell." or
ignoring the person, or not saying anything.”

Theme 5: POWERLESS Behavior Indicators.

Students were overwhelmingly consistent and repetitive with their descriptions of
powerless behavior. Descriptions fell into three groups; students said victims act
differently, avoid the bully, and do not defend themselves. Many were pensive, nearly
poetic.
One student used the following descriptors: “whimpering, subdued, shy-
 extremely, quiet-extremely, depressed, troubled, sleepless, tired.” Another conceded, “frail; nervous; Jumpy; scared; The victims don't normally go to someone for help. They, most of the time, act normal and don't let on about being bullied.” Still another, “scared -
-Trys to avoid bully --Doesn't go to school because of bully --Gets out of class late to
 avoid bully in hallway --Does whatever bully wants-- Runs away --Lies about being
 bullied --Won't tell anyone.”

Others simply said, “sad and like what the bully says maters”, “skiddish, or afraid. Avoiding a person.”, “shy--quiet --lonely --tries to be their friend --try to play it off”, or “walk faster to get away from the bully”, “no one around to help”, “They don't stand up for themselves. They try and avoid the bully.”

Theme 6: POWERLESS Cyberspace Indicators

Students reported the words used by a victim which show less power in
cyberspace are highly similar to those used in person. Expressions indicate worry, fear, anger and emotional pain: “please, sorry, I didn't mean to, stop”, “you're just jealous --
stop lying --I hate you”, and “No words used, (No response) OR Leave me alone --Quit -
-Stop it --Why are you picking on me?”.

Replies to the prompt “The way I can tell a victim has less power than a bully in
cyberspace is…” included, “when they don't say anything back”, “They don't defend themselves”, “don't use strong words; question back the bully”, “doesn't respond to hurtful or mean things posted or told –i.e., Doesn't tell anyone about it”, “If they listen to
what the bully says instead of just getting off the internet or their phone.” One student shared, “they post things less frequently then everybody else --they eliminate their page.”

Table 8. Thematic Clusters

<table>
<thead>
<tr>
<th>Study One</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two Theme Clusters with Related Formulated Meanings</td>
</tr>
</tbody>
</table>

**Theme 2: POWERFUL Behavior Indicators**

- The bully's body language portrays dominance, arrogance, physical aggression, humiliation.
- Bully shows no vulnerability.
- Bully expects no retaliation for transgressions.
- The bully demands or destroys property.
- The bully's body language portrays cruelty causing fear or deep emotional pain for the victim.
- Bully causes physical pain.
- Bully orders victim around and victim kowtows to bully.

**Theme 6: POWERLESS Cyberspace Indicators**

- Victim asks why the bully is picking on him/her.
- Victim uses weak words.
- Victim does not fight back or defend himself.
- Victim pleads or apologizes repeatedly or profusely.
- Victim agrees to everything the bully posts or does what the bully wants in an effort to avoid conflict.
- Victim warns to tell a significant adult, e.g. parent, teacher, principal, police.
- Victim does not tell anyone about the cyberbullying.
- Less frequent posts or does not respond.
- Eliminates his/her page.
- Victim does not attend school or shows up to school sad or angry.
Discussion.

Students found the bully/victim power imbalance in email, text messages, tweets, Facebook/MySpace, chat rooms, blogs, etc. In school, the settings were in the halls, bathrooms, cafeteria, locker rooms, stairwells, and other isolated areas.

Results were integrated into an essential structure of bully/victim power imbalance. More power was distinguished by openly attacking weak or sensitive issues, then taunting, threatening and stalking the victim, occasionally recruiting others for support. Weak or non-existent response and repercussions by the victim indicated less power. Figure 1 provides a graphic representation of the bully/victim power imbalance indicators.
Figure 1. Bully/Victim Power Imbalance Indicators
The expert panel reviewed the themes and supporting evidence above, and critiqued the interface of the two. It was determined the substantive evidence effectively upheld the thematic powerful-powerless indicator structure.

In this study, students focused on the differentiation of power in a bully/victim relationship in an attempt to characterize power imbalance. From their experiences and observations, they determined that in order for an imbalance to be present, one person must be powerful and the other powerless. When asked how they could tell a bully has more power than a victim, they responded “by what they say, how they act, or what they post, text or whatever…” They asserted degree of power is dependent on relationship dynamics and can vary within a relationship. Students provided specific words, phrases, strategies, and behaviors as evidence of powerful and powerless verbal, behavior and cyberspace indicators.

In cyberspace, evidence of more power was produced by “aggressive words” and interpretations of verbal and physical violence. Images of physical violence matched traditional portrayals. Verbal violence referred to words or phrases perceived as degradation, humiliation, and the attack of self-image and characterization. In the school setting, verbal and physical manifestations aligned with traditional portrayals of name-calling, insults, threats, physical posturing, cowering, or harm for both powerful and powerless indicators.

According to the participants, a qualitative measure of more power was the words and actions of bullies which appear to have a laser focus on victims’ sensitivities and
strengths, and hone in on them in an effort to destroy the victim’s self-image and confidence. Power was also awarded to bullies when victims “do not respond”, “do not know how to respond”, or react in a way perceived as “weak” or powerless. An important and disconcerting finding was that less power was identified by the use of anti-bullying strategies taught in elementary and middle school: “don’t fight back”, “ignore the bully”, “walk away”, “don’t respond”, “tell a friend”, and “tell an adult”. When these strategies are put into words or action, the victim is perceived as weak and deficient in power. Adolescents expect peers to be strong in self-advocacy and stand up for themselves; this is the adolescent perception of power equity.

As defined by Craig, Henderson, and Murphy (2000), bullying behaviors may be physical and verbal, and may include social alienation. These behaviors are indicators of power imbalance as identified by study participants. Consistent with prior research, direct behaviors (physical attack, name-calling) and indirect behaviors (spreading rumors) constitute acts of bullying (Elinoff, Chafouleas, & Sassu, 2004). Additionally, this study’s findings revealed these acts serve as latent measures of power imbalance. Six themes centered on being powerful or powerless in a bully/victim relationship. Specific words and actions were identified as indicators which delineated less and more power.

Domain Definitions.

The BVPI was constructed to measure the perceived power imbalance. It assessed the power imbalance in the bully/victim relationship in adolescents by measuring the domains listed below. Each domain was assessed by the words and behaviors derived
from the focus group data, and theoretically inherent in any bully/victim relationship. The three key elements of bullying were integrated throughout (intentionality, chronicity, power imbalance). Focus group responses were thematically coded and interpreted. Specific domains were created utilizing qualitative data derived from focus group responses, and grounded in theory to address content validity (DeVellis, 2003; Hinkin, 2001). Three domains were determined: (1) verbal indicators, (2) physical indicators, and (3) cyberspace indicators. The Item Content Specification Table (Appendix B) provided a graphic representation of how domains and the behaviors which define bullying were cross-referenced. A demographic section was also included and analyzed at the single variable level for the following purposes: (1) determination of perceived bully/victim power imbalance prevalence among certain groups, and (2) assessment of sample representation compared to actual high school population. A modified version was used by content expert review panel and can be found in Appendix B.

**Item Pool Generation.**

Items were written for relevance to the scale purpose and constructed using thematic coding of focus group data grounded in substantive theory. Precautions were taken to maintain fidelity to sound psychometric principles, i.e. minimum amount of items required for good instrumentation, adequate domain sampling, parsimony, redundancy, double-barreled items, positive or negative wording, etc. It was determined six to eight items were needed for powerful feelings and the same for powerless feelings. Items were generated for perceived powerful feelings, and for perceived powerless
feelings. The remaining two key elements of bullying, intentionality and chronicity were incorporated in item wording (intentionality) and in the pairing of one frequency item with each power item (chronicity). Next, items were grouped under verbal, physical, or social categories according to findings in extant literature and focus group results. Items were then listed in ascending order of power based on selected Conduct Disorder criteria as reported in the American Psychiatric Association’s Diagnostic and Statistical Manual-IV-TR (APA, 2000), and Diagnostic and Statistical Manual-III-R (APA, 1987). Behaviors and conditions with less power were presented first, with each subsequent listing holding more power than the previous one.

Item Format.

It was determined a 4-point Likert response format would be used in consideration of the measure’s purpose, and the age and ability of the respondents (Benson & Clark, 1982; DeVellis, 2003). On average, high school students are capable of reading and reasoning at a cognitive level conducive to this format. Since perceptions are being measured, the flexibility and variety of responses is important to the collection of salient data. Strongly Disagree to Strongly Agree response options were used for the original scale. Chronicity was measured on each item by a follow-up question asking how often that particular situation happened. Chronicity response options were Never, Rarely, Sometimes, Often, All the Time, and NA (not applicable).
Instructions.

General directions were written on page one, including definitions clarifying bullying, victim identification, and interpersonal power, concluding with a final statement, and surrounded by a rectangular border for visual acuity. Appendix D provides instructions in detail.


Participants.

One white male and two white female content experts reviewed the original quantitative measure. This panel included one substantive expert in Positive Behavior Intervention and Support (PBIS) with 16 years of experience evaluating Response to Intervention (RtI) programs in schools for a state Department of Education. This expert also holds two Master’s degrees: an M.S. in Education and an M.A. in Curriculum and Instruction. A second expert was a university faculty member who holds a Ph.D. in Quantitative Research Methods, teaches survey research, and has evaluated quantitative instruments professionally for 12 years. The third expert was a program evaluator who holds a Ph.D. in Psychology, is employed by a state Department of Education, uses surveys professionally for analysis of federal program compliance, and has 24 years of experience. Table 9 provides a summary of content expert panel demographics.
Table 9. Content Expert Panel – Sample Size and Percentage of Sample by Demographic Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
<td>33.3</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
<td>66.7</td>
</tr>
<tr>
<td>Education Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhD completed</td>
<td>2</td>
<td>66.7</td>
</tr>
<tr>
<td>PhD in progress</td>
<td>1</td>
<td>33.3</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>3</td>
<td>100</td>
</tr>
</tbody>
</table>

*Note: Federal standards were used for ethnicity classification.*

**Instrument.**

A content review protocol was designed in a crosstab specifications table, and an item difficulty rating checklist was created for content validation of individual items and the overall scale (Appendix B). Validity, clarity, conciseness, relevance, format, missing concepts or approaches, dimensionality, and item location were analyzed by matching items to the specification table. Item difficulties were assessed by checking an easy, medium, or hard column for each item (Benson & Clark, 1984; DeVellis, 2003).

**Procedure.**

University and school district Institutional Review Boards approval was requested and granted to conduct this study. Four content experts were invited to review the BVPI for validity via email as detailed in Appendix C. Informed consent forms were attached with return instructions embodied in the email. Three experts returned the consent form. One nationally recognized university faculty member with bully/victim expertise was
contacted, initially expressed interest and intention to evaluate the instrument but never
returned researcher’s follow-up emails requesting results. Upon receipt of a signed
consent form, a reply email was sent which included a two-week turn around deadline
and the following attached documents: the instrument, the content review protocol, and
the item difficulty rating sheet. Two days after receipt of the documents, one expert
requested a meeting for discussion and clarification of results. The meeting was set for
ten days later at which a hardcopy of the instrument with hand-written comments, and
completed content review protocol and item difficulty checklist were presented to the
researcher. Results were discussed and clarified, and the researcher took field notes. At
the end of the meeting, the researcher thanked the expert for her assistance and
participation. One expert returned all completed documents within two weeks via email
with a clarifier to reply with any questions or comments. All documents were complete
and understood, therefore, an email of thanks and gratitude was returned. The third expert
had not returned documentation within the return window, so a follow-up email was sent
4 days afterward to which the expert asked for and was granted more time.
Approximately five hours later, all results were returned via email. Comments were
included in the electronic version of the instrument. The content review protocol and item
difficulty checklist were completed using the electronic versions.

Results.

Items nominated for retention by each content expert were retained due to the
diversity of expertise of the panelists. Results indicated validity and unidimensionality
overall, as well as for verbal and physical intimidation, social exclusion, and
cyberbullying. Two items were omitted by all three experts (item #10 and #33), 13 items
were agreed upon unanimously, and 40 out of 42 items were selected by at least one
expert. The following data describe the number of items selected for separate indicators:
verbal intimidation (20 items total; 10 powerful, 10 powerless, no duplicates), physical
intimidation (8 items total; 6 powerful, 2 powerless, 1 duplicate), cyberbullying (3 items
total; 1 powerful, 2 powerless, 1 duplicate), and social exclusion (16 items total; 10
powerful, 6 powerless, no duplicates). Extant literature and focus group data revealed
social exclusion to be an inherent indicator of power imbalance, embedded in the words
or behaviors of a bully or victim. Therefore, the existing social exclusion items were
retained in the BVPI.

Item difficulty results revealed all seven demographic items were easy to read,
understand, and complete. Difficulty levels for powerful items were evenly dispersed
across 23 total items: easy (8 items), medium (9 items), hard (6 items). Dispersion was
not as even for powerless items (19 total) with 8 items selected as easy, 10 items medium,
and only 1 item selected as hard to agree with. Chronicity item difficulty identically
reflected powerful and powerless item difficulty.

The researcher used the content expert results to reword or modify any of the 48
items which were vague or unclear. Table 10 displays a few examples of changes made
to the BVPI as a result of content expert input.
Based on the data, 28 items overall were changed. Seven items were re-worded for clarity and missing concepts such as in the following example. Two items were re-structured to improve conciseness and specificity in data collection. Seven items were re-located to improve approach to powerful and powerless items, and 9 items were created due to missing data collection concepts, including 7 demographic items to include parent and sibling information.

The researcher decided to retain the two items omitted by the content expert panel to see if the cognitive interview data would yield similar results. With all other content review changes completed, the BVPI consisted of 42 items which was intended to measure three domains (verbal indicators, physical indicators, and cyberbullying indicators) under two conditions, powerful and powerless. This instrument was used for cognitive interviews (Appendix F).
Table 10. Item Modifications Resulting from Content Expert Review

<table>
<thead>
<tr>
<th>Power</th>
<th>Original Items</th>
<th>Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructions preceding powerful items: Please answer the following questions while thinking about how you feel when you've been a bully or been bullied.</td>
<td>“Think about a situation in which you have said or done mean, hurtful things to another student(s) to the point where they could not defend themselves. Circle the answer that describes the extent to which you agree with the following statements.” Similar instructions were written with victimization defining wording and located prior to the powerless items.</td>
<td></td>
</tr>
<tr>
<td>P1] I feel powerful in a bully-victim relationship when I lie to the other person</td>
<td>The phrase &quot;bully-victim&quot; was removed from all relevant items, re-worded and re-located in instructions (above) preceding the powerful and powerless bodies of items.</td>
<td></td>
</tr>
<tr>
<td>I feel powerful when I threaten to hurt him/her.</td>
<td>All items containing the following phrasing was replaced with &quot;the other person&quot;: his/her, him/her, s/he.</td>
<td></td>
</tr>
</tbody>
</table>

| Original Scale Modifications | Strongly Agree, Disagree, Agree, Strongly Agree, NA | Not at all powerful, Somewhat powerful, Moderately powerful, Very powerful, NA |

<table>
<thead>
<tr>
<th>Chronicity</th>
<th>Original Item Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1a] This happens</td>
<td>The phrase &quot;this happens&quot; was replaced on all chronicity items to more a specifically relevant prompt such as P1a] I lie to the other person.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Original Scale Modifications</th>
<th>Never, Rarely, Sometimes, Often, All the Time, NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>All chronicity scales were re-worded to read Never, 1-2 times/year, 1-2 times/month, 1-2 times/week, Daily</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Original Items Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>D4] How many times have you been bullied (in person or electronically) by others in your lifetime?</td>
<td>D2] In your lifetime, how many times have you said or done, mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend themselves?</td>
</tr>
<tr>
<td>D6] Bullying: I have said or done mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend him/herself.</td>
<td>D1] I have said or done mean, hurtful thinks to another student(s) repeatedly and over time, to the point where the other student could not defend him/herself.</td>
</tr>
<tr>
<td>No original item.</td>
<td>D3] When I’ve said or done mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend him/herself, I’ve done it (check all that apply)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Original Scales Modifications</th>
<th>□ yes □ no</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ in cyberspace</td>
<td>□ in person, face-to-face</td>
</tr>
<tr>
<td>□ when the student is not around</td>
<td></td>
</tr>
</tbody>
</table>
Cognitive Interviews.

When the scale items were in near-final form, the researcher conducted eight cognitive interviews with three female and five male students at an urban high school in a metropolis in the Rocky Mountain region of the western United States of America. These students were representative of the target group, and were administered the initial instrument to determine completion time, then asked to critique the instrument for clarity of items, responses, and instructions, and make recommendations for improvement (Appendix E; Appendix F). The following criteria were used in critique: completion time, conciseness and clarity of instructions, items, and response choices, item order, construct and content validity, missing indicators, and overall length. The instrument was revised and reduced based on cognitive interview results and used as the developed instrument for the pilot and field studies.

Participants.

Eight adolescents comprised the cognitive interview sample. One 9th grade African American (or Black) male, one 10th grade Hispanic/Latino male, two 10th grade European American (White) females, one 11th grade Hispanic/Latino male, one 11th grade Asian male, one 11th grade Asian female, and one 12th grade White male. Table 11 provides a summary of the cognitive interviews sample demographics.
Table 11. Cognitive Interviews – Sample Size and Percentage of Sample by Demographic Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
<td>62.5</td>
</tr>
<tr>
<td>Female</td>
<td>3</td>
<td>37.5</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>16</td>
<td>4</td>
<td>50</td>
</tr>
<tr>
<td>17</td>
<td>3</td>
<td>37.5</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>Black or African American</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>White</td>
<td>3</td>
<td>37.5</td>
</tr>
<tr>
<td>African American &amp; White</td>
<td>2</td>
<td>25.0</td>
</tr>
</tbody>
</table>

*Note: All demographic data were self-reported.*

*Instruments.*

Appendix E provides the cognitive interview protocol used for evaluation by students and Appendix F illustrates the cognitive interview version of the BVPI as described in the content review results.

After conferring with two school psychologists and a clinical psychologist, the researcher decided to design the protocol in written format due to sensitivity issues.

The sole identifier on the interview protocol was interview number. The respondent completed start time and end time on blank lines provided for each. The first two questions covered clarity and conciseness of the instructions, questions, and response choices, while the third asked if the question order was easy to follow. Response options
for the first three questions were dichotomous and accompanied by an open-ended follow-up question for editorial comments. The fourth question asked about questionnaire length with three response choices. The fifth was specific to validity regarding the power imbalance in a bullying relationship, while the final question asked if anything was missing. The fifth and sixth questions were open-ended.

Procedure.

University and school district Institutional Review Board’s approval was requested and granted to conduct this study. A process similar to participant selection for the focus groups was used. Students were selected from randomized class rosters using systematic sampling. However, for cognitive interviews, the selection process began with the tenth student on the list followed by the selection of every twentieth student thereafter, until 10 students total were selected. The researcher met with potential participants individually in a regular classroom outside school hours at a time convenient to both parties. At each meeting, the researcher explained the study purpose and handed out consent forms. Students were instructed to return consent forms within one week if they wanted to participate, at which time the researcher set individual meeting times for administration and discussion. Eight students participated for an 80% response rate. Two students opted out. One cited a sensitivity issue and one stated lack of time in her daily schedule.

Protocols and the instrument were administered to participants outside school hours in a regular classroom. Students were asked to read the instructions on the protocol,
and to ask any questions they might have throughout the process. Only one question was asked, which was “So, I take the survey just like normal and then answer these questions about it?” to which the researcher responded “Yes.” Participants recorded the time they began the survey, then answered the questions and recorded the time when they were finished. Then they answered the protocol questions which took approximately 10 minutes. Survey response times ranged from 15-65 minutes with an average of 28 minutes. The average was re-calculated as 22 minutes after removal of the 65 minute outlier. Respondents submitted both instruments to researcher upon completion, at which time the researcher and participant reviewed and discussed the respondent’s comments. The researcher took field notes of the discussion.

Results.

Seven out of eight respondents reported the survey instructions were clear and concise; however, only half thought the questions were clear and concise. A 14-year old African American and White male wrote:

One question which was not concise was the questions P(7) and P(7a). These two questions use taller and stronger. Characteristics that can apply to someone who is not a bully. So when it asks how often are you taller or stronger than this person it appears illogical to me. Being taller and stronger, as well, should not be a determining factor in bullying. [sic]

Interestingly, the researcher’s field notes reported this young man was much taller and stronger than his age peers. When asked if he could explain more, he emphasize the
discrepancy in logic in the way the follow-up question was worded contextually (7a). A 16-year old Asian male simply said, “P38 omit it”. Two participants took issue with the response options for the powerless items. A 17-year old African American and White male said, “P24-P41 These questions would be better if there was a totally powerless and very powerless option together because they're the same thing” [sic].

All eight (100%) of the respondents answered ‘yes’ on item 3) *Was the order of the questions easy to follow?* and item 5) *Overall, did the questions ask questions about bullying and feelings of power in a relationship?* A majority of the respondents (62.5%) reported the length of the survey was “just right”, while the remaining reported it was “too long” due to repetitive questions (25.0%) and interest retention (12.5%). A 16-year old White female said, “could've been just a little shorter to keep interest.” [sic], a 17-year old White male wrote, “Don't ask so many similar questions”, and the 14-year old African American and White male recommended, “I found that some of the questions were redundant and at times would ask the same thing twice. For example in question P(7) the first question, if NA is applied already answers the second question P(7a).” The final item asked, “6] Was there anything missing, or anything you think should be included that was not asked?” Five students responded that nothing was missing, one student suggested two additional items, “Do you feel powerless when people laugh at you? Do you feel powerful when people laugh at you?”, a second suggestion was simply, “Are you a bully?”, and another student thought that the wording for the powerless response options should be different. Just two changes were made to the survey itself.
One participant wrote a question mark over one of the “Very powerless” response option and scratched several lines through another. The second edit was on items P2 and P2a where the respondent scratched out the words "racist remarks" and wrote in "mean things".

In conclusion, dominant trends in the cognitive interview data indicated strong evidence for validity (100%), question order (100%), and clear and concise instructions (100%). Overall survey length was considered “just right” by 62.5% of respondents with 25.0% citing item redundancy as a cause for excessive length, and 12.5% requesting a shorter version to retain interest. Half the respondents said the questions were clear and concise while the other half cited redundancy and power items response options as reasons for confusion. The recommended addition of the powerful and powerless “…when others laugh at me” items were an interesting discovery. The “Are you a Bully?” item was also suggested. The redundancy and interest issues would likely be remedied by a change in the power response options. The researcher’s field notes revealed students believed that changing the phrasing on the chronicity items to “This happens…” would be sufficient for understanding and aid in decreasing perceptive issues with redundancy and length. Therefore, 9 total instrument revisions were made based on cognitive interview validation data. Table 12 provides a concise illustration of the revisions.
# Table 12. Instrument Revisions based on Cognitive Interview Results

<table>
<thead>
<tr>
<th>Power</th>
<th>Previous Items</th>
<th>Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2] I feel powerful when I call him/her names, tease, or say <em>racist remarks</em> to him/her.</td>
<td>P2] I feel powerful when I call this person names, tease, or say <em>mean things</em> to this person.</td>
<td></td>
</tr>
<tr>
<td>No original item.</td>
<td>Item added to powerful scale: P21] <em>I feel powerful when other people laugh at me.</em></td>
<td></td>
</tr>
<tr>
<td>No original item.</td>
<td>Item added to powerless scale: P31] <em>When other people laugh at me, I feel</em></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Powerful Scale Response Options: Not at all powerful, Somewhat powerful, Moderately powerful, Very powerful, NA</th>
<th>Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powerless Scale Response Options: Totally powerless, Somewhat powerless, Moderately powerless, Very powerless, NA</td>
<td>Powerless Scale Response Options: Totally powerless, Slightly powerless, Moderately powerless, Not at all powerless, NA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chronicity</th>
<th>Previous Items</th>
<th>Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>The phrase &quot;this happens&quot; was replaced on all chronicity items to more a specifically relevant prompt such as P1a] I lie to the other person.</td>
<td>Specifically relevant prompts such as P1a] I lie to the other person were changed back to the phrase &quot;this happens&quot; on all chronicity items.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chronicity</th>
<th>Previous Scale</th>
<th>Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never, 1-2 times/year, 1-2 times/month, 1-2 times/week, Daily</td>
<td>All chronicity scales were re-worded to replicate the Olweus frequency scale: Not in the last 2 months, 1-2 times in the last 2 months, 2-3 times a month, Once a week, Several times a week</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Previous Items</th>
<th>Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2] In your lifetime, how many times have you said or done, mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend themselves?</td>
<td>D2] In the past 30 days, how many times have you said or done mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend him/herself?</td>
<td></td>
</tr>
<tr>
<td>D5] In your lifetime, how many times has another student said or done mean, hurtful things to you repeatedly and over time, to the point you could not defend yourself?</td>
<td>D5] In the past 30 days, how many times has another student said or done mean, hurtful things to you repeatedly and over time, to the point you could not defend yourself?</td>
<td></td>
</tr>
</tbody>
</table>
**Scale Development.**

Following analyses of focus group, expert review, and cognitive interview data, a revised scale was developed for the pilot study. The new BVPI comprised 44 items total, 24 powerful items and 20 powerless items measuring three domains (verbal indicators, physical indicators, and cyberbullying indicators) under two conditions, powerful and powerless. This scale was used in the pilot administration and field administration in Study Two.
CHAPTER 4: RESULTS

Study Two

Study Two had two purposes: (1) to test the structure and reliability of the BVPI, and (2) to test the validity of the BVPI. Phase III: Quantitative Evaluation and Phase IV: validation were conducted.

Phase III: Quantitative Evaluation.

This phase addressed the first three research questions of the overall study:

1] Does the Bully/victim power Inventory reflect the three identified domains (i.e. verbal indicators, behavior indicators, and cyberspace indicators) and factor appropriately into the three domains?

2] Is the response scale use appropriate for the Bully/victim power Inventory?

3] Does the Bully/victim power Inventory evidence adequate reliability?

Evaluation of the BVPI occurred in two stages: a pilot administration and a field administration. Pilot study data were used to determine how well items reflected their specific domains. Item analysis was used to evaluate item difficulty and item discrimination using SPSS. Items were grouped by domain, followed by point-biserial correlation which produced Cronbach’s alpha estimates. Items with estimated point-biserial correlations between .50-.96 were retained. Item estimates falling outside the desired range were removed one at a time. New estimates were assessed at each iteration
until all items fell within the optimal range. Domains not uniquely identified were combined, breadth of construct measurement was considered and maintained, and the resultant instrument was used in the field administration.

Principal components analysis (PCA) and Rasch modeling were used to evaluate field study data. PCA was conducted to evaluate factor structure and item contribution within each factor using SPSS. Items which demonstrated poor factor loadings or cross-loaded were evaluated for deletion. Domains not uniquely identified were combined, and items indistinguishable in factor structure were examined for removal. Scale structure was initially assessed by PCA using SPSS, and ultimately tested by applying the Rasch model using WINSTEPS (2011). The Rasch model was also applied to field administration data to evaluate use of the response scale, dimensionality, reliability, and targeting. Rasch-Andrich Thresholds were calculated and Linacre’s (2011) criteria were used for response scale analysis. Dimensionality was tested by using principal components analysis of residuals, item fit, targeting, and person fit. Reliability was estimated by calculating the reliability of person separation index.

**Pilot Administration.**

**Participants.**

Table 13 provides a summary of pilot study participant demographic information. A sample of 26 adolescents, 42.3% females and 57.7 % males, aged 14 (3.8%), 15 (34.6%), 16 (38.5%), 17 (15.4%), and 18 (7.7%), (M=15.88, SD=.99) participated in this pilot study. Distribution by ethnicity reflected the accessible population with 15.4%
Asian, 3.8% Black or African American, 50.0% Hispanic/Latino, 26.9% White, and 3.8% representing other or mixed ethnicities.

Table 13. Pilot Study Sample Size and Percentage of Sample by Demographic Variables

<table>
<thead>
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<td>26.9</td>
</tr>
<tr>
<td>Other</td>
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<td>3.8</td>
</tr>
</tbody>
</table>

Note: All demographic data were self-reported.

Instruments.

Bully/Victim Power Inventory (BVPI).

The BVPI pilot instrument assessed perceived power imbalance in high school students between the ages of 14-18 (Appendix G). It comprised 88 items total, 1 bullying self-identification item, 1 victim self-identification item, 24 powerful items, 19 powerless items, and 43 repetition (“This happens”) items measuring three domains: verbal indicators (22 items total -12 powerful and 10 powerless), physical indicators (13 items total - 9 powerful, 4 powerless), and cyberbullying/social exclusion indicators (8 items...
total; 3 powerful, 5 powerless). A dichotomous (Yes-No) response scale was used for the bully and victim self-identification items, whereas a five point rating scale was used for powerful and powerless items. Powerful items rating scale was: 0 (NA), 1 (Not at all powerful), 2 (Slightly powerful), 3 (Moderately powerful), 4 (Very powerful). Powerless items rating scale was: 0 (NA), 1 (Totally powerless), 2 (Moderately powerless), 3 (Slightly powerless), 4 (Not at all powerless). A five point rating scale was also used for the repetition items as follows: 0 (Not in the last 2 months), 1 (1-2 times in the last 2 months), 2 (2-3 times a month), 3 (Once a week), 4 (Several times a week).

*Olweus Bully Victim Questionnaire (OBVQ).*

The OBVQ was used with permission, as a measure of convergent validity on the bullying and victimization construct. This self-report 40-item measure assesses bullying (*I called another student(s) mean names and made fun of or teased him or her in a hurtful way*) and victimization (*I was hit, kicked, pushed, shoved around, or locked indoors*) for age range 8-16 years old. Five-point (e.g., *It has not happened in the past couple of months-Several times a week*) and six-point (e.g., *I have not been bullied at school in the past couple of months-By several different students or groups of students*) rating scales were used.

Internal consistency and test-retest reliability ranging from 0.80-0.90 have been reported in prior research studies with large sample sizes, e.g. more than 5,000 students (Kyriakades et al., 2006; Olweus, 1996, 1997; Solberg & Olweus, 2003). At the individual level specifically, combinations of items assessing victimization or bullying
revealed Cronbach’s alpha values greater than 0.80 (Kyriakades et al., 2006). Validity has only been investigated in a few studies with most addressing convergent validity of the early versions of the OBVQ (Kyriakades et al., 2006). Olweus (1994) reported correlations in the 0.40 – 0.60 range between composites of 3 self-report items on being bullied or 5 self-report items on bullying and attacking others with reliable peer ratings on related dimensions in early studies in Sweden (e.g. Olweus, 1978).

Construct and convergent validity were supported in a study by Solberg and Olweus (2003). Construct validity was tested by known group differences which revealed large and highly significant differences between victims and non-victims based on self-reported prevalence ratings on three dependent internalizing variables: (1) Social disintegration ($M_{\text{non-victims}} = 1.95$, $SD_{\text{non-victims}} = 0.90$, $n_{\text{non-victims}} = 4174$; $M_{\text{victims}} = 2.94$, $SD_{\text{victims}} = 1.25$, $n_{\text{victims}} = 452$; $t_{(503)} = 16.35$, $p < .001$); (2) Global negative self-evaluations ($M_{\text{non-victims}} = 2.38$, $SD_{\text{non-victims}} = 1.04$, $n_{\text{non-victims}} = 4159$; $M_{\text{victims}} = 3.05$, $SD_{\text{victims}} = 1.34$, $n_{\text{victims}} = 446$; $t_{(504)} = 10.19$, $p < .001$); (3) Depressive tendencies ($M_{\text{non-victims}} = 2.15$, $SD_{\text{non-victims}} = 0.90$, $n_{\text{non-victims}} = 3955$; $M_{\text{victims}} = 2.84$, $SD_{\text{victims}} = 1.15$, $n_{\text{victims}} = 403$; $t_{(453)} = 11.59$, $p < .001$). Convergent validity results in the same study revealed significant ($p < .001$) point-biserial correlations between the dichotomized (“victims” and “non-victims”) global variable of being bullied and the three internalizing variables social disintegration ($r = 0.30$), global negative self-evaluations ($r = 0.18$), and depressive tendencies ($r = 0.20$). Effect sizes were substantial with Cohen’s $d$ ranging from 0.62 to 1.05 (Solberg & Olweus, 2003).
Kyriakades (2006) used Rasch analysis to support internal consistency and construct validity. The data were initially analyzed with the entire sample (N = 335) and all 8 items together on two scales: Scale A - “Being victimized,” and Scale B - “Bullying others.” The item-person map results for both scales indicated a strong mutual consistency in the responses of all 335 students, across all 8 items. Student scores for being victimized (Scale A) ranged from 22.16 to 3.09 logits with item difficulty range from 22.08 to 3.04 logits which indicated the items were well targeted against the students’ measures. Similar results were reported for the extent to which students expressed bullying behavior with the student score range from 22.08 to 3.03 logits, and the item difficulty range from 21.97 to 3.05 logits (Scale B). All items revealed satisfactory infit and outfit with item infit range of 0.85 – 1.20, and item outfit range of 0.74 – 1.42, with the infit t statistics greater than 22.00 and less than 2.00 for both students and items. This implies a good fit to the Rasch model. Item difficulties were calibrated with small errors (< 0.10), and person estimate errors were also relatively small (< 0.28).

A total of 36 items from the OBVQ were used for comparison to the BVPI during the pilot administration. Four items were not used due to redundancy, i.e. demographic items, and perception items regarding friends and school. The researcher expected a low to moderate correlation with the BVPI because both measures address bullying and victimization, however, the OBVQ measures bullying prevalence while the BVPI measures a related but quite distinct construct.
Bullying Power Differential (BPD).

Validity assessment of the BVPI was hindered by the lack of alternative power differential scales designed for children and adolescents. Thus, a multi-part bully/victim power differential item similar to the middle and high school version (BYS-S) of the Swearer Bullying Survey (2001) power item was developed and used for comparison with the BVPI. The first part of this two-part self-report multiple response scale assessed power based on age and gender differences (i.e. girl(s) younger than me, girl(s) same grade as me, boy(s) older than me), whereas the second items measures the bully’s characteristics (i.e., attractive, smart, popular) as reported by the victim in reference to the student who bullied them. Respondents were instructed to check all responses that applied. A total of 17 items were used in the pilot study ($\alpha = .82; n = 26$).

Internal consistency reliability using coefficient alpha in prior research ranged from 0.55-0.74 for the overall Swearer BYS-S in prior research (Swearer & Cary, 2003). Validity has also been assessed in previous research by known group differences between males and females in the context of bullying behaviors. Swearer and Cary analyzed the existence of gender differences across status groups (bullies, victims, bully-victim, and no-status participants), and found no differences across status with respect to gender in grade 6 ($\chi^2 = 4.46, p = .21$), grade 7 ($\chi^2 = 1.33, p = .72$), and grade 8 ($\chi^2 = 1.33, p = .85$). Additionally, the Swearer BYS-S was validated by the use of office referral data conducted as an integrity check of participants’ reported status. Students received office referrals for school rules violations, insubordination, verbal aggression, and physical
aggression. Results indicated students who bully others received the highest percentage of office referrals followed by bully-victims, victims, and students not involved in bullying (Haye, 2005; Swearer & Cary, 2003). A statistically significant moderate correlation with the BVPI was expected.

*Students’ Life Satisfaction Scale (SLSS).*

The SLSS is a seven-item self-report measure for students aged 8–18 years old. It assesses overall well-being with items which compel respondents to rate their satisfaction with respect to items which are domain-free (e.g., “My life is going well” and “I have what I want in life”) using a six-point rating scale (*strongly disagree* to *strongly agree*) (Huebner, Suldo, & Valois, 2003). Prior studies support its construct, predictive, and discriminant validity, and indicated internal consistency ranging from .73 to .88 (Felix et al., 2011; Huebner, Suldo, & Valois, 2005). Huebner (1991b) reported acceptable correlations of the SLSS with other life satisfaction scales, but independence of respondent’s life satisfaction and positive and negative affective ratings. Additionally, Huebner et al. (2003) reported a major limitation of the SLSS in that it measures only life satisfaction as a whole, and does not allow for the assessment of satisfaction across the numerous, important domains of interest to children and adolescents, such as satisfaction with, friends, family, or school. The authors go on to report that multidimensional measures, which assess satisfaction with multiple life domains, would present a more differentiated portrayal of the perceived quality of life of children and adolescents. All 7
items were used in the pilot administration as a measure of convergent validity ($\alpha = .79; n = 26$).

A moderate positive correlation was anticipated between the Powerful and Powerless subscale scores. Low to moderate positive correlations were anticipated between the BVPI scores and the OBVQ scores, as well as between the BVPI scores and the BPD scores. Based on consideration of the hypothesized multi-dimensionality of the BVPI, a zero to small correlation was expected between BVPI subscales and the SLSS.

Procedure.

University and school district Institutional Review Boards’ approval was requested and granted to conduct this study. Upon study approval, and over a 6-week period, several attempts were made by the researcher to gain permission to use the OBVQ, and the Swearer Bully Survey power item directly from Olweus, and Swearer, via university and business email addresses, work telephone numbers, as well as emails. However, no replies were obtained. At the end of the 6 weeks, the researcher purchased the OBVQ with personal funds through a telephone sales representative located via the following website: http://www.hazelden.org/web/public/olweus.page , created by Hazelden Publishing in partnership with Clemson University. The study purpose was discussed and permission to use the questionnaire was granted at time of purchase. Due to the scarcity of bully/victim power imbalance items, the researcher developed 2 item sets similar to the Swearer item to utilize as a measure of convergent validity, titled Bullying Power Differential (BPD). Following an extensive search for additional
appropriate measures of convergent validity, in peer reviewed journals, the University of Denver’s Psychological Assessment Library, and discussion with measurement and psychology professors, the researcher decided upon the Students’ Life Satisfaction Survey. The SLSS was downloaded via [http://www.psych.sc.edu/facdocs/hueblifesat.html](http://www.psych.sc.edu/facdocs/hueblifesat.html). The following disclaimer was posted on the webpage “These Life Satisfaction Scales developed by Dr. Huebner are available in both PDF and Word format. The scales are not copyrighted and can be used without charge and without permission by interested researchers.”

Students were selected from class rosters using systematic sampling. The selection process began with the second student on the list followed by the selection of every third student thereafter, until 60 students total were selected. The researcher met with 54 potential participants in a regular classroom outside regular school hours. At the meeting, the researcher explained the study purpose and handed out consent forms. Students were instructed to return consent forms within one week if they wanted to participate. Twenty-six students participated for a 48% response rate.

The pilot instrument consisted of the BVPI, the OBVQ, the BPD, and the SLSS, respectively, and was administered by the researcher to the pilot group convenience sample using Survey Monkey (n=26). Forced response was employed for all items in all instruments. Administration occurred during regular school hours in a computer lab reserved especially for this purpose, in the media center of the same urban high school.
previously used throughout this study. No identifiers were used so participant anonymity was maintained.

As students entered the computer lab, they were assigned to a computer to ensure they would not be seated next to friends with whom they might be tempted to share responses. Computers were booted to a home screen comprised of the instructions from page one of the pilot study instrument (Appendix G). Once all students were settled, the researcher read the instructions aloud to the entire class, pausing after each definition to ask if clarification was needed. For example, after reading the definition for bullying, the proctor asked, “Are there any questions about the definition of bullying, bully, or victim?” Identical phrasing was used with the replacement of relevant terminology for each specific question. After all instructions were read, one final question was asked by the researcher, “Are there any questions?” No questions were asked, so students were instructed to follow the directions on subsequent screens, and click on the “Next” button at the bottom of each page to proceed. Students responded to the scale items, and when finished, they worked on a school assignment of their choice at the study tables adjacent to the computer lab. During the administration time, the researcher recorded start time and end times for the first individual and the last individual to determine response time range which was approximately 17-24 minutes, as well as unsolicited questions or comments made by respondents. When all respondents had finished and were seated at the study tables, the interview questions were asked of the group as a whole to glean additional input from pilot study participants.
Data were collected via download from the Survey Monkey data warehouse to the researcher’s personal computer in the privacy of her home office. Backup files were saved to an external hard drive and a thumb drive, both of which were stored in a locked filing cabinet drawer in the researcher’s office.

Analysis.

Internal consistency of the BVPI was analyzed first to determine reliability in the pilot sample of students (n = 26). Summary statistics can be found in Table 15. Initially, the Powerful and Powerless subscales, and the frequency items were assessed separately to determine reliability. This was followed by evaluation of the overall BVPI measure both with frequency items included and removed. Results ranged from very strong to excellent (α_{Powerful} = .94; α_{Powerless} = .88; α_{frequency} = .93, α_{frequency items included} = .97; α_{frequency items removed} = .93). Estimates greater than 0.90 may have been attributed to item redundancy or small sample size, therefore, an item analysis was conducted with iterated results discussed below.

Item analysis was conducted on the initial pilot data to identify non-performing items using a 0.70 Cronbach’s alpha estimate as minimum criterion for item retention. In an effort to reduce the number of items, item-total statistics were analyzed and revealed the following ranges: Powerful (0.93-0.94), Powerless (0.93-0.94), global BVPI (0.964-0.966). Due to the interdependency of the subscale items, as well as the uniformity of subscale ranges, item deletion was first conducted on the global measure. When an item
was deleted, the matching frequency item was also deleted, thereby reducing the measure by 2 items per deletion.

Items with alpha estimates lower than 0.966 were deleted one at a time, and new correlation estimates were obtained at each iteration until the overall measure attained an alpha level of 0.964 (Table 14). Concurrent with each item deletion of the overall measure, a new iterations of the affected subscale was also conducted to ensure the reliability of subscales alone. Subscale iteration reliability estimates revealed alpha estimates within the following ranges: Powerful subscale (α = 0.969-0.966), powerless subscale (α = 0.939-0.933). Due diligence was accorded to maintain construct breadth, therefore, 15 items were retained per subscale.
Following the item analysis, the internal consistency of the revised global 60-item scale was investigated, along with the validity instruments. Table 15 provides a comparison of alpha estimates for the initial and revised BVPI, and validation instruments. Cronbach’s alpha estimates ranged from strong to excellent.

The revised Powerful subscale and revised frequency item estimates remained the same, whereas the revised Powerless subscale alpha decreased by 0.02. The revised overall BVPI alpha decreased by 0.01 when frequency items were included yet remained the same when frequency items were removed. Logic suggests the decrease in the overall
BVPI estimate could be attributed to the decrease in the Powerless estimate. The OBVQ estimates revealed excellent internal consistency reliability ($\alpha = .93$), while the BPD and SLSS estimates indicated strong reliability respectively ($\alpha = .82; \alpha = .79$).

Table 15. Internal Consistency Reliability - Initial and Revised Pilot Results

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Initial Cronbach's $\alpha$</th>
<th>Initial Item N</th>
<th>Obtained Cronbach's $\alpha$</th>
<th>Final Item N</th>
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<tr>
<td>Powerful</td>
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<td>0.94</td>
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<td>0.86</td>
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<td>26</td>
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<tr>
<td>Frequency</td>
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<td>0.93</td>
<td>30</td>
<td>26</td>
</tr>
<tr>
<td>Overall (Frequency included)</td>
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<td>86</td>
<td>0.96</td>
<td>60</td>
<td>26</td>
</tr>
<tr>
<td>Overall (Frequency removed)</td>
<td>0.93</td>
<td>43</td>
<td>0.93</td>
<td>30</td>
<td>26</td>
</tr>
<tr>
<td>OBVQ</td>
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<tr>
<td>Swearer</td>
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<tr>
<td>SLSS</td>
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<td></td>
<td>26</td>
</tr>
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</table>

*Validity.*

Following the selection of items for inclusion on the revised scale, support for the construct validity of the BVPI included convergent validity studies. Assessment for convergent validity examined associations between the BVPI and another measure of bullying and victimization (OBVQ), a measure of the power differential in bully/victim relationships (BPD), as well as an overall measure of positive well-being (SLSS) to which the BVPI might be expected to relate in predictable ways. The correlations between the BVPI and the other measures are displayed in Table 16.
SLSS responses were reverse coded on items 3 and 4. Z-scores were then computed from total scores for each of the aforementioned instruments, and used in the examination of relationships between the BVPI and all other measures. The correlations were in the expected directions with the exception of the correlations between the Powerless (Frequency removed) subscale and all three validation measures. The highest correlation was with the BPD measure, followed by the global OBVQ, then the Powerful-Powerless subscales, and finally the Been Bullied subscale.

Convergent validity was assessed for the parallel underlying construct of power imbalance by testing the association between the BVPI and the OBVQ first, then between the BVPI and the BPD, and finally between the BVPI and the SLSS. Correlations between the BVPI and the validation instruments were first disaggregated by subscales followed by analysis of the global measures. Each analysis was conducted with inclusion
of the frequency items; then frequency items were removed and the analysis was
conducted again.

**Powerful Subscale.**

Correlation estimates were statistically nonsignificant between the BVPI Powerful
subscale and all three validation measures \( r_{\text{Bullied Others with frequency items}} = -.04, p = .85; r_{\text{Bullied Others without frequency items}} = -.12, p = .58; r_{\text{BPD with frequency items}} = .29, p = .15; r_{\text{BPD without frequency items}} = .31, p = .13; r_{\text{SLSS with frequency items}} = -.26, p = .21; r_{\text{SLSS without frequency items}} = -.22, p = .29 \).

**Powerless Subscale.**

Interestingly, the BVPI Powerless subscale-frequency removed and the OBVQ
Been Bullied subscale correlation was nonsignificant, as were the estimates between both
Powerless subscales and the SLSS \( r_{\text{Been Bullied without frequency items}} = .36, p = .07; r_{\text{SLSS with frequency items}} = .18, p = .38; r_{\text{SLSS without frequency items}} = .12, p = .56 \). Results revealed
statistically significant positive moderate correlation between both Powerless subscales
and the BPD, as well as between the Powerless subscale-frequency included and the
OBVQ Been Bullied subscale \( r_{\text{BPD with frequency items}} = .52, p < .01; r_{\text{BPD without frequency items}} = .53, p < .01; r_{\text{Been bullied with frequency items}} = .43, p < .05 \).

**Global BVPI.**

Correlation between the global BVPI and the global OBVQ, and between the
global BVPI and the BPD also revealed statistically significant, positive moderate
estimates \( r_{\text{global OBVQ with frequency items}} = .44, p < .05; r_{\text{global OBVQ without frequency items}} = .45, p < .05 \).
\( r_{BPD\ with\ frequency\ items} = .55, p < .01; r_{BPD\ without\ frequency\ items} = .59, p < .01 \). However, statistically non-significant results were found between the SLSS and the global BVPI \( (r_{SLSS\ without\ frequency\ items} = -.05, p = .81; r_{SLSS\ with\ frequency\ items} = -.06, p = .79) \).

In summary, these findings indicated that the underlying constructs of the BVPI and OBVQ, and the BVPI and BPD were moderately related, providing initial evidence for the construct validity of the BVPI. Logic and method convergence support this conclusion as the instruments are completed in the same manner, and address bullying and victimization, and power differential in a bully-victim relationship.

**Conclusion.**

Based on the preservation of construct breadth, as well as strong results obtained from the item-analysis, internal consistency reliability, and validity tests, the revised BVPI was used in the field administration. It comprised the two subscales: Powerful (15 items), Powerless (15 items), and 30 frequency items (Appendix H).

**Field Administration.**

**Participants.**

A sample of 346 adolescents, 43.1% males and 56.9% females aged 14 (10.7%), 15 (22.5%), 16 (37.9%), 17 (15.6%), and 18 (7.8%), \( (M=15.87) \) participated in this field study. Ethnic distribution reflected the accessible population with 1.2% Native American, 5.8% Asian, 10.4% Black or African American, 50.3% Hispanic/Latino, 14.5% White, 11.8% More than one race, and 0.9% reported ethnicities which were not listed by write-in response. Table 17 provides a summary of field study participant demographics.
Nineteen (5.5%) respondents did not report gender or age, and eighteen (5.2%) did not report ethnicity.

Table 17. Field Study Sample Size and Percentage of Sample by Demographic Variables

<table>
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<tr>
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<th>n</th>
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</tr>
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</tr>
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<tr>
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<td></td>
</tr>
<tr>
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<tr>
<td>Asian/Pacific Islander</td>
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<td>5.8</td>
</tr>
<tr>
<td>African-American (not Hispanic)</td>
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<td>10.4</td>
</tr>
<tr>
<td>Hispanic</td>
<td>174</td>
<td>50.3</td>
</tr>
<tr>
<td>White (not Hispanic)</td>
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<td>14.5</td>
</tr>
<tr>
<td>More than one race (Other)</td>
<td>41</td>
<td>11.8</td>
</tr>
<tr>
<td>Not listed (open response)</td>
<td>3</td>
<td>0.9</td>
</tr>
<tr>
<td>Missing</td>
<td>18</td>
<td>5.2</td>
</tr>
</tbody>
</table>

Instruments.

The field administration instrument can be found in Appendix H. Following revisions based on pilot study results, it comprised 62 items total, 1 bullying self-identification item, 1 victim self-identification item, 15 powerful items, 15 powerless items, and 30 frequency items rated on the same five-point rating scale used in the pilot. If the participant responded “No” to the bully or victim self-identification items, skip
logic was employed to exclude the corresponding “number of times” and “location” items. Forced response was then used for all remaining power and frequency items. The verbal indicators domain contained 16 total items (8 powerful and 8 powerless), the physical indicators domain comprised 9 total items, (5 powerful, 4 powerless), and the cyberbullying/social exclusion indicators contained 5 total items (2 powerful, 3 powerless). The BVPI final instrument assessed perceived power imbalance in high school students between the ages of 14-18.

As with the pilot instrument, construct validity was investigated by the use of the BPD, the SLSS, and the OBVQ as convergent validation measures. The researcher anticipated that correlation results would reveal significant findings for all validation measures, thereby indicating that the BVPI measure assessed parallel underlying constructs. Again, low to moderate correlations were expected between the BVPI and the OBVQ and the BPD. A zero to small correlation was expected between the BVPI and the SLSS in order to rule out the likelihood that the BVPI elicits positive overall well-being which logically is unlikely with participation in a bully/victim relationship.

The Item Difficulty Rating checklist described and used in the content expert review was used in validation (Appendix B). Item difficulties were assessed by checking an easy, medium, or hard column for each item (Benson & Clark, 1984; DeVellis, 2003).

Procedure.

The field instrument was administered to convenience samples (using Survey Monkey) of approximately 30 students each (N = 346). Students were selected from
class rosters using systematic sampling. The selection process began with the second student on the list followed by the selection of every other student thereafter, until 346 students total were selected. Administration occurred at staggered times in two different computer labs reserved especially for this purpose, in the media center of the same urban high school previously used throughout this study. The staggered time frame was due to scheduling logistics. No identifiers were used to preserve participant anonymity. The primary investigator and three trained assistants administered the assessment. The procedure was similar to that used in the pilot study.

Data were collected via electronic download from the Survey Monkey data warehouse to the primary investigator’s personal computer in the privacy of her home office.

Analysis.

The first purpose of the analysis of the field study data was to provide an empirical assessment of dimensionality of the BVPI via exploratory factor analysis (EFA). The second purpose was to examine the internal consistency reliability of the potential scales using Cronbach’s alpha, and person separation estimates, assess scale use, evaluate dimensionality, item and person fit, and targeting using Rasch modeling.

In order to gain a clear perspective of the following scale analyses, it was pertinent to investigate which respondents self-identified as bullies and victims. Interestingly, 34.5% of respondents self-identified as bullies, and 50% as victims in the
pilot study, however in the field administration, only 28.5% of respondents self-identified as bullies, and 36.6% self-identified as victims.

*Exploratory Factor Analysis (EFA)*.

EFA was conducted on field data using principal components extraction with varimax rotation in SPSS. Eigenvalues and examination of scree plots were used to assist in determining the appropriate number of factors to retain. Factor structure and item contribution within each factor were evaluated by applying PCA. All items demonstrated acceptable factor loadings for retention, thereby maintaining construct breadth. Dimensions not uniquely identified were combined. Findings used to support the number of factors retained were derived from a second PCA analysis. Internal consistency reliability was then estimated.

*Principal Components Analysis (PCA)*

Prior to analysis, the Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett’s test of sphericity were reviewed to assess the factorability of the correlation matrix (Table 18). Analyses were conducted on the Powerful and Powerless subscales as well as the global BVPI with frequency items included and then removed. All Bartlett’s chi-square estimates were statistically significant, and all KMO estimates indicated sampling adequacy, thereby indicating factor analysis was appropriate for these data.
Following the sampling adequacy and sphericity evaluation, the researcher examined the distribution of the BVPI items which indicated no violations of univariate normality; all other assumptions were also met. The factor structure of the field study data was explored via EFA using principal components extraction with varimax rotation using SPSS. A sample of 346 cases was used to conduct the EFA on the 60-item measure. In order to determine the number of components indicated by the items, the researcher examined the scree plots of the eigenvalues, as well as the total variance explained for each of the following measures: (1) the global BVPI, (2) Powerful and Powerless subscales with repetition items included and removed, (3) and finally separating the Repetition items into two distinct subscales. For the sake of brevity, only the most pertinent tables and figures are displayed below.

### Table 18. Sampling Adequacy and Sphericity Tests Results - Field Administration

<table>
<thead>
<tr>
<th>BVPI</th>
<th>KMO</th>
<th>Bartlett's</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Chi-Square</td>
</tr>
<tr>
<td>Powerful (Frequency included)</td>
<td>.87</td>
<td>4870.37</td>
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<tr>
<td>Powerful (Frequency removed)</td>
<td>.90</td>
<td>1890.99</td>
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<tr>
<td>Powerless (Frequency included)</td>
<td>.83</td>
<td>72785.90</td>
</tr>
<tr>
<td>Powerless (Frequency removed)</td>
<td>.91</td>
<td>1246.93</td>
</tr>
<tr>
<td>Global (Frequency included)</td>
<td>.73</td>
<td>6432.65</td>
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<tr>
<td>Global (Frequency removed)</td>
<td>.85</td>
<td>2416.66</td>
</tr>
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</table>

Note: Kaiser-Meyer-Olkin (KMO) > .05 indicates sampling adequacy. Bartlett's test for sphericity indicates there are relationships between variables desirable for inclusion in the analysis when p < .05.

*Measure Structure.*

Following the sampling adequacy and sphericity evaluation, the researcher examined the distribution of the BVPI items which indicated no violations of univariate normality; all other assumptions were also met. The factor structure of the field study data was explored via EFA using principal components extraction with varimax rotation using SPSS. A sample of 346 cases was used to conduct the EFA on the 60-item measure. In order to determine the number of components indicated by the items, the researcher examined the scree plots of the eigenvalues, as well as the total variance explained for each of the following measures: (1) the global BVPI, (2) Powerful and Powerless subscales with repetition items included and removed, (3) and finally separating the Repetition items into two distinct subscales. For the sake of brevity, only the most pertinent tables and figures are displayed below.
Upon examination of the scree plots, a four-component solution was indicated for the Global BVPI (Figure 2). A one-component solution was indicated on each subscale (Figures 3-6).

Figure 2. Global BVPI (Repetition included)
The total variance explained was then investigated and is displayed in Table 19. Estimates revealed a four-component solution for the global BVPI with eigenvalues ranging from 19.41 to 2.46 which accounted for 51.21% of the total variance. A one-component solution was indicated for each of the subscales: (1) the Powerful subscale, with an eigenvalue of 7.52 which explained 50.16% of the total variance for that subscale, (2) the Powerless subscale, with an eigenvalue of 7.49 for 49.91% of the shared variance for its own subscale, (3) the Powerful Repetitions subscale, with an eigenvalue of 7.42 for 49.43% of the total variance and, (4) the Powerless Repetitions subscale, with an eigenvalue of 7.24 for 48.26% of the total variance. These findings suggested that each of the subscales accounted for their own distinct components, and together form the overall BVPI.
Table 19. BVPI Total Variance Explained by Factors - Field Study

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Component</th>
<th>Initial Eigenvalues</th>
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</thead>
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<tr>
<td></td>
<td>Total</td>
<td>% Variance</td>
<td>Cumulative %</td>
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</tr>
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<td>Global BVPI (Repetition included)</td>
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<tr>
<td></td>
<td>2</td>
<td>5.96</td>
<td>9.94 41.83</td>
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<td></td>
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<td>5.28 47.11</td>
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<td>4.10 51.21</td>
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<td>3.33 54.54</td>
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<td>6</td>
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<td>2.94 57.47</td>
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<tr>
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<td>8</td>
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<td>2.33 62.24</td>
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<td>9</td>
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<td>2.11 64.35</td>
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<td>7.99 58.16</td>
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<td>6.41 61.80</td>
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</table>
Item loadings from the principal components extraction for a four-component solution were reviewed to determine which items should be eliminated using the criterion of .40 or greater for retention. Items meeting the .40 criterion which loaded on more than one component with a loading difference of .10 were reviewed for elimination due to cross-loading. Results for components with eigenvalues exceeding 1.0 are listed in Table 20. All items met the retention criteria with the exception of 1 repetition item; 3 other repetition items did not meet cross-loading criteria. Forced 1-factor analyses were then conducted on each repetition subscale with favorable estimates (Table 21). A total of 60 items were retained.

Internal consistency reliability was assessed for each measure with estimates in the range of 0.96 to 0.92. Detailed results are provided in Table 22.
Table 20. Item Loadings for Global Bully Victim Power Inventory - Field Study

<table>
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<td>PLnegfacebkreps</td>
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<table>
<thead>
<tr>
<th>Component</th>
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Note: All items were retained. Items which did not meet the loading criteria appear in boldface and prompted further PCA analysis of each repetition subscale. Retention criteria: factor loading >= .40; cross-loading difference >= .10
Table 21. Item Loadings Comparison for Repetition Subscales - Field Study

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<th>Rotated Loadings</th>
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</tr>
<tr>
<td>pf_phypain_reps</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>pf_callnam_reps</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>pf_exclgrp_reps</td>
<td>0.41</td>
<td>0.54</td>
</tr>
<tr>
<td>pf_bf_reps</td>
<td>0.40</td>
<td>0.51</td>
</tr>
<tr>
<td>pf_shout_reps</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td>pf_exclact_reps</td>
<td>0.42</td>
<td>0.49</td>
</tr>
<tr>
<td>pf_tallerstringr_reps</td>
<td>0.48</td>
<td></td>
</tr>
<tr>
<td><strong>pf_lich_reps</strong></td>
<td><strong>0.45</strong></td>
<td></td>
</tr>
</tbody>
</table>

Note: Previously questionable items appear in boldface for ease of comparison between initial and final rotated loadings. Following rotated factor analysis, all items were retained.
Table 22. Final BVPI Internal Consistency Reliability - Field Study

<table>
<thead>
<tr>
<th>BVPI</th>
<th>Cronbach's $\alpha$</th>
<th>Final Item N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global (Repetition included)</td>
<td>0.96</td>
<td>60</td>
</tr>
<tr>
<td>Powerful Subscale</td>
<td>0.93</td>
<td>15</td>
</tr>
<tr>
<td>Powerless Subscale</td>
<td>0.93</td>
<td>15</td>
</tr>
<tr>
<td>Powerful Repetition Subscale</td>
<td>0.92</td>
<td>15</td>
</tr>
<tr>
<td>Powerless Repetition Subscale</td>
<td>0.92</td>
<td>15</td>
</tr>
</tbody>
</table>

Note: $n = 346$

*Rasch Model*

The Rasch model is used to develop linear interval scales that measure change (Rasch, 1980). Assumptions fundamental to Rasch measurement include (a) each person is characterized by one ability, (b) each item can be characterized by a difficulty which can be represented by numbers along a hierarchical line (similar to a yardstick or ruler), and (c) the probability of observing any specific scored response can be computed from the difference between the person and item estimates (Bond & Fox, 2007).

Bond and Fox (2007) stated that in order for a model to be useful for the examination of attributes of the human condition represented in developmental and other theories, it is essential that the model include the following properties: it should (a) intend to uncover the order of development or acquisition of the attribute, (b) reveal by how much one person is more capable, or developed than another person, and (c) allow for the determination of whether the general developmental pattern revealed among persons and items is sufficient to account for the development shown by every person and every item.
The Rasch model is predicated on the idea of unidimensionality; that useful measurement is comprised of the investigation of only one attribute at a time on a hierarchical line of inquiry. Item and person response deviations from that line are then assessed, which notifies the investigator to re-examine score interpretations and item wording in those particular data which made it an appropriate method of analysis for the BVPI field data.

The Rasch model was used in the analysis of the field study data to provide estimates of person ability and item difficulty, where person ability was estimated in conjunction with item difficulty, to identify the hierarchy of difficulty of items. Unidimensionality was assessed, Rasch-Andrich thresholds were computed to assess response scale use, and reliability was estimated by calculating the reliability of person separation index.

Dimensionality and Fit Statistics.

The idea of unidimensionality is manifested in the Rasch model’s process of fundamental measurement, and it is critical that the data fit the Rasch model’s specifications in order to attain invariant measurement within the model’s unidimensional structure (Bond & Fox, 2007). Fit statistics are used to identify differences between the collected data and the Rasch model provisions which are reported as two chi-square ratios: outfit and infit mean square statistics (Wright, 1984; Wright & Masters, 1981). Outfit is based on the sum of squared residuals, whereas infit is an information-weighted sum based on variance. Infit and outfit statistics are reported as mean squares (chi-square
statistics divided by their degrees of freedom), or in standard \( t \) or \( z \) form, and are used to monitor the concordance of the data with the model (Bond & Fox, 2007). BVPI dimensionality was tested by using principal components analysis of residuals, item-fit, as well as targeting and person-fit. Reliability was estimated by calculating the reliability of person separation index.

*Use of the Response Scale.*

Category function was assessed by applying the two tests. First, Rasch-Andrich thresholds were calculated and Linacre’s (2011) criteria were applied for collapsing adjacent categories in the scale analysis. A five point rating scale was used for both powerful and powerless items. Powerful items rating scale was: 1 (NA), 2 (Not at all powerful), 3 (Slightly powerful), 4 (Moderately powerful), 5 (Totally powerful).

Powerless items rating scale was: 1 (NA), 2 (Not at all powerless), 3 (Slightly powerless), 4 (Moderately powerless), 5 (Totally powerless). Both Repetition items rating scale was: 1 (Not in the last 2 months), 2 (1-2 times in the last 2 months), 3 (2-3 times a month), 3 (Once a week), 4 (Several times a week). Second, the use of each category was evaluated for overuse and underuse, as well as the determination of frequency of response categories used, (3) observed order of category structure, average and estimated calibrations were calculated, (4) outfit and infit mean squares. These tests check to see that all categorization of the response scale function as intended, that the categories advance, and that no category is especially noisy (Linacre, 2011). When scale use is as intended, there is a clear progression in scale values with discernible higher probabilities
for any single response as one’s logit position on the trait increases. Response category 1 (NA) was not used in the field study analysis as it has no logical numerical position.

Instrument Reliability.

Instrument reliability was assessed by person separation computation which tests the probability that respondents estimated with high scores on perception of power actually do have higher perceptions than respondents with low scores on perception of power.

Infit and outfit mean squares with infit and outfit t-scores were examined, along with the person separation index, and the index of person and item separation. Comparison standards were: infit and outfit mean squares expectation of 1.0 with a usable range of 0.5-1.5, infit and outfit t-values expectation of zero with a usable range of -2 to +2, and person separation index exceeding 2.0 (Linacre, 2011, p.276).

Global BVPI – Dimensionality.

Linacre (2010) submits that a measure is reasonably unidimensional if more than 40% of the variance is attributable to the first dimension, with an eigenvalue of 2.0 and less than 5% of the variance is attributable to the first contrast (second dimension). These criteria are somewhat flexible, especially upon consideration of the variance estimates, whereas the main focus lies on the eigenvalue.

Values obtained through principal components analysis of residuals (PCAR) decomposition of the observed residuals were measured to evaluate secondary dimensions in the data. Total variance explained, eigenvalues, percent variance, and
the variance component scree plot were analyzed for indications of a possible second dimension for the global BVPI and for each identified subscale. PCAR was first conducted on the global BVPI and revealed values contradictory for unidimensionality. Total variance explained was 43.5%, the eigenvalue for unexplained variance in the 1st contrast was 9.4, and percent variance explained by the 1st contrast was 8.8% which in general indicated possible muti-dimensionality in these data. Therefore, based on the results of the PCAR and the EFA, the researcher applied the Rasch model to each of the four subscales with initial summary statistics displayed in Table 23. Results indicated unidimensionality for each subscale based on eigenvalues. Detailed Rasch estimates for each subscale are provided in subsequent paragraphs.

Table 23. Principal Components Analysis of Residuals Results - Field Study

<table>
<thead>
<tr>
<th>BVPI</th>
<th>Items</th>
<th>Total Variance Explained</th>
<th>Eigenvalue for 1st Contrast</th>
<th>% Variance Explained by 1st Contrast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global (Repetition included)</td>
<td>60</td>
<td>58.4%</td>
<td>10.2</td>
<td>9.9%</td>
</tr>
<tr>
<td>Powerful Subscale</td>
<td>15</td>
<td>52.9%</td>
<td>1.9</td>
<td>6.6%</td>
</tr>
<tr>
<td>Powerful Repetition Subscale</td>
<td>15</td>
<td>52.5%</td>
<td>2.0</td>
<td>6.9%</td>
</tr>
<tr>
<td>Powerless Subscale</td>
<td>15</td>
<td>54.4%</td>
<td>1.7</td>
<td>6.2%</td>
</tr>
<tr>
<td>Powerless Repetition Subscale</td>
<td>15</td>
<td>55.6%</td>
<td>1.9</td>
<td>6.9%</td>
</tr>
</tbody>
</table>

The data were analyzed using the entire sample (N=346) for each of the 4 subscales separately (powerful, powerless, powerful repetition, powerless repetition). Valid sample size reduction (N=343) was due to the presence of null value responses.
Powerful Subscale.

Dimensionality.

Dimensionality of the powerful item set was tested by PCAR generated using Winsteps software (Linacre, 2011). Results indicated unidimensionality for these data. Percent variance attributed to the first dimension was 52.9% with an eigenvalue for the first contrast of 1.9 which accounted for 6.6% of the variance (Table 23).

Overall Fit.

The overall fit of the data to the Rasch model was adequate, with infit and outfit mean squares of .95 and 1.04, respectively, as well as infit and outfit t-scores from -1 to 1. The model expectation for mean squares is 1.0, and 0.0 for t-scores, if the data fit the model exactly. In this case, the data fit within acceptable ranges for adequate measurement (Bond & Fox, 2007; Linacre, 2011).

Reliability.

Reliability as calculated by the person separation index for this 15-item subscale was adequate at .69, and the estimated Cronbach's alpha was close to 1.00. Reliability of item separation for these data was 0.97.

Use of Response Scale.

As illustrated in Table 24 and Figure 7, all categories had more than 10 responses therefore, no category was underused. The NA (not applicable) category was not used in the analysis of scale structure as it has no logical numerical position. The dominant proportion of responses was in category 2 (Not at all powerful) as chosen by 64% of the
respondents, while category 3 (Slightly powerful) was used by 21%. Categories 4 and 5 were used the least frequent 7% and 8% respectively. The observed average of category structure was ordered, increasing in value from -2.12 to 0.62. Average and estimated calibrations were similar. Infit and outfit mean squares revealed acceptable values less than 2.0 for all categories. A slight inversion in step structure from category 4 (.40 logits) to category 5 (.31 logits) can be found in Table 24. The category probabilities plot (Figure 7) illustrated low probability of response values for categories 3 (Slightly powerful) and 4 (Moderately powerful).
Table 24. Summary of Category Structure-Powerful Subscale (15 Items 4 Categories)

<table>
<thead>
<tr>
<th>Category Label</th>
<th>Observed Count</th>
<th>%</th>
<th>Observed (^a) Average</th>
<th>Sample Expect</th>
<th>Infit MNSQ</th>
<th>Outfit MNSQ</th>
<th>Threshold Calibration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2411</td>
<td>64</td>
<td>-2.12</td>
<td>-2.10</td>
<td>1.08</td>
<td>1.08</td>
<td>None</td>
</tr>
<tr>
<td>3</td>
<td>786</td>
<td>21</td>
<td>-.97</td>
<td>-1.05</td>
<td>.95</td>
<td>.84</td>
<td>-.71</td>
</tr>
<tr>
<td>4</td>
<td>279</td>
<td>7</td>
<td>-.27</td>
<td>-.24</td>
<td>.98</td>
<td>.84</td>
<td>.40</td>
</tr>
<tr>
<td>5</td>
<td>298</td>
<td>8</td>
<td>.62</td>
<td>.69</td>
<td>1.13</td>
<td>1.37</td>
<td>.31</td>
</tr>
<tr>
<td>Missing</td>
<td>881</td>
<td>19</td>
<td>-1.29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\)Observed Average is mean of measures in category. It is not a parameter estimate.

---

Figure 7. Category Probabilities Plot – Powerful Subscale

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Item-fit Statistics.

Item-fit was assessed by examination of mean squares to see whether the items cooperated to measure the construct. Infit and outfit mean squares were compared to the acceptable “productive of measurement” range of 0.5-1.5 (Linacre, 2011, p.276). The actual infit and outfit values of each item displayed best, moderate, and worst fit with expected variation values which assisted in the determination of item retention and deletion (Wright, in Linacre, 2011). Point-measure correlations were reviewed for all items. All items had infit and outfit mean squares within the acceptable range (Linacre, 2008, p.249). Item 13 - PFWINARG displayed the worst fit with more random variation than expected, whereas item 7-PFSTEAL displayed the best fit. Point-measure correlations were positive for all items. Therefore, all items were retained.

Targeting and Person-fit Statistics.

Mean squares and unexpected observations were checked to evaluate student cooperation with the measure. Modeling results displayed the scale for the items of the measure with item difficulties and student measures calibrated on the same scale. Item clusters and item spread were analyzed based on logit positions which illustrated how the students responded across all items. Item redundancy possibilities and frequency of use were examined.
Figure 8 is the item-person map with item difficulties and student measures calibrated on the same scale. All 15 items clustered between -0.88 and 1.12 logits with the majority of the persons positioned between -4.0 and 0.12 logits, and a person mean of -1.38 logits. This revealed that most of the students responded they did not feel powerful with the person with whom they had experienced a bully/victim relationship across all items. Possible redundant items were retained due to representation of diverse bullying indicators (verbal, physical, exclusion). Item-13 PFWINARG was the easiest item to agree with, and item-8 PFPROP (damage property) was the most difficult item to agree with. Linacre (2011) reported possible over-sensitivity to misfit of both mean square and $t$-test values when sample size is greater than 300.
Powerful PERSON - MAP - ITEM

I feel more powerful when I

Behaviors which rarely occur

1. # +
2. +
3. # +

Powerful PERSON - MAP - ITEM
Note: Each # represents 7 students. Each (.) represents 1 to 6 students. M represents the mean logit position for person or item. S represents 1 standard deviation above or below the mean. T represents 2 standard deviations above or below the mean.

Figure 8. Item-Person Map – Powerful Subscale
Powerless Subscale.

Dimensionality.

PCAR was also used to analyze the Powerless item data for fit to a unidimensional structure. Total variance explained was 54.5%, the eigenvalue for unexplained variance in the 1st contrast was 1.7, and percent variance explained by the 1st contrast was 6.2% which indicated unidimensionality in these data (Table 23).

Overall Fit.

The overall fit of the Powerless subscale data to the Rasch model was very good, with infit and outfit mean squares of 1.00 and .99, respectively, and infit and outfit t-scores of -0.1 and 0.0 respectively, which indicated these data marginally underfit the model but still fit within acceptable ranges.

Reliability.

The estimated Cronbach's alpha for these data was close to 1.00, with person separation reliability at 0.75. Reliability of item separation for the Powerless subscale data was 0.94. Internal consistency was strong for these data.

Use of Response Scale.

Rasch-Andrich thresholds were calculated and displayed in Table 25 for 4 of the 5 response categories, 1 (NA), 2 (Not at all powerless), 3 (Slightly powerless), 4 (Moderately powerless), 5 (Totally powerless). The NA (not applicable) category was not used in the scale use analysis. The most often used category was category 2 as chosen by
43% of responders. Categories 3 and 5 were chosen by 23% and 20% respectively, with 14% of responders choosing category 4. The observed average of category structure was ordered, increasing in logit position from -1.33 to .66. Infit and outfit mean squares revealed acceptable values less than 1.1 for all categories. Threshold calibrations were satisfactory, increasing in value from -.55 to .26 (Table 25). The category probabilities plot (Figure 9) illustrated low probability of response values for categories 3 (Slightly powerless), 4 (Moderately powerless).

Table 25. Summary of Category Structure-Powerless Subscale (15 Items 4 Categories)

<table>
<thead>
<tr>
<th>Category Label</th>
<th>Observed Count</th>
<th>%</th>
<th>Observed(^a) Average</th>
<th>Sample Expect</th>
<th>Infit MNSQ</th>
<th>Outfit MNSQ</th>
<th>Threshold Calibration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1464</td>
<td>43</td>
<td>-1.33</td>
<td>-1.32</td>
<td>1.07</td>
<td>1.16</td>
<td>None</td>
</tr>
<tr>
<td>3</td>
<td>800</td>
<td>23</td>
<td>-.52</td>
<td>-.52</td>
<td>.91</td>
<td>.86</td>
<td>-.55</td>
</tr>
<tr>
<td>4</td>
<td>485</td>
<td>14</td>
<td>.13</td>
<td>.07</td>
<td>.88</td>
<td>.84</td>
<td>.28</td>
</tr>
<tr>
<td>5</td>
<td>694</td>
<td>20</td>
<td>.66</td>
<td>.70</td>
<td>1.02</td>
<td>1.08</td>
<td>.26</td>
</tr>
<tr>
<td>Missing</td>
<td>1042</td>
<td>23</td>
<td>.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\)Observed Average is mean of measures in category. It is not a parameter estimate.
Figure 9. Category Probabilities Plot – Powerless Subscale

**Item-fit Statistics.**

All items had infit and outfit mean squares within the acceptable range of 0.5-1.5 (Linacre, 2011). Item 1-PLFORCHEME displayed the best fit, and item 10-PLTRAPPED displayed the worst fit with more random variation than expected. Point-measure correlations were positive for all items. Therefore, all Powerless subscale items were retained.
Targeting and Person-fit Statistics.

Figure 10 displays the scale for the 15 items of the BVPI concerning the extent to which students were feeling powerless. Both students’ measures and item difficulties were calibrated on the same scale. Figure 10 indicated strong mutual consistency in the responses of the 343 students located at different positions on the scale, across all 15 items. Students’ scores ranged from -3.0 to 4.0 logits, with a person mean of 0.50 logits, whereas all 15 items were clustered with item difficulties range from -.63 to .38 logits. Item 4-PLDISAGREE was the easiest item to agree with, and 5 items were equally represented as most difficult to agree with: item 15-PLBLV, item-5 PLEMB, item-13 PLFAM, item-1 PLFORCE, item 10-PLTRAP.

When items are appropriately targeted for the sample and sufficient construct coverage is provided, there will be item category responses available to reflect all person positions. The targeting of items measuring the extent to which students are feeling powerless could be improved if items that are relatively difficult (i.e. their difficulties range from 1.0 to 4.0 logits) and items that were relatively easy (i.e., difficulties range from -1.0 to -3.0) were included. However, possible redundant items were retained due to representation of diverse victimization indicators (verbal, physical, exclusion).

Any discrepancy in analysis of person fit was attributed to sample size in this study as reported by Linacre (2011), due to possible over-sensitivity to misfit of both mean square and $t$-test values when sample size is larger than 300.
Powerless PERSON - MAP – ITEM

I feel more powerless when this person | Behaviors which rarely occur

4  .############################+ 
    # |
    # | 
    # T|
    . |
    . |
    .##|

3  . + 
    # T|
    . |
    . |
    .##|

2  . + 
    .# |
    . #|
    .##|
    # S|
    ####|
    .# |
    .## |

1  .#### + 
    #### |
    ###### T
    ###### |
    ###### M
    ###### | S PLBLV PLEMB PLFAM PLFORCE PLTRAP
    ###### | PLTCHR
    ###### | PLSHOOTS

0  ## +M 
    ### | PLCRIT PLLAUGH PLMATES 
    ### | PLBYMY
    ### | S PLNEGFB PLWO
    ### | S PLSTUPID
    .# | PLDISAG
    .## | T

136
Note: Each # represents 7 students. Each (.) represents 1 to 6 students. M represents the mean logit position for person or item. S represents 1 standard deviation above or below the mean. T represents 2 standard deviations above or below the mean.

Figure 10. Item-Person Map –Powerless Subscale

**Powerful Repetition Subscale.**

**Dimensionality.**

Initial results revealed a possible second component, therefore the researcher attempted to improve dimensionality by removal of items. Multiple item combinations and iterations revealed no improvement in dimensionality. Therefore, response scale item use was analyzed, which revealed that removal of category 1 (Not in the last 2 months)
improved dimensionality without compromising response scale quality. The decision to remove category 1 was based on the current acceptable frequency cut-off point for victimization classification of at least 2-3 times a month (Felix, 2011). As a result of category 1 removal, unidimensional structure was indicated following PCAR analysis of the Powerful Repetition subscale data with an eigenvalue of 2.0. Percent variance explained by the first contrast was 6.9%, and total variance explained 52.5% (Table 23). Examination of the scree plot supported unidimensionality.

*Overall Fit.*

In regard to the Powerful Repetition subscale, the data overfit the model slightly, with a bit more random variation than expected. Overall fit of these data to the Rasch model was strong, with the infit mean square at 1.04, and the outfit mean square at .98, whereas, the infit and outfit t-scores were 0.1 and zero respectively.

*Reliability.*

Reliability of item separation for the Powerful Repetition subscale data was 0.94. Estimated Cronbach's alpha for these data was nearly 1.00, with person separation reliability at 0.69 which revealed minimally adequate internal consistency.

*Use of Response Scale.*

No category was underused for the Powerful Repetition subscale as all categories had more than 10 responses (Table 26). Category 1 (Not in the last 2 months) was not used in the analysis of scale structure to improve dimensionality, based on the current acceptable frequency cut-off point for victimization classification of at least 2-3 times a
month (Felix, 2011). Category 2 (1-2 times in the last 2 months) was chosen by 76% of the respondents which comprised the dominant proportion of responses, far more than the remaining three categories combined, which were chosen by 24%. Category 3 (2-3 times a month) was used by 14% of the respondents, whereas categories 4 (Once a week) and 5 (Several times a week) were used the least frequently at 5% each. The observed average of category structure was ordered, increasing in value from -2.09 to 0.32, with average and estimated calibrations similar. Infit and outfit mean squares indicated acceptable values less than 2.0 for all categories. Threshold calibrations indicated a slight inversion in step structure from category 4 at .29 logits to category 5 at .09 logits (Table 26). Figure 11 displays results of the category probabilities plot which revealed high probability of response values for categories 2 (Not at all powerful), and 5 (Totally powerful).
Table 26. Summary of Category Structure-Powerful Repetition Subscale (15 Items 4 Categories)

<table>
<thead>
<tr>
<th>Category Label</th>
<th>Observed Count</th>
<th>% Observed</th>
<th>Observed(^a) Average</th>
<th>Sample Expect</th>
<th>Infit</th>
<th>Outfit</th>
<th>MNSQ</th>
<th>MNSQ</th>
<th>Threshold Calibration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2767</td>
<td>76</td>
<td>-2.09</td>
<td>-2.08</td>
<td>1.10</td>
<td>1.15</td>
<td>1.10</td>
<td>1.15</td>
<td>None</td>
</tr>
<tr>
<td>3</td>
<td>508</td>
<td>14</td>
<td>-1.09</td>
<td>-1.14</td>
<td>.94</td>
<td>.72</td>
<td>.72</td>
<td>.72</td>
<td>-.38</td>
</tr>
<tr>
<td>4</td>
<td>178</td>
<td>5</td>
<td>-.33</td>
<td>-.39</td>
<td>.92</td>
<td>.77</td>
<td>.77</td>
<td>.77</td>
<td>.29</td>
</tr>
<tr>
<td>5</td>
<td>185</td>
<td>5</td>
<td>.32</td>
<td>.32</td>
<td>1.17</td>
<td>1.37</td>
<td>1.37</td>
<td>1.37</td>
<td>.09</td>
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<tr>
<td>Missing</td>
<td>702</td>
<td>16</td>
<td>-1.38</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\)Observed Average is mean of measures in category. It is not a parameter estimate.

Figure 11. Categories Probability Plot – Powerful Repetitions Subscale
Item-fit Statistics.

All Powerful Repetition subscale items were retained following review of infit and outfit mean squares, which were satisfactory. Results revealed acceptable infit and outfit mean square estimates, and point-measure correlations were positive for all items. Item 1-PFLIE_REP displayed the best fit, and item 15-PFXACT_REP displayed the worst fit with more random variation than expected.

Targeting and Person-fit Statistics.

The scale for the 15 items of the BVPI concerning students’ perceptions of how often (repetition) they were feeling powerful in each of the situations presented in the powerless subscale is presented in Figure 12. For example, Powerful subscale item-1 prompt reads “I feel powerful in a relationship when I lie to the other person.” which is followed by the corresponding Powerful Repetition item-1 “This happens…” with response options ranging from “Not in the last 2 months” to “Several times a week.” Students’ responses on the repetition items, and item difficulties were calibrated on the same scale.
Figure 12 illustrates items were spread out between -1.25 and 1.0 logits with the majority of the persons positioned between -0.63 and -4 logits, and a person mean of 0.50 logits. This illustrated that most of the 325 students responded that they were never or rarely felt powerful along the scale, across all 15 items. It appeared redundancy was a notable possibility for 8 of the items; however, upon further review the researcher discovered the 3 redundant item sets were representative of diverse powerful indicators (verbal, physical, exclusion), and therefore retained to preserve the breadth of the trait.
Powerful Repetitions PERSON - MAP - ITEM
This happens…Several times a week | Behaviors which rarely occur
3                  +
   2                +
   1  + FPROPREP  FSTEALRP  S T FXGRFRP  FEMOREP FPHYREP FXACTREP  FCRUELRP
   0                +M FBFREP  FGRPFRRE FLIEREP  FAFRADRP FNAMREP FSTRNGRP  S  S  S  
   -1               + T  ## FWINREP
Note: Each # represents 7 students. Each (.) represents 1 to 6 students.
M represents the mean logit position for person or item.
S represents 1 standard deviation above or below the mean.
T represents 2 standard deviations above or below the mean.

<table>
<thead>
<tr>
<th>Category 1 (Not in the last 2 months)</th>
<th>Behaviors which often occur</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td></td>
</tr>
<tr>
<td>.</td>
<td>+</td>
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<td>.</td>
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<td>.#</td>
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<tr>
<td>.# S</td>
<td></td>
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<tr>
<td>-3</td>
<td></td>
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<td>.</td>
<td>+</td>
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<tr>
<td>.</td>
<td></td>
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<tr>
<td>.###</td>
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</tr>
<tr>
<td>-4</td>
<td></td>
</tr>
<tr>
<td>.############</td>
<td>+</td>
</tr>
</tbody>
</table>

This happens…Not in the last 2 months | Behaviors which often occur

Figure 12. Item-Person Map –Powerful Repetition Subscale

*Powerless Repetition Subscale.*

Category 1 (Not in the last 2 months) was also removed from the Powerless subscale field study analysis, based on the current acceptable frequency cut-off point for victimization classification of at least 2-3 times a month (Felix, 2011).
Dimensionality.

Values obtained through PCAR decomposition of the observed residuals were measured to evaluate secondary dimensions in the Powerless Repetition subscale data. Unidimensional structure was also indicated for these data with an eigenvalue of 1.9 which matched the Powerful subscale eigenvalue. Percent variance explained by the first contrast was 6.9% with a total variance explained estimate of 55.6%. Scree Plot results also indicated unidimensionality.

Overall Fit.

The infit and outfit mean squares were both 1.03, with infit and outfit $t$-scores both at 0.0 for the Powerless Repetition data; therefore, the overall fit to the Rasch model was good. These data also underfit the model somewhat, with slightly more than expected random variation.

Reliability.

Reliability of person separation for this 15-item Powerless repetition subscale was .75, with an estimate of Cronbach’s alpha from the Rasch analysis of .99, which indicated high internal consistency. Item separation reliability for these data was 0.90.

Use of Response Scale.

Rasch-Andrich thresholds were calculated to review use of the response scale, comprised of a four-point rating scale: 2 (1-2 times in the last 2 months), 3 (2-3 times a month), 4 (Once a week), 5 (Several times a week). Category 1 (Not in the last 2 months)
was removed to improve dimensionality, based on the current acceptable frequency cut-off point for victimization classification of at least 2-3 times a month (Felix, 2011).

Summary statistics can be found in Table 27. The most often used category was category 2, chosen by 62% of respondents, the least often used categories were categories 4 and 5, chosen by 9% and 8% of respondents respectively, with category 3 chosen by 21% of respondents. Increasing in logit position from -1.62 to .32, the observed average of category structure was ordered and similar to the expected order. Infit and outfit mean squares were acceptable with values of less than 1.26 for all categories, and threshold calibrations were also adequate, increasing in value from -.61 to .29. The category probabilities plot (Figure 13) indicated high probability of response values for categories 2 (Not at all powerless), and 5 (Totally powerless), and low probability of response values for categories 3 (Slightly powerless), and 4 (Moderately powerless).

Table 27. Summary of Category Structure-Powerless Repetition Subscale (15 Items 4 Categories)

<table>
<thead>
<tr>
<th>Category Label</th>
<th>Observed Count</th>
<th>%</th>
<th>Observed Average</th>
<th>Sample Expect</th>
<th>Infit MNSQ</th>
<th>Outfit MNSQ</th>
<th>Threshold Calibration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2026</td>
<td>62</td>
<td>-1.62</td>
<td>-1.62</td>
<td>1.06</td>
<td>1.05</td>
<td>None</td>
</tr>
<tr>
<td>3</td>
<td>685</td>
<td>21</td>
<td>-.86</td>
<td>-.85</td>
<td>.91</td>
<td>.91</td>
<td>-.61</td>
</tr>
<tr>
<td>4</td>
<td>288</td>
<td>9</td>
<td>-.16</td>
<td>.26</td>
<td>.85</td>
<td>.83</td>
<td>-.32</td>
</tr>
<tr>
<td>5</td>
<td>249</td>
<td>8</td>
<td>.32</td>
<td>.40</td>
<td>1.10</td>
<td>1.25</td>
<td>.29</td>
</tr>
<tr>
<td>Missing</td>
<td>945</td>
<td>23</td>
<td>-.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*aObserved Average is mean of measures in category. It is not a parameter estimate.*
Item-fit Statistics.

Point-measure correlations were positive for all items of the Powerless Repetition subscale. Two items violated outfit criteria; Item-11 PLNGFB_REP and Item 11-PLTCHR_REP with respective outfit mean squares of 1.66 and 1.53. Infit and outfit mean squares for all other items ranged from 1.43 to 0.61, and therefore, were satisfactory. Item 13-PLFAM displayed the best fit, and item-7 PLEMB_REP displayed the worst fit with more random variation than expected. The items which described latent trait positions of more severity were not removed due to acceptable infit mean squares of 1.25 and 1.43, inter-related associations with corresponding power items (PLNGFB and
PLTCHR), and the importance of extending trait coverage. Therefore, all Powerless Repetition subscale items were retained.

Targeting and Person-fit Statistics.

Item targeting for this sample of students is displayed in Figure 14, which indicated strong mutual consistency in the responses of the 343 students located at different positions on the scale, across all 15 items. Students’ responses ranged from -4.0 to 3.0 logits, with a person mean of -1.0 logits. Interestingly, there was a clustering of student responses at -4.0 logits. All 15 items were clustered with item difficulties range from -.25 to .38 logits.
This happens... Several times a week. Behaviors which rarely occur.
Note: Each # represents 7 students. Each (.) represents 1 to 6 students. M represents the mean logit position for person or item. S represents 1 standard deviation above or below the mean. T represents 2 standard deviations above or below the mean.

Figure 14. Item-Person Map – Powerless Repetition Subscale
Phase IV: Validation

This phase addressed the final research question of the overall study:

4] Does the Bully/Victim Power Inventory evidence adequate content and construct validity?

The field administration data were used to determine construct validity and data from the development expert review were used to support content validity.

Construct and Content Validity.

The intention of the BVPI was to measure the perceived power imbalance in a bully/victim relationship. Construct validity was estimated by calculating the correlation between the BVPI and the OBVQ, the BPD, and the SLSS with summary statistics displayed in Table 28 below. Content validity was supported by one content expert following analysis of item-person logit positions in Figures 8, 10, 12, and 14. It was determined that, overall, the items measured the same construct, and all indicators (verbal, physical, social exclusion) of the construct were represented in each subscale for these students.

Construct Validity.

The expectation of responses to the item hierarchy of each subscale would result in the majority of responses clustering at category 2, (Not at all powerful; Not at all powerless; 1-2 times in the last 2 months), and fewer responses at category 4 (Totally powerful; Totally powerless; Several times a week). It was expected that (a) fewer people feel powerful when they damage someone’s property (PFPROP) than
when they win an argument (PFWINARG), and (b) fewer people feel powerless when they are told they are stupid (PLSTUPID) than when they are forced to do something they don’t want to do (PLFORCE). Additionally, it was expected that these experiences occur less frequently (1-2 times in the last 2 months) than more frequently (Several times a week). The typical student in the field study sample supported these expectations by indicating s/he has rarely experienced the feelings of power imbalance surveyed (Figures 8, 10, 12, 14).

As displayed in Table 28, instrument correlation estimates were statistically significant between the BVPI subscales and each validation measure with one exception; the Powerful Repetition subscale and the SLSS. This indicated the BVPI was statistically significantly but minimally related to bullying, victimization, and students’ life satisfaction, and also suggested the BVPI assessed a separate and distinct construct.

Table 28. Instrument Correlation Results - Field Study

<table>
<thead>
<tr>
<th>Instrument</th>
<th>OBVQ Bullied Others</th>
<th>OBVQ Been Bullied</th>
<th>BPD</th>
<th>SLSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BVPI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powerful Subscale</td>
<td>.34***</td>
<td>.23***</td>
<td>-.12*</td>
<td></td>
</tr>
<tr>
<td>Powerful Repetition</td>
<td>.35***</td>
<td>.24***</td>
<td>-.09</td>
<td></td>
</tr>
<tr>
<td>Powerless Subscale</td>
<td>.20***</td>
<td>.18**</td>
<td>-.20**</td>
<td></td>
</tr>
<tr>
<td>Powerless Repetition</td>
<td>.37***</td>
<td>.30***</td>
<td>-.15**</td>
<td></td>
</tr>
</tbody>
</table>

Note: Null values indicate correlation was not meaningful, therefore not analyzed.
*** Significant at p<.001 **Significant at p<.01 *Significant at p<.05
Correlation estimates between all BVPI subscales and all validation measures were statistically significant with low correlations, with the exception of the SLSS and the Powerful Repetition subscale which revealed a statistically nonsignificant estimate. The highest correlation was between the Powerless Repetition subscale and the OBVQ Been Bullied subscale \( (r = .37, p < .001) \), followed by the Powerful Repetition and OBVQ Bullied Others subscales \( (r = .35, p < .001) \), Powerful and OBVQ Bullied Others subscales \( (r = .34, p < .001) \), and finally Powerless and OBVQ Been Bullied \( (r = .20, p < .001) \).

Correlation coefficients for all BVPI subscales and the BPD ranged from \( r = .18 \) to \( r = .30 \). Significant correlations between the BVPI subscales and the SLSS were as follows: \( r_{\text{Powerful}} = -.12, p < .05 \); \( r_{\text{Powerless}} = -.20, p < .001 \); \( r_{\text{Powerless Repetition}} = -.15, p < .01 \).

**Content Validity.**

For further support of validity, correlation between expert ratings of item position and logit item position were conducted on each subscale. Results revealed statistically significant correlations between expert ratings and logit item positions on the Powerful subscale \( (r = .53, p < .05) \) and the Powerful Repetition subscale \( (r = .55, p < .05) \). However, correlations between empirical and expert-rated item position were statistically nonsignificant for the Powerless, and Powerless Repetition subscales.

**Group Differences.**

When the final factor structure of the BVPI was determined, descriptive statistics were run for each subscale as displayed in Table 29. Females had a higher mean level of perceived power than males for all subscales with the exception of the Powerful Subscale.
(Powerful subscale: $M_{(male)} = -1.73$, $M_{(female)} = -1.61$; Powerless subscale: $M_{(male)} = .76$, $M_{(female)} = .53$; Powerful Repetition subscale: $M_{(male)} = -2.03$, $M_{(female)} = -2.14$; Powerless Repetition subscale: $M_{(male)} = -1.56$, $M_{(female)} = -1.46$).

Table 29. Descriptive Statistics - Field Study

<table>
<thead>
<tr>
<th></th>
<th>Powerful Subscale</th>
<th>Powerless Subscale</th>
<th>Powerful Repetition</th>
<th>Powerless Repetition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male (n = 141)</td>
<td>-1.73</td>
<td>1.61</td>
<td>0.76</td>
<td>1.6</td>
</tr>
<tr>
<td>Female (n = 186)</td>
<td>-1.61</td>
<td>1.66</td>
<td>0.53</td>
<td>1.69</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 (n = 37)</td>
<td>-2.33</td>
<td>1.6</td>
<td>0.93</td>
<td>1.34</td>
</tr>
<tr>
<td>15 (n = 78)</td>
<td>-1.52</td>
<td>1.65</td>
<td>0.55</td>
<td>1.71</td>
</tr>
<tr>
<td>16 (n = 131)</td>
<td>-1.74</td>
<td>1.66</td>
<td>0.62</td>
<td>1.65</td>
</tr>
<tr>
<td>17 (n = 54)</td>
<td>-1.57</td>
<td>1.48</td>
<td>0.29</td>
<td>1.89</td>
</tr>
<tr>
<td>18 (n = 27)</td>
<td>-1.22</td>
<td>1.98</td>
<td>0.42</td>
<td>1.59</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian/Alaska Native (n = 4)</td>
<td>-1.65</td>
<td>1.51</td>
<td>-0.03</td>
<td>0.98</td>
</tr>
<tr>
<td>Asian/Pacific Islander (n = 20)</td>
<td>-1.44</td>
<td>0.99</td>
<td>0.58</td>
<td>1.03</td>
</tr>
<tr>
<td>African-American (n = 36)</td>
<td>-1.54</td>
<td>1.84</td>
<td>0.64</td>
<td>2.12</td>
</tr>
<tr>
<td>Hispanic (n = 174)</td>
<td>-1.87</td>
<td>1.68</td>
<td>0.55</td>
<td>1.64</td>
</tr>
<tr>
<td>White (not Hispanic) (n = 50)</td>
<td>-1.34</td>
<td>1.45</td>
<td>0.59</td>
<td>1.51</td>
</tr>
<tr>
<td>More than 1 race (n = 41)</td>
<td>-1.54</td>
<td>1.88</td>
<td>0.69</td>
<td>1.84</td>
</tr>
</tbody>
</table>

Summary statistics for mean comparisons on gender, age, and ethnicity across all subscales are provided in Table 30. Independent samples t-tests were conducted across all subscales by gender. Levene’s statistic revealed equal variances on all subscales with the exception of the Powerless subscale ($F_{Powerful} = .042$, $p = .837$; $F_{Powerless} = .007$, $p < .935$; $F_{Powerful Repetition} = .015$, $p = .902$; $F_{Powerless Repetition} = .035$, $p = .853$). Reported perception
of power imbalance did not differ significantly between males and females for any subscale (Powerful: $t_{322} = -.693, p = .489$, Powerless: $t_{322} = 1.27, p = .206$, Powerful Repetition: $t_{322} = .625, p = .533$, Powerless Repetition: $t_{322} = -.519, p = .604$). This finding is consistent with Swearer and Cary (2003) which found no differences across status groups (bullies, victims, bully-victim, and no-status participants) with respect to gender in grades 6 to 8.

A one-way analysis of variance (ANOVA) was conducted by age and ethnicity for each subscale. Levene’s test of Homogeneity of Variance (HOV) revealed equal variances on age for all subscales ($F_{\text{Powerful}} = .247, p = .911; F_{\text{Powerless}} = .813, p = .518; F_{\text{Powerful Repetition}} = .723, p = .577; F_{\text{Powerless Repetition}} = .087, p = .986$). ANOVA results revealed no significant differences between ages on respondents’ perception of power imbalance as measured by all subscales ($F_{\text{Powerful}}[4, 322] = 2.26, p = .062; F_{\text{Powerless}}[4, 322] = .898, p = .466; F_{\text{Powerful Rep}}[4, 322] = 1.09, p = .363; F_{\text{Powerless Rep}}[4, 322] = 1.44, p = .221$).

Levene’s HOV also indicated equal variances for ethnicity across all subscales ($F_{\text{Powerful}} = 1.69, p = .124; F_{\text{Powerless}} = 1.30, p = .258; F_{\text{Powerful Repetition}} = 2.41, p = .057; F_{\text{Powerless Repetition}} = 2.01, p = .064$). ANOVA results revealed no significant differences between ethnicities across all subscales except the Powerful Repetition subscale. However, Bonferroni post-hoc estimates indicated no significant differences between ethnicities on that subscale ($F_{\text{Powerful}}[6, 321] = .901, p = .494; F_{\text{Powerless}}[6, 321] = .192, p = .979; F_{\text{Powerful Rep}}[6, 321] = 2.523, p = .021; F_{\text{Powerless Rep}}[6, 321] = 2.084, p = .055$).
Table 30. Group Differences - Field Study

<table>
<thead>
<tr>
<th></th>
<th>Powerful Subscale</th>
<th>Powerless Subscale</th>
<th>Powerful Repetition Subscale</th>
<th>Powerless Repetition Subscale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$t$</td>
<td>$p$</td>
<td>$t$</td>
<td>$p$</td>
</tr>
<tr>
<td>Gender</td>
<td>-.693</td>
<td>.489</td>
<td>1.27</td>
<td>.206</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>$p$</td>
<td>F</td>
<td>$p$</td>
</tr>
<tr>
<td>Age</td>
<td>2.260</td>
<td>.062</td>
<td>0.898</td>
<td>0.466</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>0.901</td>
<td>0.494</td>
<td>0.192</td>
<td>0.979</td>
</tr>
</tbody>
</table>

Note: Gender $df = 322$; Age $df_1 = 4$, $df_2 = 322$; Ethnicity $df_1 = 6$, $df_2 = 321$
CHAPTER 5: DISCUSSION

Prior to the BVPI study, a wide variety of instruments existed for measuring bullying and victimization, yet little research had focused primarily on the power imbalance in the bully/victim relationship, especially in adolescence. Most discussions of bullying and victimization acknowledged the existence of a power imbalance, even rendering it as the defining characteristic between victim and aggressor. Clearly, there was a call for a quantitative measure of this power differential, with admirable endeavor to include items in existing measures. However, the main focus of extant bullying measures was prevalence, intentionality, or a combination of these two components with little regard paid to the power differential (Cornell et al., 2006; Lee & Cornell, 2010). Thus, it was critical that the researcher first define power imbalance in the adolescent bully/victim relationship from the perspective of adolescents, and then attempt to develop a valid and reliable instrument to assess the adolescent perception of power imbalance. The intention of this dissertation was to provide additional insight into the construct of the power imbalance in the bully/victim relationship, and the bully/victim behavioral continuum through the initial development and validation of the Bully/Victim Power Inventory (BVPI). The main goal in constructing the BVPI was not to create yet another measure of bullying or victimization, but to create a comprehensive and distinct measure of the perceived power imbalance between victim and aggressor.
The results of this dissertation suggested that the power differential in an adolescent bully/victim relationship could be measured quantitatively as perceived power imbalance, indicated by the verbal, physical, and social exclusion behaviors continuum which characterize bullying and victimization.

In this chapter, summary results from the measure construction phases are discussed. Noteworthy findings, suggestions for improvement, study limitations, and ideas for further research follow.

**Major Findings**

The goal in the development of the BVPI was two-fold: (1) to address the gap in existing bullying measures, and (2) to provide greater insight into the construct of the power imbalance in the bully/victim relationship for students, mental health professionals, and school personnel. This was accomplished in the BVPI study by the creation of a definition for the power imbalance in the bully/victim relationship through the words and lived experiences of adolescents, and by the construction of the BVPI, such that it measured the multiple facets of perceived power imbalance in the bully/victim relationship discussed in the literature.

The BVPI is different from extant measures in that it measures the power imbalance component of the bully/victim relationship distinctly, exclusively, and comprehensively. Most bullying measures primarily used the chronicity (repetition) characteristic only (Greif & Furlong, 2006; Felix et al., 2011). Prior research has reported that few children inherently integrate repetition and power difference in self-generated
bullying definitions (Vaillancourt et al., 2008). Generally, a statement about power
differential is included in the definition of bullying, and respondents are asked to rate
frequency of bullying or victimization in other measures. Other attempts to include this
key element have added 1 to 3 power imbalance items to an existing bullying instrument
(Hunter et al., 2007; Swearer, 2011), or included 3 items with indicators and response
choices similar to those used in the Swearer Bully Survey (Felix et al., 2011). Felix et al.
(2011) reported a possible constraint of the power differential scale used in the CBVS as
limiting respondents who did not identify the specific power difference which they
experienced among the response choices, and acknowledged the list of response choices
only represented a few of many potential qualities which might assess power differential.

It was interesting, but not especially surprising, that the BVPI factored into 4
subscales, each of which consisted of equal representation of verbal, physical, and social
alienation indicators. Four subscales are appropriate for measurement of power
imbalance as defined by the students in the focus group study, and grounded in literature.
Focus group participants determined 2 components were vital in the measurement of
power imbalance: (1) powerful perception, and (2) powerless perception. The literature
supported measurement of a repetition component (Austin & Joseph, 1996; Colvin et al.,
1998; Crothers & Levinson, 2004; Felix et al., 2011; Nansel et al., 2001; Olweus, 1997;
Solberg & Olweus, 2004; Smith et al., 2002), and factor analysis determined
measurement of two chronicity factors, Powerful Repetition and Powerless Repetition,
which logic supported.
It could be rightly argued that the BVPI did not encompass all three key components of the bully/victim relationship as it is lacking the intentionality component, and the BVPI chronicity items measure repetition of perceived power rather than bullying or victimization prevalence. The researcher acknowledged and agreed, with the reminder that numerous other instruments were available for intentionality and chronicity measurement, and that the purpose of this study was initial development and validation of the power imbalance component alone, with possible utility as a separate scale, or for inclusion in a larger inventory of all three key components.

**Study One: Qualitative Strand.**

Study One had two purposes: (1) to explore qualitatively how power was defined by the words and actions of bullies and victims, both in the school setting and through cyberbullying, and (2) to construct a quantitative measure of bully/victim power imbalance for pilot administration. Substantive evidence produced favorable results that addressed the study purpose as discussed in subsequent paragraphs.

**Phase I: Planning.**

In the planning phase of measure construction, the construct was operationalized as a score composed of responses to items which measured intimidation, social alienation, and repetition by verbal, physical, and social exclusion behaviors, and the target population was chosen to be an urban high school in the Rocky Mountain region of the United States.
Phase II: Construction.

Research conducted throughout the construction phase included administration of instruments, and data analysis which originated from focus groups, item generation, scale response format, content expert review of the quantitative instrument, cognitive interviews, and subsequent revisions.

Development of the focus group questions, procedure, thematic analysis, and results were completed by the researcher, with support by the review of each process in collaboration with seven content experts as proposed by Benson and Clark (1982), Creswell (2007), Creswell and Plano Clark (2011), and Meadows and Morse (2001). From 18 verbatim transcripts, 165 significant statements directly pertaining to lived experiences of bullying and victimization were extracted, and organized into clusters which revealed dichotomous ‘Powerful’ and ‘Powerless’ supercategories, and three cross-indexed themes: Verbal Indicators, Behavior Indicators, and Cyberspace Indicators. The dichotomization of thematic clusters caused the researcher to question the initial identification of the three domain construct of verbal indicators, behavior indicators, and cyberspace indicators. The data suggested there might be 2 domains, powerful and powerless, which were measured by verbal, physical, and cyberspace behaviors. Additionally, this study’s findings revealed these acts served as latent measures of power imbalance.

Another important and disconcerting finding was that behaviors taught to students in elementary and middle school anti-bullying programs as strategies to increase a
victim’s power over a bully were the same behaviors which high school students identified as indicators of decreased power: “ignore the bully,” “don’t fight back”, “walk away,” “don’t respond,” “tell a friend,” and “tell an adult.” Two expert panelists, both practicing school psychologists, confirmed these strategies were taught in the earlier grades, and communicated serious concern that these approaches were essentially back-firing in adolescence. Strategic behaviors intended to increase power for victims, actually decreased their power. Adolescents in the BVPI study expected peers to be strong in self-advocacy and stand up for themselves.

Focus Groups.

From their experiences and observations, students determined that in order for an imbalance to be present in a bully/victim relationship, one person must be powerful and the other powerless. More power was distinguished by openly attacking weak or sensitive issues, then taunting, threatening and stalking the victim, occasionally recruiting others for support. Weak or non-existent response and repercussions by the victim indicated less power, with a variable degree of power unique to the dynamics within a relationship. Participants identified direct and indirect physical, verbal, and social alienation bullying behaviors as indicators of power imbalance which was in agreement with the behavioral categorization in the literature (Craig, Henderson, & Murphy, 2000; Elinoff, Chafouleas, & Sassu, 2004).

A few examples of Powerless Indicators included “Victim asks why the bully is picking on him/her,” “Victim pleads or apologizes repeatedly or profusely,” “Victim
does not fight back or defend himself,” and “Eliminates his/her [facebook] page.” More power was distinguished by openly attacking weak or sensitive issues, then taunting, threatening and stalking the victim, occasionally recruiting others for support. Weak or non-existent response and repercussions by the victim indicated less power.

*Expert Review of Thematic Structure.*

The expert panel reviewed the themes and supporting evidence above, and critiqued the interface of the two. Six themes centered on being powerful (verbal, physical, social alienation/cyberspace) or powerless (verbal, physical, social alienation/cyberspace) in a bully/victim relationship. Specific words and actions were identified as indicators which demonstrated less and more power. It was determined the substantive evidence effectively upheld the thematic powerful-powerless indicator structure. Upon recurrent review of the focus group data, the evidence for two domains (powerful and powerless) rather than three domains (verbal, physical, and cyberspace indicators) was more apparent.

*Initial Instrument Development.*

An item pool of 84 items, intended to be discernible by domain and level agreeability, were created under the thematic *powerful* and *powerless* supercategory structure, with fidelity to the use of verbal, physical, and social alienation indicators ( 23 *powerful* and 23 *powerful repetition* items; 19 *powerless* and 19 *powerless repetition* items). A 4-point response scale comprised Strongly Disagree to Strongly Agree response options. This instrument was used for review by experts and for cognitive interviews.

Results indicated validity and unidimensionality overall, as well as for verbal and physical intimidation, social exclusion, and cyberbullying. Item difficulty levels were well dispersed across items, 28 items overall were changed, resulting in 42 items intended to measure three domains (verbal indicators, physical indicators, and cyberbullying indicators) under two conditions, powerful and powerless. This instrument was used for cognitive interviews (Appendix F).

Cognitive Interviews.

Data trends indicated support for validity, question order, and clear and concise instructions. Overall survey length was considered “just right”, phrasing was changed on chronicity items to “This happens…”, and the recommended addition of the “…when others laugh at me” items were included. Therefore, 9 revisions were made based on cognitive interview and validation data and the resultant instrument was used in the pilot administration (Appendix G).

In summary, the initial instrument was reviewed by three experts, modified, and pretested through eight cognitive interviews (Benson & Clark, 1982; DeVellis, 2003). Experts found the instrument to be valid and unidimensional. Based on expert-rated agreeability levels, these items were ordered within each factor, and used for the cognitive interviews. Interview results indicated strong evidence for validity, question order, and clear and concise instructions. Survey length was acceptable, a new item was
recommended and added, and chronicity item phrasing was edited to reduce redundancy and length. Twenty-eight total items were modified, re-structured, or re-located which resulted in 42 power items and 42 corresponding repetition items, 1 bully self-identification item, and 1 victim self-identification item for a total of 86 items. This measure was used in Study Two for instrument evaluation and validation.

**Study Two: Quantitative Strand.**

Study Two had two purposes, (1) to test the structure and reliability of the BVPI, and (2) to test the validity of the BVPI, and addressed the first three research questions of the overall study, (1) Does the Bully/victim power Inventory reflect the three identified domains (i.e., verbal indicators, behavior indicators, and cyberspace indicators) and factor appropriately into the three domains? (2) Is the response scale use appropriate for the Bully/victim power Inventory? (3) Does the Bully/Victim Power Inventory evidence adequate reliability?

**Phase III: Evaluation.**

*Pilot Study.*

Eighty-six total items within two subscales, 42 power items, 42 corresponding repetition items, one bully self-identification item, and one victim self-identification item, were piloted in the fourth week of the 2011-2012 school year resulting in a total pilot sample size of 26 students. Pilot study data were used to determine how well items reflected their specific domains. Internal consistency reliability estimates were strong to excellent ($\alpha = .88-.97$) which allowed the scale to be reduced by 26 items, from 86 to 62
total items with 15 items per subscale, while preserving construct breadth, and maintaining strong to excellent reliability estimates ($r = .86-.96$). Items comprised of verbal indicators were reduced in number from 22 to 16, physical indicators from 13 to 9, whereas cyberbullying and social exclusion items were reduced from 8 to 5. Breadth of construct measurement was preserved by retention of 14 verbal items, 9 physical items, and 7 social exclusion items, plus 30 corresponding repetition items, 1 bully self-identification item, and 1 victim self-identification item. However, this reduction in items drastically altered the item composition of the cyberbullying domain until only 1 cyberbullying item remained along with 6 social exclusion items, therefore, the domain was redefined as social alienation.

Convergent correlations between the BVPI and the Olweus Bully-Victim Questionnaire (OBVQ), and the Bullying Power Differential (BPD) were in the expected directions with statistically significant, positive, low to moderate correlations, with the exception of the Powerful subscale, and Powerless (Frequency removed) subscale. This could be attributed to low sample size for the pilot or to a lack of feeling of power on the part of bullies. The highest correlation was between the global BVPI and the BPD measure, followed by the Powerless subscales and the BPD measure, the global BVPI and global OBVQ, and finally the Powerless (Frequency included) and the PBVQ Been Bullied subscale. Sample means were as follows: Powerful (Mean = -1.70, SD = 1.65), Powerless (Mean = -.65, SD = 1.67), Bullied Others (Mean = 10.25, SD = 5.88), BPD
Consistent with the findings of Felix et al. (2011), the correlation between the BVPI and the SLSS was not statistically significant for all scales. This was not unexpected, based on the reasoning that adolescents may struggle with the conceptual understanding of a link between feelings of power and life satisfaction. The sample mean for the SLSS was 27.29 (SD = 10.21). The combination of correlation results, method convergence, and logic provide support for the convergent validity for parallel underlying constructs of the BVPI, the OBVQ, and the BPD.

Based on the preservation of construct breadth, and strong results obtained from the item-analysis, internal consistency reliability, and validity tests the resultant instrument was used in the field administration. It comprised 62 total items in two subscales: 15 powerful items, 15 powerless items, 30 repetition items, 1 bully self-identification item, and 1 victim self-identification item (Appendix H).

Field Study.

Administration of the 62-item BVPI occurred during the last three weeks of the first semester of the 2011-2012 school year resulting in a final administration sample size of 346 students. Field study results revealed all assumptions were met. EFA estimates suggested four 1-component solutions factored into Powerful, Powerless, Powerful Repetition, and Powerless Repetition items in contradiction to the three domains expected to reflect verbal intimidation, physical (behavior) intimidation, and cyberbullying or
social alienation. It was notable however, that these results supported the 2-factor power supercategory structure results obtained from the pilot study, and the chronicity characteristic definitive of the bully/victim relationship, lending evidence that the items measured power differences in the bully/victim relationship. These findings suggested that each of the subscales accounted for their own distinct components, and combined to form the overall BVPI. Internal consistency reliability was assessed for each measure with estimates which ranged from 0.96 to 0.92, therefore, the researcher decided to retain the same 62 items for further analysis.

Field study estimates obtained from principal components analysis of residuals (PCAR) revealed possible multidimensionality for the global BVPI in these data. Therefore, based on this finding and the EFA, the researcher applied the Rasch model to each of the four subscales separately. Eigenvalues indicated unidimensionality, and overall fit was adequate for each subscale. Item-fit statistics revealed infit and outfit mean squares at approximately 1.0, with infit and outfit $t$-values at approximately zero. Person-fit statistics indicated the persons fit well to the measurement model with responders’ answers matching projected expectations on all items. Scale use indicated that students used the response format appropriately. Construct and content validity were established for these data. Targeting tests showed item functionality similar for all membership of the target population. Estimated Cronbach’s alpha was nearly 1.00 for all four subscales with adequate person separation reliability from 0.69 to 0.75. In
combination, these findings revealed strong internal consistency for each subscale, however, person separation was not strong for some subscales.

Convergent correlation results were in the expected directions for all scales. The highest correlation was between the Powerful and Powerless Repetition subscales and the OBVQ subscales, followed by the Powerful and Powerless subscales and the OBVQ subscales. Results revealed statistically significant positive low estimates between all BVPI subscales and the BPD, and statistically significant negative low estimates between all BVPI subscales and the SLSS, with the exception of Powerful Repetition and the SLSS which was nonsignificant (Table 28).

Even though the final instrument did not reflect the three hypothetically identified domains of verbal indicators, physical indicators, and cyberbullying, it did reflect the powerful and powerless domains suggested by the focus group results, and identified by the pilot study and field study results. This was attributed more to an initial ambiguous understanding of power than to instrument construction.

**Phase IV: Validation.**

The intention of the BVPI was to measure the perceived power imbalance in a bully/victim relationship. Content validity was supported by expert analysis of item-person logit positions of subscale item-person maps. Factor analysis resulted in definition of the latent factor of power imbalance as measured by verbal, physical, and social exclusion indicators. Assessment of construct validity was conducted by correlation of the BVPI subscales and corresponding validation instruments, with the expectation of
positive low to moderate correlations with the OBVQ and the BPD, and zero to low correlation with the SLSS. Results were in the expected directions for all validation measures, though the SLSS was correlated at a low level with all subscales except the Powerful Repetition subscale. These findings indicated that correlations with conceptually related constructs were significant but low, suggesting measurement of a related but distinct construct, and a construct particularly distinct from the student life satisfaction.

Descriptive statistics indicated females had a higher mean level of perceived power than males for all subscales with the exception of the Powerful Subscale, and 43% of the males self-identified as both bullies and victims. However, gender differences were not statistically significant, yielding the same results as Swearer and Cary (2003) found, when they analyzed gender differences across status groups (bullies, victims, bully-victim, and no-status participants), and found no differences across status with respect to gender in grades 6 to 8. BVPI gender difference results were further supported by other studies which reported age-related decreases in bully victimization rates, as students transition from middle school to high school (Felix et al., 2011; Nansel et al., 2001; Solberg et al., 2007). This is also consistent with other extant literature (Baldry & Farrington, 2000; Carlyle & Steinman, 2007; Viding, et al., 2009). Juvonen, Graham and Schuster (2003) found boys were at least twice as likely as girls to be a victim or a bully, and three times as likely to be a bully-victim. However, the Juvonen study used a peer
nominated instrument, rather than a self-report instrument as used in the BVPI study, which could explain the discrepancy between study results.

In contrast to the results in the BVPI study of no significant differences in BVPI subscale scores across grades, Pepler et al. (2006) found reports of bullying peaked at grade 9, the school transition point, followed by lower reports of bullying for students in grades 10 and 12, F(6, 1,633)= 54.57, p<001. However, Monks and Smith reported relative stability of victimization in adolescence which is supported by the results of this study and other research (e.g. Boulton & Smith, 1994; Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996). It is notable that Pepler et al. and the other referenced studies examined bullying, whereas the current study examined power imbalance.

No significant differences were found in the BVPI data for ethnicity which was contrary to the following three studies. Vervoot et al. (2010) reported ethnicity was not directly related to victimization, in a comprehensive investigation of bullying, victimization, and the role of ethnicity conducted in the Netherlands, but ethnic majorities scored significantly lower on bullying than ethnic minority group members. In another study which examined predictors of latent class typologies of bullying involvement in middle school students, Lovegrove et al. (2012) reported no differences between ethnicities, except for African American students as compared to White, non-Hispanic students in latent bully and victim classifications. Spriggs et al. (2007) reported bullying and victimization prevalence differed significantly with a lower prevalence of victimization reported by black adolescents than whites and Hispanic adolescents.
Discrepancies between the BVPI results and the Vervoot et al (2010), Lovegrove et al (2012), and Spriggs et al (2007) could be attributed to sample age-group differences, or the measure of different constructs, i.e. power imbalance, bullying, and victimization.

**Suggestions for Instrument Improvement**

An increase in the number of items at the frequent and rare ends of the scale is one recommendation for improvement (see Figures 8, 10, 12, 14). Application of the Spearman-Brown Prophecy formula can determine the estimated number of comparable items needed to improve reliability. Additional suggestions include rephrasing or redesigning redundant items, test persons with more extreme experiences (high and low), and/or better sample-item targeting.

Further recommendations might include the use of 1 repetition item per subscale for prevalence measurement as used in OBVQ with the same classification cutoff of 2–3 times a month or more, which is easy for schools to use and understand. Change the wording and replace the response options for the demographic item which currently states: “In the past year, how many times have you said or done mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend him/herself?” to “In the past year, how often have you said or done mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend him/herself?” Current response options “0, 1-3, 4-6, 7-9, 10+” would be replaced by “Not in the last 2 months, 1-2 times in the last 2 months, 2-3 times a month, Once a week, Several times a week”.
Upon review of the category probabilities plots, a comparison study which used the original response scale ranging from Strongly Disagree to Strongly Agree might improve person separation reliability compared to the current response options of Not at all Powerful to Totally Powerful. The current wording of the two middle categories, slightly and moderately, may have contributed to the inversion in step structure due to nebulous distinction between categories. The researcher suspected this may have contributed to the evidence of high probability for categories 2 and 5.

Another improvement might be made by removing the NA response option and re-coding the retained response options as follows: 0-Not at all powerful/less, 1-Slightly, 2-Moderate, 3-Totally. This would simplify coding and total score calculations and decrease probability of step inversions.

**Implications of Results**

The global BVPI can be used to measure the global component of bullying that is power imbalance, i.e. perception of feeling powerful, powerless, prevalence of powerful perception, and prevalence of powerless perception. Administered separately, each subscale can be used to target a specific status group; e.g. the Powerful subscale for bullies, the Powerless subscale for victims, both Powerful and Powerless subscales for bully-victims.

Scores for each item indicated degree of power perceived on the particular behavior measured. Calculation of a subscale total score from 0 to 75, where 75 indicates greater perception of powerful or powerless feelings, and 0 indicates lower perception of
powerful or powerless feelings invoked from behaviors measured by items allows for analysis of the responder’s overall perception of powerful, powerless.

Another suggestion is that it is necessary that the instrument be “normed” which would allow for the investigation of “typical” score ranges for degree of powerful and powerless perceptions.

Strategies for intervention could be developed and utilized at the individual, class, and school levels targeting specific behaviors and perceptions using subscale scores. Interventions strategies such as Restorative Justice (Liebmann, 2007; Umbreit, Coates, & Vos; 2007), could utilize BVPI data to pinpoint and customize intervention plans by comparison of a bully’s Powerful subscale score and a victim’s Powerless subscale score.

Hunter et al. (2007) suggested it was reasonable to expect coping strategy use and depressive symptomatology to be associated with power imbalance attributions; if a child experienced a situation in which (s)he is inferior in power, it is likely (s)he would also experience decreased hope of rectifying the situation in his/her favor. Decreased hope, pessimism and self-rated social competency are related to depression in youth (Hunter et al., 2007; Lewinsohn, Roberts, Seeley, Rohde, Gotlib, & Hops, 1994). BVPI scale scores at the item level can be used to pinpoint problem behaviors for therapeutic or restorative justice plans for bullies, victims, or bully-victims.

Early intervention by targeting, measuring, and developing coping strategies for children who have experienced a bully/victim power imbalance may provide early
screening in a multi-gating assessment such as the CBVS described by Felix, et al. (2011). The BVPI would provide a new tool for inclusion in such an assessment.

**Limitations**

This study comprised the initial development and validation of the BVPI, and was a preliminary demonstration that the BVPI appeared to have potential as a psychometrically sound measure of the power imbalance in a bully/victim relationship. However, some limitations warrant discussion.

First, no other validation data have been collected through expert and respondent observation, or by self-report respondents’ results. A second limitation was the BVPI does not clearly differentiate students who were bullies from those who have been bullied, were bully-victims, or other participant roles (defender, reinforcer, bystander, etc.). Thirdly, the BVPI was a definition-first self-report measure which may have contributed to underestimation or over-identification of bullying, fear of repercussion, or shame. Lastly, generalizability of the sample was in question due to the restricted scope of the convenience sample located in an urban high school of a large metropolitan city in the Rocky Mountain region of the U.S., with half the student population comprised of Hispanic students, and the other half composed of a relatively even distribution of Native-Americans, Asians, African-Americans, White, and multi-racial students.

**Future Research**

Expansion of administration of the BVPI using samples dissimilar to the present study is a necessary contribution to generalizability and further instrument validation.
Agreement with or discrimination from other measures such as the OBVQ, Swearer Bully Survey, SLSS, as well as alternative validation methods are essential to the establishment of BVPI validity. Correlation with other pertinent psychological measures, such as Rosenberg’s Self-Esteem Scale, and measures of anxiety and depression, would also be interesting and useful.

It would also be useful to establish clear role differentiation, and deeper understanding of peer group influences such as best friend, and group of friends, as well as possible effects on the power imbalance unique to the bully/victim relationship using the BVPI.

The results of this study suggest the BVPI is a psychometrically promising measure that could be used in the development of intervention strategies to (a) reverse powerless perceptions, (b) increase powerful perceptions to be used in positive ways, and (c) develop substantially different anti-bullying strategies for students in grades 9-12 from anti-bullying strategies currently taught in grades K-8.

**Conclusion**

Although there is a wealth of research devoted to bullying and peer victimization, a void in measurement of one of the construct’s key components, power imbalance, is clear. An abundance of systematically developed measures of prevalence and intentionality within expansive populations have been thoroughly studied. However, it is vital to include a comprehensive measure of power imbalance in the relationship in order for bullying scholarship to advance. The researcher developed the BVPI to address this
conspicuous gap in existing measures. In this initial study, the BVPI defined and measured the adolescent power imbalance in a bully/victim relationship. Each subscale was found to be reliable, and factored into four identifiable domains (powerful, powerless, powerful chronicity, and powerless chronicity) as measured by the following indicators of bully/victim behavior: verbal intimidation, physical intimidation, and social exclusion. Results also indicated appropriate response scale use, and support for content and construct validity.

These findings indicated that the BVPI has potential for inclusion in the new generation of valid bullying instruments used to study the impact of bullying at the individual and school levels. The ultimate goal is that the BVPI be incorporated with a comprehensive bullying assessment, by which students with high BVPI scores will be referred for customized interventions. For instance, a student with high scores for feeling powerless in a bully/victim relationship, or a student with high scores for feeling powerful on negative behaviors may benefit from an intervention aimed at self-image and self-esteem in general, or in the context of that particular relationship, or the context of their classroom or school. As another example, a student who experiences feeling powerless (or a student who experiences powerful feelings) from repeated bullying experiences across a variety of environments by several individuals may need guided intervention to develop understanding of the bullying process and how powerful and powerless feelings can tip the balance in that relationship (or find the cause and solution for developing a healthy relationship). Furthermore, classroom or school-wide data can
be analyzed from which classroom and school-wide interventions can potentially be developed and studied, while offering individual level interventions.
References


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Karatzias, A. A., Power, K. G., & Swanson, V. V. (2002). Bullying and victimisation in Scottish secondary schools: Same or separate entities?. Aggressive Behavior, 28(1), 45-61.


APPENDICES
Appendix A
Bully/victim power Inventory
Focus Group Questions

Most of us have seen or experienced a bully being mean to someone else. The person that is picked on by the bully is called a victim. Answer the questions below by writing your thoughts, opinions, or beliefs about how you know when a bully has power over a victim. What do you see, hear, or read?

**BULLY**

1. The way I can tell a bully has power over a victim is when he/she uses words like…

2. The way I can tell a bully has power over a victim is when he/she acts like…

3. Other ways I can tell a bully has power over someone…
VICTIM

4. The way I can tell someone has less power is when he/she uses words like….

5. The way I can tell someone has less power is when he/she acts like….

6. Other ways I can tell a victim has less power than the bully…
“Cyberbullying” means bullying or being bullied in cyberspace; in email, text messages, on Facebook/MySpace, chat rooms, blogs, etc. Please answer the questions below by writing your thoughts, opinions, or beliefs about cyberbullying.

7. The way I can tell a bully has power over a victim in cyberspace is…

8. The way I can tell a victim has less power than a bully in cyberspace is…

9. The words a bully uses to show or gain power in cyberspace are…

10. The words a victim uses that show less power in cyberspace are…
As an expert in your field, you have been invited to review the Bully/victim power Inventory survey for content validation purposes of bullying, victimization, and perceived power in the bully/victim relationship. Please pay particular attention to the evaluation criteria below as you evaluate items and responses by matching items to the specification table below. Feel free to make any changes, comments, or recommendations directly on the survey or, if you prefer, on a separate sheet of paper. Thank you for your time and input!

Evaluation criteria:

- Item/response wording and location
- Clarity/conciseness/relevance
- Validity/dimensionality
- Overall format/missing concepts or approaches
## BULLY/VICTIM POWER INVENTORY

**Item Content Specification Table**

*Directions: Please record each item number in the appropriate cell below.*

Objective 1  The instrument will assess severity of victimization.
Objective 2  The instrument will assess severity of bullying.
Objective 3  The instrument will assess perceived power balance in the bully/victim relationship.

<table>
<thead>
<tr>
<th></th>
<th>INTIMIDATION Verbal</th>
<th>INTIMIDATION Physical</th>
<th>INTIMIDATION Cyberbullying</th>
<th>REPETITION over Time</th>
<th>CYBER BULLYING Victimization</th>
<th>CYBER BULLYING Bully</th>
</tr>
</thead>
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<tr>
<td>Victimization</td>
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<td>Bullying</td>
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<td>Power Balance</td>
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<td>TOTAL # Items</td>
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# BULLY/VICTIM POWER INVENTORY

**Item Content Specification Table**

*Directions: Please record each item number in the appropriate cell below.*

Objective 1  The instrument will assess severity of victimization.
Objective 2  The instrument will assess severity of bullying.
Objective 3  It will assess perceived power balance in the bully/victim relationship.

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<td>2</td>
<td>Bullying</td>
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<td>3</td>
<td>Power Balance</td>
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</tbody>
</table>

**TOTAL # Items**
Item Difficulty Rating - Powerful

Directions: Please rate each item according to difficulty by checking the most appropriate box.

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<thead>
<tr>
<th>Scale</th>
<th>Item #</th>
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<th>Hard</th>
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<td>BACKGROUND</td>
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## Item Difficulty Rating - Powerless

Directions: Please rate each item according to difficulty by checking the most appropriate box.

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<td>P25a</td>
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<td>P42a</td>
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</tr>
</tbody>
</table>
Appendix C

Bully/victim power Inventory
Content Expert Invitation
Marybeth Lehto, Ph.D Candidate
Morgridge College of Education
University of Denver

Dear ____________________,

My name is Marybeth Lehto, and I am a Ph.D. candidate at the University of Denver. As a recognized expert, I would like to invite you to review the Bully/victim power Inventory measure for content validation purposes. This instrument was designed to assess power imbalance in the bully/victim relationship in pre-teens and adolescents by measuring the following factors: severity of bullying, severity of victimization, and perceived power in an interpersonal relationship. Participation in this project is strictly voluntary and confidential, will involve review and examination of the newly constructed measure for content validity, and should take about 60 minutes of your time. A copy of the study results will be made available to you, if interested.

This study is being conducted to fulfill the requirements of a Ph.D. dissertation. It has been approved by the Aurora Public Schools Accountability & Research Division, and the University of Denver Institutional Review Board. This project is supervised by Dr. Kathy Green, Morgridge College of Education, University of Denver, Denver, CO 80208, 303-871-2490, kgreen@du.edu. Results will be used for presentation and/or publication, and to receive a grade in a course. If you have questions, I can be reached at 720-217-7155, Mary.Lehto@du.edu.

If you are interested, please read the attached informed consent letter, sign and return the attached signature page to the fax number below or as a pdf file by reply email. If you prefer a hardcopy, please let me know, and I will be happy to mail you the forms with a self-addressed, stamped return envelope. I greatly appreciate your time and assistance.

Sincerely,

Marybeth Lehto, M.Ed.
PhD Candidate, Quantitative Research Methods
Morgridge College of Education
University of Denver
Cell 720-217-7155
Fax 303-326-1274
Appendix D
Bully/victim power Inventory- Content Experts
Marybeth Lehto, Ph.D Candidate
Morgridge College of Education
University of Denver

Instructions: Thank you for your help in providing information for this project. It is greatly appreciated. It will be used to help people who are bullying or being bullied.

Bullying is when one student intimidates or alienates another student(s), repeatedly and over time, and the student(s) being bullied finds it difficult to defend him or herself. A student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more students. The victim of the negative actions finds it difficult to defend him or herself.

Power between two people is the ability to control one’s own outcomes and also the outcomes of the other person; the things they think, do, or say. Please answer the following questions about the power in your relationship with the person who bullied you.

Please respond to the following questions by circling the number that best describes your experience. Thank you.
Background

D1] My GENDER is

Female  Male
1       2

D2] My AGE is  13  14  15  16  17  18

D3] My ETHNICITY is

American Indian/Alaska Native  Asian/Pacific Islander  African-American (not Hispanic)  Hispanic (not Hispanic)  White  Multi-racial
1       2       3       4       5       6

D4] How many times have you been bullied (in person or electronically) by others in your lifetime?

0  1-3  4-6  7-9  10+

D5] How many times have you taken part in bullying others (in person or electronically) in your lifetime?

0  1-3  4-6  7-9  10+

D6] Bullying: I have said or done mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend him/herself.

☐ Yes
☐ No
D7] Victimization: Another student said or did mean, hurtful things to me repeatedly and over time, to the point where I could not defend myself.

☐ Yes
☐ No

Please answer the following questions while thinking about how you feel when you’ve been a bully or been bullied.

P1] I feel powerful in a bully/victim relationship when I lie to the other person.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

P1a] This happens:

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

P2] I feel powerful when I call him/her names, tease, or say racist remarks to him/her.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>NA</th>
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</table>

P2a] This happens:

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<tr>
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<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
</thead>
</table>

P3] I feel powerful when my voice sounds sarcastic, angry, or I shout at him/her.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>NA</th>
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P3a] This happens:

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<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
</thead>
</table>
P4] I feel powerful when I threaten to hurt him/her.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>NA</th>
</tr>
</thead>
</table>

P4a] This happens:

<table>
<thead>
<tr>
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<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
</thead>
</table>

P5] I feel powerful when I say cruel things that cause him/her to worry.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>NA</th>
</tr>
</thead>
</table>

P5a] This happens:

<table>
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<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
</thead>
</table>

P6] I feel powerful when I say things that cause him/her deep emotional pain.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>NA</th>
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P6a] This happens:

<table>
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<tr>
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<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
</thead>
</table>
P7] I feel powerful when I am taller or stronger than him/her.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>NA</th>
</tr>
</thead>
</table>

P7a] This happens:

<table>
<thead>
<tr>
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<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
</thead>
</table>

P8] I feel powerful when I steal from or break into his/her backpack, desk, or locker.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>NA</th>
</tr>
</thead>
</table>

P8a] This happens:

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<thead>
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<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
</thead>
</table>

P9] I feel powerful when I break or damage his/her personal property.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>NA</th>
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</thead>
</table>

P9a] This happens:

<table>
<thead>
<tr>
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<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
</thead>
</table>
**P10**] I feel *powerful* when I start fights with him/her.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>NA</th>
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</table>

P10a] *This happens:*

<table>
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<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
</thead>
</table>

**P11**] I feel *powerful* when I cause him/her physical pain.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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P11a] *This happens:*

<table>
<thead>
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<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
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**P12**] I feel *powerful* when I can get other kids to exclude him/her from an activity.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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P12a] *This happens:*

<table>
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<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
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</thead>
</table>
P13] I feel *powerful* when I can get other kids to exclude him/her from our group.

Strongly Disagree  Disagree  Agree  Strongly Agree  NA

P13a] *This happens:*

Never  Rarely  Sometimes  Often  All the Time  NA

P14] I feel more *powerful over him/her* when I’m with my best friend.

Strongly Disagree  Disagree  Agree  Strongly Agree  NA

P14a] *This happens:*

Never  Rarely  Sometimes  Often  All the Time  NA

P15] I feel more *powerful over him/her* when I’m with my teacher(s).

Strongly Disagree  Disagree  Agree  Strongly Agree  NA

P15a] *This happens:*

Never  Rarely  Sometimes  Often  All the Time  NA
P16] I feel more powerful over him/her when I make all the decisions in the relationship.

Strongly Disagree   Disagree   Agree   Strongly Agree   NA

P16a] This happens:

Never   Rarely   Sometimes   Often   All the Time   NA

P17] I feel more powerful over him/her when I win an argument.

Strongly Disagree   Disagree   Agree   Strongly Agree   NA

P17a] This happens:

Never   Rarely   Sometimes   Often   All the Time   NA

P18] I feel more powerful over him/her when I’m with a group of my friends.

Strongly Disagree   Disagree   Agree   Strongly Agree   NA

P18a] This happens:

Never   Rarely   Sometimes   Often   All the Time   NA
P19] I feel powerful when people like me.

| Strongly Disagree | Disagree | Agree | Strongly Agree | NA |

P19a] *This happens:*

| Never | Rarely | Sometimes | Often | All the Time | NA |

P20] I feel powerful when people agree with me.

| Strongly Disagree | Disagree | Agree | Strongly Agree | NA |

P20a] *This happens:*

| Never | Rarely | Sometimes | Often | All the Time | NA |

P21] I feel more powerful when people are afraid of me.

| Strongly Disagree | Disagree | Agree | Strongly Agree | NA |

P21a] *This happens:*

| Never | Rarely | Sometimes | Often | All the Time | NA |
P22] I feel more powerful at home than at school.

Strongly Disagree  Disagree  Agree  Strongly Agree  NA

P22a] This happens:

Never  Rarely  Sometimes  Often  All the Time  NA

P23] I feel powerful when I feel safe.

Strongly Disagree  Disagree  Agree  Strongly Agree  NA

P23a] This happens:

Never  Rarely  Sometimes  Often  All the Time  NA

P24] I feel powerless when s/he forces me to do something I don’t want to do.

Strongly Disagree  Disagree  Agree  Strongly Agree  NA

P24a] This happens:

Never  Rarely  Sometimes  Often  All the Time  NA
P25] I feel powerless when s/he shoots down my ideas.

Strongly Disagree  Disagree  Agree  Strongly Agree  NA

P25a] This happens:

Never  Rarely  Sometimes  Often  All the Time  NA

P26] I feel powerless when s/he tells me I’m stupid.

Strongly Disagree  Disagree  Agree  Strongly Agree  NA

P26a] This happens:

Never  Rarely  Sometimes  Often  All the Time  NA

P27] I feel powerless when s/he tells me I’m not allowed to go anywhere by myself.

Strongly Disagree  Disagree  Agree  Strongly Agree  NA

P27a] This happens:

Never  Rarely  Sometimes  Often  All the Time  NA
P28] I feel *powerless* when s/he tells me I’m not allowed to disagree.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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P28a] *This happens:*

<table>
<thead>
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<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
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</table>

P29] I feel *powerless* when s/he tells me embarrasses me in front of others.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</table>

P29a] *This happens:*

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
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</thead>
</table>

P30] I feel *powerless* when s/he criticizes what I say.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>NA</th>
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P30a] *This happens:*

<table>
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<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
</thead>
</table>
P31] I feel *powerless* when I feel trapped in a situation.

Strongly Disagree  Disagree  Agree  Strongly Agree  NA

P31a] *This happens:*

Never  Rarely  Sometimes  Often  All the Time  NA

P32] I feel *powerless* when nothing I say or do pleases the him/her.

Strongly Disagree  Disagree  Agree  Strongly Agree  NA

P32a] *This happens:*

Never  Rarely  Sometimes  Often  All the Time  NA

P33] I feel *powerless* when someone writes something negative about me on facebook/myspace without my permission.

Strongly Disagree  Disagree  Agree  Strongly Agree  NA

P33a] *This happens:*

Never  Rarely  Sometimes  Often  All the Time  NA
**P34**] I feel *powerless* when someone writes something positive about me on facebook/myspace without my permission.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>NA</th>
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**P34a**] *This happens:*

<table>
<thead>
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<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
</thead>
</table>

**P35**] I often feel *powerless* with some of my classmates at school.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</tr>
</thead>
</table>

**P35a**] *This happens:*

<table>
<thead>
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<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
</thead>
</table>

**P36**] I often feel *powerless* within my family.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>NA</th>
</tr>
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</table>

**P36a**] *This happens:*

<table>
<thead>
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<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
</thead>
</table>
P37] I often feel *powerless* with my teachers.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>NA</th>
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P37a] *This happens:*

<table>
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<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
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</thead>
</table>

P38] I feel powerless in many situations.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>NA</th>
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P38a] *This happens:*

<table>
<thead>
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<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
</thead>
</table>

P39] I feel powerless when people think I’m wrong.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>NA</th>
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P39a] *This happens:*

<table>
<thead>
<tr>
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<th>Often</th>
<th>All the Time</th>
<th>NA</th>
</tr>
</thead>
</table>
P40] I feel powerless when no one believes what I say.

Strongly Disagree  Disagree  Agree  Strongly Agree  NA

P41a] This happens:

Never  Rarely  Sometimes  Often  All the Time  NA

P42] I feel powerless when no one believes in me.

Strongly Disagree  Disagree  Agree  Strongly Agree  NA

P42a] This happens:

Never  Rarely  Sometimes  Often  All the Time  NA
Appendix E
Bully/victim power Inventory - Cognitive Interview Protocol
Marybeth Lehto, Ph.D Candidate
Morgridge College of Education
University of Denver

Interview # _________ Start Time _______________ End Time ______________

Please respond to the Bully/victim power Inventory survey to determine how long it takes to complete. Record your time in the spaces provided above. After you have finished, please answer the questions below.

1] Were the instructions clear and concise? Yes No
   If not, what would make them better?

2] Were the questions and response choices clear and concise? Yes No
   If not, please list the question/response number and tell what might make it better.

3] Was the order of the questions easy to follow? Yes No
   If not, what would make it easier?

4] The length of the questionnaire was (circle one)
   just right too long too short
   If too long or too short, what was wrong about it or would make it better?

5] Overall, did the questions ask questions about bullying and feelings of power in a relationship?

6] Was there anything missing, or anything you think should be included that was not asked?
Appendix F

Bully/victim power Inventory- Cognitive Interview

Instructions: Thank you for your help in providing information for this project. It is greatly appreciated. It will be used to help people who are bullying or being bullied.

Bullying is when one student intimidates or alienates another student(s), repeatedly and over time, and the student(s) being bullied finds it difficult to defend him or herself. A student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more students. The victim of the negative actions finds it difficult to defend him or herself.

Cyberbullying is harassing, impersonating, insulting, threatening, and/or stalking victims in email, text messages, chat rooms, blogs, on Facebook/MySpace, etc.

Power between two people is the ability to control one’s own outcomes and also the outcomes of the other person; the things they think, do, or say. Please answer the following questions about the power in your relationship with this person who bullied you.

Thank you.

D1] I have said or done mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend him/herself.

☐ No
☐ Yes, they were
  ☐ Male
  ☐ Female
  ☐ Both
D2] In your lifetime, how many times have you said or done mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend him/herself?

0 1-3  4-6  7-9  10+

D3] When I’ve said or done mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend him/herself, I’ve done it (check all that apply)

☐ in cyberspace
☐ in person, face-to-face
☐ when the student is not around

Think about a situation in which you have said or done mean, hurtful things to another student(s) to the point where they could not defend themselves. Circle the answer that describes the extent to which you agree with the following statements.

P1] I feel powerful in a relationship when I lie to the other person.

Not at all powerful  Somewhat powerful  Moderately powerful  Very powerful  NA

P1a] I lie to the other person

Never  1-2 times/year  1-2 times/month  1-2 times/week  Daily
P2] I feel powerful when I call this person names, tease, or say racist remarks to this person.

Not at all powerful Somewhat powerful Moderately powerful Very powerful NA

P2a] I call this person names, tease, or say racist remarks to this person

Never 1-2 times/year 1-2 times/month 1-2 times/week Daily

P3] I feel powerful when I sound sarcastic, angry, or I shout at this person.

Not at all powerful Somewhat powerful Moderately powerful Very powerful NA

P3a] I sound sarcastic, angry, or I shout at this person

Never 1-2 times/year 1-2 times/month 1-2 times/week Daily

P4] I feel powerful when I threaten to hurt this person.

Not at all powerful Somewhat powerful Moderately powerful Very powerful NA

P4a] I threaten to hurt this person

Never 1-2 times/year 1-2 times/month 1-2 times/week Daily
**P5**] I feel powerful when I say cruel things that cause this person to worry.

<table>
<thead>
<tr>
<th>Not at all powerful</th>
<th>Somewhat powerful</th>
<th>Moderately powerful</th>
<th>Very powerful</th>
<th>NA</th>
</tr>
</thead>
</table>

**P5a] I say cruel things that cause this person to worry**

<table>
<thead>
<tr>
<th>Never</th>
<th>1-2 times/year</th>
<th>1-2 times/month</th>
<th>1-2 times/week</th>
<th>Daily</th>
</tr>
</thead>
</table>

**P6**] I feel powerful when I say things that cause this person deep emotional pain.

<table>
<thead>
<tr>
<th>Not at all powerful</th>
<th>Somewhat powerful</th>
<th>Moderately powerful</th>
<th>Very powerful</th>
<th>NA</th>
</tr>
</thead>
</table>

**P6a] I say things that cause this person deep emotional pain**

<table>
<thead>
<tr>
<th>Never</th>
<th>1-2 times/year</th>
<th>1-2 times/month</th>
<th>1-2 times/week</th>
<th>Daily</th>
</tr>
</thead>
</table>

**P7**] I feel powerful when I am taller or stronger than this person.

<table>
<thead>
<tr>
<th>Not at all powerful</th>
<th>Somewhat powerful</th>
<th>Moderately powerful</th>
<th>Very powerful</th>
<th>NA</th>
</tr>
</thead>
</table>

**P7a] I am taller or stronger than this person**

<table>
<thead>
<tr>
<th>Never</th>
<th>1-2 times/year</th>
<th>1-2 times/month</th>
<th>1-2 times/week</th>
<th>Daily</th>
</tr>
</thead>
</table>
P8] I feel powerful when I steal from or break into this person’s backpack, desk, or locker.

Not at all powerful Somewhat powerful Moderately powerful Very powerful NA

P8a] I steal from or break into this person’s backpack, desk, or locker

Never 1-2 times/year 1-2 times/month 1-2 times/week Daily

P9] I feel powerful when I break or damage this person’s personal property.

Not at all powerful Somewhat powerful Moderately powerful Very powerful NA

P9a] I break or damage this person’s personal property

Never 1-2 times/year 1-2 times/month 1-2 times/week Daily

P10] I feel powerful when I start physical fights with this person.

Not at all powerful Somewhat powerful Moderately powerful Very powerful NA

P10a] I start physical fights with this person

Never 1-2 times/year 1-2 times/month 1-2 times/week Daily
P11] I feel powerful when I cause this person physical pain.

Not at all powerful  Somewhat powerful  Moderately powerful  Very powerful  NA

P11a] I cause this person physical pain

   Never  1-2 times/year  1-2 times/month  1-2 times/week  Daily

P12] I feel powerful when I can get other kids to exclude this person from an activity.

Not at all powerful  Somewhat powerful  Moderately powerful  Very powerful  NA

P12a] I get other kids to exclude this person from an activity

   Never  1-2 times/year  1-2 times/month  1-2 times/week  Daily

P13] I feel powerful when I can get other kids to exclude this person from our group.

Not at all powerful  Somewhat powerful  Moderately powerful  Very powerful  NA

P13a] I get other kids to exclude this person from our group

   Never  1-2 times/year  1-2 times/month  1-2 times/week  Daily
P14] I feel more powerful over this person when I’m with my best friend.

Not at all powerful  Somewhat powerful  Moderately powerful  Very powerful  NA

P14a] My best friend is with me when I’m being bullied

Never  1-2 times/year  1-2 times/month  1-2 times/week  Daily

P15] I feel more powerful over this person when I’m with my teacher(s).

Not at all powerful  Somewhat powerful  Moderately powerful  Very powerful  NA

P15a] My teacher(s) are with me when I’m being bullied

Never  1-2 times/year  1-2 times/month  1-2 times/week  Daily

P16] I feel more powerful over this person when I make all the decisions in the relationship.

Not at all powerful  Somewhat powerful  Moderately powerful  Very powerful  NA

P16a] I make all the decisions in the relationship

Never  1-2 times/year  1-2 times/month  1-2 times/week  Daily
**P17** I feel more powerful over this person when I win an argument.

<table>
<thead>
<tr>
<th>Not at all powerful</th>
<th>Somewhat powerful</th>
<th>Moderately powerful</th>
<th>Very powerful</th>
<th>NA</th>
</tr>
</thead>
</table>

**P17a** I win an argument

<table>
<thead>
<tr>
<th>Never</th>
<th>1-2 times/year</th>
<th>1-2 times/month</th>
<th>1-2 times/week</th>
<th>Daily</th>
</tr>
</thead>
</table>

**P18** I feel more powerful over this person when I’m with a group of my friends than when I’m alone.

<table>
<thead>
<tr>
<th>Not at all powerful</th>
<th>Somewhat powerful</th>
<th>Moderately powerful</th>
<th>Very powerful</th>
<th>NA</th>
</tr>
</thead>
</table>

**P18a** I’m with a group of my friends when this person(s) is bullying me

<table>
<thead>
<tr>
<th>Never</th>
<th>1-2 times/year</th>
<th>1-2 times/month</th>
<th>1-2 times/week</th>
<th>Daily</th>
</tr>
</thead>
</table>

**P19** I feel powerful when people like me.

<table>
<thead>
<tr>
<th>Not at all powerful</th>
<th>Somewhat powerful</th>
<th>Moderately powerful</th>
<th>Very powerful</th>
<th>NA</th>
</tr>
</thead>
</table>

**P19a** This happens:

<table>
<thead>
<tr>
<th>Never</th>
<th>1-2 times/year</th>
<th>1-2 times/month</th>
<th>1-2 times/week</th>
<th>Daily</th>
</tr>
</thead>
</table>
**P20**] I feel powerful when people agree with me.

<table>
<thead>
<tr>
<th>Not at all powerful</th>
<th>Somewhat powerful</th>
<th>Moderately powerful</th>
<th>Very powerful</th>
<th>NA</th>
</tr>
</thead>
</table>

**P20a] People agree with me**

<table>
<thead>
<tr>
<th>Never</th>
<th>1-2 times/year</th>
<th>1-2 times/month</th>
<th>1-2 times/week</th>
<th>Daily</th>
</tr>
</thead>
</table>

**P21**] I feel powerful when people are afraid of me.

<table>
<thead>
<tr>
<th>Not at all powerful</th>
<th>Somewhat powerful</th>
<th>Moderately powerful</th>
<th>Very powerful</th>
<th>NA</th>
</tr>
</thead>
</table>

**P21a] People are afraid of me**

<table>
<thead>
<tr>
<th>Never</th>
<th>1-2 times/year</th>
<th>1-2 times/month</th>
<th>1-2 times/week</th>
<th>Daily</th>
</tr>
</thead>
</table>

**P22**] I feel more powerful at home than at school.

<table>
<thead>
<tr>
<th>Not at all powerful</th>
<th>Somewhat powerful</th>
<th>Moderately powerful</th>
<th>Very powerful</th>
<th>NA</th>
</tr>
</thead>
</table>

**P22a] I’m more powerful at home than at school**

<table>
<thead>
<tr>
<th>Never</th>
<th>1-2 times/year</th>
<th>1-2 times/month</th>
<th>1-2 times/week</th>
<th>Daily</th>
</tr>
</thead>
</table>
P23] I feel powerful when I feel safe.

Not at all powerful  Somewhat powerful  Moderately powerful  Very powerful  NA

P23a] I feel safe

Never  1-2 times/year  1-2 times/month  1-2 times/week  Daily

D4] Another student said or did mean, hurtful things to me repeatedly and over time, to the point where I could not defend myself.

☐ No
☐ Yes, they were
☐ Male
☐ Female
☐ Both

D5] In your lifetime, how many times has another student said or done mean, hurtful things to you repeatedly and over time, to the point you could not defend yourself?

0  1-3  4-6  7-9  10+

D6] When someone has said or done mean, hurtful things to me, repeatedly and over time, to the point where I could not defend myself, they’ve done it (check all that apply)

☐ in cyberspace
☐ in person, face-to-face
☐ to other students when I wasn’t there
Think about a situation in which someone has said or done mean, hurtful things to you to the point where you could not defend yourself. Circle the answer that describes the extent to which you agree with the following statements.

P24] When this person forces me to do something I don’t want to do, I feel

| Totally powerless | Somewhat powerless | Moderately powerless | Very powerless | NA |

P24a] How often does this person(s) force you to do something you don’t want to do?

| Never | 1-2 times/year | 1-2 times/month | 1-2 times/week | Daily |

P25] When this person shoots down my ideas, I feel

| Totally powerless | Somewhat powerless | Moderately powerless | Very powerless | NA |

P25a] How often does this person(s) shoot down your ideas?

| Never | 1-2 times/year | 1-2 times/month | 1-2 times/week | Daily |

P26] When this person tells me I’m stupid, I feel

| Totally powerless | Somewhat powerless | Moderately powerless | Very powerless | NA |

P26a] How often does this person tell you you’re stupid?

| Never | 1-2 times/year | 1-2 times/month | 1-2 times/week | Daily |
**P27** | When this person tells me I’m not allowed to disagree with them, I feel

| Totally powerless | Somewhat powerless | Moderately powerless | Very powerless | NA |

**P27a** | How often does this person tell you you’re not allowed to disagree with them?

| Never | 1-2 times/year | 1-2 times/month | 1-2 times/week | Daily |

**P28** | When this person tells me I’m not allowed to go anywhere by myself, I feel

| Totally powerless | Somewhat powerless | Moderately powerless | Very powerless | NA |

**P28a** | How often does this person(s) tell you you’re not allowed to go anywhere by yourself?

| Never | 1-2 times/year | 1-2 times/month | 1-2 times/week | Daily |

**P29** | When this person tells me I’m not allowed to go anywhere without them, I feel

| Totally powerless | Somewhat powerless | Moderately powerless | Very powerless | NA |

**P29a** | How often does this person tell you you’re not allowed to go anywhere without them?

| Never | 1-2 times/year | 1-2 times/month | 1-2 times/week | Daily |

**P30** | When this person embarrasses me in front of others, I feel

| Totally powerless | Somewhat powerless | Moderately powerless | Very powerless | NA |

**P30a** | How often does this person(s) embarrass you in front of others?

| Never | 1-2 times/year | 1-2 times/month | 1-2 times/week | Daily |
P31] When this person criticizes what I say, I feel

<table>
<thead>
<tr>
<th></th>
<th>Totally powerless</th>
<th>Somewhat powerless</th>
<th>Moderately powerless</th>
<th>Very powerless</th>
<th>NA</th>
</tr>
</thead>
</table>

P31a] How often does this person criticize what you say?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Never</th>
<th>1-2 times/year</th>
<th>1-2 times/month</th>
<th>1-2 times/week</th>
<th>Daily</th>
</tr>
</thead>
</table>

P32] When I feel trapped in a situation, I feel

<table>
<thead>
<tr>
<th></th>
<th>Totally powerless</th>
<th>Somewhat powerless</th>
<th>Moderately powerless</th>
<th>Very powerless</th>
<th>NA</th>
</tr>
</thead>
</table>

P32a] How often do you feel trapped in a situation?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Never</th>
<th>1-2 times/year</th>
<th>1-2 times/month</th>
<th>1-2 times/week</th>
<th>Daily</th>
</tr>
</thead>
</table>

P33] When nothing I say or do pleases the this person, I feel

<table>
<thead>
<tr>
<th></th>
<th>Totally powerless</th>
<th>Somewhat powerless</th>
<th>Moderately powerless</th>
<th>Very powerless</th>
<th>NA</th>
</tr>
</thead>
</table>

P33a] How often are you in a situation where nothing you say or do pleases this person?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Never</th>
<th>1-2 times/year</th>
<th>1-2 times/month</th>
<th>1-2 times/week</th>
<th>Daily</th>
</tr>
</thead>
</table>
P34] When someone writes something negative about me on facebook/myspace, I feel

| Totally powerless | Somewhat powerless | Moderately powerless | Very powerless | NA |

P34a] How often does someone write something negative about you on facebook or myspace?

- Never
- 1-2 times/year
- 1-2 times/month
- 1-2 times/week
- Daily

P35] When someone writes something positive about me on facebook/myspace, I feel

| Totally powerless | Somewhat powerless | Moderately powerless | Very powerless | NA |

P35a] How often does someone write something positive about you on facebook or myspace?

- Never
- 1-2 times/year
- 1-2 times/month
- 1-2 times/week
- Daily

P36] When I feel powerless with some of my classmates at school, I feel

| Totally powerless | Somewhat powerless | Moderately powerless | Very powerless | NA |

P36a] How often do you feel powerless with your classmates at school?

- Never
- 1-2 times/year
- 1-2 times/month
- 1-2 times/week
- Daily
P37] When I feel powerless within my family, I feel

| Totally powerless | Somewhat powerless | Moderately powerless | Very powerless | NA |

P37a] How often do you feel powerless within your family?

- Never
- 1-2 times/year
- 1-2 times/month
- 1-2 times/week
- Daily

P37b] With whom do you feel powerless in your family? (check all that apply)

- [ ] mom
- [ ] dad
- [ ] older brother, step-brother, half-brother
- [ ] younger brother, step-brother, half-brother
- [ ] older sister, step-sister, half-sister
- [ ] younger sister, step-sister, half-sister

P38] When my teacher(s) doesn’t respect me or listen to what I say, I feel

| Totally powerless | Somewhat powerless | Moderately powerless | Very powerless | NA |

P38a] How often does your teacher(s) not respect you or listen to what you say?

- Never
- 1-2 times/year
- 1-2 times/month
- 1-2 times/week
- Daily
P39] When I feel powerless in situations, I feel

Totally powerless    Somewhat powerless    Moderately powerless    Very powerless    NA

P39a] How often do you feel powerless in situations?

Never    1-2 times/year    1-2 times/month    1-2 times/week    Daily

P40] When people think I’m wrong, I feel

Totally powerless    Somewhat powerless    Moderately powerless    Very powerless    NA

P40a] How often do people think you’re wrong?

Never    1-2 times/year    1-2 times/month    1-2 times/week    Daily

P41] When other people don’t believe what I say, I feel

Totally powerless    Somewhat powerless    Moderately powerless    Very powerless    NA

P41a] How often do other people not believe what you say?

Never    1-2 times/year    1-2 times/month    1-2 times/week    Daily
P42] When no one believes in me, I feel

| Totally powerless | Somewhat powerless | Moderately powerless | Very powerless | NA |

P42a] How often does it feel like no one believes in you?

| Never | 1-2 times/year | 1-2 times/month | 1-2 times/week | Daily |

Background

D7] My GENDER is

- Female
- Male

1 | 2

D8] My AGE is

13 | 14 | 15 | 16 | 17 | 18

D9] My ETHNICITY is (check all that apply)

1. American Indian/Alaska Native
2. Asian/Pacific Islander
3. African-American (not Hispanic)
4. Hispanic
5. White (not Hispanic)
6. Other (please specify) __________________________________________
Please answer the following referring to the home in which you live most of the time.

**Siblings:** Circle the number of

- D10] step-brothers 0 1 2 3 4 or more
- D11] step-sisters 0 1 2 3 4 or more
- D12] half-brothers 0 1 2 3 4 or more
- D13] half-sisters 0 1 2 3 4 or more
- D14] biological brothers 0 1 2 3 4 or more
- D15] biological sisters 0 1 2 3 4 or more

**Who lives with you?** Check all that apply.

- D16] □ Mom    □ Dad    □ Stepmom    □ Stepdad
Appendix G  
Bully/victim power Inventory- Pilot Study

<table>
<thead>
<tr>
<th>Instructions and Definitions</th>
</tr>
</thead>
</table>

Thank you for your help in providing information for this project. It is greatly appreciated. It will be used to help people who are bullying or being bullied.

Bullying is when one student intimidates or alienates another student(s), repeatedly and over time, and the student(s) being bullied finds it difficult to defend him or herself.

A student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more students. The victim of the negative actions finds it difficult to defend him or herself. But it is **not bullying** when a student teases in a playful, friendly way. Also, it is not bullying when two students argue or fight and they are about equal in strength or power.

Cyberbullying is harassing, impersonating, insulting, threatening, and/or stalking victims in email, text messages, chat rooms, blogs, on Facebook/MySpace, etc.
Bullying

D1] I have said or done mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend him/herself.

- No

   Yes, they were
   - Male
   - Female
   - Both

Bullying

D2] In the past year, how many times have you said or done mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend him/herself?

- 0
- 1-3
- 4-6
- 7-9
- 10+

D3] When I’ve said or done mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend him/herself, I’ve done it (check all that apply)

- in cyberspace
- in person, face-to-face
- when the student is not around

Feeling Powerful

Think about a situation in which you have said or done mean, hurtful things to another student(s). Choose the answer that describes the extent to which you agree with the following statements.
P1] I feel powerful in a relationship when I lie to the other person.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P1a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P2] I feel powerful when I call this person names, tease, or say mean things to this person.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P2a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P3] I feel powerful when I sound sarcastic, angry, or I shout at this person.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P3a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P4] I feel powerful when I threaten to hurt this person.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P4a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P5] I feel powerful when I say cruel things that cause this person to worry.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P5a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P6] I feel powerful when I say things that cause this person deep emotional pain.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P6a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P7] I feel powerful when I am taller or stronger than this person.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P7a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P8] I feel powerful when I steal from or break into this person’s backpack, desk, or locker.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P8a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P9] I feel powerful when I break or damage this person’s personal property.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P9a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P10] I feel powerful when I start physical fights with this person.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P10a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P11] I feel powerful when I cause this person physical pain.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P11a] *This happens*

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P12] I feel powerful when I can get other kids to exclude this person from an activity.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P12a] *This happens*

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P13] I feel powerful when I can get other kids to exclude this person from our group.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P13a] *This happens*

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P14] I feel powerful over this person when I’m with my best friend.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P14a] *This happens*

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P15] I feel powerful over this person when I’m with my teacher(s).

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P15a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P16] I feel powerful over this person when I make all the decisions in the relationship.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P16a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P17] I feel powerful over this person when I win an argument.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P17a] *This happens*

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P18] I feel more powerful over this person when I’m with a group of my friends than when I’m alone.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P18a] *This happens*

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

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P19] I feel powerful when people like me.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P19a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P20] I feel powerful when people agree with me.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P20a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P21] I feel powerful when other people laugh at me.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P21a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P22] I feel powerful when people are afraid of me.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P22a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P23] I feel more powerful at home than at school.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P23a] *This happens*

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P24] I feel powerful when I feel safe.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P24a] *This happens*

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
Bullied by Other Student(s)

D4] Another student said or did mean, hurtful things to me to the point where I could not defend myself.
☐ No
☐ Yes, they were
☐ Male
☐ Female
☐ Both

D5] In the past year, how many times has another student said or done mean, hurtful things to you repeatedly and over time, to the point you could not defend yourself?

☐ 0
☐ 1-3
☐ 4-6
☐ 7-9
☐ 10+

D6] When someone has said or done mean, hurtful things to me, repeatedly and over time, to the point where I could not defend myself, they’ve done it (check all that apply)
☐ in cyberspace
☐ in person, face-to-face
☐ when the student is not around

******************************************************************************

Feeling Powerless
Think about a situation in which someone has said or done mean, hurtful things to you to the point where you could not defend yourself. Choose the answer that describes the extent to which you agree with the following statements.
P25] When this person forces me to do something I don’t want to do, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P25a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P26] When this person shoots down my ideas, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P26a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P27] When this person tells me I’m stupid, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P27a] This happens?

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P28] When this person tells me I’m not allowed to disagree with them, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P28a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P29] When this person tells me I’m not allowed to go anywhere by myself, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P29a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P30] When this person tells me I’m not allowed to go anywhere without them, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P30a] How often does this person tell you you’re not allowed to go anywhere without them?

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P31] When this person embarrasses me in front of others, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P31a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P32] When other people laugh at me, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P32a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P33] When this person criticizes what I say, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P33a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P34] When I feel trapped in a situation, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P34a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P35] When nothing I say or do pleases this person, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P35a] *This happens*

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P36] When someone writes something negative about me on facebook/myspace, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P36a] *This happens*

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P37] When someone writes something positive about me on facebook/myspace, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P37a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P38] When I feel powerless with some of my classmates at school, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P38a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P39] When I feel powerless within my family, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P39a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P40] When my teacher(s) doesn’t respect me or listen to what I say, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P40a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
**P41] When I feel powerless in situations, I feel**

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

**P41a] This happens**

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

**P42] When people think I’m wrong, I feel**

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

**P42a] This happens**

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P43] When other people don’t believe what I say, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P43a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P44] When no one believes in me, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P44a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

*******************************************************************************
About being bullied by other students

O4. How often have you been bullied at school in the past couple of months?
   o I have not been bullied at school in the past couple of months
   o It has only happened once or twice.
   o 2 or 3 times a month
   o About once a week
   o Several times a week

Have you been bullied at school in the past couple of months in one or more of the following ways (questions O5-13)?

O5. I was called mean names, was made fun of, or teased in a hurtful way.
   o It has not happened to me in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O6. Other students left me out of things on purpose, excluded me from their group of friends, or completely ignored me.
   o It has not happened to me in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O7. I was hit, kicked, pushed, shoved around, or locked indoors.
   o It has not happened to me in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O8. Other students told lies or spread false rumors about me and tried to make others dislike me.
   o It has not happened to me in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week
O9. I had money or other things taken away from me or damaged.
   o It has not happened to me in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O10. I was threatened or forced to do things I did not want to do.
   o It has not happened to me in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O11. I was bullied with mean names or comments about my race or color.
   o It has not happened to me in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O12. I was bullied with mean names, comments, or gestures with a sexual meaning.
   o It has not happened to me in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O12a. I was bullied with mean or hurtful messages, calls or pictures, or in other ways on
   my cell phone or over the Internet (computer). (Please remember that it is not bullying
   when it is done in a friendly and playful way.)
   o It has not happened to me in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O12b. If you were bullied on your cell phone or over the Internet, how was it done?
   o Only on the cell phone
   o Only over the Internet
   o In both ways
O13. I was bullied in another way.
   o It has not happened to me in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O14. In which class(es) is the student or students who bully you?
   o I have not been bullied at school in the past couple of months
   o In my class
   o In a different class but the same grade (year)
   o In a higher grade(s)
   o In a lower grade(s)
   o In both higher and lower grades

O15. Have you been bullied by boys or girls?
   o I have not been bullied at school in the past couple of months
   o Mainly by 1 girl
   o By several girls
   o Mainly by 1 boy
   o By several boys
   o By both boys and girls

O16. By how many students have you usually been bullied?
   o I have not been bullied at school in the past couple of months
   o Mainly by 1 student
   o By a group of 2-3 students
   o By a group of 4-9 students
   o By a group of 10 or more students
   o By several different students or groups of students

O17. How long has the bullying lasted?
   o I have not been bullied at school in the past couple of months
   o It lasted 1 or 2 weeks
   o It lasted about a month
   o It lasted about 6 months
   o It lasted about a year
   o It lasted for several years
**O18. Where** have you been bullied?

- I have not been bullied at school in the past couple of months
- I have been **bullied in one or more of the following places** in the past couple of months

*Please fill in the circles for all the places where you have been bullied:*
- O18a. On the playground/athletic field (during recess or break times)
- O18b. In the hallways/stairwells
- O18c. In class (when the teacher was in the room)
- O18d. In class (when the teacher was **not** in the room)
- O18e. In the bathroom
- O18f. In gym class or the gym locker room/shower
- O18g. In the lunchroom
- O18h. On the way to and from school
- O18i. At the school bus stop
- O18j. On the school bus
- O18k. Somewhere else at school

**O19. Have you **told anyone** that you have been bullied in the past couple of months?**

- I have not been bullied at school in the past couple of months
- I have been bullied, **but I have not told anyone**
- I have been bullied, and **I have told somebody about it**

*Please fill in the circles for all the people you have told:*

- O19a. Your class or homeroom teacher
- O19b. Another adult at school
- O19c. Your parent(s)/guardian(s)
- O19d. Your brother(s) or sister(s)
- O19e. Your friend(s)
- O19f. Somebody else
O20. How often do the teachers or other adults at school try to put a stop to it when a student is being bullied at school?
   - Almost never
   - Once in a while
   - Sometimes
   - Often
   - Almost always

O21. How often do other students try to put a stop to it when a student is being bullied at school?
   - Almost never
   - Once in a while
   - Sometimes
   - Often
   - Almost always

O22. Has any adult at home contacted the school to try to stop your being bullied at school in the past couple of months?
   - I have not been bullied at school in the past couple of months
   - No, they have not contacted the school
   - Yes, they have contacted the school once
   - Yes, they have contacted the school several times

O23. When you see a student your age being bullied at school, what do you feel or think?
   - That is probably what he or she deserves
   - I do not feel much
   - I feel a bit sorry for him or her
   - I feel sorry for him or her and want to help him or her
About bullying other students

O24. How often have you taken part in bullying another student(s) at school in the past couple of months?
   o I have not bullied another student(s) at school in the past couple of months
   o It has only happened once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

Have you bullied another student(s) at school in the past couple of months in one or more of the following ways (questions O25-33)?

O25. I called another student(s) mean names and made fun of or teased him or her in a hurtful way.
   o It has not happened in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O26. I kept him or her out of things on purpose, excluded him or her from my group of friends, or completely ignored him or her.
   o It has not happened in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O27. I hit, kicked, pushed, and shoved him or her around, or locked him or her indoors.
   o It has not happened in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week
O28. I spread false rumors about him or her and tried to make others dislike him or her.
  o It has not happened in the past couple of months
  o Only once or twice
  o 2 or 3 times a month
  o About once a week
  o Several times a week

O29. I took money or other things from him or her or damaged his or her belongings.
  o It has not happened in the past couple of months
  o Only once or twice
  o 2 or 3 times a month
  o About once a week
  o Several times a week

O30. I threatened or forced him or her to do things he or she did not want to do.
  o It has not happened in the past couple of months
  o Only once or twice
  o 2 or 3 times a month
  o About once a week
  o Several times a week

O31. I bullied him or her with mean names or comments about his or her race or color.
  o It has not happened in the past couple of months
  o Only once or twice
  o 2 or 3 times a month
  o About once a week
  o Several times a week

O32. I bullied him or her with mean names, comments, or gestures with a sexual meaning.
  o It has not happened in the past couple of months
  o Only once or twice
  o 2 or 3 times a month
  o About once a week
  o Several times a week
O32a. I bullied him or her with mean or hurtful messages, calls or pictures, or in other ways on my cell phone or over the Internet (computer).
- It has not happened in the past couple of months
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

O32b. If you bullied another student(s) on your cell phone or over the Internet (computer), how was it done?
- Only on the cell phone
- Only over the Internet
- In both ways

O33. I bullied him or her in another way.
- It has not happened in the past couple of months
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

O34. Has your class or homeroom teacher or any other teacher talked with you about your bullying another student(s) at school in the past couple of months?
- I have not bullied another student(s) at school in the past couple of months
- No, they have not talked with me about it
- Yes, they have talked with me about it once
- Yes, they have talked with me about it several times

O35. Has any adult at home talked with you about your bullying another student(s) at school in the past couple of months?
- I have not bullied another student(s) at school in the past couple of months
- No, they have not talked with me about it
- Yes, they have talked with me about it once
- Yes, they have talked with me about it several times
O36. Do you think you could join in bullying a student whom you do not like?
  o Yes
  o Yes, maybe
  o I do not know
  o No, I do not think so
  o No
  o Definitely no

O37. How do you usually react if you see or learn that a student your age is being bullied by another student(s)?
  o I have never noticed that students my age have been bullied
  o I take part in the bullying
  o I do not do anything, but I think the bullying is okay
  o I just watch what goes on
  o I do not do anything, but I think I ought to help the bullied student
  o I try to help the bullied student in one way or another

O38. How often are you afraid of being bullied by other students in your school?
  o Never
  o Seldom
  o Sometimes
  o Fairly often
  o Often
  o Very often

O39. Overall, how much do you think your class or homeroom teacher has done to cut down on bullying in your classroom in the past couple of months?
  o little or nothing
  o Fairly little
  o Somewhat
  o A good deal
  o Much
SP1. Who bullied you most often (check all that apply)

- girls younger than me
- girls older than me
- girls same grade as me
- boys younger than me
- boys older than me
- boys same grade as me

SP2. The person who bullied you the most often is (check all that apply):

- popular
- smart
- has lots of friends
- powerful
- attractive
- an adult
- not popular
- not smart
- does not have many friends
- not powerful
- not attractive
- someone I didn't know

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**Students’ Life Satisfaction Scale**  
*(Huebner, 1991)*

**Directions:** We would like to know what thoughts about life you have had during the past several weeks. Think about how you spend each day and night and then think about how your life has been during most of this time. Here are some questions that ask you to indicate your satisfaction with your overall life. Circle the words next to each statement that indicate the extent to which you agree or disagree with each statement. For example, if you Strongly Agree with the statement “Life is great,” you would circle those words on the following sample item:

Life is great.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Mildly Disagree</th>
<th>Mildly Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

It is important to know what you REALLY think, so please answer the questions the way you really think, not how you should think. This is NOT a test. There are NO right or wrong answers.

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>1. My life is going well.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>Moderately Disagree</td>
<td>Mildly Disagree</td>
<td>Mildly Mildly</td>
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<td>2. My life is just right.</td>
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<td>3. I would like to change many things in my life.</td>
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<td>4. I wish I had a different kind of life.</td>
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<td>5. I have a good life.</td>
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6. I have what I want in life.

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7. My life is better than most kids.

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<th>Moderately Agree</th>
<th>Strongly Agree</th>
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**Background**

D7) My GENDER is  
1. Female  
2. Male

D8) My AGE is  
13  
14  
15  
16  
17  
18

D9) My ETHNICITY is (check all that apply)

- American Indian/Alaska Native
- Asian/Pacific Islander
- African-American (not Hispanic)
- Hispanic
- White (not Hispanic)
- Other (please specify)
Appendix H
Bully/victim power Inventory- Field Administration Study

Instructions and Definitions

Thank you for your help in providing information for this project. It is greatly appreciated. It will be used to help people who are bullying or being bullied.

Bullying is when one student intimidates or alienates another student(s), repeatedly and over time, and the student(s) being bullied finds it difficult to defend him or herself.

A student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more students. The victim of the negative actions finds it difficult to defend him or herself. But it is not bullying when a student teases in a playful, friendly way. Also, it is not bullying when two students argue or fight and they are about equal in strength or power.

Cyberbullying is harassing, impersonating, insulting, threatening, and/or stalking victims in email, text messages, chat rooms, blogs, on Facebook/MySpace, etc.

Power between two people is the ability to control one’s own outcomes and also the outcomes of the other person; the things they think, do, or say. Please answer the following questions about the power in your relationship with this person who bullied you.

Bullying

D1] I have said or done mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend him/herself.

- No

Yes, they were

- Male
- Female
- Both
Bullying

D2] In the past year, how many times have you said or done mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend him/herself?

- 0
- 1-3
- 4-6
- 7-9
- 10+

D3] When I’ve said or done mean, hurtful things to another student(s) repeatedly and over time, to the point where the other student could not defend him/herself, I’ve done it (check all that apply)

- in cyberspace
- in person, face-to-face
- when the student is not around
Feeling Powerful

Think about a situation in which you have said or done mean, hurtful things to another student(s). Choose the answer that describes the extent to which you agree with the following statements.

P1] I feel powerful in a relationship when I lie to the other person.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P1a] This happens
- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P2] I feel powerful when I call this person names, tease, or say mean things to this person.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P2a] This happens
- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P3] I feel powerful when I sound sarcastic, angry, or I shout at this person.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P3a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P4] I feel powerful when I say cruel things that cause this person to worry.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P4a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P5] I feel powerful when I say things that cause this person deep emotional pain.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P5a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P6] I feel powerful when I am taller or stronger than this person.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P6a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P7] I feel powerful when I steal from or break into this person’s backpack, desk, or locker.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P7a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P8] I feel powerful when I break or damage this person’s personal property.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P8a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P9] I feel powerful when I cause this person physical pain.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P9a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P10] I feel powerful when I can get other kids to exclude this person from an activity.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P10a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P11] I feel powerful when I can get other kids to exclude this person from our group.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P11a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P12] I feel powerful over this person when I’m with my best friend.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P12a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P13] I feel powerful over this person when I win an argument.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P13a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P14] I feel more powerful over this person when I’m with a group of my friends than when I’m alone.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P14a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P15] I feel powerful when people are afraid of me.

- Not at all powerful
- Slightly powerful
- Moderately powerful
- Very powerful
- NA (Skip to next question)

P15a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
Bullied by Other Student(s)

D4] Another student said or did mean, hurtful things to me to the point where I could not defend myself.

☐ No

Yes, they were

☐ Male

☐ Female

☐ Both

D5] In the past year, how many times has another student said or done mean, hurtful things to you repeatedly and over time, to the point you could not defend yourself?

☐ 0

☐ 1-3

☐ 4-6

☐ 7-9

☐ 10+

D6] When someone has said or done mean, hurtful things to me, repeatedly and over time, to the point where I could not defend myself, they’ve done it (check all that apply)

☐ in cyberspace

☐ in person, face-to-face

☐ when the student is not around
Feeling Powerless

Think about a situation in which someone has said or done mean, hurtful things to you to the point where you could not defend yourself. Choose the answer that describes the extent to which you agree with the following statements.

P16] When this person forces me to do something I don’t want to do, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P16a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P17] When this person shoots down my ideas, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P17a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P18] When this person tells me I’m stupid, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P18a] This happens?

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P19] When this person tells me I’m not allowed to disagree with them, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P19a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P20] When this person tells me I’m not allowed to go anywhere by myself, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P20a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P21] When this person tells me I’m not allowed to go anywhere without them, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P22a] How often does this person tell you you’re not allowed to go anywhere without them?

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P23] When this person embarrasses me in front of others, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P23a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P24] When other people laugh at me, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P24a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P25] When this person criticizes what I say, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P25a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P26] When I feel trapped in a situation, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P25a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P26] When someone writes something negative about me on facebook/myspace, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P26a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P27] When I feel powerless with some of my classmates at school, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P27a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P28] When I feel powerless within my family, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P28a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

P29] When my teacher(s) doesn’t respect me or listen to what I say, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P29a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week
P30] When other people don’t believe what I say, I feel

- Totally powerless
- Moderately powerless
- Slightly powerless
- Not at all powerless
- NA (Skip to next question)

P30a] This happens

- Not in the last 2 months
- 1-2 times in the last 2 months
- 2-3 times a month
- Once a week
- Several times a week

*********************************************************************
**About being bullied by other students**

**O4.** How often have you been bullied at school in the past couple of months?
- I have not been bullied at school in the past couple of months
- It has only happened once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

**Have you been bullied at school in the past couple of months in one or more of the following ways (questions O5-13)?**

**O5.** I was called mean names, was made fun of, or teased in a hurtful way.
- It has not happened to me in the past couple of months
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

**O6.** Other students left me out of things on purpose, excluded me from their group of friends, or completely ignored me.
- It has not happened to me in the past couple of months
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

**O7.** I was hit, kicked, pushed, shoved around, or locked indoors.
- It has not happened to me in the past couple of months
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

**O8.** Other students told lies or spread false rumors about me and tried to make others dislike me.
- It has not happened to me in the past couple of months
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week
O9. I had money or other things taken away from me or damaged.
   o It has not happened to me in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O10. I was threatened or forced to do things I did not want to do.
   o It has not happened to me in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O11. I was bullied with mean names or comments about my race or color.
   o It has not happened to me in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O12. I was bullied with mean names, comments, or gestures with a sexual meaning.
   o It has not happened to me in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O12a. I was bullied with mean or hurtful messages, calls or pictures, or in other ways on my
cell phone or over the Internet (computer). (Please remember that it is not bullying when it is done in a friendly and playful way.)
   o It has not happened to me in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O12b. If you were bullied on your cell phone or over the Internet, how was it done?
   o Only on the cell phone
   o Only over the Internet
   o In both ways
O13. I was bullied in another way.
   o It has not happened to me in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O14. In which class(es) is the student or students who bully you?
   o I have not been bullied at school in the past couple of months
   o In my class
   o In a different class but the same grade (year)
   o In a higher grade(s)
   o In a lower grade(s)
   o In both higher and lower grades

O15. Have you been bullied by boys or girls?
   o I have not been bullied at school in the past couple of months
   o Mainly by 1 girl
   o By several girls
   o Mainly by 1 boy
   o By several boys
   o By both boys and girls

O16. By how many students have you usually been bullied?
   o I have not been bullied at school in the past couple of months
   o Mainly by 1 student
   o By a group of 2-3 students
   o By a group of 4-9 students
   o By a group of 10 or more students
   o By several different students or groups of students

O17. How long has the bullying lasted?
   o I have not been bullied at school in the past couple of months
   o It lasted 1 or 2 weeks
   o It lasted about a month
   o It lasted about 6 months
   o It lasted about a year
   o It lasted for several years
O18. Where have you been bullied?
   o I have not been bullied at school in the past couple of months
   o I have been bullied in one or more of the following places in the past couple of months

*Please fill in the circles for all the places where you have been bullied:*
   o O18a. On the playground/athletic field (during recess or break times)
   o O18b. In the hallways/stairwells
   o O18c. In class (when the teacher was in the room)
   o O18d. In class (when the teacher was not in the room)
   o O18e. In the bathroom
   o O18f. In gym class or the gym locker room/shower
   o O18g. In the lunchroom
   o O18h. On the way to and from school
   o O18i. At the school bus stop
   o O18j. On the school bus
   o O18k. Somewhere else at school

O19. Have you told anyone that you have been bullied in the past couple of months?
   o I have not been bullied at school in the past couple of months
   o I have been bullied, but I have not told anyone
   o I have been bullied, and I have told somebody about it

*Please fill in the circles for all the people you have told:*
   o O19a. Your class or homeroom teacher
   o O19b. Another adult at school
   o O19c. Your parent(s)/guardian(s)
   o O19d. Your brother(s) or sister(s)
   o O19e. Your friend(s)
   o O19f. Somebody else
O20. How often do the teachers or other adults at school try to put a stop to it when a student is being bullied at school?

- Almost never
- Once in a while
- Sometimes
- Often
- Almost always

O21. How often do other students try to put a stop to it when a student is being bullied at school?

- Almost never
- Once in a while
- Sometimes
- Often
- Almost always

O22. Has any adult at home contacted the school to try to stop your being bullied at school in the past couple of months?

- I have not been bullied at school in the past couple of months
- No, they have not contacted the school
- Yes, they have contacted the school once
- Yes, they have contacted the school several times

O23. When you see a student your age being bullied at school, what do you feel or think?

- That is probably what he or she deserves
- I do not feel much
- I feel a bit sorry for him or her
- I feel sorry for him or her and want to help him or her
About bullying other students

O24. How often have you taken part in bullying another student(s) at school in the past couple of months?
   o I have not bullied another student(s) at school in the past couple of months
   o It has only happened once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

Have you bullied another student(s) at school in the past couple of months in one or more of the following ways (questions O25-33)?

O25. I called another student(s) mean names and made fun of or teased him or her in a hurtful way.
   o It has not happened in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O26. I kept him or her out of things on purpose, excluded him or her from my group of friends, or completely ignored him or her.
   o It has not happened in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O27. I hit, kicked, pushed, and shoved him or her around, or locked him or her indoors.
   o It has not happened in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

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O28. I spread false rumors about him or her and tried to make others dislike him or her.
   o It has not happened in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O29. I took money or other things from him or her or damaged his or her belongings.
   o It has not happened in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O30. I threatened or forced him or her to do things he or she did not want to do.
   o It has not happened in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O31. I bullied him or her with mean names or comments about his or her race or color.
   o It has not happened in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O32. I bullied him or her with mean names, comments, or gestures with a sexual meaning.
   o It has not happened in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week
O32a. I bullied him or her with mean or hurtful messages, calls or pictures, or in other ways on my cell phone or over the Internet (computer).
   o It has not happened in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O32b. If you bullied another student(s) on your cell phone or over the Internet (computer), how was it done?
   o Only on the cell phone
   o Only over the Internet
   o In both ways

O33. I bullied him or her in another way.
   o It has not happened in the past couple of months
   o Only once or twice
   o 2 or 3 times a month
   o About once a week
   o Several times a week

O34. Has your class or homeroom teacher or any other teacher talked with you about your bullying another student(s) at school in the past couple of months?
   o I have not bullied another student(s) at school in the past couple of months
   o No, they have not talked with me about it
   o Yes, they have talked with me about it once
   o Yes, they have talked with me about it several times

O35. Has any adult at home talked with you about your bullying another student(s) at school in the past couple of months?
   o I have not bullied another student(s) at school in the past couple of months
   o No, they have not talked with me about it
   o Yes, they have talked with me about it once
   o Yes, they have talked with me about it several times
O36. Do you think you could join in bullying a student whom you do not like?
   o Yes
   o Yes, maybe
   o I do not know
   o No, I do not think so
   o No
   o Definitely no

O37. How do you usually react if you see or learn that a student your age is being bullied
   by another student(s)?
   o I have never noticed that students my age have been bullied
   o I take part in the bullying
   o I do not do anything, but I think the bullying is okay
   o I just watch what goes on
   o I do not do anything, but I think I ought to help the bullied student
   o I try to help the bullied student in one way or another

O38. How often are you afraid of being bullied by other students in your school?
   o Never
   o Seldom
   o Sometimes
   o Fairly often
   o Often
   o Very often

O39. Overall, how much do you think your class or homeroom teacher has done to cut down
   on bullying in your classroom in the past couple of months?
   o little or nothing
   o Fairly little
   o Somewhat
   o A good deal
   o Much
SP1. Who bullied you most often (check all that apply)

- girls younger than me
- girls older than me
- girls same grade as me
- boys younger than me
- boys older than me
- boys same grade as me

SP2. The person who bullied you the most often is (check all that apply):

- popular
- smart
- has lots of friends
- powerful
- attractive
- an adult
- not popular
- not smart
- does not have many friends
- not powerful
- not attractive
- someone I didn’t know
Students’ Life Satisfaction Scale  
(Huebner, 1991)

**Directions:** We would like to know what thoughts about life you have had during the past several weeks. Think about how you spend each day and night and then think about how your life has been during most of this time. Here are some questions that ask you to indicate your satisfaction with your overall life. Circle the words next to each statement that indicate the extent to which you agree or disagree with each statement. For example, if you Strongly Agree with the statement “Life is great,” you would circle those words on the following sample item:

**Life is great.**

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Mildly Disagree</th>
<th>Mildly Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

It is important to know what you REALLY think, so please answer the questions the way you really think, not how you should think. This is NOT a test. There are NO right or wrong answers.

1. My life is going well.
   
2. My life is just right.
   
3. I would like to change many things in my life.
   
4. I wish I had a different kind of life.
   
5. I have a good life.
   
6. I have what I want in life.
   
7. My life is better than most kids.

Background

D7] My GENDER is   Female   Male
      1             2

D8] My AGE is   13   14   15   16   17   18

D9] My ETHNICITY is (check all that apply)

1. _____ American Indian/Alaska Native
2. _____ Asian/Pacific Islander
3. _____ African-American (not Hispanic)
4. _____ Hispanic
5. _____ White (not Hispanic)
6. _____ Other (please specify)__________________________________________