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THE EFFECTIVENESS OF AN ANTI-BULLYING INTERVENTION FOR  
ELEMENTARY SCHOOL STUDENTS

by

Joel Leonard Harris, Ed.M.

A Dissertation

Submitted in Partial Fulfillment of the

Requirements for the Degree of

Doctor of Philosophy

Major: Counseling Psychology

University of Memphis

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## **Abstract**

Harris, Joel Leonard. Ph.D. The University of Memphis. August 2015. The Effectiveness of an Anti-bullying Intervention for Elementary School Students. Major Professor: Chrisann Schiro-Geist, Ph.D.

Kids On the Block (KOB) is a program designed to increase knowledge and improve attitudes toward students with disabilities in schools. Research has not yet examined KOB's effects on students with regard to bullying. The present study examined the program's effectiveness at increasing knowledge and prosocial attitudes toward bullying by examining trends in student knowledge and attitudes prior to and after viewing the intervention. Social Cognitive Theory was used to provide a theoretical framework for approaching this question.

Fourth and fifth grade students completed measures of bullying knowledge, explicit attitudes toward bullying, and implicit attitudes toward bullying. The measures were administered at three time points using an interrupted time-series design with the intervention introduced after the first time point for one group of participants. Another group acted as a waitlisted control group and did not view the intervention until later. After viewing the show, students in the experimental group demonstrated small but statistically significant increases in knowledge as well as explicit prosocial attitudes toward bullying after viewing the show compared to prior to the show. At this time it is unclear whether these small observed changes are practically significant enough to warrant implementation of the program.

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## The Effectiveness of An Anti-bullying Intervention For Elementary School Students

Bullying is aggressive behavior marked by power imbalance occurring repetitively with intent to harm others. It is typically defined as repeated acts of aggression, coercion, or intimidation against a victim who is at a disadvantage to the bully in regard to physical size, psychological/social power, or other elements that contribute to a power imbalance (Carney & Merrell, 2001; Olweus, 1993; Smith & Ananiadou, 2003).

The key features of bullying include the intent to harm, the repetition of the harmful acts, and the power differential between a bully and a victim (Merrell, Gueldner, Ross, & Isava, 2008). Bullying can be physical (e.g., fighting, pushing) or relational in nature (e.g., social exclusion, spreading rumors) (Smith, Morita, Junger-Tas, Olweus, Catalano, & Slee, 1999), and may be the most prevalent type of school violence (Batsche, 1997; Swearer & Cary, 2008). The Center for Disease Control's Youth Risk Behavior Survey indicates that 30% of students in grades six to ten have been involved in a bullying situation as either the bully or victim of bullying (Whitted & Dupper, 2005), while in some studies up to 75% of children reported being bullied at least once during their time in school (Hoover, Oliver, & Hazler, 1992; Swearer & Cary, 2008). Despite the fact that about 88% of all bullying incidents are observed by others (Bauman, 2010), most instances of bullying are unreported (Eliot, Cornell, Gregory, & Fan, 2010).

### **Effects of Bullying**

Bullying has psychological and physical costs for both victims and bullies. There are significant short-term effects of bullying for victims of bullying, including psychosomatic symptoms such as headaches, stomach and back aches (Due, et al., 2005;

Nansel, Craig, Overpeck, Saluja, & Ruan, 2004; Williams, Chambers, Logan, & Robinson, 1996), as well as psychological issues, such as depression, anxiety, short temper, loneliness, suicidal ideation, and helplessness (Harel-Fisch et al., 2011; Haynie et al., 2001; Kaltiala-Heino, Rimpelä, Marttunen, Rimpelä, & Rantanen, 1999; Peskin, Tortolero, Markham, Addy, & Baumler, 2007; Salmon, James, Cassidy, & Javaloyes, 2000). The effects of peer victimization in early adolescence are fairly stable even after victimization ceases. It has been shown to result in anxiety, depression, lower self-esteem, poorer attitude toward school, lower GPA, and attendance issues throughout the postsecondary years (Rueger, Malecki, & Demaray, 2011). Additionally, being a victim of bullying in school is a significant predictor of depression up to seven years later (Ttofi, Farrington, & Lösel, 2012). Being a victim of bullying is associated with violence, running away from home, illegal activity, aggression, violence, and substance abuse later in life (Farrington, 1989; Kaltiala-Heino, Rimpelä, Rantanen, & Rimpelä, 2000; Kim, Catalano, Haggerty, & Abbott, 2011; Ttofi et al., 2012).

There are also significant effects of bullying for perpetrators of bullying. Bullies typically have poorer academic skills and grades than the majority of their classmates (Smith, Schneider, Smith, & Ananiadou, 2004), lack empathy, may have cognitive distortions and social perception biases with respect to perceived threats in their environment, and frequently view aggression as a means to solve problems (Merrell et al., 2008). They are also more likely to consume alcohol and smoke, display a strong need for social dominance, and show a low degree of empathy for their victims (Roberts & Morotti, 2000; Smith et al., 2004). Negative effects on the perpetrator's own psychological health include increased anxiety, depression, low self-esteem, and even

suicidality (Baldry, 2004; Roland, 2002). Bullies are also subject to psychosomatic complaints in later life, as well as a tendency to continue to bully in the workplace well after the postsecondary years (Cook, Williams, Guerra, Kim, & Sadek, 2010; Schäfer et al., 2004). They are more likely to be incarcerated, carry weapons, and engage in domestic disputes (Cook et al., 2010). They are at a heightened risk for experiencing psychiatric problems, difficulties in romantic relationships, as well as substance abuse problems in the future (Cook et al., 2010). One study found that more than half of children identified as bullies in school had criminal convictions by the time they reached their twenties (Olweus, Limber, & Mihalic, 1999). Perpetration of bullying has even been found to have an inter-generational component. The Cambridge Study in Delinquent Development found that a significant number of former childhood bullies, at age 32, tended to have children who were bullies as well (Ttofi et al., 2012).

### **Bullying in Elementary School**

Bullying is especially prevalent and problematic during the elementary school years from kindergarten through fifth grade. Fifth graders in one study reported more victimization than students in all other grades from kindergarten through 12th grade (Swearer, Wang, Maag, Siebecker, & Frerichs, 2012). According to Williams, Connolly, Pepler & Craig (2003), bullying in school settings is generally thought to begin in elementary school and peak during the middle school years. Elementary bullies, victims, and bully/victims reported more depressive symptoms than their classmates (Vanderbilt & Augustyn, 2010). Adding to this problem is the low likelihood that bullying behaviors will be reported. Twenty-five to thirty percent of students who have been bullied report the incident to an authority figure (Eliot et al., 2010), and of this percentage, only 11% of

students are willing to seek help at school for personal problems (Siyahhan, Aricak, & Cayirdag-Acar, 2012). Additionally, students who never spoke with their parents or teachers about bullying reported significantly higher levels of hopelessness (a key element of depression) than students who reported bullying or were not involved (Siyahhan et al., 2012). As a result, many researchers advocate strongly for proactive bullying-related interventions and prevention focused on elementary school students (Lawson, Alameda-Lawson, Downer, & Anderson, 2013; Olweus, 2004). Given the extent and harmful effects of bullying, especially in elementary schools, this research tested the effectiveness of a widely used anti-bullying program.

### **Why Does Bullying Occur?**

Bandura's Social Cognitive Theory (SCT) offers a framework for exploring why students engage in bullying (Shafer & Silverman, 2013). According to this theory, behavior is learned through modeling and social experiences (Prati, 2012). Modeling is the process of learning by watching someone else's behavior. The likelihood of modeling is predicated by three different conditions: (a) the model is perceived to be a powerful figure; (b) the outcome of engaging in the modeled behavior is reward rather than punishment; (c) the model has some characteristics in common with the observer (Bandura, 1973, 1986; Prati, 2012). It is also important to note SCT emphasizes that while social experiences may continuously affect behaviors, individuals are able to alter their cognitions and behaviors. Specifically, this model stresses the ability of an individual to take part in self-directed behavior change, as well as vicarious learning given the role of cognitive function in behavior (Shafer & Silverman, 2013; Wilson, 2011).

A significant amount of research to date has examined bullying in the context of Social Cognitive Theory. For example, bullies are perceived by their peers as popular, powerful, and leaders in school settings (McLaughlin, Laux, Pescara-Kovach, 2006; Papanikolaou, Chatzikosma, & Kleio, 2011; Roberts & Morotti, 2000; Vaillaincourt, Hymel, & McDougall, 2003). Teachers and peers rarely punish bullies for aggressive behaviors (Craig & Pepler, 1997). In fact, peers of a bully often actively reinforce these aggressive behaviors by joining the bully in these actions, reacting passively (e.g., not informing a teacher of these behaviors or expressing negative feelings regarding the actions), or by being respectful and cordial to bullies (Burns, Maycock, Cross, & Brown, 2008; O'Connell, Pepler, & Craig, 1999). Accordingly, Bandura (1977) has found that both vicarious reinforcement and vicarious punishment can affect observers' behaviors. In school settings, teachers typically enforce rules by rewarding desirable, prosocial behaviors and punishing undesirable, antisocial behaviors which is likely to either increase or decrease behaviors, respectively, in a linear fashion (Lam, Law, Chan, Wong, & Zhang, 2014). While such consequences are likely effective in school settings to promote prosocial behaviors and prevent antisocial behaviors, these rules may not be effective when applied to the inherently complex concept of bullying (Shafer & Silverman, 2013). When addressing the act of bullying, school personnel must not only work to extinguish bullying behaviors, but also clearly define as well as demonstrate alternative behaviors. Many researchers suggest that school personnel incorporate school-wide anti-bullying programs that work to define bullying, how to identify bullying, rules and consequences of bullying, how to avoid being a bystander to bullying, how to report

bullying, as well as providing resources to allow students to practice these skills (Jones, Doces, Swearer, & Collier, 2012).

### **Anti-bullying Programs and Strategies**

Over the last several years, many anti-bullying programs and interventions have been developed and implemented in elementary schools. Many programs are comprehensive and school-wide with a structured evaluation process, including students, faculty, staff, administration, and parents of students (Bell, Raczynski, & Horne, 2010; Newman-Carlson & Horne, 2004; Olweus, 1993; Olweus, 2005; Smith et al., 2004). Programs such as the Olweus Bullying Prevention Program and the Bully Busters Program emphasize the development of prosocial skills by way of redirecting victims and bullies on a case-by-case basis appropriate to the age and situation (Bell et al., 2010; Olweus, 2005). Newer comprehensive programs, such as Steps to Respect, reinforce academic performance while teaching students strategies for responding to bullying (Hall, 2006). Other programs focus on enhancing skills of assertiveness for those who are victimized by bullies (Hall, 2006). Kochenderfer and Ladd (1997) found that use of problem-solving strategies by students was helpful in ending bullying. As a result, some programs such as Bully Proofing Your School, a bullying prevention program designed to curtail bullying at the elementary level, focus on remediation of bully and victim problem-solving skills (Garrity, 1997).

There are three key elements of anti-bullying programs that have been empirically supported to reduce bullying and victimization. First, while different anti-bullying programs vary widely in age range, comprehensiveness, focus, and degree of evaluation, the majority of anti-bullying programs conceptualize bullying as a behavior that needs to

be redirected or remediated, rather than simply punished (Colvin, Tobin, Beard, Hagan, & Sprague 1998). Roth, Maymon, & Bibi (2010) as well as Rigby and Griffiths (2011) provide evidence that non-punitive approaches focused on remediating bullies have positive outcomes in regard to significantly increasing empathy and prosocial values, as well as reducing bullying behaviors. Second, many anti-bullying programs emphasize the importance of creating a positive school climate (Ttofi & Farrington, 2011), as research suggests that efforts by school staff to provide a supportive climate can be a valuable method of engaging students in the prevention of bullying as well as threats of violence (Eliot et al., 2010; Swearer & Doll, 2001). Third, numerous studies have found that bullies can be trained to enhance their diminished empathic ability (Olweus, 1993), which significantly decrease or even inhibit aggressive and bullying behaviors (Kaukiainen et al., 1999; Miller & Eisenberg, 1988; Richardson, Hammock, Smith, Gardner, & Signo, 1994; Sahin, 2012).

### **Bullying Attitudes**

Goethem, Scholte, and Wiers (2010) state that in attitude research, it is important to differentiate between implicit attitudes and explicit attitudes. Implicit attitudes are spontaneous, impulsive emotional evaluations and reactions, while explicit attitudes refer to intentional, controlled, and conscious evaluations (Gawronski & Bodenhausen, 2006). These concepts of implicit and explicit attitudes are related to bullying as many theorists support their usage particularly in aggression research, maintaining that the more automatic processes of implicit attitudes can affect the more reflective processes of explicit attitudes (Hofmann, Gschwendner, Castelli, & Schmitt, 2008). Accordingly, this study includes measures of both explicit as well as implicit bullying attitudes.

## **Kids On the Block**

Kids On the Block, Inc. (KOB) is a program that addresses bullying using principles of remediation, positive school climate, empathy training, as well as increasing prosocial bullying attitudes. KOB is a puppet show for students in elementary and middle school, specifically kindergarten through sixth grade (Kids On the Block, 2012). This program originated in 1977 in direct response to United States Public Law 94-142, which required that children with disabilities be educated in the least restrictive environment (Dietl, 1982). For many children, this meant being included in a classroom with their non-disabled peers. KOB was created with a focus on increasing knowledge and changing attitudes toward individuals with disabilities (Dunst, 2012). The puppets vividly and effectively model relationships between children by using frank, humorous communication of facts and feelings among the puppets as well as between the puppets and the audience (Kids On the Block, Inc., 2012).

Research has not yet examined the Kids On the Block, Inc. program regarding its effectiveness in promoting prosocial attitudes of students toward bullying or increasing their knowledge about bullying. Past studies have examined the effectiveness of KOB in the context of students with disabilities and found the program to be effective in promoting knowledge and prosocial attitudes toward individuals with disabilities (Dunst, 2012; Gilfoyle & Gliner, 1985; Grider, 1985; Haugland, 1986; Schumacher, Leibowitz, & Furst, 1997; Snart, 1993). Although the effectiveness of KOB on knowledge and attitudes regarding individuals with disabilities is well-established, it is unknown whether it is effective in improving knowledge and attitudes about bullying in general.

## **Purpose of the Study**

The goal of the present study was to assess the effectiveness of Memphis Kids On the Block in improving fourth and fifth grade students' knowledge and attitudes about bullying. This research asked whether significant improvements in student knowledge, explicit attitudes, and implicit attitudes occurred when students saw the KOB "No Bullying" puppet show. Hypotheses are as follows:

**Hypothesis 1.** Students who view the KOB intervention will show a linear increase in bullying knowledge over time, and the control group will not show a linear increase across time.

**Hypothesis 2.** Students who view the KOB intervention will show a linear increase in prosocial explicit attitudes about bullying over time, and the control group will not show a linear increase across time.

**Hypothesis 3.** Students who view the KOB intervention will show a linear increase in prosocial implicit attitudes about bullying over time, and the control group will not show a linear increase across time.

## Chapter 2

### Method

#### Research Design

To evaluate the effectiveness of KOB as an anti-bullying intervention, an interrupted time-series design was used. Measures of bullying knowledge, explicit attitudes toward bullying, and implicit attitudes toward bullying were administered to two classes per grade of elementary school students (fourth and fifth grades) at three time points, with the intervention introduced immediately after the first time point. Another group of two classes per grade of fourth and fifth grade students acted as a waitlisted control group. The waitlisted control group did not view the intervention until four school weeks later at which point all measure administrations had been completed. The first and second measure administrations were spaced approximately one week (approximately five school days) apart, and the third and final administration occurred approximately two weeks (approximately 10 school days) after the second administration. The first time point provided a baseline measure of these bullying constructs prior to exposure to the KOB show. The second administration of measures occurred one week after the KOB puppet show was shown to students, and measured bullying knowledge, and attitudes in the week immediately following the KOB intervention. A third administration of measures occurred approximately three weeks (approximately 15 school days) following the intervention.

Regarding the rationale for the time frame of this study, Dunst (2012) has previously used the time period of one week between a pretest and a KOB performance on disability. Furlong, Sharkey, Felix, Tanigawa, and Greif-Green (2010) have also

recommended that bullying assessments both before and after be administered chronologically close to the intervention as in this study.

## **Participants**

Participants were 175 students at an elementary school in the Memphis, Tennessee area. This sample size was estimated based on a power analysis of the number of participants needed to have an 80% chance of detecting a small ( $f = 0.1$ ) effect (Cohen, 1992), assuming a correlation among repeated measures of .8 and using an alpha level of 0.05. Participants were 52% male ( $n = 91$ ) and 47.4% female ( $n = 83$ ) with 0.6% (1) not reporting on gender, and the age range was 8.5 to 11 years ( $M_{\text{age}} = 9.6$ ). The reported racial makeup of the sample was 82.9% ( $n = 145$ ) African American, 5.6% ( $n = 11$ ) Hispanic or Latino, 6.3% ( $n = 11$ ) Native American, 4.6% ( $n = 8$ ) Caucasian, 2.3% ( $n = 4$ ) Asian or Pacific Islander, 0.6% ( $n = 1$ ) other, and 1.1% ( $n = 2$ ) did not report race.

## **Measures**

**Demographic questionnaire.** Participants completed a questionnaire asking about age, grade level, gender, teacher name, and race (see Appendix A). These items were used to provide descriptive statistics about the sample.

**Kids On the Block Bullies and School Safety Test.** Knowledge about bullying was measured using the Kids On the Block Bullies and School Safety Test (see Appendix B). The Kids On the Block Bullies and School Safety Test (BSST) is a 10-item measure developed and used by Kids On the Block (KOB) to assess knowledge gained from viewing the “No Bullying” puppet show, and was created based on information that is presented to students in the KOB scripts. Students were asked to indicate whether each statement was true or false, and a sample item is, “Bullying is not your problem if it is not

happening to you.” Though this measure has been administered in the past as a pretest and posttest for the intervention, no formal analysis of the results is currently available. Therefore, psychometric properties of this measure have not been established.

Cronbach’s alpha for the BSST for this study was 0.45 at Time 1, 0.49 at Time 2, and 0.52 at Time 3. The scale’s internal consistency reliability is low, which may indicate that bullying knowledge would be better conceptualized as a multidimensional rather than unidimensional construct. However, rather than dropping any items, the full scale was used in the analyses for two reasons. First, the scale was designed by KOB, Inc., specifically to sample knowledge that should be gained from the program, and removing items might have reduced content validity. Second, the sample size was large enough that adequate power was achieved to detect effects on the BSST measure despite its low reliability. Participants were required to complete at least half of the items in this measure to be included in the analysis (see Preliminary Analyses for more information regarding treatment of missing data).

**Moral Approval of Bullying Subscale.** Explicit student attitudes toward bullying were measured using the 10-item Moral Approval of Bullying Subscale (see Appendix C) of the Student School Survey created by Williams and Guerra (2007). Explicit student attitudes toward bullying refer to intentional, controlled, and conscious evaluations (Gawronski & Bodenhausen, 2006). The Moral Approval of Bullying Subscale (MABS) asked students to rate how wrong or OK actions are on a five-point scale, with answer choices of “Really wrong,” “Sort of wrong,” “Sort of OK,” “Perfectly OK,” and “Pass.” A sample item is, “Students ignore it when someone weaker is being pushed around.” Response options were changed to reflect student attitudes toward bullying over the past

week instead of the past year. This scale is intended for use with youth 10 to 17 years old. Responses were reverse-coded as needed on a 4-point scale so that higher values reflected more prosocial explicit attitudes about bullying, and responses of “Pass” were recoded as missing. The mean score was computed for each respondent. Previous research has consistently found that endorsement of bullying as acceptable or normative is associated with a higher likelihood of committing acts of bullying (Bentley & Li, 1995; Espelage & Swearer, 2003; Huesmann & Guerra, 1997). Predictive validity is supported by a study in which a very similar 6-item version of the MABS was administered by Williams and Guerra (2007) to 5<sup>th</sup>, 8<sup>th</sup>, and 11<sup>th</sup> grade students, and scores were significant positive predictors of bullying involvement. Cronbach’s alpha for the MABS is 0.93 (Hamburger, Basile, & Vivolo, 2011), indicating excellent internal consistency. Cronbach’s alpha for the MABS for this study was found to be 0.73 at Time 1, 0.63 at Time 2, and 0.71 at Time 3. Participants were required to complete at least half of the items in this measure to be included in the analysis (see Preliminary Analyses).

**Semantic Differential Scale.** Student implicit attitudes towards bullying were assessed using Osgood, Suci, and Tannenbaum’s (1957) Semantic Differential Scale (see Appendix D). Implicit attitudes are spontaneous, impulsive emotional evaluations and reactions (Gawronski & Bodenhausen, 2006; Osgood et al., 1957). The Semantic Differential Scale (SDS) is a type of scale that can be used to measure attitudes toward a concept, person, or object. Students were presented with the concept “bully” and asked to rate that concept on ten 5-point bipolar dimensions. Bipolar adjective pairs anchoring these dimensions were chosen to be easily understandable by elementary school students, with sample pairs such as ‘good-bad’ and ‘safe-dangerous.’ As is typical for semantic

differential scales measuring attitudes, the bipolar adjective pairs were selected from the evaluative domain of the Semantic Differential Technique sourcebook (Snider & Osgood, 1969). The evaluative domain generally accounts for most of the variance in overall scores when the semantic differential method is used to assess attitudes (Bauer, 2008). Adjective pairs were presented so that the more positive adjective anchored the left side of the scale in some items and the right side in other items to prevent response biases. Scales ranged from Good = 5, to Neutral = 3, to Bad = 1. To score this measure, the mean rating across all of the items was used as the subject's attitude score (Aronson, Ellsworth, Carlsmith, & Gonzales, 1990). Cronbach's coefficient alpha for semantic differential scales typically ranges from .87 to .97 according to Heise (1970), indicating good to excellent internal consistency. Crites, Fabrigar, and Petty (1994) found a median Cronbach's alpha of .95 for semantic differential scales measuring attitudes, and found that the semantic differential scale is psychometrically stable across multiple attitude objects. Past research supports the content (Bauer, 2008) convergent, and discriminant (Crites et al., 1994) validity of semantic differential scales. Cronbach's alpha for the SDS for this study was found to be 0.95 at Time 1, 0.94 at Time 2, and 0.95 at Time 3, indicating excellent internal consistency. Participants were required to complete at least half of the items in this measure to be included in the analysis (see Preliminary Analyses).

### **Procedure**

Elementary school students at a local Memphis area school were given consent forms to take to their parents or guardians to request passive consent for participation in this study. The document explained that students would be viewing a puppet show in the

near future, and researchers would like to evaluate the effectiveness of the program by surveying students at three time points about issues regarding bullying (see Appendix E). Parents were asked to return the form within one school week if they did not consent to their child's participation in the study.

One school week after being given consent forms, prior to the KOB puppet show, students were given the demographic questionnaire, the Kids On the Block Bullies and School Safety Test (BSST), the Moral Approval of Bullying Scale (MABS), and the Semantic Differential Scale (SDS). Two KOB puppeteers/research assistants visited each of the eight elementary school classrooms at an agreed-upon time arranged with the school. The research assistants determined, based on consent forms sent home, which students' guardians did not passively consent to their participation, and measures were not given to those students.

After introducing themselves, the research assistants explained to the students that this information collected was for research about bullying, and that they were asking the students to fill out some surveys to help study this topic. Students were told that they did not have to take the surveys, that there were no right or wrong answers, and that they could stop taking them at any time. Students were also told that these surveys would not be assigned a grade, and that their teachers would not see their surveys. It was emphasized that their answers would be kept confidential. Although students wrote their names at the top of the measures packet to enable matching of pre- and posttests, code numbers were assigned to each participant so that their data could be entered to correspond with their other three packets. The research assistants explained that they

were going to pass out the surveys, and would then verbally review the instructions for each one.

Once the measures were passed out, the research assistants explained the instructions for each measure, and then allowed students time to complete it. The research assistants moved about the classroom to help any students who had difficulties on account of a learning disability or who had additional questions. Students were encouraged to raise their hands if they had any questions while taking the survey, so that a research assistant could come by and answer the question. Once all measures were completed, the research assistants collected the measure packets and thanked the students for their help.

After completing the measures, two 4<sup>th</sup>-grade classes of students entered the auditorium of the school with their teachers for each performance. The KOB puppet shows were conducted in a standard form as prescribed by KOB, Inc., in which the scripts for the plays were strictly adhered to with no changes made by the puppeteers. The two scripts of the KOB “No Bullying” program used in this study were entitled “Safe At School,” and “Rescue or Report”. The “Safe At School” performance includes two female puppets and one male puppet (all playing the role of students), and focuses on different ways to work with peers and adults in the school to make school a safer place that is free of bullying. This script emphasizes that school safety plans goes beyond crossing guards and fire drills, and has to do with proactive planning of strategies for how bullying behavior can be handled in the future. The “Rescue or Report” performance has one male and one female puppet (both students), and focuses on appropriate ways to handle bullying. There is an emphasis on the reinforcing role of bystanders to bullying,

reporting instances of bullying to adults rather than trying to handle it with violence (e.g., fighting the bully), and listening to one's conscience.

The puppeteers had each puppet describe who he or she was (name, age, and grade) before starting each of the two performances. These two performances lasted between 45 and 60 min total, which were followed by 20 min of a question-and-answer period during which participants had an opportunity to comment on and pose questions to any of the puppets. The following day, the procedure was repeated for two 5<sup>th</sup>-grade classes.

Five school days (approximately one week) after the KOB puppet shows, the research assistants repeated the data collection process to conduct a second administration of the measures, except for the demographic questionnaire. Each class completed the measures again. A third administration of these measures occurred eight school days (approximately two school weeks) following the intervention, again omitting the demographic questionnaire.

## Chapter 3

### Results

#### Preliminary Analyses

Responses on the Kids On the Block Bullies and School Safety Test (BSST), Moral Approval of Bullying Subscale (MABS), and Semantic Differential Scale (SDS) measures were rescored so that higher scores represented greater knowledge about bullying and attitudes reflecting greater disapproval of bullying. Completion of at least five items in each scale was chosen as the a priori cutoff for a participant's responses on a scale to be included in analysis. Person-mean imputation was used to compute scale means as recommended by Roth, Switzer, and Switzer (1999). Averaging a participant's responses on the items in a scale that they answered is conceptually equivalent to imputing their average response on the scale for all missing items. Because each scale measured one construct, a participant's mean score on answered items in a scale should provide a good estimate of what their response on missing items would have been. Therefore, completion of at least half of each scale allowed a scale score to be computed (Roth et al., 1999).

If, however, a participant completed less than half of a scale (or, more likely, were not present on that day of data collection) a scale score was not computed. A missing values analysis was run on the scale scores for the three measures at each of the three time points. Little's MCAR test indicated that data were missing completely at random,  $\chi^2(66) = 73.75, p = .24$ . Therefore, participants with missing scale scores were removed from the analysis via listwise deletion (Tabachnik & Fidell, 2013). Descriptive statistics are shown in Table 1, and means by group are shown in Table 2.

Table 1

*Means and Standard Deviations of BSST, MABS, and SDS Measures*

Measure	<i>N</i>	<i>M</i>	<i>SD</i>
BSST			
Time 1	173	0.75	0.15
Time 2	162	0.77	0.15
Time 3	143	0.75	0.16
MABS			
Time 1	172	3.34	0.48
Time 2	161	3.40	0.48
Time 3	141	3.40	0.48
SDS			
Time 1	168	4.08	1.22
Time 2	160	4.11	1.18
Time 3	142	4.27	1.23

Table 2

*Mean Scores on BSST, MABS, and SDS by Group*

Measure	Control ( <i>n</i> = 67) <i>M</i> ( <i>SD</i> )	Experimental ( <i>n</i> = 54) <i>M</i> ( <i>SD</i> )
BSST		
Time 1	1.73(0.17)	1.80(0.12)
Time 2	1.73(0.15)	1.82(0.12)
Time 3	1.69(0.15)	1.84(0.12)
MABS		
Time 1	3.26(0.45)	3.43(0.49)
Time 2	3.22(0.54)	3.54(0.33)
Time 3	3.25(0.49)	3.54(0.38)
SDS		
Time 1	4.11(1.08)	4.36(1.09)
Time 2	4.17(1.01)	4.38(1.10)
Time 3	4.25(0.98)	4.35(1.23)

**Analytic Plan**

Multivariate analysis of variance was considered because the dependent variables were correlated with each other (see Table 3). However, our hypotheses concerned time effects on each of the separate dependent variables, and not effects on the linear combination of the variables that best discriminated between groups. When research questions do not call for multivariate analyses and multivariate results are not interpretable (as would be the case in this study), univariate analyses are more appropriate (Grice & Iwasaki, 2007). Thus, planned linear trend analyses were conducted

for each of the three dependent variable measures. Hypothesis 1 was that the experimental group would demonstrate linear gains in bullying knowledge across the three time points, whereas students in the control group would not. These ideas were tested using orthogonal polynomial contrasts for each group with BSST scores at each of the three time points as the dependent variable and time as the repeated measures variable. Hypothesis 1 would be supported if the experimental group showed a significant linear increase in BSST scores over time and the control group did not. Hypothesis 2 (with MABS scores as the dependent variable) and Hypothesis 3 (with SDS scores as the dependent variable) were also tested using orthogonal polynomial contrasts. Hypothesis 2 would be supported if the experimental group showed a linear increase in MABS scores over time and the control group did not. Hypothesis 3 would be supported by the same linear pattern in SDS scores.

Table 3

*Correlations Between BSST, MABS, and SDS Measures*

	BSST			MABS			SDS		
	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
BSST T1	-								
BSST T2	.46**	-							
BSST T3	.41**	.69**	-						
MABS T1	.19*	.27**	.40**	-					
MABS T2	.26**	.33**	.48**	.67**	-				
MABS T3	.27**	.40**	.40**	.72**	.84**	-			
SDS T1	.08	.00	.17*	.10	.18*	.12	-		
SDS T2	.12	.07	.26**	.17*	.19*	.18	.79**	-	
SDS T3	.11	.13	.24**	.14	.29**	.20*	.60**	.82**	-

\*  $p < .05$ . \*\*  $p < .01$ .

## **Assumptions**

First, assumptions of the analyses were addressed. Outliers were identified as having a standardized residual on a dependent measure greater than 3. Univariate outliers were found and analyses were conducted both with and without outliers, with both results reported in each section below. Generally, removing outliers did not influence results. All Cook's distance values were less than 1, and no cases exceeded critical values for leverage. Shapiro-Wilk's test indicated that the dependent variable distributions deviated significantly from normal, all  $p$ s < .01, which may have reduced the power to detect trends. But because the hypothesized trends were detected, this reduced power was not an issue in this study. Mauchly's test of sphericity indicated that the assumption of sphericity was not met for any of the analyses, all  $p$ s < .05. This is to be expected in repeated-measures designs, as measures closer in time to each other tend to be more similar than those that are farther apart in time. However, in trend analysis there is only one degree of freedom for the time variable so that the assumption of sphericity is not required (Schinka, Velicer, & Weiner, 2003); therefore the lack of sphericity was not problematic.

## **Knowledge About Bullying**

In support of Hypothesis 1, the experimental group showed a significant linear increase in BSST knowledge scores,  $F(1, 58) = 4.92, p = .031, \eta_p^2 = .08$ . Although no linear effect was predicted for the control group, it exhibited a nearly significant linear decrease in BSST scores,  $F(1, 72) = 3.78, p = .056, \eta_p^2 = .05$ , although this did not reach significance at the  $p = .05$  level (see Table 3 for means). When outliers on the BSST

were removed, similar results were obtained,  $F(1, 56) = 8.40, p = .005, \eta_p^2 = .13$  for the experimental group;  $F(1, 72) = 3.78, p = .056, \eta_p^2 = .05$  for the control group.

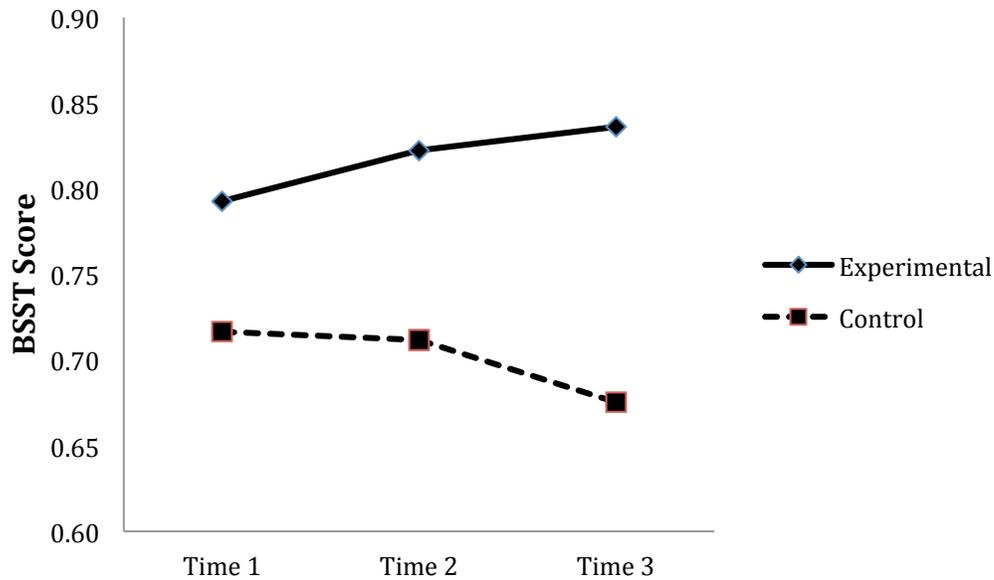


Figure 1. BSST Scores by Group at Each Time Point.

### Explicit Bullying Attitudes

Consistent with Hypothesis 2, there was a significant positive linear trend in MABS scores for the experimental group over time,  $F(1, 60) = 8.59, p = .005, \eta_p^2 = .13$ , but no linear effect for the control group,  $F(1, 68) = 0.04, p = .842, \eta_p^2 = .001$ . Results did not change when outliers were removed,  $F(1, 56) = 9.64, p = .003, \eta_p^2 = .15$  for the experimental group;  $F(1, 66) = 0.27, p = .609, \eta_p^2 = .004$  for the control group.

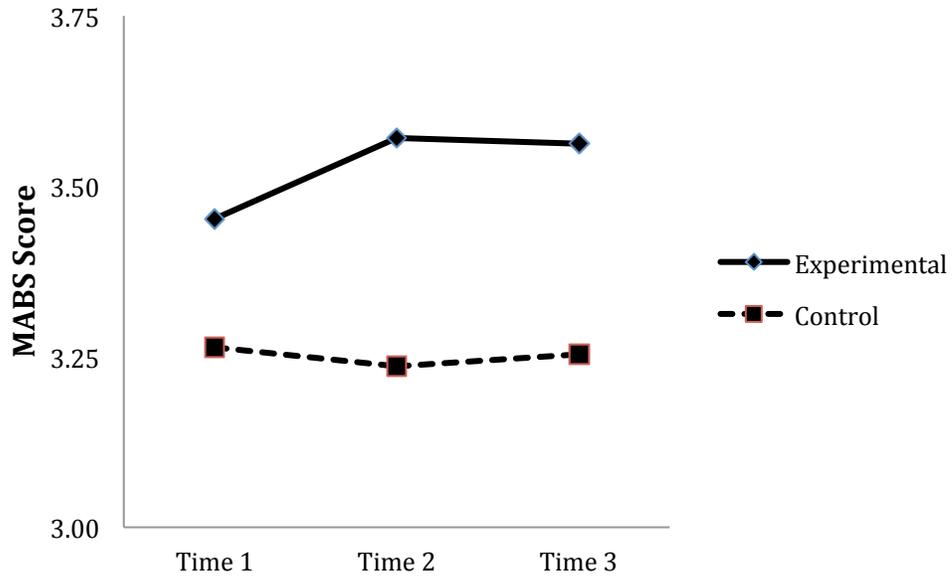


Figure 2. MABS Scores by Group at Each Time Point.

### Implicit Bullying Attitudes

There was no significant linear effect of time on SDS scores for the experimental group or the control group,  $ps > .05$ . Therefore, Hypothesis 3 was not supported (see Figure 3). Results obtained when outliers were removed were the same,  $F(1, 49) < .001$ ,  $p = .99$ ,  $\eta_p^2 < .001$  for the experimental group;  $F(1, 68) = 1.55$ ,  $p = .218$ ,  $\eta_p^2 = .02$  for the control group.

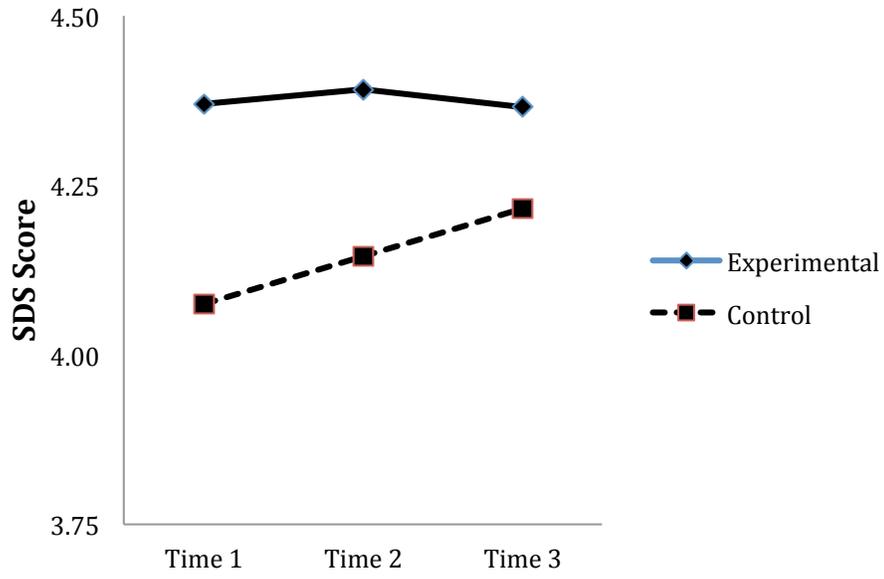


Figure 3. SDS Scores by Group at Each Time Point

## Chapter 4

### **Discussion**

The present research examined whether the KOB intervention improves elementary school students' knowledge, explicit attitudes, and implicit attitudes about bullying. It was hypothesized that students who viewed the KOB puppet show would report significant improvements in knowledge, explicit attitudes, and implicit attitudes about bullying, while students in the waitlisted control group would not report significant improvements in knowledge or attitudes toward bullying. Accordingly, it was predicted that the experimental group would exhibit a linear increase over time in scores on the BSST, MABS, and SDS, respectively. It was also hypothesized that there would not be a significant linear increase in the waitlisted control group's scores on the BSST, MABS, and SDS. Results provided some evidence of significant but small improvements in knowledge and explicit attitudes but not for improvement in implicit attitudes.

Consistent with Hypothesis 1, students who viewed the KOB puppet show exhibited a significant linear increase on the BSST knowledge measure while the control group did not, suggesting that students gain knowledge about bullying from the intervention. Support was also found for Hypothesis 2, which was that students who viewed the KOB puppet show exhibited a significant linear increase on the MABS knowledge measure while the control group did not, suggesting that students improved in explicit bullying attitudes across time. Hypothesis 3 was not supported, with no significant improvements in implicit attitudes toward bullying being evident.

Results provided partial support for the efficacy of the KOB program because students who saw the intervention displayed increased knowledge of bullying and more

prosocial explicit attitudes toward bullying over time. These findings support KOB's continued use in schools as a one-time bullying intervention. It should be noted that effect sizes were relatively small. For the experimental group, 8% of the variance in BSST scores and 13% of MABS scores was attributable to the linear effect of time. Some improvements were still occurring approximately two school weeks after the intervention, supporting the idea that changes in knowledge and explicit attitudes are lasting, at least to some degree. However, again, results did not support the program's effectiveness in improving implicit attitudes about bullying.

The linear increase in bullying knowledge and explicit attitudes over the three weeks following the KOB show could reflect a steady increase due to a gradual change in school and/or class climate. This is consistent with bullying theories such as Bandura's Social Cognitive Theory. Bandura (1986) stresses the role of abstraction, cognition, and integration of information extracted from a range of social experiences, which is most often the exposure to behavior of models. There may be a delay between observing modeled behaviors and the integration of this information to the degree that an individual enacts the modeled behaviors (Prati, 2012). The linear increases on the BSST and MABS for the experimental group could also be due in part to practice effects. However, this possibility is reduced because the control group did not demonstrate such an effect, and participants were not given feedback about their performance on the measure at any point.

Results do not support the hypothesized improvement in implicit attitudes about bullying. There are two possible reasons for this finding. First, it is possible that the semantic differential scale used to measure implicit attitudes lacked precision to detect

these differences. Additionally, semantic differential scales can be difficult to understand for children. Helwig and Avitable (1995) recommend exercising caution using semantic differential scales with children when applied to abstract concepts, such as bullying.

Second, KOB may be affecting explicit but not implicit attitudes, so it may be beneficial for KOB to focus on ensuring that students are internalizing the messages from the show regarding prosocial attitudes toward bullying. The gains in explicit attitudes may reflect greater knowledge of what the socially desirable responses to items are rather than an actual change in attitude. Anti-bullying research supports the use of school-wide anti-bullying programs that not only model prosocial knowledge and attitudes toward bullying as KOB does, but also engage students firsthand in various ways (Olweus, 1999). These school-wide programs include experiences such as empathy training and assertiveness skill development (Hall, 2006), learning to effectively problem-solve to prevent conflict (Garrity, 1997; Kochenderfer & Ladd, 1997; Newman-Carlson & Horne, 2004; Olweus, 1993), in addition to peer mediation training as to facilitate understanding of conflict resolution (Garrity, 1997). Perhaps the addition of some of these other empirically supported methods might increase KOB's impact on implicit attitudes.

### **Implications**

The results of this study provide some evidence that schools that need to address bullying might benefit from implementing KOB. The KOB intervention seems to be effective in fostering knowledge and prosocial explicit attitudes to some degree. A benefit to KOB is that it can be implemented quickly and easily relative to many other anti-bullying programs. Despite the one-time nature of the intervention, KOB has been demonstrated to influence knowledge and explicit attitudes for at least three weeks.

Prior to this study, there has been little research to date regarding the effects of brief presentation-based anti-bullying interventions. Results suggest that these brief interventions might be an efficient way to influence student knowledge and explicit attitudes about bullying.

As discussed above, this research suggested that affecting implicit attitudes about bullying is an area where KOB might focus on improving. Additional elements might be added to the program to help students internalize positive values and attitudes about bullying.

### **Limitations**

There are some limitations of the current study that should be addressed when interpreting these results. First, this research design was necessarily quasi-experimental and not a true experiment because groups had to be based on pre-existing classes. Other unmeasured variables may have contributed to students being organized into classes as they were, and cannot be completely ruled out as causes of observed group differences. One such issue arose when comparisons of Time 1 measures revealed that the experimental group reported greater knowledge and more prosocial explicit and implicit attitudes prior to the intervention, suggesting that the experimental group started with greater knowledge and more prosocial explicit attitudes about bullying than the control group. Following the statistical calculations, the researcher contacted the school at which the data was collected, and was told that two fourth-grade classes as well as one of the two fifth-grade classes were disproportionately comprised of “academically gifted” students. These classes with more gifted students had been selected by the school to be included in the experimental group. Per the school, this group of students have

historically obtained higher grades than their peers, which Kenny and Faunce (2004) have also found frequently correlates with advanced test-taking skills. Information regarding this unequal demographic was unknown prior to and during data collection. Thus, caution should be used in interpreting these results, because it cannot be determined whether the same improvements would have been seen if the experimental group had been comprised of less-gifted students.

Second, collecting data at one school helped to control many possible extraneous variables, but caution should be used when generalizing these results to populations at schools that differ from the school sampled. The racial demographic of this school as of 2013 (per most recent data collection) was 84% African American, 10% Hispanic, 5% White, 1% Native American, and 1% of students are two or more races (National Center for Educational Statistics, 2013). This could affect generalizability for this study as the racial demographic of students in the United States in 2011 (per most recent United States Census) was 52% White, 16% African American, 24% Hispanic, 5% Asian/Pacific Islander, 1% Native American, and 3% two or more races (National Center for Educational Statistics, 2013). Accordingly, results of this study may differ when compared with student populations of public schools in the United States as racial demographics of the target school are not representative of national averages. Additionally, data was collected at a public school, so the culture, rules, policies, and therefore, results of this study may be different than had the study taken place in a private school environment (Figlio & Ludwig, 2012).

Another limitation of the study is the relatively low socioeconomic status (SES) of the target school. A meta-analysis of bullying research from 1970 through 2012 by

Tippett and Wolke (2014) found that schools of low SES frequently report more instances of bullying than schools of high SES. This is noteworthy as 85% of students at the target school qualify for free or reduced lunch based on family income (United States Department of Education, 2013), whereas the United States national average is 51% of students qualifying for free or reduced lunch (Bidwell, 2015). Students in this demographic are often subjected to greater amounts of bullying in various roles (e.g., as a victim, perpetrator, and bystander) and exposed to different forms of bullying than high-SES demographics (Bowes et al., 2009). For example, Wang, Iannotti, and Nansel (2009) found that victims of relational as well as physical bullying are more likely to come from families of low SES, whereas victims of cyberbullying are more likely to come from families of high SES.

A fourth limitation of this study was that it did not measure bullying behaviors before and after the KOB puppet show. While multiple measures of bullying behavior have been developed and applied in similar research (Dukes, Stein, & Zane, 2009; McLaughlin, 2006; and Ross & Horner, 2014), ethical concerns were raised by the district office of the target school. Specifically, the proposed measure of bullying behaviors would request students to cite instances of prior bullying but would not provide follow-up regarding the involvement of these students. As this measure of bullying behavior introduced safety concerns regarding ethics of student well-being, this proposed measure was removed accordingly from this study.

A fifth limitation of the study involves the Semantic Differential Scale (SDS). Although it is possible that the KOB intervention failed to affect implicit attitudes on the SDS, it is also possible that the scale used to measure implicit attitudes lacked the ability

to detect these differences. Semantic differential scales can be difficult to understand for children. Helwig and Avitable (1995) recommend exercising caution using semantic differential scales with children when applied to abstract concepts, such as bullying.

Finally, it is impossible to know whether gains in student bullying knowledge and prosocial attitudes toward bullying will be maintained over time. Given the relatively short time that a student is exposed to KOB as a one-time anti-bullying intervention, the impact of this two-hour exposure may have a limited effect on the measures of student knowledge and attitudes about bullying if measured beyond three school weeks as in this study. A longitudinal study would have to be conducted to measure student bullying knowledge and attitudes over time.

### **Future Directions**

Based on the findings of this study, further research is needed to examine changes in bullying in elementary school when exposed to an anti-bullying intervention. One element of a future study of this nature that could be of benefit would be including a self-reported measure of bullying behavior. Such a measure would allow one to track student bullying behavior before and after the KOB puppet show, which could also be compared to the control group as well to determine the effectiveness of this intervention. Future research should also replicate the results of this study with more equivalent groups of students in terms of academic giftedness.

Student bullying knowledge and attitudes toward bullying could be optimally examined using a longitudinal study assessing participants throughout the course of a school year. While this study did measure bullying knowledge and attitudes at three points over the range of approximately three school weeks, a longitudinal design would

allow for measure of time-related changes within the same group of students, as well as between experimental and control groups of students in the study.

## References

- Aronson, E., Ellsworth, P. C., Carlsmith, J. M., & Gonzales, M. H. (1990). *Methods of research in social psychology*. New York: McGraw-Hill.
- Baldry, A. C. (2004). The impact of direct and indirect bullying on the mental and physical health of Italian youngsters. *Aggressive Behavior, 30*, 343-355.
- Bandura, A. (1973). *Aggression: A social learning analysis*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Batsche, G. (1997). Bullying: Development and implications. In G. G. Bear, K. M. Minke, & A. Thomas (Eds.), *Children's needs: Psychological perspectives*. (Vol. 2, pp. 171–179). Bethesda, MD: National Association of School Psychologists.
- Bauer, C. F. (2008). Attitude towards chemistry: A semantic differential instrument for assessing curriculum impacts. *Journal of Chemical Education, 85*, 1440-1445.
- Bauman, S. (2010). Groups and bullying. *Journal for Specialists in Group Work, 35*, 321-323. doi:10.1080/01933922.2010.515177
- Bell, C. D., Raczynski, K. A., & Horne, A. M. (2010). Bully Busters abbreviated: Evaluation of a group-based bully intervention and prevention program. *Group Dynamics: Theory, Research and Practice, 14*, 257-267, doi: 10.1037/a0020596
- Bentley, K. M., & Li, A. (1995). Bully and victim problems in elementary schools and students' beliefs about aggression. *Canadian Journal of School Psychology, 11*, 153-165.
- Beran, T., & Shapiro, B. (2005). Evaluation of an anti-bullying program: Student

- reports of knowledge and confidence to manage bullying. *Canadian Journal of Education*, 28(4), 700-717. doi:10.2307/4126451
- Bowes, L., Arseneault, L., Maughan, B., Taylor, A., Caspi, A., & Moffitt, T. E. (2009). School, neighborhood, and family factors are associated with children's bullying involvement: A nationally representative longitudinal study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 48, 545-553.
- Burns, S., Maycock, B., Cross, D., & Brown, G. (2008). The power of peers: Why some students bully others to conform. *Qualitative Health Research*, 18(12), 1704-1716. doi:10.1177/1049732308325865
- Carney, A. G., & Merrell, K. W. (2001). Bullying in schools: Perspectives on understanding and preventing an international problem. *School Psychology International*, 22, 364-382, doi: 10.1177/0143034301223011
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112, 155-159.
- Colvin, G., Tobin, T., Beard, K., Hagan, S., & Sprague, J. (1998). The school bully: Assessing the problem, developing interventions, and future research directions. *Journal of Behavioral Education*, 8, 293-319.
- Cook, C. R., Williams, K. R., Guerra, N. G., Kim, T. E., & Sadek, S. (2010). Predictors of bullying and victimization in childhood and adolescence: A meta-analytic investigation. *School Psychology Quarterly*, 25, 65-83, doi: 10.1037/a0020149
- Craig, W. M., & Pepler, D. J. (1997). Observations of bullying and victimization in the school yard. *Canadian Journal of School Psychology*, 13, 41-59.
- Crites, S. L., Fabrigar, L. R., & Petty, R. E. (1994). Measuring the affective and cognitive properties of attitudes: Conceptual and methodological issues. *Personality and*

- Social Psychology Bulletin*, 20, 619-634.
- Dietl, D. (1982). Not the world as it is... the world as it should be: why there needs to be Kids On the Block. *Journal of Rehabilitation*, 48(4), 10-14.
- Due, P., Holstein, B. E., Lynch, J., Diderichsen, F., Gabhain, S. N., Scheidt, P., ... Currie, C. (2005). Bullying and symptoms among school-aged children: International comparative cross sectional study in 28 countries. *The European Journal of Public Health*, 15, 128-132.
- Dukes, R. L., Stein, J. A., & Zane, J. I. (2009). Effect of relational bullying on attitudes, behavior and injury among adolescent bullies, victims and bully-victims. *The Social Science Journal*, 46, 671-688.
- Dunst, C. J. (2012). Effects of puppetry on elementary students' knowledge of and attitudes toward individuals with disabilities. *International Electronic Journal of Elementary Education*, 4, 451-457.
- Eliot, M., Cornell, D., Gregory, A., & Fan, X. (2010). Supportive school climate and student willingness to seek help for bullying and threats of violence. *Journal of School Psychology*, 48, 533-553.
- Espelage, D. M., & Swearer, S. M. (2003). Research on school bullying and victimization: What have we learned and where do we go from here? *School Psychology Review*, 32, 365-383.
- Farrington, D. P. (1989). Early predictors of adolescent aggression and adult violence. *Violence and Victims*, 4(2), 79-100.
- Figlio, D., & Ludwig, J. (2012). Sex, drugs, and catholic schools: Private schooling and non-market adolescent behaviors. *German Economic Review*, 13(4), 385-415.

- Furlong, M. J., Sharkey, J. D., Felix, E., Tanigawa, D., & Greif-Green, J. (2010.)  
Bullying assessment: A call for increased precision of self-reporting  
procedures. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage (Eds.), *The  
International Handbook of School Bullying* (pp. 329-346). New York: Routledge.
- Garrity, C. (1997). Bully proofing your school: Creating a positive climate. *Intervention  
in School and Clinic, 32*, 235-243.
- Gawronski, B., & Bodenhausen, G. V. (2006). Explicit- and implicit bullying attitudes in  
relation to bullying behavior. *Journal of Abnormal Child Psychology, 38*, 829-  
842.
- Gilfoyle, E. M., & Gliner, J. A. (1985). Attitudes toward handicapped children: Impact of  
an educational program. *Physical & Occupational Therapy in Pediatrics, 5*(4),  
27-41.
- Goethem, A., Scholte, R. J., & Wiers, R. W. (2010). Explicit- and implicit bullying  
attitudes in relation to bullying behavior. *Journal of Abnormal Child  
Psychology, 38*, 829-842.
- Grice, J. W., & Iwasaki, M. (2007). A truly multivariate approach to MANOVA. *Applied  
Multivariate Research, 12*(3), 199-226.
- Grider, S. G. (1985). *A study of an effort to modify non-handicapped students' attitudes  
toward the handicapped*. (Unpublished doctoral dissertation). The College of  
William and Mary, Williamsburg, Virginia.
- Hall, K. R. (2006). Using problem-based learning with victims of bullying  
behavior. *Professional School Counseling, 9*, 231-237.

- Hamburger, M. E., Basile, K. C., & Vivolo, A. M. (Eds.). (2011). *Measuring bullying victimization, perpetration, and bystander experiences: A compendium of assessment tools*. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Violence Prevention.
- Harel-Fisch, Y., Walsh, S. D., Fogel-Grinvald, H., Amitai, G., Pickett, W., Molcho, M., Due, P., de Matos, M. G., & Craig, W. (2011). Negative school perceptions and involvement in school bullying: A universal relationship across 40 countries. *Journal of Adolescence, 34*, 639-652.
- Haugland, P. (1986). *The use of puppetry to modify non-handicapped students' attitudes toward the handicapped*. Unpublished manuscript, Department of Education, California State University, Los Angeles, California.
- Haynie, D. L., Nansel, T., Eitel, P., Crump, A. D., Saylor, K., Yu, K., & Simons-Morton, B. (2001). Bullies, victims, and bully/victims: Distinct groups of at-risk youth. *The Journal of Early Adolescence, 21*(1), 29-49.
- Heise, D. (1970). The semantic differential and attitude research. In G. F. Summers (Ed). *Attitude Measurement* (pp. 235-253). Chicago: Rand McNally.
- Helwig, A. A., & Avitable, N. (2004). School children's responses on a semantic differential over a 10-year span. *Psychological Reports, 95*(1), 345-354.
- Hoffman, W., Gschwendner, T., Castelli, L., & Schmitt, M. (2008). Implicit and explicit attitudes and interracial interaction: The moderating role of situationally available control resources. *Group Processes & Intergroup Relations, 11*, 69-81.
- Hoover, J. H., Oliver, R. & Hazler, R. J. (1992). Bullying: Perceptions of adolescent victims in the midwestern USA. *School Psychology International, 13*(1), 5-16.

- Howell, D. C. (2002). *Statistical methods for psychology*. Belmont, CA: Duxbury Press.
- Huberty, C. J., & Petoskey, M. D. (2000). Multivariate analysis of variance and covariance. *Handbook of Applied Multivariate Statistics and Mathematical Modeling*, 183-208.
- Huesmann, L. R., & Guerra, N. G. (1997). Children's normative beliefs about aggression and aggressive behavior. *Journal of Personality and Social Psychology*, 72(2), 408.
- Jones, L., Doces, M., Swearer, S., & Collier, A. (2012). Implementing bullying prevention programs in schools: A how-to guide. In D. Boyd & J. Palfrey (Eds.), *Kinder & Braver World Project: Research Series*. Boston, MA: Harvard University.
- Kaltiala-Heino, R., Rimpelä, M., Marttunen, M., Rimpelä, A., & Rantanen, P. (1999). Bullying, depression, and suicidal ideation in Finnish adolescents: school survey. *British Medical Journal*, 319, 348-351.
- Kaltiala-Heino, R., Rimpelä, M., Rantanen, P., & Rimpelä, A. (2000). Bullying at school - an indicator of adolescents at risk for mental disorders. *Journal of Adolescence*, 23, 661-674.
- Kaukiainen, A., Bjorkqvist, K., Lagerspetz, K., Osterman, K., Salmivalli, C., Forsblom, ... Ahlbom, A. (1999). The relationships between social intelligence, empathy, and three types of aggression. *Aggressive Behavior*, 25, 81-89.
- Kenny, D. T., & Faunce, G. (2004). The impact of group singing on mood, coping, and perceived pain in chronic pain patients attending a multidisciplinary pain

- clinic. *Journal of Music Therapy*, 41(3), 241-258.
- Kids On the Block Inc. (2012). *About the Kids On the Block puppets*. Retrieved from <http://www.KOB.com/kob2.htg/style.html>
- Kim, M. J., Catalano, R. F., Haggerty, K. P., & Abbott, R. D. (2011). Bullying at elementary school and problem behavior in young adulthood: a study of bullying, violence and substance use from age 11 to age 21. *Criminal Behaviour and Mental Health*, 21, 136-144, doi: 10.1002/cbm.804
- Kochenderfer, B. J., & Ladd, G. W. (1997). Victimized children's responses to peers' aggression: Behaviors associated with reduced versus continued victimization. *Development and Psychopathology*, 9(1), 59-73.
- Lam, S., Law, W., Chan, C., Wong, B. P., & Zhang, X. (2014). A latent class growth analysis of school bullying and its social context: The self-determination theory perspective. *School Psychology Quarterly*, 30(1), 75-90.
- Lawson, M. A., Alameda-Lawson, T., Downer, J., & Anderson, E. (2013). Analyzing sub-population profiles and risk factors for school bullying. *Children And Youth Services Review*, 35(6), 973-983. doi:10.1016/j.childyouth.2013.03.006
- McLaughlin, L., Laux, J. M., & Pescara-Kovach, L. (2006). Using Multimedia to Reduce Bullying and Victimization in Third-Grade Urban Schools. *Professional School Counseling*, 10(2) 153-160.
- Merrell, K. W., Gueldner, B. A., Ross, S. W., & Isava, D. M. (2008). How effective are school bullying intervention programs? A meta-analysis of intervention research. *School Psychology Quarterly*, 24, 26-42, doi: 10.1037/1045-3830.23.1.26
- Miller, P., & Eisenberg, N. (1988). The relation of empathy to aggressive and

- externalizing/antisocial behavior. *Psychological Bulletin*, 103, 324–344.
- Nansel, T. R., Craig, W., Overpeck, M. D., Saluja, G., & Ruan, W. (2004). Cross-national consistency in the relationship between bullying behaviors and psychosocial adjustment. *Archives of Pediatrics & Adolescent Medicine*, 158, 730.
- National Center for Educational Statistics. (2013). Public school demographics [Data file]. Retrieved from <http://nces.ed.gov/ccd/schoolsearch/>
- Newman-Carlson, D., & Horne, A. M. (2004). Bully busters: A psychoeducational intervention for reducing bullying behavior in middle school students. *Journal of Counseling & Development*, 82(3), 259-267. doi:10.1002/j.1556-6678.2004.tb00309.x
- O’Connell, P., Pepler, D. J., & Craig, W. (1999). Peer involvement in bullying: Insights and challenges for intervention. *Journal of Adolescence*, 22, 86-97.
- Olweus, D. (1993). Victimization by peers: Antecedents and long-term outcomes. In K. H. Rubin, & J. B. Asendorpf (Eds.), *Social withdrawal, inhibition, and shyness in childhood* (pp. 315-341). Hillsdale, NJ England: Lawrence Erlbaum Associates, Inc.
- Olweus, D. (2004). Bullying at school: Prevalence estimation, a useful evaluation design, and a new national initiative in Norway. *Association for Child Psychology and Psychiatry Occasional Papers*, 23, 5-17.
- Olweus, D. (2005). *Bullying at school: What we know and what we can do*. Oxford, England: Blackwell Publishers.
- Olweus, D., Limber, S., & Mihalic, S. F. (1999). *Blueprints for violence prevention, book*

- nine: Bullying prevention program*. Boulder, CO: Center for the Study and Prevention of Violence.
- Osgood, C. E., Suci, G., & Tannenbaum, P. (1957) *The measurement of meaning*. Urbana, IL: University of Illinois Press.
- Papanikolaou, M., Chatzikosma, T., & Kleio, K. (2011). Bullying at school: The role of family. *Procedia-Social and Behavioral Sciences*, 29, 433-442.
- Peskin, M. F., Tortolero, S. R., Markham, C. M., Addy, R. C., & Baumler, E. R. (2007). Bullying and victimization and internalizing symptoms among low-income black and Hispanic students. *Journal of Adolescent Health*, 40, 372-375.
- Prati, G. (2012). A social cognitive learning theory of homophobic aggression among adolescents. *School Psychology Review*, 41(4), 413-428.
- Richardson, D. R., Hammock, G. S., Smith, S. M., Gardner, W., & Signo, M. (1994). Empathy as a cognitive inhibitor of interpersonal aggression. *Aggressive Behavior*, 20, 275-289.
- Roberts, W. B., & Morotti, A. A. (2000). The bully as victim: Understanding bully behaviors to increase the effectiveness of interventions in the bully–victim dyad. *Professional School Counseling*, 4, 148-155.
- Roland, E. (2002). Bullying, depressive symptoms and suicidal thoughts. *Educational Research*, 44(1), 55-67.
- Ross S. W., & Horner R. H. (2014). Bully prevention in positive behavior support: preliminary evaluation of third-, fourth-, and fifth-grade attitudes toward bullying. *Journal of Applied Behavioral Analysis*, 42(4), 747–759.  
doi: 10.1901/jaba.2009.42-747

- Roth, G., Kanat-Maymon, Y., & Bibi, U. (2011). Prevention of school bullying: The important role of autonomy-supportive teaching and internalization of pro-social values. *British Journal of Educational Psychology, 81*, 654-666, doi: 10.1348/2044-8279.002003
- Roth, P. L., Switzer, F. S., & Switzer, D. M. (1999). Missing data in multiple item scales: A Monte Carlo analysis of missing data techniques. *Organizational Research Methods, 2*(3), 211-232.
- Rueger, S. Y., Malecki, C. K., & Demaray, M. K. (2011). Stability of peer victimization in early adolescence: Effects of timing and duration. *Journal of School Psychology, 49*, 443-464.
- Şahin, M. (2012). An investigation into the efficiency of empathy training program on preventing bullying in primary schools. *Children and Youth Services Review, 34*(7), 1325-1330.
- Salmon, G., James, A., Cassidy, E. L., & Javaloyes, M. A. (2000). Bullying a review: Presentations to an adolescent psychiatric service and within a school for emotionally and behaviourally disturbed children. *Clinical Child Psychology and Psychiatry, 5*, 563-579.
- Schäfer, M., Korn, S., Smith, P. K., Hunter, S. C., Mora-Merchán, J. A., Singer, M. M., ... Meulen, K. (2004). Lonely in the crowd: Recollections of bullying. *British Journal of Developmental Psychology, 22*, 379-394.
- Schinka, J. A., Velicer, W. R., & Weiner, I. B. (Eds.): Handbook of Psychology. *In Vol. 2 of Research methods in psychology*. John Wiley & Sons Inc. Hoboken, NJ; 2003.

- Schumacher, J. M., Leibowitz, J. M., & Furst, D. W. (1997). *The effectiveness of the Kids On the Block program in increasing children's knowledge of and attitudes toward individuals with disabilities*. Unpublished manuscript, Department of Education. University of Nebraska at Omaha, Omaha, Nebraska.
- Shafer, K. S., & Silverman, M. J. (2013). Applying a social learning theoretical framework to music therapy as a prevention and intervention for bullies and victims of bullying. *The Arts In Psychotherapy, 40*(5), 495-500.  
doi:10.1016/j.aip.2013.07.004
- Siyahhan, S., Aricak, O. T., & Cayirdag-Acar, N. (2012). The relation between bullying, victimization, and adolescents' level of hopelessness. *Journal of Adolescence, 35*, 1053-1059.
- Smith, P. K., & Ananiadou, K. (2003). The nature of school bullying and the effectiveness of school-based interventions. *Journal of Applied Psychoanalytic Studies, 5*, 189-209.
- Smith, P. K., Morita, Y., Junger-Tas, J., Olweus, D., Catalano, R. & Slee, P. (1999). *The nature of school bullying: A cross-national perspective*. Routledge, London.
- Smith, J. D., Schneider, B. H., Smith, P. K., & Ananiadou, K. (2004). The effectiveness of whole-school antibullying programs: A synthesis of evaluation research. *School Psychology Review, 33*, 547-560.
- Snart, F. (1993). *Examining the effectiveness of one innovative program with the goal to improve the knowledge and attitudes of elementary school-aged children toward the disabled using the Kids On the Block puppet approach*. Unpublished manuscript, Department of Education, University of Alberta, Edmonton, Alberta,

Canada.

Snider, J. G., & Osgood, C. E. (1969). *Semantic Differential technique: A sourcebook*.

Chicago: Aldine.

Swearer, S. M., & Cary, P. T. (2008). Perceptions and attitudes toward bullying in middle school youth. *Journal of Applied School Psychology, 19*, 63-79, doi:

10.1300/J008v19n02\_05

Swearer, S. M., & Doll, B. (2001). Bullying in schools: An ecological framework. *Journal of Emotional Abuse, 2*, 7-23.

Swearer, S. M., Wang, C., Maag, J. W., Siebecker, A. B., & Frerichs, L. J. (2012).

Understanding the bullying dynamic among students in special and general education. *Journal of School Psychology, 50*, 503-520.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics*. Boston:

Pearson.

Tippett, N., & Wolke, D. (2014). Socioeconomic status and bullying: a meta-

analysis. *American Journal of Public Health, 104*(6), 48-59.

Ttofi, M. M., & Farrington, D. P. (2011). Effectiveness of school-based programs to

reduce bullying: A systematic and meta-analytic review. *Journal of Experimental Criminology, 7*(1), 27-56.

Ttofi, M. M., Farrington, D. P., & Lösel, F. (2012). School bullying as a predictor of

violence later in life: A systematic review and meta-analysis of prospective longitudinal studies. *Aggression and Violent Behavior, 17*, 405-418.

Vaillancourt, T., Hymel, S., & McDougall, P. (2003). Bullying is power: Implications for school-based intervention strategies. *Journal of Applied School Psychology, 19*,

157-176.

- Vanderbilt, D., & Augustyn, M. (2010). The effects of bullying. *Pediatrics and Child Health, 20*(7), 315-320. doi: 10.1016/j.paed.2010.03.008
- Wang, J., Iannotti, R. J., & Nansel, T. R. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent Health, 45*(4), 368-375.
- Whitted, K. S., & Dupper, D. R. (2005). Best practices for preventing or reducing bullying in schools. *Children & Schools, 27*, 167-174. doi:10.1093/cs/27.3.167
- Williams, K., Chambers, M., Logan, S., & Robinson, D. (1996). Association of common health symptoms with bullying in primary school children. *British Medical Journal, 313*(7048), 17.
- Williams, K. R., & Guerra, N. G. (2007). Prevalence and predictors of internet bullying. *Journal of Adolescent Health, 41*, 14-21.
- Williams, T., Connolly, J., Pepler, D., & Craig, W. (2003). Questioning and sexual minority adolescents: High school experiences of bullying, sexual harassment and physical abuse. *Canadian Journal of Community Mental Health (Revue canadienne de santé mentale communautaire), 22*(2), 47-58.
- Wilson, G. T. (2011). Behavior therapy. In R. Corsini & D. Wedding (Eds.), *Current psychotherapies* (9<sup>th</sup> ed., pp. 235-275). Belmont, CA: Brooks/Cole.

Appendix A  
Demographic Questionnaire

Name: \_\_\_\_\_

Gender:      Male

Female

Age: \_\_\_\_\_

Grade level: \_\_\_\_\_

Race:        Asian / Pacific Islander

African American

Hispanic or Latino

Native American

Caucasian

Other \_\_\_\_\_

Appendix B

Name: \_\_\_\_\_

Kids On the Block Bullies and School Safety Test

Instructions: Circle T for True or F for False (True means right, False means wrong)

1. Bullying is being mean to someone on purpose more than once. T F
2. Bullying is not your problem if it is not happening to you. T F
3. Bullies like to have an audience when they are picking on someone. T F
4. The only thing to do if you see someone getting bullied is to go and get help for that person. T F
5. There is a difference between tattling on someone and telling if they are bullying you. T F
6. If someone is saying bad things about you and not hitting you, that's not really bullying. T F
7. It is okay to hit someone if they are bullying you. T F
8. As long as bullies think it's okay to pick on others, they will keep doing it. T F
9. Only boys get picked on by bullies. T F
10. It takes principals, teachers, parents, and students working together to make school a safe place for everyone. T F

## Appendix C

### Moral Approval of Bullying Scale

Welcome to the survey! We really appreciate your help. This survey is a series of statements allowing you to tell us how you think and feel about things in your school. Remember: we are only asking for what you think, not what other people think. There are no right and wrong answers, so please choose the answer that best tells us how you think or feel about each statement. If you do not wish to respond to the question, please choose the “pass” option.

Think about whether the following actions are WRONG or OK for students your age based on your experience over the past week. Check the box for each question whether you think the actions are really wrong, sort of wrong, sort of OK, or perfectly OK.

#### **Is it wrong or OK when...**

##### **1. Students tease weaker students in front of others.**

- Really Wrong
- Sort of Wrong
- Sort of OK
- Perfectly OK
- Pass

##### **2. Students spread rumors and lies about other students behind their back.**

- Really Wrong
- Sort of Wrong
- Sort of OK
- Perfectly OK
- Pass

**3. Students tell lies or make fun of less popular students using the Internet (email, instant messaging, cell phone text messaging, or websites).**

- Really Wrong
- Sort of Wrong
- Sort of OK
- Perfectly OK
- Pass

**4. Students push, shove, or pick fights with weaker students.**

- Really Wrong
- Sort of Wrong
- Sort of OK
- Perfectly OK
- Pass

**5. Students encourage others to fight weaker students and cheer them on.**

- Really Wrong
- Sort of Wrong
- Sort of OK
- Perfectly OK
- Pass

**6. Students encourage others to be mean and spread lies about less popular students.**

- Really Wrong
- Sort of Wrong
- Sort of OK
- Perfectly OK
- Pass

**7. Students ignore it when someone weaker is being pushed around.**

- Really Wrong
- Sort of Wrong
- Sort of OK
- Perfectly OK
- Pass

**8. Students defend others who are being shoved around by stronger students.**

- Really Wrong
- Sort of Wrong
- Sort of OK
- Perfectly OK
- Pass

**9. Students go to the teacher or an adult for help when someone is getting beaten up.**

- Really Wrong
- Sort of Wrong
- Sort of OK
- Perfectly OK
- Pass

**10. Students go to the teacher or an adult for help when others are spreading rumors and lies about someone.**

- Really Wrong
- Sort of Wrong
- Sort of OK
- Perfectly OK
- Pass

## Appendix D

### Semantic Differential Scale

#### **Instructions:**

You are being asked to tell how you feel or what you think about yourself as a student. Please reply by using the sets of words listed on the next page below the word “BULLY”. You will find two words at either end of each line. You can show your feeling or understanding by checking one of the five spaces along each line.

If you feel that a word at either end of the line shows that you feel strongly about the word “BULLY” at the top of the page, then place a check mark in the space nearest that word. But, if you think that the word at either end only shows that you feel it’s somewhat like your true feelings, then place an ‘X’ in the 2<sup>nd</sup> or 4<sup>th</sup> space. However, there may be some words used at both ends of the number line that don’t show how you feel, or don’t fit in with the word “BULLY” at all. If this is the case, then place a ‘X’ in the 3<sup>rd</sup> space.

Please place your ‘X’ in the middle of the spaces, and not on the two dots. Also, be sure that you place only a ‘X’ on each number line.

Do not spend more than a few seconds on each number line. Your first thought is the one we want. Think about the word “BULLY” at the top of the page, and place your ‘X’ on each of the scales right away. Do not change or erase any choice you have made.

## BULLY

GOOD \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ BAD

DIRTY \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ CLEAN

SAD \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ HAPPY

SAFE \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ DANGEROUS

BRAVE \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ COWARDLY

DISHONEST \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ HONEST

UGLY \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ BEAUTIFUL

KIND \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ CRUEL

GENTLE \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ VIOLENT

UNPLEASANT \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ PLEASANT

## Appendix E

### Informed Consent Form

Your child is invited to be in a research study being conducted by Joel Harris, Ed.M., a Ph.D. candidate from the University of Memphis. Your child is invited because they are a 4<sup>th</sup> or 5<sup>th</sup> grade student at their participating school who will have the opportunity to witness the Kids On the Block (KOB) "No Bullying" puppet show in the next 30 days. We ask that you read this form and ask any questions you may have before giving permission for your child's participation.

If you agree to let your child be included in the study, your child will be asked to complete a 5-10 minute questionnaire on 4 occasions over 3 weeks. The questionnaire will be used to assess the role that the KOB puppet show plays in bully and victim behaviors. The questionnaire used for this study will ask about types of bullying involved, if it was reported, and how the student felt when being bullied. Students are encouraged to answer the questions as openly and honestly as possible.

There is no direct benefit to you or your child. However, in the event that this study obtains significant results, it may increase our understanding of the relationship between the KOB puppet show and the role it plays in bully/victim behaviors. Even though staff members will not see individual surveys, the administration will be given a copy of the final report of the survey results.

The survey results will be kept private and in a locked cabinet to protect the confidentiality of the participants. In any report we might publish, we will not include any information that will make it possible to identify a participant. Research records will only be accessed by the researchers. Research records will be kept for three years, at which point the records will be destroyed by shredding.

All information provided such as name, age, race, grade and gender, will remain confidential. Your decision to allow your child to participate will not affect your current or future relations with the school, teachers, researcher, or the University of Memphis. Your decision will not affect your child's grades in any way. Your child will also be instructed of his/her voluntary participation prior to taking the survey. You or your child may withdraw from the study at any time prior to submitting the survey. The survey would then be destroyed.

The risks to participants are no greater than those experienced in daily life. Due to the nature of the study, it is possible that students who have been bullied may have an emotional response. In preparation for this possibility, the guidance counselor will be prepared for any referrals of students of this nature. If your child decides at any time that they do not wish to finish the questionnaire, they may stop whenever they want. I am required to note that the University of Memphis does not have any funds budgeted for compensation for injury, damages, or other expenses.

You can ask Joel Harris questions at any time about anything in this study. If you have any questions or concerns about the study, please contact him at [jlhrris9@memphis.edu](mailto:jlhrris9@memphis.edu) or call 910-398-0188. You may also contact his faculty advisor, Dr. Chrisann Schiro-Geist at 901-678-4303. Questions regarding subject rights can be discussed with Beverly Jacobik, Administrator for the Institutional Review Board for the Protection of Human Subjects at the University of Memphis. She can be contacted via email at: [atirb@memphis.edu](mailto:atirb@memphis.edu) or by phone at 901-678-3074.

Please sign this paper and have your child (or yourself) return it to the child's teacher ONLY if you DO NOT wish for your child to participate in the study. If you do give consent for your child to participate in this study, you do not need to have this paper returned to their teacher. Being in the study is up to you and your child, and there will be no negative outcomes if you sign this paper, or even if you or your child wish to withdraw from the study later. You agree that you and your child have been told about this study, as well as why it is being done and what to do.

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Signature of Parent NOT AGREEING for their child to be surveyed in the study

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Date