

# UC Riverside

## UC Riverside Electronic Theses and Dissertations

### Title

Assessing the Effect of the Bullying Literature Project on Moral Disengagement After Controlling for Student Perceptions and Prosocial Behavior

### Permalink

<https://escholarship.org/uc/item/8x6857cd>

### Author

Goldberg, Taryn Shea

### Publication Date

2020

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA  
RIVERSIDE

Assessing the Effect of the *Bullying Literature Project* on Moral Disengagement After  
Controlling for Student Perceptions and Prosocial Behavior

A Dissertation submitted in partial satisfaction  
of the requirements for the degree of

Doctor of Philosophy

in

Education

by

Taryn Shea Goldberg

June 2020

Dissertation Committee:  
Dr. Austin Johnson, Chairperson  
Dr. William Erchul  
Dr. Rollanda O'Connor

Copyright by  
Taryn Shea Goldberg  
2020

The Dissertation of Taryn Shea Goldberg is approved:

---

---

---

Committee Chairperson

University of California, Riverside

## ABSTRACT OF THE DISSERTATION

Assessing the Effect of the *Bullying Literature Project* on Moral Disengagement After Controlling for Student Perceptions and Prosocial Behavior

by

Taryn Shea Goldberg

Doctor of Philosophy, Graduate Program of Education  
University of California, Riverside, June 2020  
Dr. Austin Johnson, Chairperson

The study investigated the effect of an anti-bullying intervention, the *Bullying Literature Project- Moral Disengagement Version (BLP-MD)*, on third-grade students' endorsement of moral disengagement mechanisms in bullying. A rationale for the investigation is provided through a comprehensive discussion of the literature on moral disengagement, bullying, and student perceptions of themselves and their climate. An ANCOVA was used to answer the primary research question: To what extent does the *BLP-MD* affect student endorsement of moral disengagement mechanisms in bullying after controlling for student perceptions of their social-emotional assets, peer friendships, teacher behavior, peer behavior, and teacher-reported prosocial behavior? Limitations and future research directions are discussed.

*Keywords:* moral disengagement, bullying, anti-bullying intervention, elementary

## Table of Contents

Introduction.....	1
<i>Bullying</i> .....	3
<i>Bullying Prevention Programs</i> .....	5
<i>Moral Disengagement and Bullying</i> .....	8
<i>Moral Disengagement in Bullying Prevention Programs</i> .....	15
<i>Student Perceptions</i> .....	16
Method.....	20
<i>Participants</i> .....	20
<i>Procedure</i> .....	21
<i>Measures</i> .....	24
<i>Analysis</i> .....	30
Results.....	31
Discussion.....	38
<i>Limitations</i> .....	43
<i>Future Directions</i> .....	47
References.....	49
Tables.....	57
Figures.....	64
Appendix.....	66

Assessing the Effect of the *Bullying Literature Project* on Moral Disengagement After  
Controlling for Student Perceptions and Prosocial Behavior

Social cognitive theory (Bandura, 1986) proposes that behavior is a consequence of the continuous and reciprocal influences between a person's thoughts (cognitions) and his/her environment (social context). These interplaying elements determine how a person will behave. A subsection of this phenomenon is the social cognitive theory of moral agency, which explains how individuals may engage in aggressive behavior by reframing thoughts to justify harmful behavior (Bandura, 1986). When an individual determines whether a behavior is right or wrong in a morally ambiguous situation, he/she is employing moral reasoning (Kohlberg, 1976). Moral behavior is said to occur as a result of moral reasoning; however, immoral behavior is more likely to occur when the individual is able to commit the act without negative feelings associated with his/her wrongdoing (Leenders & Brugman, 2005). When it comes to aggressive behavior, one or more mechanisms of moral disengagement may be employed in order to perceive immoral action as moral, such that the individual does not feel guilt or shame associated with the transgression, and thereby making the behavior more likely to occur (Bandura, 1986, 1999; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996).

Moral disengagement encompasses eight strategies that are classified into four broad categories: (a) restructuring cognitions, (b) minimizing one's agentic role, (c) disregarding/distorting the consequences, and (d) blaming or dehumanizing the victim (Bandura, 1986; 1999; Bandura, Barbaranelli et al., 1996). The first category (cognitive restructuring) involves reclassifying immoral behavior as moral behavior by means of

justifying the end goal of aggressive behavior (i.e., moral justification), changing the language of the aggressive behavior (i.e., euphemistic labeling), or comparing the aggressive behavior to a more harmful behavior (i.e., advantageous comparison). An example of moral justification would be engaging in bullying because the individual views himself/herself as doing so to help a friend who has been bullied by their current victim. An example of euphemistic labeling may be calling the bullying “playful teasing” or indicating that they were “just kidding.” Additionally, an example of advantageous comparison may be comparing the act of rarely calling somebody names to physically attacking the person every day.

The second category, minimizing one’s agentic role, includes spreading the blame to other members of a bullying party (i.e., diffusion of responsibility) or blaming another member entirely (i.e., displacement of responsibility). An example of diffusion of responsibility would be regarding one’s role in bullying as simply an “assistant” or “reinforcer” to the main bully as opposed to being the “ringleader bully.” Doing so would absolve the individual from guilt by thinking that even if they were not participating in the bullying, it would still occur. An example of displacement of responsibility would be the individual seeing himself/herself as bullying only because they have been bullied, so somebody else is responsible for causing the harm.

The third category involves disregarding or distorting the consequences of the aggressive behavior (i.e., not seeing it as harmful). An example would be the perpetrator not perceiving the harmful outcomes of his/her behavior. This would involve individuals



thinking that their actions do not have severe consequences, so it does not matter that they are engaging in bullying behavior.

The final category of moral disengagement involves either blaming the victim or not perceiving the victim as a human being with thoughts and feelings. Blaming the victim may involve thinking that the victim is “asking for it” because of his/her appearance or another personal characteristic. An example of blaming the victim would be saying that the victim is weak or puny and making themselves an easy target. Dehumanization is another mechanism in this category that involves viewing the victim as devoid of feelings and incapable of being hurt (Bandura et al., 1996).

### **Bullying**

One of the most prevalent forms of aggression for children in schools is bullying (Elinoff, Chafouleas, & Sassu, 2004), and the examples of moral disengagement for this specific form of aggression show how these social-cognitive processes may be utilized to explain such harmful behavior. The most commonly used definition of bullying in the literature comes from the United States Center for Disease Control and Prevention, where bullying is described as “any unwanted aggressive behavior(s) by another youth or group of youths” (Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014, p.7). It also includes a “perceived power imbalance and is repeated multiple times or highly likely to be repeated” (Gladden et al., 2014, p. 7). The rate of perpetration for this specific form of aggression varies in studies but has typically been found to range from 6% to 38% (Nansel et al., 2001; Swearer, Siebecker, Frerichs, & Wang, 2010; Wang, Iannotti, & Nansel, 2009). Self-report and peer nomination are the most common means of assessing

bullying behavior. There are even higher reports for victimization, ranging from 28% to 69% (Robers, Kemp, Truman, & Snyder, 2013; Swearer et al., 2010; Wang et al., 2009).

These rates are alarming considering the long-lasting consequences of bullying for both academic and behavioral outcomes. Glew, Fan, Katon, Rivara, and Kernic (2005) found students who were involved in bullying scored significantly lower academically than students who were not involved in bullying. The results suggest that perpetrators, victims, and those students who were both perpetrators and victims (i.e., bully-victims) are at increased risk of poor academic performance (Glew et al., 2005). Students involved in bullying perpetration are also at an increased risk of involvement in other aggressive acts later in life (Farrington & Ttofi, 2011). In addition to a greater likelihood of crime and violence, this research found that perpetrators are more likely to have low job status and be involved in drug use. Arseneault et al. (2006) found that victims experienced more internalizing problems than peers uninvolved in bullying. Children who were bully-victims, however, experienced both more internalizing and externalizing problems. Kumpulainen and Räsänen (2000) also found those who played a role in bullying at an early elementary age to be significantly more likely to have psychiatric symptoms in adolescence; this was particularly salient for those classified as bully-victims. Research suggests that bullying has also been associated with anxiety, depressive symptoms, low self-esteem, and suicidal ideation (Card & Hodges, 2008; Swearer, Collins, Haye-Radliff, & Wang, 2011).

## **Bullying Prevention Programs**

The prevalence rates of perpetration and victimization indicate that bullying is a concern in school-aged children, and longitudinal research illustrates the harmful long-term outcomes that have been associated with bullying involvement both academically and psychologically for both perpetrators and victims. Thus, it is imperative that anti-bullying programs are effectively designed and implemented to prevent this unwanted aggressive behavior in schools. Unfortunately, meta-analyses on anti-bullying interventions have shown an overall lack of bullying behavior change due to these programs (Ferguson, San Miguel, Kiburn, & Sanchez, 2007; Merrell, Gueldner, Ross, & Isava, 2008). Ferguson et al. (2007) found only a small effect size ( $r = 0.12$ ) for anti-bullying interventions, which did not reach practical significance after accounting for the bias of publishing papers with mainly positive results (i.e., file drawer effect). Effect sizes were slightly higher for programs targeting only aggressive students (Ferguson et al., 2007). Merrell et al. (2008) were also unable to find significant bullying behavior change. Knowledge, attitudes, and self-perceptions, however, were more likely to improve as a result of anti-bullying programs (Merrell et al., 2008).

In another meta-analysis, Ttofi and Farrington (2011) demonstrated a significant decrease in perpetration and victimization associated with anti-bullying programs, but not all interventions are created equal. An assessment of moderating variables indicated that programs that included school staff support were generally more effective. Bullying prevention programs that included staff support with disciplinary methods (odds ratio [OR] = 1.57 for perpetration and OR = 1.44 for victimization) and playground

supervision (OR = 1.53 for perpetration) were more effective. Those programs that included a parent component (OR = 1.57 for perpetration and OR = 1.41 for victimization) were also more effective for decreasing negative bullying behavior (Ttofi & Farrington, 2011). The larger effect sizes found for programs with staff and parent elements suggest that these are critical components of anti-bullying interventions. Thus, the research advocates for an ecological, systems-level approach in bullying prevention programs, including multiple aspects of the students' environment to combat bullying.

One bullying prevention program that includes a systems-level approach is *Steps to Respect* (Frey et al., 2005). Staff and parents are encouraged to take part in this comprehensive intervention. Using survey methods and observation to assess behavior change due to this program, Frey et al. (2005) found that bullying behavior and arguments on the playground significantly decreased in treatment groups. Agreeable interactions and bystander responsibility also increased in schools that underwent treatment (Frey et al., 2005). Another comprehensive program, *KiVa* (Kärnä et al., 2010), targets all students and continuously monitors identified aggressive children. There are multiple components of the intervention and the administrative team of the school may be involved in the lessons and progress monitoring of students. This intervention also includes a distribution of handouts for parents to encourage their involvement. Kärnä et al. (2010) found this intervention to result in significant behavior change. Victimization (both self-reported and peer-reported) and self-reported bullying decreased after implementation of this comprehensive curriculum (Kärnä et al., 2010).

Although these comprehensive programs are more likely to result in significant behavior change, both *Steps to Respect* and *KiVa* are resource-intensive programs that can be costly and require a lot of time and oversight. On the other hand, short-term and inexpensive efforts may be less likely to result in behavior change or knowledge gains. For example, Beran and Shapiro (2005) did not find a significant difference in the knowledge and skillset for students who watched a one-time 30-minute puppet show on bullying. Another critical aspect in the design of bullying prevention programs is the need for the intervention to be easily incorporated into the current academic instruction/curriculum (Domitrovich et al., 2010; Swearer, Espelage, & Napolitano, 2009). This incorporation would also facilitate increased treatment integrity of the program, where teachers or other implementers are more likely to carry out the necessary components of the intervention with fidelity (Langley, Nadeem, Kataoka, Stein, & Jaycox, 2010).

Bibliotherapy, or the process of using literature to promote personal problem solving or teach skills (Bodart, 1980), is one technique that allows for a program to be easily incorporated into the current Language Arts curriculum of the classroom. Some anti-bullying interventions have been developed that use children's books to teach about strategies to use during bullying situations and encourage discussions in the classrooms. Teglassi and Rothman (2001) used the *STORIES* curriculum to assist in the teaching of social skills to small groups of teacher-identified aggressive students. The bibliotherapy intervention resulted in significantly less teacher-reported externalizing problems and antisocial behaviors for students in treatment (Teglassi & Rothman, 2001). The *WITS*

*Primary Program* (Leadbeater, Hoglund, & Woods, 2003) is another anti-bullying intervention that is embedded in bibliotherapy. This program teaches four useful strategies for dealing with bullying using the W.I.T.S. acronym: Walk Away, Ignore, Talk it Out, and Seek Help. Victimization decreased and teacher-reported social responsibility increased for students who underwent the *WITS Primary Program* (Leadbeater & Sukhawathanakul, 2011).

When examining the literature on bullying prevention programs, it is important to consider the effective elements in bullying prevention and turn to factors that are strongly associated with this popular form of aggression. Thus, it may be useful to explore the role of social-cognitive processes, such as moral disengagement, to design effective anti-bullying interventions.

### **Moral Disengagement and Bullying**

It has been debated in the literature whether perpetrators of bullying have deficits or strengths in the cognitive processes for judging immoral transgressions. Sutton, Smith, and Swettenham (1999) argued against the social skills-deficit hypothesis and proposed that bullying perpetrators utilize social-cognitive skills, such as theory of mind, to carry out their transgressions. In their critique, the authors suggest that knowing whether there are strengths or limitations in the social cognition of perpetrators can help inform intervention (Sutton et al., 1999).

Gini, Pozzoli, and Hauser (2010) investigated moral competence and moral compassion related to bullying roles. Bullies and defenders were found to demonstrate advanced moral competence, which was defined as “integrating information about beliefs

and outcomes to judge the permissibility of actions” (Gini et al., 2010, p. 1). That is, bullies and defenders judged that attempted harm would be worse than accidental harm, focusing on the intention/belief of the transgressor. Victims, on the other hand, judged accidental harm more negatively than attempted harm that led to a neutral outcome (i.e., individuals with lower moral competence view outcomes as more important than beliefs). For bullies, deficits were found in moral compassion, which was assessed using Caprara, Pastorelli, and Bandura’s (1995) moral disengagement scale. Bully perpetrators endorsed significantly more moral disengagement statements than victims and defenders. Research suggests that even though perpetrators have the skill to accurately assess scenarios, they may be more likely to engage in harmful cognitive processes to justify their own immoral action (Gini et al., 2010). This finding is consistent with Menesini et al. (2003), who found that bullies were more likely to morally disengage than victims and outsiders. Specifically, bullies elicited egocentric reasoning so that they felt indifference or pride, thereby focusing on their personal motives and the advantages of their behavior when acting aggressively (Menesini et al., 2003).

Similar results were also found by Gini (2006), who found those who were identified as bullies as well as those who were classified as “reinforcers” and “assistants” of bullies showed higher levels of moral disengagement than students who were not identified as perpetrators. Furthermore, defender status was associated with lower moral disengagement, whereas victim status was not significantly related to this construct. This finding illustrates how defenders use less moral disengagement than students who do not intervene (i.e., outsiders) in bullying situations (Gini, 2006). This negative relation is also

important to consider for the development of anti-bullying interventions that promote positive bystander behavior.

The relations between social-cognitive processes and bullying behavior were also explored using structural equation modeling by Thornberg and Jungert (2013a). The authors found moral sensitivity to have a negative relation with pro-bullying behavior and a positive relation with defending and outsider behavior. That is, there was a distinction between bullies and non-bullies in moral sensitivity, which was defined in the study as “the ability to recognize moral issues in complex situations” (Thornberg & Jungert, 2013a, p. 2). Contradictory to the findings of Gini et al. (2010), the research suggests that bullies may have deficits in their assessment of morality, and non-bullies (defenders and outsiders) may be better able to detect moral issues. Moral sensitivity had a negative, indirect relation with pro-bullying behavior and a positive, indirect relation with non-bullying behavior. Specifically, the model revealed that each of the relations were mediated by moral disengagement. Basic moral sensitivity was negatively mediated by moral disengagement, which in turn, was positively related to pro-bullying behavior. Moral sensitivity was negatively mediated by moral disengagement, which in turn, was negatively related to outsider and defender behavior.

Thornberg and Jungert (2013a) assessed moral disengagement using six items identified in a post hoc manner on a 7-point Likert scale from “*not true at all*” to “*very true.*” Questions measured to what degree the subjects justified bullying (e.g., “Bullying is okay in certain cases,” “It’s okay to bully someone who you don’t like,” “Some people deserve to be bullied”). Although the questions included different mechanisms (e.g.,



blaming the victim, disregard of the consequences), moral disengagement was measured as a single construct. The researchers justified not including all eight of the moral disengagement mechanisms by reporting the high reliability of items (Cronbach's  $\alpha = 0.83$ ) and by citing factor-analytic support for use of the one-factor construct (e.g., Bandura et al., 1996; Hymel et al., 2005). The finding of the mediating role of moral disengagement suggests the strong role that this construct plays in different bullying behaviors (Thornberg & Jungert, 2013a). Instead of using a Likert-type scale, Perren and Guzwiller-Helfenfinger (2012) asked open-ended questions to assess moral disengagement and how it relates to bullying. Answers to questions were coded using Menesini et al.'s (2003) model that included egocentric disengagement (e.g., minimizing/distorting consequences, euphemistic labeling), deviant rules (e.g., moral justification, attribution of blame, advantageous comparison, displacement/diffusion of responsibility), and dehumanization. Two independent raters coded the data (ICC = 0.83). Results revealed that although a lack of moral values and remorse was associated with cyberbullying and traditional bullying, both of these deficits as well as moral disengagement were associated with traditional bullying (Perren & Guzwiller-Helfenfinger, 2012).

Moral disengagement has repeatedly been shown to be strongly related to bullying behavior. Pozzoli, Gini, and Vieno (2012) performed a multilevel analysis to assess the associations between the broad categories of moral disengagement mechanisms and bullying behavior at the individual- and class-levels. Using factor analysis to establish four separate constructs in Caprara and colleagues' (1995) scale, cognitive

restructuring was found to be positively related to individual bullying; minimizing one's agentic role and blaming/dehumanizing the victim were related to bullying at the class level. Surprisingly, disregarding/distorting the consequences of bullying (i.e., "People do not mind being teased because it shows interest in them," "Teasing someone does not really hurt them") was negatively associated with bullying at the class level. The researchers hypothesized that this may be due to perpetrators' actions (i.e., consequences) needing to be perceived by their peers for the aggressive behavior to be effective (Pozzoli et al., 2012). Assessing the specific categories of moral disengagement, Robson and Witenberg (2013) found moral justification and diffusion of responsibility were associated with traditional bullying. Diffusion of responsibility and attribution of blame were associated with cyberbullying. The overall construct of moral disengagement, however, was associated with both forms of bullying (Robson & Witenberg, 2013).

Hymel, Rocke-Henderson, and Bonanno (2005) used principal component analysis with varimax rotation to determine how to best capture the construct of moral disengagement to assess for differences in bullies and bully-victims. Results suggested that the four broad categories (i.e., cognitive restructuring, minimizing one's agentic role, disregarding/distorting the consequences, and blaming/dehumanizing the victim) of moral disengagement items to load onto one overall factor, which is consistent with the measure used by Thornberg and Jungert (2013a). The researchers found 38% of the variance in bullying was accounted for by the overall construct of moral disengagement. There were also significant differences in moral disengagement between those who bullied frequently, those who bullied sometimes, and those who did not engage in

bullying. When assessing the level of moral disengagement between bully-victims (those who reported participation in both roles), no differences were found for disengagement when perpetrator behavior was frequent (i.e., “once a week or more”). When bullying was reported as limited (i.e., “a few times, once in a while”), however, moral disengagement was significantly lower when the participant also held the role of victim. This suggests the complex role that moral disengagement plays in different bullying roles. Perpetrators who have also experienced victimization were less likely to justify aggressive behavior (Hymel et al., 2005).

Gendron, Williams, and Guerra (2011) found that bullying perpetration was significantly correlated with normative beliefs about aggression. Researchers found those individuals who justified bullying behaviors on an adapted version of Huesmann and Guerra’s (1997) scale were more likely to be identified as bullies. These individuals rated more bullying behavior as “okay” rather than “wrong” (Gendron et al., 2011). Using two different methods of identifying bullies, Obermann (2011) found that both those who self-identified as bullies and those who were nominated by their peers as bullies showed similar levels of moral disengagement. That is, even those students who did not identify themselves as bullies displayed higher levels of moral disengagement than outsiders. The findings suggest that students may be unaware of their participation in moral disengagement, and Obermann (2011) encouraged future research to explore how moral disengagement prevails even when individuals do not perceive themselves as acting immorally. This is a critical feature that goes into the design of the current investigation, which involves the assessment of change in moral disengagement in students who may or

may not identify as a bully. Obermann's (2011) finding of statistically similar levels of moral disengagement for self-identified and peer-nominated bullies establishes the need to identify and target all students who morally disengage to justify aggressive behavior. The *BLP-MD* encourages discussion among participants on the mechanisms that the characters in the stories are using to justify harmful behavior. Classroom conversations include discussing why bullying is never okay under any circumstance.

In a dissertation study using Bandura's (1995) moral disengagement scale, Turner (2008) found moral disengagement to be moderately correlated ( $r = .36$ ) with bullying. Turner (2008) hypothesized that moral disengagement was responsible for influencing bullying behavior. Wang, Ryoo, Swearer, Turner, and Goldberg (2017) also studied the longitudinal relation between these constructs and found that moral disengagement predicted bullying six months later. This finding was consistent with Sticca and Perren (2015), who found moral disengagement, along with low moral responsibility and weak feelings of remorse, to predict bullying. Furthermore, these constructs also were predictive of changes in bullying behavior over time (Sticca & Perren, 2015). Considering the direction of this relation, it would be of interest to intervene to decrease levels of moral disengagement before these social-cognitive processes develop into bullying perpetration. That is, it could be beneficial to implement prevention programs for individuals who are starting to disengage before these processes lead to the development of an even more serious issue.

Inconsistent with aforementioned studies, however, Obermann (2013) found initial levels and changes in bullying behavior to predict one's level of moral

disengagement. Although there are mixed findings on the direction of the relation between these constructs, Bandura (1999) proposed that the relation between moral reasoning and bullying is reciprocal. This theory outlines how an individual may utilize moral disengagement to achieve absolved guilt from an aggressive behavior, making it easier to engage in aggressive behavior in the future. The individual is then more likely to commit a more severe aggressive act, where greater levels of moral disengagement will need to be used (Bandura, 1999). The longitudinal relation between these variables highlights the need for bullying prevention programs to include social-cognitive components that are used to permit aggressive behavior.

### **Moral Disengagement in Bullying Prevention Programs**

Despite the strong literature on the associations between bullying behavior and moral disengagement, social-cognitive processes have rarely been incorporated into anti-bullying efforts. Only one known intervention has explicitly targeted moral disengagement in its role in bullying. Barkoukis, Lazura, Ourda, and Tsorbatzoudis (2015) sought to raise awareness of the harmful consequences of adolescent cyberbullying. The intervention included training in morality and empathy for victims of aggression. A significant decrease was observed for overall disengagement as well as for the specific mechanisms: distortion of consequences and attribution of blame. Although the intervention took place in the school setting, its efforts were focused on decreasing cyberbullying specifically. The promising findings, however, support how moral disengagement may be effectively targeted and discouraged in anti-bullying efforts (Barkoukis et al., 2015).

Other social-cognitive processes have received more attention in the design of anti-bullying interventions. Perceptions of school social norms were targeted using the display of a poster in Perkins, Craig, and Perkins (2011) to inform students of their peers' attitudes surrounding bullying. Additionally, positive bystander behavior has been targeted by the encouragement of responsibility-taking during bullying situations (Menesini, Codecasa, Benelli & Cowie, 2003; Salmivalli, Kaukiainen, & Voeten, 2005). It is worth noting that most bullying prevention efforts that have targeted social-cognitive processes have involved adolescent or middle school populations. There is an absence of research in the literature that evaluates whether targeting social-cognitive processes, such as moral disengagement, is effective at changing behavior in younger students.

### **Student Perceptions**

Considering how one's level of moral disengagement is related to bullying behaviors (i.e., higher levels of moral disengagement for perpetrator roles and lower levels of moral disengagement for defending role), Gini (2006) suggested exploring the potential relations between other constructs, such as the moral climate of the student's environment. Bullying and the social-cognitive processes associated with bullying may be influenced by the students' perceptions.

Ttofi and Farrington (2008) assessed children's defiant versus compliant reactions to vignettes of parents punishing children. The children were more likely to bully if they indicated defiance toward the hypothetical person sanctioning the transgressor. Thus, the researchers argued that defiance is useful in predicting bullying. The research on defiance theory suggests how the perception of a punishment as fair is associated with compliance,

whereas the perception of a punishment as unfair is associated with defiance (Sherman, 1993), which can lead to bullying behavior. Path analysis also suggested that unacknowledged shame led to the child's perception of fairness. That is, children were more likely to utilize neutralization techniques when asked if they would be ashamed if they had committed the hypothetical wrongdoing (Ttofi & Farrington, 2008). The implications of this study are that perceptions of the child are related to justification of behavior and acknowledged shame. Although this study included vignettes in which parents were punishing their children, a child's perception of their teacher's fairness in the classroom may also have associations with immoral behavior and level of moral disengagement.

The interpersonal constructs of students' social status were found to have associations with bullying roles in the study by Caravita, Di Blasio, and Salmivalli (2010). Peers were asked to nominate the five classmates they liked least and liked best. The researchers found that social preference had a negative relation with bullying and a positive relation with defending. Both defenders and bullies, however, were more likely to be high in perceived popularity (i.e., peers nominated who they thought were the most popular students in the class). These findings suggest that an individual's social status may also play a part in the individual's participation in bullying. Because Caravita et al. (2010) used peer nomination to measure social status, it could be informative to assess results using students' perceptions of their own popularity or friendships in the classroom and how they relate to their behavior. That is, it may be that the students' own perception of their peer relations may have a stronger influence on their bullying behavior than what

their peers think of them. For example, if individuals believe they are popular within their group of peers, they may be more likely to take a pro-bullying or defending role versus if their peers believe they are popular but they themselves do not view themselves that way.

Pozzoli et al. (2012) found broad categories of moral disengagement to be related to bullying at both the individual- and class-level. The multilevel analysis suggests that moral disengagement not only has a role at the individual level, but also contributes to group bullying, where the perpetrator's peers may influence their behavior. The negative relation found between disregarding and distorting the consequences and bullying at the class level also suggests that the perception of other students in the peer group may influence bullying behavior. The researchers suggest that if the peers are not recognizing the consequences and the perpetrator is unable to be perceived by his/her peers as being a bully, then the perpetrating behavior may be less likely to occur (Pozzoli et al., 2012). Thus, moral disengagement and bullying behavior may have associations with other classroom factors, such as peer behavior. Caravita, Sijtsema, Rambaran, and Gini (2013) investigated moral disengagement among friends and found that friends were likely to be influenced by their peers' level of moral disengagement a year later. Bullying and perceived popularity, however, did not moderate this relation (Caravita et al., 2013). The findings further suggest that peer behavior may have a strong influence over one's own level of moral disengagement.

In addition to normative beliefs about aggression, self-esteem was also predictive of bullying status in Gendron et al. (2011). However, this construct was moderated by school climate. Specifically, high self-esteem predicted higher levels of bullying when



the school climate was perceived as negative; and high self-esteem predicted lower levels of bullying when the school climate was perceived as positive (Gendron et al., 2011). The results suggest that beliefs about one's self and perception of the school climate are variables that contribute to bullying in some fashion. However, there is less evidence as to whether these student perceptions influence change in social-cognitive processes, such as moral disengagement. Students' perceptions of themselves and their school climate may be explored to understand how these constructs work to influence change in moral disengagement. In other words, students' perceptions about themselves and their school may predict their change in moral disengagement above and beyond an intervention targeting these social-cognitive processes. In this case, it would be useful to establish the effect of an intervention for decreasing moral disengagement while controlling for the effects of students' perceptions of themselves or their school.

### **Current Study**

The current investigation sought to examine whether the implementation of an anti-bullying intervention, the *Bullying Literature Project- Moral Disengagement Version (BLP-MD)* would result in change in moral disengagement. The *BLP-MD* utilizes bibliotherapy to teach effective strategies to use in bullying situations as well as to discourage the harmful social-cognitive process of moral disengagement, which has been repeatedly shown to be associated with bullying. The intervention also addresses the problem of bullying using an ecological perspective, where factors at multiple levels were targeted. Student perceptions of themselves and their climate were assessed, given

that these factors have been tied to bullying and moral disengagement in previous investigations. The following research questions were used to guide the current study.

### **Research Questions**

1. To what extent does the *BLP-MD* affect student endorsement of moral disengagement mechanisms in bullying after controlling for student perceptions of their social-emotional assets, peer friendships, teacher behavior, peer behavior, and teacher-reported prosocial behavior?

2. Do students and their teachers believe the *BLP-MD* to be a socially valid intervention where useful skills and strategies are learned?

### **Method**

#### **Participants**

A power analysis was conducted using the G-Power software (Faul, Erdfelder, Lang, & Buchner, 2007) to determine the sample size needed for an  $F$  test of  $R^2$  deviation from zero in linear regression. With an alpha level of .05, a beta level of .20 (power = .80), seven predictors (five control variables, intervention group, and pre-test) and the effect size found in a previous investigation of the *BLP-MD* (partial eta squared ES = 0.54; Wang & Goldberg, 2017), a total of 110 participants would be needed to detect an effect of this size.

Students in third grade classrooms were recruited to participate in the current investigation. After Institutional Review Board (IRB) and school district approval was obtained, a consent form with information about the intervention and study was distributed to the parents of students. Upon parent consent, students were also informed

about the intervention and it was explained that their assent to participate would be asked for before completion of the initial survey. Consent was obtained for a total of 80 students; however, the original sample decreased by 5 students who either had moved or were absent at the time of post-test ( $n = 75$ ). Noteworthy, a post hoc power analysis was conducted at the study's conclusion due to the obtained sample size of 75 participants. A critical  $F(1,66)$  value of 3.99 was determined with a corresponding effect size of  $d = 0.48$  (power = 0.996) (Thalheimer & Cook, 2002).

According to the demographics on the school's website, third-grade students were predominately Hispanic (84%), with 13% White, 0.01% Asian, and 0.01% Black/African American. It is also important to note that the school also has a dual-immersion program, which was present in two of the third-grade classrooms. Due to the high rate of parents who were Spanish-speaking, teachers requested a Spanish version of the consent form to be sent home with these students so parents were able to obtain information and consent in their native language. The relevant documents were translated and sent home for these families.

## **Procedure**

The study utilized a quasi-experimental design, where classrooms were randomly assigned to either the treatment group or the waitlist-control group. An online random number generator was used to assign classrooms to treatment condition (3 treatment classrooms; 2 control classrooms). All students in those randomly selected treatment classrooms received the class-wide intervention for five sessions. Because it was hypothesized that the *BLP-MD* would result in a decrease in moral disengagement,

students in the waitlist-control classrooms received the intervention once the study was concluded.

### ***The Bullying Literature Project- Moral Disengagement Version***

The *Bullying Literature Project (BLP)* is a 5-week class-wide program in which a story is read each week (i.e., *Bullying B.E.A.N.S.*, *Just Kidding*, *Recess Queen*, *Say Something*, and *Juice Box Bully*). The bibliotherapy component involves using bullying literature as a springboard for problem solving what may be done in various bullying situations. The students are asked about how they think the characters in the stories feel based on their situations, using their faces and body language as clues. Students are also asked how they would feel in these situations and other critical thinking questions throughout the books. Previous research has shown that the *BLP* improves positive bystandering and prevents a negative change in harmful pro-bullying attitudes (Couch, 2015; Wang, Couch, Rodriguez, & Lee, 2015).

In the current version of the *BLP*, Bandura's moral disengagement mechanisms were also targeted. The students were asked to think critically about how characters in the stories justified their role in bullying. After the students identified the social-cognitive processes of the characters during aggressive situations, conversations around moral disengagement then took place. Discussions included how bullying behavior is never okay under any circumstance. Evidence-based strategies, including WITS: Walk Away, Ignore, Talk it Out, and Seek Help (Leadbeater et al., 2003), were also modeled and role-played throughout the *BLP* curriculum for responding to bullying at school. The second portion of the lesson included an activity where students had a chance to practice what

they learned during that week's lesson. Activities included making a bookmark, finishing a story starter, writing about a bullying situation, making a group poster, and constructing a booklet. Direct instruction, modeling by the implementers and teacher, and role playing with feedback for students were also included for strategy practice. At the end of each lesson, students made the bullying promise, which encourages them to use their WITS and help other kids to use their WITS when dealing with bullying. Table 1 includes an overview of the *BLP-MD* curriculum.

The study occurred over a seven-week period (five weeks of intervention and two weeks of assessment) during general English Language Arts instruction for approximately one hour each week. The student and teacher questionnaires were administered one week prior to the start of intervention and one week after the conclusion of the intervention to collect data on moral disengagement in bullying and other student characteristics.

Confidentiality and the importance of honesty when answering the survey questions were explained to the students. The students were informed that they did not have to answer any question that they did not wish to answer and may withdraw their assent at any time during the study without penalty by letting the interventionist know. When talking about bullying with students, the universal definition was used (Gladden et al., 2014), where in order for a behavior to be classified as bullying, it must contain (a) harmful intent, (b) a perceived power imbalance, and (c) repetition or likelihood that the behavior will be repeated.

In order to reduce the amount of potentially missing data, surveys were visually inspected before they were returned to make sure questions were not skipped accidentally and that multiple responses were not chosen for the same item. If an item was skipped, the participant was asked if they intentionally skipped the question because they did not wish to answer or if this was done by mistake. It was repeatedly emphasized that students were not required to answer any question if they did not want to. The survey collected information on moral disengagement, social-emotional assets, peer friendships, teacher behavior, and school behavior. During this time, teachers were also given the *Children's Social Behavior Scale- Teacher Form (CSBS-TF; Crick, 1996)*; students' names were pre-filled into this form, and teachers were asked to rate each student's prosocial behavior.

## **Measures**

**Moral disengagement.** The *Moral Disengagement in Bullying Scale (MDBS; Thornberg & Jungert, 2013b, 2014)* was originally developed for use with 10 to 14 year-olds; this measure was modified for the elementary-aged sample. The scale consists of 18 items, which assess the participants' endorsement of Bandura's moral disengagement mechanisms for bullying scenarios. Sample items include, "It is okay to harm another person a little if you do it to protect your friends" (moral justification), "It is okay to bully a classmate if my friends are doing it too" (minimizing one's agentic role), and "It is okay to tease people because they don't really get too sad about it" (dehumanization). The 7-point Likert scale ranges from "1-disagree" to "7-agree."

Slight modifications to the wording of the original measure were necessary for the younger sample. Specifically, the items were condensed so that the younger population

would not be asked to estimate specific amounts of time. For example, the item “It’s okay to harm another person a couple of times a week if you do that to protect your friends” was changed to “It is okay to harm another person a little if you do it to protect your friends.” In addition, each item was changed to begin with “it is okay” to facilitate the reading of the items. For example, the item “Teasing a person a couple of times a week is no big deal because it’s much worse to give the person a beating every week” was changed to “It is okay to tease a person a little because it’s much worse to give the person a beating every week.”

The original measure was tested using exploratory and confirmatory factor analyses with a seven-factor model (assessed using  $r$  or Cronbach’s alpha based on number of items in factor): moral justification ( $r = .59$ ), euphemistic labeling (Cronbach’s  $\alpha = .65$ ), advantageous comparison ( $r = .49$ ), displacement of responsibility ( $\alpha = .70$ ), diffusion of responsibility ( $r = .26$ ), distorting consequences ( $r = .56$ ), and victim attribution ( $\alpha = .64$ ; Thornberg & Jungert, 2013b, 2014). When considering general moral disengagement as a single factor, Cronbach’s alpha increased to .84. Thus, the total score for moral disengagement was used in the current investigation.

For a previous investigation using the *BLP-MD* modified for the younger population (Wang & Goldberg, 2017), the internal consistency of this scale was  $\alpha = 0.70$  at pre-test and  $\alpha = 0.82$  at post-test, which is considered to range from moderate to large based on Cohen’s (1988) criteria. The original measure’s overall reliability was  $\alpha = 0.84$  (Thornberg & Jungert, 2014).

**Social-emotional assets.** The *Social Emotional Assets and Resilience Scales-C* (short form for grades 3–6; *SEARS*; Merrell, 2011) was used to measure the participants’ assessment of their own social-emotional knowledge, resiliency, use of coping and problem solving, and empathy. The seven items on this measure are on a 4-point scale, where participants rate their social-emotional assets ranging from “*never*,” “*sometimes*,” “*often*,” and “*always*.” Sample questions include, “I understand how other people feel” and “I think before I act.”

The internal consistency in the original study was  $\alpha = 0.85$  (Merrell, 2011). The internal consistency for the items on this measure was  $\alpha = 0.70$  at pre-test and  $\alpha = 0.78$  at post-test in a previous investigation (Wang & Goldberg, 2017).

**Peer friendships.** The self-reported peer friendships subscale of the *ClassMaps Survey* (*CMS*; Doll et al., 2009; Doll et al., 2010) was used to assess students’ perceptions of friendships in the classroom. The measure includes six items where student-peer relations are rated on a 4-point scale from “*never*” to “*almost always*.” Sample items include “I have friends to eat lunch with and play with at recess” and “I have friends who would stick up for me if someone picks on me.” Exploratory factor analysis suggested an eight-factor solution for the original measure with peer friendship items making up a separate factor (Doll, Spies, LeClair, Kurien, & Foley, 2010).

The internal consistency of this scale ranged from  $\alpha = 0.78$  to 0.93 in the original study (Doll et al., 2009; Doll et al., 2010) and was  $\alpha = 0.74$  at pre-test and  $\alpha = 0.79$  at post-test for a previous investigation of the *BLP-MD* (Wang & Goldberg, 2017).



**Teacher behavior.** The teacher behavior subscale of the *ClassMaps Survey (CMS;* Doll et al., 2009; Doll et al., 2010) was used to assess student perceptions of their relationship with their teacher in the classroom. This subscale contains seven items rated on a 4-point scale from “*never*” to “*almost always*.” Sample items include, “My teacher listens carefully to me when I talk,” “My teacher likes having me in this class,” and “My teacher is fair to me.” Results from factor analysis suggested that the teacher behavior factor comprises its own construct, and prior research has demonstrated an internal consistency coefficient for this scale of 0.79 (Doll et al., 2010).

**Peer behavior.** The peer behavior subscale of the *ClassMaps Survey (CMS;* Doll et al., 2009; Doll et al., 2010) was used to assess student perceptions of their peers for following the rules in the classroom. There are six items in this subscale that are rated on a 4-point scale from “*never*” to “*almost always*.” Sample items include, “Most kids work quietly and calmly in this class,” “Most kids in this class listen carefully when the teacher gives directions,” “Most kids follow the rules in this class,” and “Most kids in this class behave well when the teacher isn’t watching.” Results from an exploratory factor analysis found that all questions of the “peers following the rules” subscale loaded onto one factor. The internal consistency coefficient for this scale was 0.84 (Doll et al., 2010).

**Prosocial behavior.** The prosocial behavior subscale in *Children’s Social Behavior Scale- Teacher Form (CSBS-TF;* Crick, 1996) was used to assess teachers’ perception of the prosocial behavior of their students. This four-item 5-point Likert scale asks whether “the child is helpful to peers,” “the child is kind to peers,” “says supportive things to peers,” and “tries to cheer up peers when they are sad or upset about

something.” A principal component factor analysis with varimax rotation was run to evaluate the structural validity of scores from the full original scale that consisted of relational aggression, overt aggression, and prosocial behavior. The analysis yielded three expected factors, where the four questions for prosocial behavior made up a separate construct.

The reliability in the original study in which the measure was used was  $\alpha = 0.83$  (Crick, 1996). For a previous study using the *BLP-MD*, the internal consistency was  $\alpha = 0.90$  at pre-test and  $\alpha = 0.95$  at post-test for teacher-reported prosocial behavior (Wang & Goldberg, 2017).

**Social validity.** A 5-item scale for students was modified from Castro-Olivo (2014) to assess the social validity of the *Bullying Literature Project-MD*. Students were asked questions as to whether they liked the program and if they thought useful skills were taught in the program on the 4-point scale from “*strongly disagree*” to “*strongly agree*.” The reliability of this measure was  $\alpha = 0.79$  for students and  $\alpha = 0.81$  for teachers in a previous study (Wang & Goldberg, 2017) and  $\alpha = 0.87$  in the original study (Castro-Olivo, 2014).

In addition, teacher-reported social validity was assessed using the *Usage Rating Profile- Intervention, Revised (URP-IR)*; Chafouleas, Briesch, Neugebauer, & Riley-Tillman, 2011). This 29-item measure is on a 6-point Likert scale from “*strongly disagree*” to “*strongly agree*.” The *URP-IR* uses an ecological approach to assess an intervention’s social validity by considering multiple factors, including the individual, intervention, and environment. Exploratory and confirmatory factor analyses suggested a

6-factor structure to this scale that includes the following: acceptability, understanding, feasibility, family-school collaboration, system climate, and system support. Internal consistency of these factors ranged from  $\alpha = 0.72$  to 0.95 (BRIESCH, CHAFOULEAS, NEUGEBAUER, & RILEY-TILLMAN, 2013). The *URP-IR* gauges how likely the intervention would be adopted by considering these multiple factors.

**Treatment fidelity.** A checklist was used to assess implementer integrity of the intervention. The different components of the intervention were listed. Example items included “review WITS and ask student if they used WITS,” “introduce the story with opening questions,” “praise student for appropriate answers and for participating,” “model the appropriate strategies,” and “complete the planned activities, such as writing and role play.” For each of the five sessions in the treatment classrooms, a trained graduate student in the *BLP-MD* rated intervention components on a 3-point scale (3 = *always*, 2 = *sometimes*, 1 = *never*) for how consistently the treatment provider carried out each component (Appendix A). The ratings of the trained graduate student indicated that 100% of the *BLP-MD* program was completed with fidelity (i.e., all items were rated the highest score of 3 with the exception of the first item which was not applicable for the first week of implementation).

Additional open-ended questions included: what activities worked this time, how students responded to the intervention, and areas for improvement. Additionally, the dosage (i.e., duration of sessions) was recorded to examine how much exposure students received to this program. Each of the sessions took place for approximately one hour.

## **Analysis**

The planned primary analytic technique used for this investigation was a one-way analysis of covariance (ANCOVA) with the mean score across items on the moral disengagement scale as the dependent variable, whether the child received intervention coded dichotomously as the independent variable, and several student covariates. Covariates were to include student social-emotional assets, peer friendships, teacher behavior, peer behavior, and prosocial behavior at the start of the intervention. The statistical software package SPSS 24 was used to input data and conduct the analysis. Data were inspected for missingness, and only 39 cases were missing out of a total of 7,169 cases (0.01% missing); therefore, pairwise deletion was used for missing data (Enders, 2010).

**Assumption testing.** As described in the outline of the measures, the dependent variable and covariates were each on a continuous scale. The independent variable consisted of two independent groups (i.e., treatment and waitlist-control group). All observations were independent of each other (i.e., no participants belong to both groups).

Other model assumptions for ANCOVA were tested prior to running the model. This involves checking for significant outliers that may skew results. The residuals were assessed to determine if they are approximately normally distributed in both the treatment and wait-list control groups. The Shapiro-Wilk test for normality and QQ-Plots was used to test this assumption. Homogeneity of variances was assessed using Levene's test. The covariates' relation with the dependent variable at each level of the independent variable was checked using scatterplots. The assumption of homoscedasticity was also checked

using scatterplots of the standardized residuals against the predicted values. Finally, the assumption of homogeneity of regression slopes was used to determine that there were no interactions between the covariates and the treatment.

**Model.** The following equation was used to answer the primary research question about the change in moral disengagement for students undergoing the *BLP-MD* above and beyond student perceptions and teacher-reported prosocial behavior (i.e., after controlling for 5 covariates):

$$Y_{ij} = \mu + \alpha_j + \beta_1(X_{ij} - \mu_1) + \beta_2(X_{ij} - \mu_2) + \beta_3(X_{ij} - \mu_3) + \beta_4(X_{ij} - \mu_4) + \beta_5(X_{ij} - \mu_5) + \varepsilon_{i(j)},$$

where  $Y$  is the observed score on moral disengagement for individual  $i$  in group  $j$ ,  $\mu$  is the overall grand population mean,  $\alpha$  is the treatment effect for group  $j$ ,  $\beta$  is the within group slope from the regression of  $Y$  on  $X$ ,  $X$  is the observed score on covariate,  $\mu_x$  is the overall grand population mean for covariate  $x$ , and  $\varepsilon$  is the random residual error.

The secondary research question was answered using descriptive statistics (means and standard deviations) of the Likert scales to determine the social validity and treatment acceptability of the *BLP-MD* for students and their teachers.

## Results

### Descriptive Statistics

**Means and standard deviations.** The difference score between pre-test and post-test for moral disengagement was generated to serve as the outcome variable. Although there exist controversies around the use of difference scores due to reasons on low reliability, Edwards (2001) dispelled some of these myths. For example, difference scores may be more reliable than using the component scores if they are correlated. Because this

study aimed to detect the difference in moral disengagement from pre-test to post-test, this type of score served as the outcome variable. The mean difference in moral disengagement for the treatment group was  $-.35$  ( $SD = .57$ ) and the mean difference for the control group was  $-.27$  ( $SD = .82$ ), indicating that both groups decreased their endorsement to moral disengagement statements over time. A larger negative value here indicates that there was a larger decrease in moral disengagement from pre- to post-test. Positive values would have suggested that students increased their endorsement to moral disengagement mechanisms. The range of possible scores at pre- and post-test was 1 to 7. Therefore, the range of possible difference scores may have included  $-6$  to  $6$ . Boxplots depicting interquartile range along with the standard deviations indicated that there was more variability in moral disengagement differences in the control group when compared to the treatment group. There were two outliers,  $1.5$  and  $-1.76$ , in the treatment group that were out of the interquartile range on the boxplots.

The mean for student-rated social-emotional assets measured at pre-test was  $3.11$  ( $SD = .64$ ) for the treatment group and  $2.76$  ( $SD = .50$ ) for the control group on the 4-point scale. A higher score on this scale indicates students tended to agree that they had stronger social-emotional assets. There was one outlier score,  $1.14$ , in the treatment group. Additionally, there was a significant difference between groups on this variable,  $t(73) = -2.55, p = .01$ .

The mean for student perceptions of friendships was  $3.41$  ( $SD = .59$ ) for the treatment group and  $3.36$  ( $SD = .68$ ) for the control group on the 4-point scale. A higher score on this scale indicates students tended to agree they had stronger friendships. The

boxplots revealed no outliers in either group. No significant difference was found between groups for student-reported friendships,  $p = .75$ .

The mean for student perceptions of teacher behavior was 3.68 ( $SD = .53$ ) for the treatment group and 3.63 ( $SD = .44$ ) for the control group on the 4-point scale. A higher score on this scale indicates students tended to have positive feelings toward their teachers in the classroom. There were four outliers, 2.43, 2.43, 2.14, and 2.00, on this scale that were in the treatment group. No significant difference was found between groups for student perceptions of teacher behavior,  $p = .68$ .

The mean for student perceptions of peer behavior in their classroom was 1.82 ( $SD = .80$ ) for the treatment group and 1.60 ( $SD = .71$ ) for the control group on the 4-point scale. A lower score on this scale indicates students tended to disagree that their peers' behavior was poor. There were four outliers (two in each condition) for this variable, 3.5 and three values of 4.0. No significant difference was found between groups for student perceptions of peer behavior,  $p = .22$ .

The mean for teacher-rated prosocial behavior was 3.85 ( $SD = .98$ ) for the treatment group and 3.73 ( $SD = .97$ ) for the control group on the 5-point scale. The boxplots revealed that there were no outliers in either of the groups. No significant difference was found between groups for prosocial behavior,  $p = .18$ .

**Social validity.** In order to evaluate the social validity of the intervention, as stated in the second research question, descriptive statistics were analyzed for the student- and teacher-reported scales. The mean social validity score for the *BLP-MD* was 3.71 ( $SD = .50$ ) on the 4-point scale for students in the treatment group. A higher score on

this scale indicates that students tended to agree that the program was socially valid. That is, students reported positive feelings towards the program and reported learning useful skills and strategies to use in bullying situations.

The scale for teachers is interpreted across multiple factors of social validity. The mean for program acceptability was 4.70 ( $SD = .17$ ) on the 6-point scale. It is important to note that the small amount of variability in these scores may be a product of the small sample size of teachers ( $n = 3$ ) in the treatment group who completed this measure. Therefore, the range of scores may be a better indication of variability. The range for program acceptability was 4.56 to 4.89. The mean for program understanding was 4.78 ( $SD = .38$ ). The range for program understanding was 4.33 to 5.00. The mean for program feasibility was 4.17 ( $SD = .33$ ). The range for program feasibility was 3.83 to 4.50. The mean for system climate for this program was 4.80 ( $SD = .20$ ). The range for system climate was 4.6 to 5.0. The mean for system support was 4.22 ( $SD = .51$ ). The range for system support was 3.67 to 4.67. Unlike in the previous subscales, a lower score for system support indicates that the teacher feels he/she would be able to carry out this intervention more independently and would not need to rely as heavily on administrative support. The mean for home-school collaboration was 4.44 ( $SD = 1.17$ ). The range for home-school collaboration was 3.33 to 5.67. Responses varied the most on this subscale, indicating that teachers may have different viewpoints regarding parental collaboration. It is worth noting that some teachers may have felt they needed more home-school collaboration because of the parent consent process that came with the IRB protocol for the study. Refer to Table 2 for descriptive statistics (i.e., means, standard



deviations) for the outcome variable and covariables, and refer to Table 3 for social validity variables.

**Correlations.** The correlations between the dependent variable and covariates were assessed to explore the bivariate relationships between variables. Student perceptions of their friendships and teacher behavior in the classroom had the highest significant correlations, ranging from  $r = .24$  to  $.61$  and  $r = .43$  to  $.61$ , respectively. The highest significant correlation was between these two variables,  $r = .6$ ,  $p < .01$ . Because these correlations are not necessarily large enough for concern, they were added into the model with caution to observe the change in  $R^2$ , or the improvement of the model.

### **Assumption Testing**

The assumption of normality was met for both groups on the difference score for moral disengagement dependent variable, Shapiro-Wilk ( $W$ ) = 0.96,  $p = .27$  for the control group and  $W = 0.96$ ,  $p = .10$  for the intervention group. The data points fell along the normal distribution line on the normal Q-Q Plots. The assumption of normality was also met for the pre-test score for the control group,  $W = 0.95$ ,  $p = .22$ , but not for the treatment group,  $W = 0.87$ ,  $p > .00$ . The assumption of normality was also violated for the post-test score for the control and treatment groups,  $W = 0.78$ ,  $p > .00$  and  $W = 0.73$ ,  $p > .00$ , respectively.

The assumption of homogeneity of variance was violated using Levene's Test. Moral disengagement score variances were not homogeneous,  $F(1,73) = 5.21$ ,  $p = .03$ . However, the assumption of homogeneity of variances was met for the pre-test score,  $F(1,73) = 0.08$ ,  $p = .78$ , and post-test score,  $F(1,73) = 0.02$ ,  $p = .88$ .

The covariates' relationship with the dependent variable at each level of the independent variable was checked by observing the scatterplots and the correlations between these variables. Correlations between covariates and the dependent variable at pre-test ranged in strength from  $r = .07$  to  $.44$  with the stronger relationships existing between moral disengagement and social-emotional assets and teacher behavior,  $r = -.43$  and  $r = -.44$ , respectively. Correlations between covariates the dependent variable at post-test ranged in strength from  $r = .21$  to  $.50$ . Again, the strongest correlations were between the moral disengagement score and social-emotional assets and teacher behavior,  $r = -.44$  and  $r = -.50$ , respectively.

Finally, the assumption of homogeneity of regression slopes was met for each of the five covariates. Neither of the covariates had significant interactions with the independent variable.

## **ANOVA**

The ANOVA,  $Y_{ij} = \mu + \alpha_j + \epsilon_{i(j)}$ , was run, where  $Y$  is the observed difference score on moral disengagement for individual  $i$  in group  $j$ ,  $\mu$  is the overall grand population mean,  $\alpha$  is the treatment effect for group  $j$ , and  $\epsilon$  is the random residual error.

The base model revealed that there were no significant differences between groups for moral disengagement,  $F(1,73) = 0.22, p = .64$ . The  $R^2$  value was  $.003$ , indicating that the base model explained almost no variance in the dependent variable (see Table 4).

### **Building the Model with Covariates**

Covariates were added one at a time in a stepwise fashion to observe the increases in  $R^2$ . The order of covariates was determined by adding those with the smallest correlations with each other first to avoid issues of multicollinearity (see Table 5 for variables added in a step-wise fashion). Adding social-emotional assets as a covariate in the base model resulted an  $R^2$  value of .02. Adding peer behavior to the model resulted in an  $R^2$  value of .08 (improvement by .06). Adding prosocial behavior resulted in an  $R^2$  value of .13. (improvement by .05). Adding friendships to the model resulted in an  $R^2$  value of .15 (improvement by .02). Finally, adding teacher behavior as a covariate in the model resulted in an  $R^2$  value of .16 (improvement by .01). The model that was determined to be the best fit was an ANCOVA with three covariates: social-emotional assets, peer behavior, and prosocial behavior. The model improved from  $R^2 = .08$  to  $R^2 = .13$  adding the third covariate. Adding any more covariates improved the model by only .01-.02. Although the amount of explained variance is still small, statistical and substantive reasoning supports the inclusion of these three covariates. The remaining covariates, friendships and teacher behavior, were among the covariates with the largest correlations with other variables (i.e.,  $r = .61$  at the .01 level). In order to avoid issues of multicollinearity, these two variables were left out of the model.

The ANCOVA with the best fit revealed that there were no significant differences between groups for moral disengagement,  $p = .92$ . The covariates also did not help explain the variation in scores; however, this model was a slightly better fit determined by the increase in  $R^2$  of .13 (see Table 6).

Although the assumption of normality was violated for post-test scores for both groups and pre-test scores for the treatment group, the calculated moral disengagement difference scores fell along a normal distribution. Thus, the ANCOVA may still be considered robust because the difference score was used as the dependent variable. In other words, the difference scores were normally distributed and did not violate this assumption, further supporting the decision to use difference scores as the o. The moral disengagement difference scores, however, were not homogeneous across groups. The ANCOVA may still be considered robust with a violation of this assumption as long as group sizes are approximately equal. Due to the quasi-experimental design of classroom assignment to intervention, 45 subjects were in the treatment group and 30 subjects were in the control group. Thus, the  $F$ -statistic may be biased due to unequal group sizes (Grace-Martin, 2008). Future studies using this type of model may aim for more equal group compositions to negate the potential biases when the homogeneity of variance assumption is violated. That being said, the original pre-test and post-test scores for moral disengagement were homogenous, indicating the robustness of this model. All other assumptions of ANCOVA were met, supporting the model's robustness.

### **Discussion**

Anti-bullying programs addressing moral disengagement appear to be generally absent from the literature. That is, it is not clear whether targeting this specific social-cognitive process is effective in enacting change in harmful bullying outcomes, particularly for elementary-school populations. Thus, the current study sought to establish

the extent an elementary-level anti-bullying program affected the bullying outcome of moral disengagement.

Results of the current study with the *Bullying Literature Project- Moral Disengagement Version* revealed there were no differences between students who underwent intervention and those who did not. Rather, students from both groups decreased in their endorsement to moral disengagement statements from the pre-test to post-test measure (see Figure 1). This was the expected direction of change in moral disengagement for students in the treatment group; however, it was not hypothesized that both groups would show this change. Although it is encouraging that students as a whole were less likely to endorse morally disengaged statements, the current investigation does not suggest that the *BLP-MD* program was responsible for this change. In a previous study with the *BLP-MD* (Wang & Goldberg, 2017), researchers found a significant decrease in the treatment group while the control group remained relatively stable over time.

Because the results of the current investigation differ from those found in Wang and Goldberg (2017), it is worth exploring possible explanations for inconsistent findings. One potential explanation for this finding may be that treatment effects carried over to the control group because classrooms were in the same school. That is, third-grade teachers may have conversed with each another about the intervention before the study was complete, and treatment teachers may have inadvertently shared skills their students had learned with the other classrooms, resulting in control students being exposed to certain aspects of treatment. This may explain the significant decrease in

moral disengagement for these students before the interventionists even began lessons in their classrooms. The school's climate also promoted anti-bullying policies and bystander intervention, as evidenced by posters displayed in the cafeteria and in the halls. Perkins et al. (2011) observed this reduction in pro-bullying perceptions and behavior when a poster on school perception of social norms was displayed. In the current investigation, it is conceivable that teachers may have shared resources or strategies that were exhibited during intervention to keep aligned with their school's objective of keeping students safe. It would behoove future studies assessing the effect of the program to perform treatment in more than one school. A larger sample size of classrooms and schools would reduce chances of treatment carry over effects and therefore, increase the potential validity of findings.

Another potential explanation for inconsistent findings between the *BLP-MD* in Wang and Goldberg (2017) and the current investigation involves the modifications of the dependent measure. Because the original scale was developed for adolescents (Thornberg & Jungert, 2013a), researchers in the prior investigation of the *BLP-MD* (Wang & Goldberg, 2017) altered the 7-point Likert scale to accommodate the younger sample. Specifically, the scale was modified to include "smiley faces" that represented how the child felt about each of the moral disengagement statements. In the current study, however, the scale was reverted back to the original 7-point scale in order to preserve the established validity of this measure. It is possible that it was difficult for the younger students to differentiate between increments of numbers. It may be more developmentally appropriate for third-grade students to select a "smiley face" to indicate their mood

toward a statement. It is also uncertain if an individual's level of moral disengagement can be accurately captured at this young of an age. The literature in this area primarily includes samples of adolescents or young adult populations (Obermann, 2011; Perren & Guzwiler-Helfenfinger, 2012; Robson & Witenberg, 2013; Thornberg & Jungert, 2013a; Sticca & Perren, 2015). More work needs to be conducted to establish accurate measures of moral disengagement in elementary school samples. The rationale for targeting a younger audience in this study was because earlier intervention is often more effective. If it is possible to target social-cognitive processes before more aggressive behavior is repeatedly practiced and becomes established in the individual's repertoire, anti-bullying efforts may be more effective.

Finally, statistically speaking, the  $R^2$  value was very low both in the base model and with added covariates. This may be indicative of another extraneous variable better explaining the variation. That is, another construct that was not measured or taken into account may better explain both groups' change in moral disengagement. In the previous investigation with the *BLP-MD* (Wang & Goldberg, 2017), a MANOVA was used to determine the interaction effect. In other words, the difference score in moral disengagement was not calculated; rather, a time by treatment interaction was found for the students' endorsement of moral disengagement mechanisms before and after implementation. The computed effect size ( $d = 0.544$ ) represented how much the program contributed to the change in moral disengagement. That being said, due to the low  $R^2$  value of the current model, other constructs related to bullying and moral disengagement in school should be explored in future studies. One such example may be the actual

climate of the school rather than the students' perceptions of their climate. For instance, the moral climate of the students' environment may be assessed in its contribution to moral disengagement (Gini, 2006). Other student characteristics and behaviors may also have stronger associations with bullying thoughts and behavior and would be worth exploring, such as self-esteem (Gendron et al., 2011) and social status (Caravita et al., 2010). Additionally, other social-cognitive aspects, such as peer levels of moral disengagement, may affect individual moral disengagement, as found in Caravita et al. (2012). Aspects of student morality, such as moral compassion and moral competence assessed in Gini et al. (2010) may help explain moral disengagement and bullying behavior. An outside event may have also occurred during the course of the current investigation that contributed to students in both groups showing decreased moral disengagement over time.

Although the findings of this study do not suggest the *BLP-MD* program was responsible for decreased harmful perceptions (i.e., moral disengagement) in students, it is still worth exploring the effects of anti-bullying programs on bullying outcomes. Because we know the detrimental academic and psychological effects bullying roles have on children, it is critical to find components of intervention which are attributed to bullying behavior and perception change in students. The research demonstrates that comprehensive anti-bullying programs which target multiple facets are more effective (e.g., Frey et al., 2005; Kärnä et al., 2010) than short-term programs for enacting significant change in bullying outcomes. However, these programs are less likely to be implemented in schools because they require more effort and resources (Ferguson et al.,



2007; Merrell et al., 2008). Furthermore, the research on anti-bullying programs targeting social-cognitive principles, such as moral disengagement, is scarce. That is, the research that uses moral disengagement focuses on adolescent cyberbullying (Barkoukis et al., 2015) or other social-cognitive processes altogether (Menesini et al., 2003; Salmivalli et al., 2005; Perkins et al., 2011). The *Bullying Literature Project- Moral Disengagement* was developed to address moral disengagement at a younger age in order to use early intervention efforts before cognitive processes become more stable in individuals. Findings of the current study and previous investigations of this program should be considered when moving forward when designing and analyzing the effect of anti-bullying programs.

### **Limitations**

As with any study, there are several limitations for the current investigation that are worth mentioning. In addition to the aforementioned limitations of possible treatment carry over effects and issues with the outcome measure, there are limitations involving the sample size used in this study. The power analysis determined that 110 participants would have been needed to establish an effect size due to intervention. Although a whole school district was recruited to participate in the study, only a total of five classrooms consented to treatment. Moreover, these five classrooms were from the same school. This was due in part to the many layers of the consent required for the selected school district. Approval had to come from the school district before the recruitment letter was sent out to elementary school principals. Although multiple principals displayed interest in the program, only one principal was able to follow through with providing the primary

investigator with contact information for the third-grade teachers at their school. Thus, all classrooms came from the same school. Caution must be exercised when interpreting the generalizability of findings from the study.

Another limitation with the study's sample was that participants' ethnicity was predominately Hispanic (84%), which is consistent with the demographics of this school district located in Southern California. Moreover, two of these classrooms were dual-immersion classrooms, where teachers taught in both Spanish and English. Findings must be interpreted with the demographics of the sample in mind. Future investigations may explore the effectiveness of the *BLP-MD* with students from various ethnic backgrounds and those residing in areas outside of Southern California.

Limitations may also stem from the measure of moral disengagement used from the previous study to the current investigation. Specifically, Wang and Goldberg (2017) altered the original Likert scale (*MDBS*; Thornberg & Jungert, 2013b, 2014) by using "smiley faces" instead of the numbered Likert scale to target the elementary-age audience. In efforts to preserve the validity of the developed measure, the current investigation used the original scale. As previously mentioned, this difference in measure may also explain differences in findings between the two studies. It is difficult to determine which measure served as a better representation of this construct in this younger sample. To this author's knowledge, there is no measure of moral disengagement normed and developed for elementary school students.

Limitations also include violations of the assumptions for an ANCOVA. Although the calculated difference scores that were used as the outcome measure fell on a normal

distribution, the assumption of normality was violated for the pre-test moral disengagement score for the treatment group and the post-test scores for both groups. Data were not transformed because the actual scores used for the dependent variable were normally distributed. The moral disengagement difference score variances were also not homogeneous and violated this assumption. In addition to this violation, some research cautions against the use of difference scores in general due to factors like poor reliability (Edwards, 2001).

Furthermore, visual inspection for outliers (Figure 2) revealed most moral disengagement scores during pre-test fell between 1 and 4 on the Likert scale. Four students endorsed feelings above this range; however, these outliers were evenly dispersed among the treatment and control groups. That is, there appear to be no differences between groups as two students endorsed higher feelings of moral disengagement in each group. Noteworthy, the observation that most students endorsed low feelings of moral disengagement before the intervention was even implemented may play into the more negligible change in outcome variable (i.e., difference score from pre-test to post-test). Although it is assuring that these students self-reported low perceptions of moral disengagement from the start, these initially low scores may have impacted the results of this study. In other words, the *BLP-MD* may be more effective in enacting change for students who self-identified with higher levels of harmful cognitive processes. This study did not analyze differences among groups of students who may have been more inclined to justify aggressive behaviors versus not. Thus, it is difficult to determine

whether some students changed more than others in their endorsement of moral disengagement mechanisms.

Further visual inspection of outliers across the student perceptions used as covariates revealed differences among groups at pre-test. Specifically, it appears as though the treatment group generally had a greater range across these variables than the control group. Ideally, randomization across these different variables would have contributed to this model's robustness. Hedges (2007) warned that the assumption of randomization typically "leads to an overstatement of the precision of results." This is problematic as the current study used random assignment at the class level but analysis was conducted at the individual level.

Lastly, in terms of treatment integrity, it should be noted that the treatment fidelity checklist served as a measure of adherence rather than a measure of quality of implementation. Thus, an important dimension of integrity may not have been assessed. Although implementation integrity improved from 98.97% in the previous study with the *BLP-MD* (Wang & Goldberg, 2017), future studies with this program may look at the quality in which the different components were implemented. It would also be beneficial to collect another wave of data after the second set of classrooms received intervention. Due to the timing of the school year's end, this third wave of data collection was unable to be collected. Thus, there is no data to determine whether the waitlist-control classrooms decreased in their level of moral disengagement following intervention.

## **Future Directions**

The *Bullying Literature Project- Moral Disengagement Version (BLP-MD)* warrants further investigation to determine the effectiveness of the program for decreasing students' moral disengagement. The preliminary evidence for the program found in Wang and Goldberg (2017) supports a decrease in student moral disengagement and bullying behavior. Future studies need to explore the reasoning behind the unanticipated results of the current investigation. This may involve the inclusion of confounding factors, such as student and school characteristics assessed in previous anti-bullying investigations (Caravita et al., 2010; Caravita et al., 2012; Gendron et al., 2011; Gini et al., 2010), that are beyond the interventionists' control.

Interventionists should control outside variables to the best of their ability, including the prevention of treatment carry over effects by limiting discussion between groups. Future work may involve the development of a moral disengagement measure that is specifically normed for an elementary school sample. Lastly, it would be beneficial for future investigations to include larger and more diverse samples of participants to improve the generalizability of findings. To date, the *BLP* has only been conducted in the Southern California region (Couch, 2015; Wang, Couch, Rodriguez, & Lee, 2015; Wang & Goldberg, 2017).

The preliminary evidence for the *BLP-MD* is encouraging given that research on shorter-term anti-bullying efforts indicates programs are often ineffective in altering students' behavior (Ferguson et al., 2007). Thus, it is worth exploring the context in which this program is effective. The *BLP-MD* is a 5-week program that may be feasibility

embedded into an elementary school's language arts curriculum, which is a critical component for such an intervention (Domitrovich et al., 2010; Swearer, Espelage, & Napolitano, 2009). Teachers and students have positive feelings toward the program, and the value of the *BLP-MD* in decreasing moral disengagement and bullying is worth further investigation.

## References

- Arseneault, L., Walsh, E., Trzesniewski, K., Newcombe, R., Caspi, A., & Moffitt, T. E. (2006). Bullying victimization uniquely contributes to adjustment problems in young children: a nationally representative cohort study. *Pediatrics, 118*, 130-138. doi:10.1542/peds.2005-2388
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall, Inc.
- Bandura, A. (1995). Multifaceted scale of mechanisms of moral disengagement. (Available from A. Bandura, Stanford University, Stanford, California 94305 2130).
- Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review, 3*, 193-209.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology, 71*, 364-374.
- Barkoukis, V., Lazuras, L., Ourda, D., & Tsorbatzoudis, H. (2015). Tackling psychosocial risk factors for adolescent cyberbullying: Evidence from a school-based intervention. *Aggressive Behavior, 42*, 114-122. doi:10.1002/ab.21625
- Beran, T., & Shapiro, B. (2005). Evaluation of an anti-bullying program: Student reports of knowledge and confidence to manage bullying. *Canadian Journal of Education/Revue canadienne de l'education, 700-717*. doi:10.2307/4126451
- Bodart, J. (1980). Bibliotherapy: The right book for the right person at the right time-and more!. *Top of the News, 36*, 183-88.
- Briesch, A. M., Chafouleas, S. M., Neugebauer, S. R. & Riley-Tillman, T. C. (2013). Assessing influences on intervention use: Revision of the Usage Rating Profile-Intervention. *Journal of School Psychology, 51*, 81-96. doi:10.1016/j.jsp.2012.08.006.
- Caprara, G. V., Pastorelli, C., & Bandura, A. (1995). Measuring age differences in moral disengagement. *Eta Evolutiva, 51*, 18-29.
- Caravita, S., Di Blasio, P., & Salmivalli, C. (2009). Unique and interactive effects of empathy and social status on involvement in bullying. *Social Development, 18*, 140-163. doi:10.1111/j.1467-9507.2008.00465.x

- Caravita, S. S., Sijtsema, J. J., Rambaran, J., & Gini, G. (2013). Peer influences on moral disengagement in late childhood and early adolescence. *Journal of Youth and Adolescence, 43*, 193-207. doi:10.1007/s10964-013-9953-1
- Card, N. A., & Hodges, E. V. E. (2008). Peer victimization among schoolchildren: Correlations, causes, consequences, and considerations in assessment and intervention. *School Psychology Quarterly, 23*, 451-461. doi:10.1037/a0012769
- Castro-Olivo, S. M. (2014). Promoting social-emotional learning in adolescent Latino ELLs: A study of the culturally adapted Strong Teens program. *School Psychology Quarterly, 29*, 567-577. doi:10.1037/spq0000055
- Chafouleas, S. M., Briesch, A. M., Neugebauer, S. R., & Riley-Tillman, T. C. (2011). *Usage Rating Profile – Intervention (Revised)*. Storrs, CT: University of Connecticut.
- Couch, L. (2015). The Bullying Literature Project: An evaluation of a class-wide bullying intervention program. Unpublished master's thesis, University of California Riverside, Riverside, CA.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Crick, N. R. (1996). The role of overt aggression, relational aggression, and prosocial behavior in the prediction of children's future social adjustment. *Child Development, 67*, 2317-2327. doi:10.1111/j.1467-8624.1996.tb01859.x
- Doll, B., Kurien, S., LeClair, C., Spies, R., Champion, A., & Osborn, A. (2009). The ClassMaps Survey: A framework for promoting positive classroom environments. In (Eds.), *Handbook of Positive Psychology in the Schools*, 213-227. New York: Routledge/Taylor & Francis Group.
- Doll, B., Spies, R. A., Champion, A., Guerrero, C., Dooley, K., & Turner, A. (2010). The ClassMaps Survey: A measure of middle school science students' perceptions of classroom characteristics. *Journal of Psychoeducational Assessment, 28*, 338-348. doi:10.1177/0734282910366839
- Doll, B., Spies, R. A., LeClair, C. M., Kurien, S. A., & Foley, B. P. (2010). Student perceptions of classroom learning environments: Development of the ClassMaps survey. *School Psychology Review, 39*, 203.
- Domitrovich, C. E., Bradshaw, C. P., Greenberg, M. T., Embry, D., Poduska, J. M., & Jalongo, N. S. (2010). Integrated models of school based prevention: logic and theory. *Psychology in the Schools, 47*, 71-88. doi:10.1002/pits.20452



- Edwards, J. R. (2001). Ten difference score myths. *Organizational Research Methods, 4*, 264-286.
- Elinoff, M. J., Chafouleas, S. M., & Sassu, K. A. (2004). Bullying: Considerations for defining and intervening in school settings. *Psychology in the Schools, 41*(8), 887-897.
- Enders, C. K. (2010). *Applied missing data analysis*. New York, NY: Guildford Press.
- Farrington, D. P., & Ttofi, M. M. (2011). Bullying as a predictor of offending, violence and later life outcomes. *Criminal Behaviour and Mental Health, 21*, 90-98. doi:10.1002/cbm.801
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39*, 175-191.
- Ferguson, C. J., San Miguel, C., Kilburn, J. C., & Sanchez, P. (2007). The effectiveness of school-based anti-bullying programs: A meta-analytic review. *Criminal Justice Review, 32*, 401-414. doi:10.1177/0734016807311712
- Frey, K. S., Hirschstein, M. K., Snell, J. L., Edstrom, L. V. S., MacKenzie, E. P., & Broderick, C. J. (2005). Reducing playground bullying and supporting beliefs: an experimental trial of the steps to respect program. *Developmental Psychology, 41*, 479. doi:10.1037/0012-1649.41.3.479
- Gendron, B. P., Williams, K. R., & Guerra, N. G. (2011). An analysis of bullying among students within schools: Estimating the effects of individual normative beliefs, self-esteem, and school climate. *Journal of School Violence, 10*, 150-164. doi:10.1080/15388220.2010.539166.
- Gini, G. (2006). Social cognition and moral cognition in bullying: What's wrong?. *Aggressive Behavior, 32*, 528-539.
- Gini, G., Pozzoli, T., & Hauser, M. (2011). Bullies have enhanced moral competence to judge relative to victims, but lack moral compassion. *Personality and Individual Differences, 50*, 603-608. doi:10.1016/j.paid.2010.12.002.
- Gladden, R. M., Vivolo-Kantor, A. M., Hamburger, M. E., & Lumpkin, C. D. (2014). Bullying surveillance among youths: Uniform definitions for public health and recommended data elements, version 1.0. Atlanta, GA. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention and U.S. Department of Education.

- Glew, G. M., Fan, M. Y., Katon, W., Rivara, F. P., & Kernic, M. A. (2005). Bullying, psychosocial adjustment, and academic performance in elementary school. *Archives of Pediatrics & Adolescent Medicine, 159*, 1026-1031. doi:10.101001/archpedi.159.11.1026
- Grace-Martin, K. (2008). When Unequal Sample Sizes Are and Are NOT a Problem in ANOVA. *The Analysis Factor*. Retrieved from <https://www.theanalysisfactor.com/when-unequal-sample-sizes-are-and-are-not-a-problem-in-anova/comment-page-1/>
- Hedges, L.V. (2007). Correcting a significance test for clustering. *Journal of Educational and Behavioral Statistics, 32*(2). <https://doi.org/10.3102/1076998606298040>
- Huesmann, L. R., & Guerra, N. G. (1997). Children's normative beliefs about aggression and aggressive behavior. *Journal of Personality and Social Psychology, 72*, 408. doi:10.1037/0022-3514.72.2.408
- Hymel, S., Roche-Henderson, N., & Bonanno, R. A. (2005). Moral disengagement: A framework for understanding bullying among adolescents. *Journal of Social Sciences, 8*, 1-11.
- Kärnä, A., Voeten, M., Little, T. D., Poskiparta, E., Kaljonen, A., & Salmivalli, C. (2011). A large-scale evaluation of the KiVa antibullying program: Grades 4–6. *Child Development, 82*, 311-330. doi:10.1111/j.1467-8624.2010.01557.x
- Kohlberg, L. (1976). Moral stages and moralization: The cognitive developmental approach. In T. Lickona (Ed.). *Moral development and behavior: Theory, research, and social issues* (pp. 31–53). New York: Holt, Rinehart and Winston.
- Kumpulainen, K., & Räsänen, E. (2000). Children involved in bullying at elementary school age: their psychiatric symptoms and deviance in adolescence: an epidemiological sample. *Child Abuse & Neglect, 24*, 1567-1577.
- Langley, A.K., Nadeem, E., Kataoka, S.H., Stein, B.D., & Jaycox, L.H. (2010). Evidence-based mental health programs in schools: Barriers and facilitators of successful implementation. *School Mental Health, 2*, 105–113. doi:10.1007/s12310-010-9038-1
- Leadbeater, B. J., Hoglund, W. L. & Woods, T. (2003). Changing contexts? The effects of a primary prevention program on classroom levels of peer relational and physical victimization. *Journal of Community Psychology, 31*, 397-418. doi:10.1002/jcop.10057

- Leadbeater, B., & Sukhawathanakul, P. (2011). Multicomponent programs for reducing peer victimization in early elementary school: A longitudinal evaluation of the WITS primary program. *Journal of Community Psychology, 39*, 606-620. doi:10.1002/jcop.20447
- Leenders, I., & Brugman, D. (2005). Moral/non-moral domain shift in young adolescents in relation to delinquent behaviour. *The British Journal of Developmental Psychology, 23*, 65-79. doi:10.1348/026151004X20676.
- Menesini, E., Codecasa, E., Benelli, B., & Cowie, H. (2003). Enhancing children's responsibility to take action against bullying: Evaluation of a befriending intervention in Italian middle schools. *Aggressive Behavior, 29*, 1-14. doi:10.1002/ab.80012
- Menesini, E., Sanchez, V., Fonzi, A., Ortega, R., Costabile, A., & Lo Feudo, G. (2003). Moral emotions and bullying: A cross-national comparison of differences between bullies, victims and outsiders. *Aggressive Behavior, 29*, 515-530. doi:10.1002/ab.10060
- Merrell, K. W. (2011). Social and emotional assets and resilience scales (SEARS). Lutz, FL: Psychological Assessment Resources.
- 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, 23*, 26. doi:10.1037/1045-3830.23.1.26
- Nansel, T. R., Overpeck, M., Pilla, R. S., Ruan, W. J., Simons-Morton, B. G., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *Journal of the American Medical Association, 285*, 2094-2100.
- Obermann, M. L. (2011). Moral disengagement in self-reported and peer-nominated school bullying. *Aggressive Behavior, 37*, 133-144.
- Obermann, M. L. (2013). Temporal aspects of moral disengagement in school bullying: crystallization or escalation?. *Journal of School Violence, 12*, 193-210. doi:10.1080/15388220.2013.766133
- Perkins, H. W., Craig, D. W., & Perkins, J. M. (2011). Using social norms to reduce bullying: A research intervention among adolescents in five middle schools. *Group Processes & Intergroup Relations, 13*, 684-804. doi:10.1177/1368430210398004.
- Perren, S., & Gutzwiller-Helfenfinger, E. (2012). Cyberbullying and traditional bullying in adolescence: Differential roles of moral disengagement, moral emotions, and

- moral values. *European Journal of Developmental Psychology*, 9, 195-209.  
doi:10.1080/17405629.2011.643168
- Pozzoli, T., Gini, G., & Vieno, A. (2012). Individual and class moral disengagement in bullying among elementary school children. *Aggressive Behavior*, 38, 378-388.  
doi:10.1002/ab.21442
- Robers, S., Kemp, J., Truman, J., & Snyder, T. D. (2013). Indicators of School Crime and Safety: 2012 (NCES 2013-036/NCJ 241446). National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington, DC. Retrieved from <http://nces.ed.gov>
- Robson, C., & Witenberg, R. T. (2013). The influence of moral disengagement, morally based self-esteem, age, and gender on traditional bullying and cyberbullying. *Journal of School Violence*, 12, 211-231. doi:10.1080/15388220.2012.76291
- Salmivalli, C., Kaukiainen, A., & Voeten, M. (2005). Anti-bullying intervention: Implementation and outcome. *British Journal of Educational Psychology*, 75, 465-487. doi:10.1348/000709905X26011
- Sherman, L. W. (1993). Defiance, deterrence, and irrelevance: A theory of the criminal sanction. *Journal of Research in Crime and Delinquency*, 30(4), 445-473.
- Sticca, F., & Perren, S. (2015). The chicken and the egg: Longitudinal associations between moral deficiencies and bullying: A parallel process latent growth model. *Merrill-Palmer Quarterly*, 61, 85-100.
- Sutton, J., Smith, P. K., & Swettenham, J. (1999). Bullying and 'theory of mind': A critique of the 'social skills deficit' view of anti-social behaviour. *Social Development*, 8, 117- 127.
- Swearer, S. M., Collins, A., Haye-Radliff, K. & Wang, C. (2011). Internalizing problems in students involved in bullying and victimization: Implications for intervention. D. L. Espelage & S. M. Swearer (Eds.), *Bullying in North American schools* (2<sup>nd</sup> ed.) (pp. 45-61). New York, NY: Routledge.
- Swearer, S. M., Espelage, D. L., & Napolitano, S. A. (2009). *Bullying prevention and intervention: realistic strategies for schools*. New York, NY: Guilford.
- Swearer, S. M., Siebecker, A. B., Frerichs, L. J., & Wang, C. (2010). Assessment of bullying/victimization: The problem of comparability across studies and across methodologies. In S. R. Jimerson, S. M. Swearer & D. L. Espelage (Eds.),

*Handbook of bullying in schools: An international perspective* (pp. 305-327).  
New York, NY: Routledge.

- Teglasi, H., & Rothman, L. (2001). STORIES: A classroom-based program to reduce aggressive behavior. *Journal of School Psychology, 39*, 71-94. doi:10.1016/S0022-4405(00)00060-1
- Thalheimer, W., & Cook, S. (2002). How to calculate effect sizes from published research: A simplified methodology. *Work-Learning Research, 1*-9.
- Thornberg, R., & Jungert, T. (2013a). Bystander behavior in bullying situations: Basic moral sensitivity, moral disengagement and defender self-efficacy. *Journal of Adolescence, 36*, 475-483. doi:10.1016/j.adolescence.2013.02.003
- Thornberg, R., & Jungert, T. (2013b). Moral disengagement in bullying. Paper presented at the 41th Congress of Nordic Educational Research Association at the University of Iceland, Reykjavik, Iceland, 7–9 March 2013.
- Thornberg, R., & Jungert, T. (2014). School bullying and the mechanisms of moral disengagement. *Aggressive Behavior, 40*, 99-108. doi:10.1002/ab.21509
- Turner, R. M. (2008). Moral disengagement as a predictor of bullying and aggression: Are there gender differences? The University of Nebraska-Lincoln.
- Ttofi, M. M., & Farrington, D. P. (2008). Bullying: Short-term and long-term effects, and the importance of defiance theory in explanation and prevention. *Victims and Offenders, 3*, 289-312. doi:10.1080/15564880802143397
- 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*, 27-56. doi:10.1007/s11292-010-9109-1
- Wang, C., Couch, L., Rodriguez, G. R., & Lee, C. (2015). The Bullying Literature Project: using children's literature to promote prosocial behavior and social-emotional outcomes among elementary school students. *Contemporary School Psychology, 19*, 320-329. doi:10.1007/s40688-015-0064-8
- Wang, C., & Goldberg, T. S. (2017). Using children's literature to decrease moral disengagement and victimization among elementary school students. *Psychology in the Schools, 1*-14. doi:10.1002/pits/22042
- 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*, 368–375. doi:10.1016/j.jadohealth.2009.03.021

Wang, C., Ryoo, J. H., Swearer, S. M., Turner, R., & Goldberg, T. S. (2017). Longitudinal relationships between bullying and moral disengagement among adolescents. *Journal of Youth and Adolescence*, *46*, 1304. doi:10.1007/s10964-016-0577-0

## Tables

Table 1  
*Overview of the BLP Curriculum*

Session	Book and Author	Skills Targeted	Sample Discussion Questions	Moral Disengagement Mechanism Targeted	Activities
1	<i>Bully Beans</i> by Julia Cook	Introduce WITS; different feelings; empathy for students being victimized	“How did kids feel when Bobbette was mean to them?” “Was there anything special about the beans? What did they represent?”	Displacement of responsibility; Dehumanization	WITS bookmark; WITS promise; role playing to practice WITS strategies
2	<i>Just Kidding</i> by Trudy Ludwig	Use of humor when bullied; strategies to calm down; “tattling” versus seeking help	“When do you think teasing is okay and when is it not?” “When Dad was talking to D.J., he was too angry to answer. What helped him to calm down in the story? What can you do to calm down when you feel too angry to talk to an adult about teasing or bullying?”	Blaming the victim; Diffusion of responsibility; Euphemistic labeling; Disregarding injurious consequences	Cartoon strip with bullying situations; role playing the cartoons to practice strategies
3	<i>Recess Queen</i> by Alexis O’Neill	How to intervene as a bystander; including others	“If Mean Jean pushed or said something mean to Katie Sue when she invited her to play, what would you do?” “What can you do to help when you see a Recess Queen or Recess King at school?”	Attribution of blame; Diffusion of responsibility; Dehumanization	Completing stories regarding bullying situations; role playing how to respond as a victim and a bystander
4	<i>Say Something</i>	Empathy for students being	“Why are they laughing? Is it	Advantageous comparison;	Group poster of

	by Peggy Moss	victimized: how to stand up for others	okay to laugh when other students are being made fun of? How does it [laughing] make the girl feel?"	Diffusion of responsibility; Displacement of responsibility	different strategies
5	<i>The Juice Box Bully</i> by Bob Sornson and Maria Dismondy	Respecting others' differences; appropriate bystander behavior	"Ruby said 'when someone acts hurtfully, we all speak up.' What can you say when you want to speak up?"	Moral justification; Displacement of responsibility	Story Booklet of all the strategies learned; role play selected scenes from booklet

---

*Note:* The four WITS strategies and other strategies are reviewed at the beginning of sessions 2 through 5; students are provided an opportunity to share how they used their WITS or other strategies during the previous week and are praised for using strategies; all students in the class make a pledge to use their strategies at the end of every session



Table 2

*Descriptive Statistics, Outcome Variable, and Covariates*

Variable	Condition	Mean	Standard Deviation
Moral Disengagement	Control	-0.27	0.82
	Intervention	-0.35	0.57
Social-Emotional Assets	Control	2.76	0.50
	Intervention	3.11	0.64
Friendships	Control	3.36	0.68
	Intervention	3.41	0.59
Teacher Behavior	Control	3.63	0.44
	Intervention	3.68	0.53
Peer Behavior	Control	1.60	0.71
	Intervention	1.83	0.80
Prosocial Behavior	Control	3.54	0.97
	Intervention	3.85	0.98

*Note:* Difference scores were generated for moral disengagement from pre-test to post-test

Table 3

*Descriptive Statistics for Social Validity Measures*

Variable	Mean	Standard Deviation
Student Social Validity	3.71	0.50
Acceptability	4.70	0.17
Understanding	4.78	0.38
Home School Collaboration	4.44	1.17
Feasibility	4.17	0.33
System Climate	4.80	0.20
System Support	4.22	0.51

Table 4

*Base Model, Mixed Analysis of Variance, Moral Disengagement*

Source	df	Sum of Squares	Mean Square	F Value	p Value (Sig.)
Time*Condition	1	0.100	0.100	0.217	0.642
Error(Time)	73	33.497	0.459		
Corrected Total	74	33.597			

Table 5

*Building the Model with Covariates in a Step-wise Fashion*

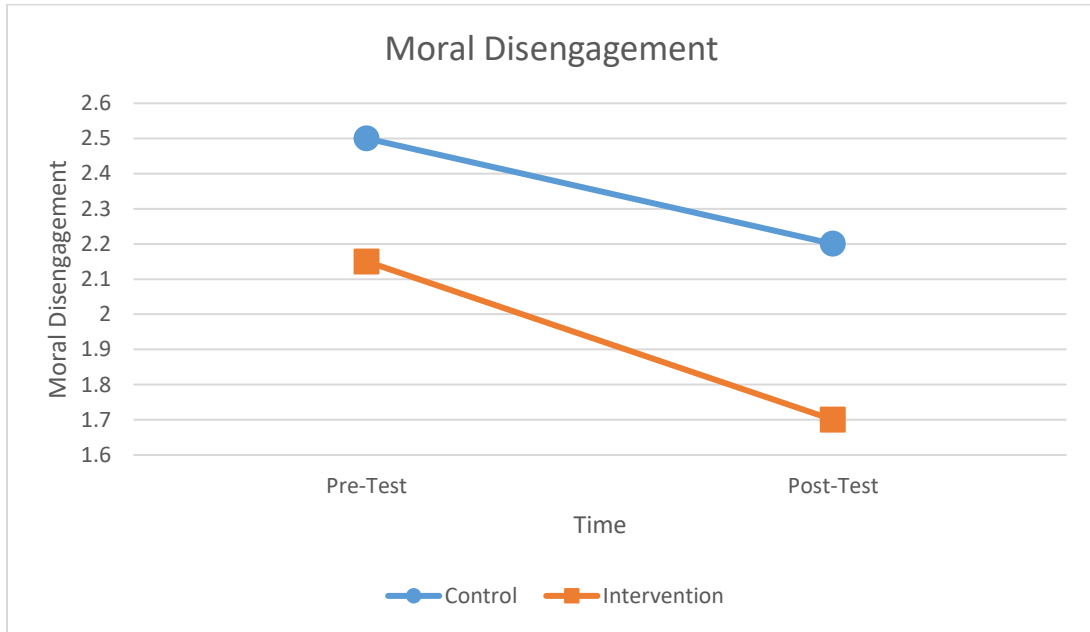
Source	<i>R</i> Squared	Improvement in <i>R</i> Squared
Social-Emotional Assets	0.023	0.02
Peer Behavior	0.078	0.06
Prosocial Behavior	0.128	0.05
Friendships	0.153	0.02
Teacher Behavior	0.157	0.01

Table 6

*Analysis of Covariance, Moral Disengagement*

Source	df	Sum of Squares	Mean Square	F Value	p Value (Sig.)
Social-Emotional Assets	1	0.056	0.056	0.128	0.722
Peer Behavior	1	1.208	1.208	2.762	0.101
Prosocial Behavior	1	1.098	1.098	2.510	0.118
Condition	1	0.004	0.004	0.009	0.923
Condition* Social-Emotional Assets	1	0.313	0.313	0.715	0.401
Condition*Peer Behavior	1	0.511	0.511	1.167	0.284
Condition*Prosocial Behavior	1	0.303	0.303	0.692	0.408
Error(Time)	67	29.309	0.437		
Corrected Total	74	33.597			

## Figures



*Figure 1.* Interaction Effect for Moral Disengagement

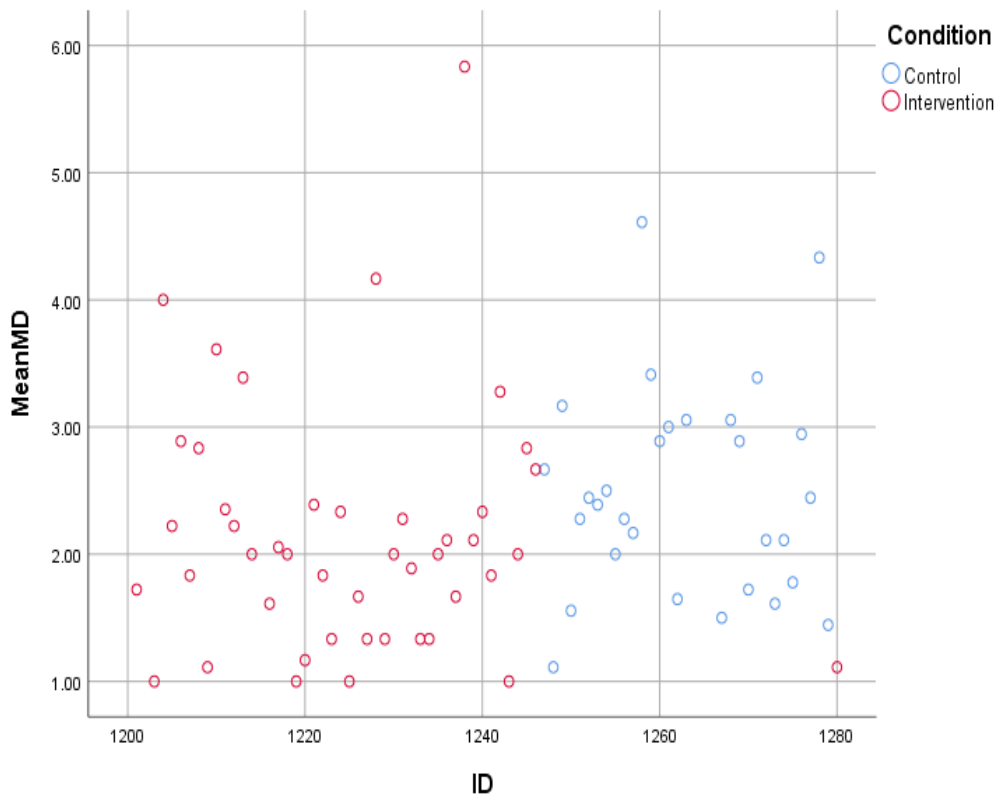


Figure 2. Scatterplot of Student's Pre-test Moral Disengagement

## Appendix A

Treatment Fidelity Checklist: Bullying Literature Project  
Week \_\_\_\_ Your Name \_\_\_\_\_ Other interventionist \_\_\_\_\_  
School \_\_\_\_\_ Teacher \_\_\_\_\_

On a 3-point scale (3=always, 2=sometimes, 1=never), how consistently does the treatment provider do the following things?

1. Review WITS and ask students if they used WITS during the previous weeks (starting from week 2) \_\_\_\_
2. Introduce the story with the opening questions? \_\_\_\_
3. Read the full story to the students? \_\_\_\_
4. Ask at least ½ of the post-reading questions? \_\_\_\_
5. Keeps students on task during reading. \_\_\_\_
6. Keeps students on task during questions. \_\_\_\_
7. Redirects conversation as needed. \_\_\_\_
8. Praise students for appropriate answers and for participating. \_\_\_\_
9. Model the appropriate strategies. \_\_\_\_
10. Complete the planned activities (e.g., writing and role play activities). \_\_\_\_

### Self-Assessment: Bullying Literature Project

1. What activities worked this time?
2. How students responded to the intervention?
3. Areas for improvement