

THE EFFECTS OF A RESILIENCE PROGRAM ON SOCIAL SKILLS, BULLYING, AND  
VICTIMIZATION AMONG STUDENTS IN GRADES THREE THROUGH SIX

by

Brian James Bain

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University

2019



THE EFFECTS OF A RESILIENCE PROGRAM ON SOCIAL SKILLS, BULLYING, AND  
VICTIMIZATION AMONG STUDENTS IN GRADES THREE THROUGH SIX

by Brian James Bain

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University, Lynchburg, VA

2019

APPROVED BY:

Rebecca Lunde Ed.D., Committee Chair

JoAnna Oster Ed.D., Committee Member

James Shasteen Ed.D., Committee Member



## ABSTRACT

Bullying has created a negative social dynamic in schools. The continued prevalence of bullying among children has shown the need for research pertaining to prevention. The resilience program studied in this research uniquely emphasizes teaching social resilience skills that may help students to not become bullying victims. The purpose of this study was to determine the effects of a resilience program on the self-reported social skills, victimization, and bullying among third- through sixth-grade students. This study of the effectiveness of a social and emotional learning framework in bullying prevention was conducted to contribute social and emotional learning research to the bullying prevention literature. This quantitative research investigated the effects of the resilience program via a quasi-experimental design. The sample of 102 third- through sixth-grade students self-reported social skills, bullying, and victimization in a pretest-posttest data collection. Student participants reported social skills in the Social Skills Improvement System Social and Emotional Learning Edition student scale (SSIS SEL). Student participants reported bullying and victimization in the Peer Interactions in Primary School Questionnaire (PIPSQ). This methodology generated descriptive and inferential statistics from students' reports of social skills, bullying, and victimization before and after an implementation of the resilience program. Mean comparisons of pretests and posttests were conducted via paired samples *t* tests. Based on the resulting analysis of the resilience program effects on mean differences in social skills, bullying, and victimization, recommendations were made regarding bullying prevention approaches that are available to school districts. Recommendations were also made regarding future bullying prevention research.

*Keywords:* social skills, bullying, victimization, prevention, resilience program, school-wide approach, social skill-based approach



### **Dedication**

This study is dedicated to children and adults who lack the confidence to be fully who they are due to fear of social situations. This study was conducted in the hope of showing them that instead of living in fear, and instead of relying on others to save them from mistreatment, they can learn to be socially resilient. I wanted this work to reveal the strategies that allow individuals to be fully themselves in the face of social opposition as part of bringing God's Kingdom to earth. "How blessed are those who make peace, because it is they who will be called God's children" (Matthew 5:9, International Standard Version).

Early in my experience in this doctoral program, I received a powerful prompting by the Holy Spirit that while some are motivated to achieve this degree for money, others for opportunities, and still others for recognition, for me this is for Jesus. From the outset, I lay this "crown" at the feet of Jesus and regard not the praises of men. Whatever doors open in my future as a result of this degree, I endeavor to use this title to serve Him and others for His Names' sake.



### **Acknowledgement**

This work could not have been done without Christ working in me. May He receive the glory in the process and completion of this research. Through this journey, Christ first showed me that I am capable of learning and doing work at this level of rigor and excellence. He then showed me that I must peacefully marry my ability to a dependent trust in Him pertaining to things that I cannot control. The roadblocks and setbacks to completing this work were numerous and significant, several of which had the potential to irreparably halt this work. “Not by might, nor by power, but by My Spirit,” was a real and powerful reality in the face of ominous obstacles. He made it possible for this work to be completed.

The countless hours of sacrifice that my wife made, doing more than she should have had to in order to manage our home and care for our children both grieved me and inspired my work. This is as much hers as it is mine. My parents were a continual encouragement and support financially, emotionally, and with practical help. My wife’s parents similarly stood alongside us with help whenever it was needed. Without this team, this work could not have been done and I am forever grateful. These gifts helped to make a way for every contribution that I will be able to make as a result of this achievement.



## Table of Contents

ABSTRACT .....	3
Dedication.....	4
Acknowledgement .....	5
List of Abbreviations.....	10
List of Tables .....	11
List of Figures .....	12
CHAPTER ONE: INTRODUCTION.....	13
Overview .....	13
Background .....	13
Historical Overview .....	15
Social Overview .....	17
Theoretical Overview .....	18
Summary .....	20
Problem Statement.....	20
Purpose Statement .....	21
Significance of the Study .....	22
Research Questions .....	24
Definitions.....	24
CHAPTER TWO: LITERATURE REVIEW.....	26
Introduction .....	26
Conceptual or Theoretical Framework .....	26
Summary .....	30



Related Literature .....	30
Bullying Construct .....	31
Characteristics of Victims .....	37
Characteristics of Bullies.....	41
Characteristics of Bully/Victims.....	43
Importance of School Bullying Prevention .....	43
Cyberbullying .....	48
Importance of Workplace Bullying Prevention.....	50
Framework and Effectiveness of School-Wide Approaches to Bullying Prevention.....	54
Framework and Effectiveness of Social Skill-Based Approaches to Bullying Prevention.....	60
Summary .....	64
CHAPTER THREE: METHODS .....	67
Design .....	67
Research Questions .....	69
Null Hypotheses .....	69
Participants and Setting .....	70
Instrumentation.....	71
Procedures .....	75
Data Analysis .....	78
CHAPTER FOUR: FINDINGS.....	80
Overview.....	80



Research Questions .....80

Null Hypotheses .....80

Descriptive Statistics .....81

    Pretest Scores.....81

    Posttest Scores .....83

Results.....84

    Data Screening.....84

    Null Hypothesis One: Social Skills.....90

    Null Hypothesis Two: Bullying.....93

    Null Hypothesis Three: Victimization .....96

CHAPTER FIVE: CONCLUSIONS .....100

    Overview .....100

    Discussion .....100

        Null Hypothesis One: Social Skills.....100

        Null Hypothesis Two: Bullying.....102

        Null Hypothesis Three: Victimization .....103

    Implication .....105

    Limitations .....108

    Recommendations for Future Research.....111

        Future Research: Social Skill Development.....112

        Future Research: Bullying Prevention .....113

        Importance of Future Research.....114

References .....117



APPENDIX A: IRB Approval and Investigator Agreement .....	134
APPENDIX B: Informed Consent, Assent, and Recruitment Letters.....	136
APPENDIX C: Agreement of Data Release.....	141
APPENDIX D: Permissions for Survey Use .....	144
APPENDIX E: Permissions for Data Collection.....	146



### **List of Abbreviations**

Bullying Prevention Challenge Course Curriculum (BPCCC)

Conflict Resolution and Peer Mediation (CRPM)

Olweus Bullying Prevention Program (OBPP)

Peer Interactions in Primary School Questionnaire (PIPSQ)

Positive Behavioral Interventions and Supports (PBIS)

Social Skills Improvement System Social and Emotional Learning Edition (SSIS SEL)

Statistical Package for the Social Sciences (SPSS)

Take the Lead (TTL)

Youth Matters (YM)



### **List of Tables**

Table 1. Descriptive Statistics for the Pretest and Posttest of Social Skills, Bullying, and Victimization.....	82
Table 2. Paired Samples T-Test Analysis Comparing Pretest versus Posttest Mean Social Skills Scores.....	93
Table 3. Paired Samples T-Test Analysis Comparing Pretest versus Posttest Mean Bullying Scores.....	96
Table 4. Paired Samples T-Test Analysis Comparing Pretest versus Posttest Mean Victimization Scores.....	99



### List of Figures

Figure 1. Box and whiskers plot for identifying outliers among mean social skill scores for the social skills pretest (1) and posttest (2).....	85
Figure 2. Box and whiskers plot for identifying outliers among mean bullying scores for the bullying pretest (1) and posttest (2).....	86
Figure 3. Box and whiskers plot for identifying outliers among mean victimization scores for the bullying pretest (1) and posttest (2).....	87
Figure 4. Box and whiskers plot for identifying outliers among mean social skill score differences .....	88
Figure 5. Box and whiskers plot for identifying outliers among mean bullying score differences .....	89
Figure 6. Box and whiskers plot for identifying outliers among mean victimization score differences .....	90
Figure 7. Social skills mean differences distributed and evaluated for normality .....	92
Figure 8. Bullying mean differences distributed and evaluated for normality .....	95
Figure 9. Victimization mean differences distributed and evaluated for normality .....	98



## **CHAPTER ONE: INTRODUCTION**

### **Overview**

The problem of bullying presents a salient obstacle within schools. Efforts to mitigate bullying have become commonplace in schools in order to decrease the harmful effects of bullying on students (Apel & Burrow, 2011; Hazelden Foundation, 2016a; Risser, 2013). This bullying prevention research investigated the effectiveness of a resilience program, which is based on social and emotional learning theory (Bandura, 1971). Contrary to the more prominent, school-wide approaches that emphasize stopping or punishing bullying, the resilience program may empower children to successfully navigate bullying interactions (Olweus, 1991). This bullying prevention research contributed to the evaluation of social and emotional approaches to the problem of bullying, which the literature presently lacks (Domino, 2013).

### **Background**

Despite decades of school intervention and research, bullying remains a critical problem that psychologically harms children in ways that remain in adulthood (Thornberg, Halldin, Bolmsjö, & Petersson, 2013). Largely one-dimensional, school-wide approaches to prevention dominate the bullying prevention literature, yet underrepresented, social skill-based approaches indicate the need to explore alternatives in bullying prevention. The litany of detrimental effects associated with school bullying is well established by the research. For instance, Risser (2013) identified a negative correlation between fourth- and fifth-grade students' victimization experiences and academic performance. Similarly, Sideridis, Antoniou, Stamovlasis, and Morgan (2013) found that victimization negatively influenced reading achievement. Young-Jones, Fursa, Byrket, and Sly (2015) showed that even among adult students, past and present victimization was associated with significantly lower scores on measures of academic



motivation. Beyond academic effects, bullied students can exhibit destructive behavioral symptoms (Apel & Burrow, 2011). Bullying victimization has also been shown to contribute to student absences as well as students choosing alternative educational options like home-schooling (Brown, Clery, & Ferguson, 2011).

While experiences of victimization influence children academically and behaviorally, the psychological influence of bullying might induce lasting effects on individuals' perspectives as well (Ciby & Raya, 2014). Thornberg et al. (2013) explained that victimized students may engage in negative thought and lifestyle patterns *after* separation from the bullying context, including later during adulthood. The profound consequences and extensive reach of victimization establish it as a critical issue today that requires investigation and prevention.

Amidst the literature about bullying, a primary theme of school-wide prevention approaches has surfaced that many school leaders have responded to. However, studies of compelling, divergent approaches have lacked a voice in the bullying prevention discourse. Alternative approaches to bullying prevention have been eclipsed by the more extensively researched school-wide approaches (Hazelden Foundation, 2016a). The Olweus Bullying Prevention Program (OBPP) became the most celebrated prevention program in schools and served as a flagship for school-wide approaches to bullying prevention (Hazelden Foundation, 2016c). According to the Center for Safe Schools (2012), the OBPP operates from the premise that victims of bullying lack the ability to stop their victimization. Consequently, the OBPP and other school-wide approaches seek buy-in from the school community by training students and staff to villainize bullying; subsequently, the school community works to curtail and punish bullying behavior (Olweus, 1993; Center for Safe Schools, 2012). As a stark contrast to this ideology, Allen (2013) showed that bullying may be better described as a social game of student



competition that involves avoiding emotional overreaction, while stimulating it from others. The spoils of the bullying contest consist of improved social status (Allen, 2013). Thornberg and Knutsen (2011) supported this alternative view of bullying by reporting that students often identify victims' socially inept behavior as the cause of bullying. These data provide a compelling invitation to examine alternatives to school-wide approaches to bullying prevention.

### **Historical Overview**

The current prominence of the literature on bullying began with tragedy. In 1983, three adolescent boys committed suicide in Norway, which sparked investigations that revealed that the boys' victimization was a likely cause of their shocking deaths (Olweus & Limber, 2010b). These events sparked a campaign that centered on implementing the newly designed OBPP, which was evaluated longitudinally from 1983 to 1985 (Olweus & Limber, 2010b). Results brought much needed encouragement to Norwegian schools; over two years of data revealed a highly statistically significant 64% reduction in victimization and 53% reduction in bullying (Olweus, 1994; Olweus & Limber, 2010b). According to the Hazelden Foundation (2016a), the pioneer of the OBPP, Dan Olweus, then worked with Swedish and Norwegian legislators to successfully outlaw bullying as a violation of human rights. Following Norwegian success, the OBPP was brought to the United States for implementation and research.

The notable, initial study on the OBPP was not replicated to the same level of success in the U.S. In an implementation among northeastern, urban/suburban, seventh- and eighth-grade students, the data did not support prior evaluation (Bowllan, 2011). While bullying decreased among seventh-grade students, it increased among eighth-grade students following program implementation (Bowllan, 2011). A South Carolina study of the OBPP yielded no improvements in the incidence of bullying among one-year participants (Limber, Nation, Tracy, Melton, &



Flerx, 2004). Longitudinal, two-year participants demonstrated a range of improvements in the first year of implementation, but regressed during the second year of implementation and analysis (Limber et al., 2004). In discussion, Limber et al. (2004) cited the lack of staff buy-in and enthusiasm as potentially contributing to poor results in data. These results may have called the effectiveness of the OBPP into question, as well as potentially showing the importance and difficulty of generating buy-in among stakeholders when implementing the OBPP. A buy-in challenge might present an undesirable difficulty to schools seeking to utilize the OBPP or any other school-wide approach to bullying prevention.

While the OBPP continued to receive widespread implementation throughout Norway and the United States, other bullying prevention programs surfaced bearing either a similar, school-wide approach, or a contrasting, social skill-based approach. For example, Pack, White, Raczynski, and Wang (2011) described a school-wide approach to bullying prevention that is similar to the OBPP and produced improvements to the incidence of bullying. According to Pack et al. (2011), these improvements were attributed to the increased involvement of non-bullied students coming to the aid of bullied students. Intervention by adults or non-bullied students characterizes a major emphasis of school-wide approaches to the problem of bullying (Olweus, 1993). On the other hand, Domino (2013) described a social skills-based approach to bullying prevention that also produced decreases in the incidence of bullying among students. However, as a contrast to school-wide programs, social skill-based approaches are designed to provide victimized students with social tools to improve their actions in social situations (Domino, 2013, Kalman, 2013). Alternatives to school-wide approaches have surfaced in recent literature (Battey & Ebbeck, 2013; Jenson, Brisson, Bender, & Williford, 2013). These social



skill-based approaches apply both contrasting ideologies and different strategies to bullying prevention.

### **Social Overview**

The construct of bullying is social in nature. According to Olweus (1991), bullying is defined as “when (a person) is exposed, repeatedly and over time, to negative actions on the part of one or more other persons” (p. 413). Olweus (1993) added that these actions must be between individuals where the person receiving the actions has less power, and consequently, cannot defend himself or herself. The presence of bullying in schools potentially alters schools’ social climates across the globe. Experiences of victimization have been shown to produce a negative impact on students’ perceptions of their safety at school (Harper, Parris, Henrich, Varjas, & Meyers, 2012). As a consequence of the tension felt by victimized students, bullying can unexpectedly turn victims into the perpetrators of school violence, including school shootings (Ferguson, Coulson, & Barnett, 2011). Harper et al. (2012), as well as Ferguson et al. (2011), showed the need for identifying a process of victimization that makes students feel unsafe and contributes to the victimized committing extreme violence themselves. In the wake of the school shootings of recent years, school violence has subsequently become a prioritized public health concern (Center for Safe Schools, 2012).

Students’ perceptions of their own safety constitute an important part of schools’ social climates. Bullying as well as the more subtle social interactions, including student responses to bullying, may all influence student perceptions of safety (Battey & Ebbeck, 2013; Harper et al., 2012). While the literature demonstrates that bullying influences student perceptions of themselves and their safety, research has also shown a potential link between student self-perceptions and the likelihood that they will be bullied in the future (Battey & Ebbeck, 2013;



Ferguson et al., 2011). These data could indicate that while reducing bullying may improve student self-perceptions, improving student self-perceptions may decrease the incidence of bullying.

The social nature of bullying bears a complexity that challenges both the clarity of the construct of bullying and important qualities of well-designed bullying prevention programs. The literature demonstrates that bullying constitutes an aspect of school climate that influences students in negative ways. The problem of bullying merits attention in education literature as well as in school programming.

### **Theoretical Overview**

This bullying prevention research studied the effects of a resilience program on student reports of social skills, bullying, and victimization. The resilience program was designed to teach students about bullying interactions using a social and emotional learning approach (Collaborative for Academic, Social, and Emotional Learning, 2005; Kalman, 2013). The bullying dynamic is described by this approach as minor to major offenses, to which the best responses are calm and friendly (Kalman, 2013). Based on a social and emotional understanding of bullying, students learn socially and emotionally skillful responses that deter bullying behaviors by improving victims' responses to mistreatment (Collaborative for Academic, Social, and Emotional Learning, 2005; Kalman, 2013). The resilience program that this research focused on derives its approach from the social and emotional learning theory of Bandura (1971), and receives support from the theory of the hierarchy of human needs developed by Maslow (1943).

Bandura (1971) described a social and emotional learning theory to explain a learning process that occurs in a social environment or through social modelling teaching methods.



Furthermore, social and emotional learning emphasizes the development of emotional competencies, such as: (a) self and social awareness, (b) managing one's self, (c) relationship skills, and (d) decision-making (Collaborative for Academic, Social, and Emotional Learning, 2005). The resilience program studied in this research uses social modelling to train students in the application of social and emotional skills to bullying situations. Victims gain an emotional skill-set that may mitigate victimization and support confidence in social situations (Collaborative for Academic, Social, and Emotional Learning, 2005; Kalman, 2013, Maslow 1943). Accordingly, the resilience program receives support from the theory of the hierarchy of human needs (Maslow, 1943). As a contrast to self-esteem based on feelings of social approval from peers, a more stable self-esteem in social contexts requires students to develop social competence (Maslow, 1943). While school-wide approaches emphasize protecting victims from challenging social situations, the resilience program studied in this research emphasizes students learning to improve their own social interactions.

Several bullying prevention programs have used social and emotional learning frameworks (Domino, 2013; Jenson et al., 2013). Domino (2013) studied a program with a social and emotional learning framework and explained that the program emphasized bullying victims' potential and strengths as a contrast to bullying programs that emphasize protecting victims (victim weakness). This bullying prevention research added to the literature by contributing an application of social and emotional learning theory to the problem of bullying. Specifically, this research provided data from an investigation into the value of social and emotional skill development among victims of bullying.



## **Summary**

Researchers and school leaders must continue to seek solutions to the problem of bullying in schools. Victimization, due to bullying, has negatively impacted student achievement, absenteeism, rates of students leaving public schools, and the risk that students will partake in violent activity (Apel & Burrow, 2011; Brown et al., 2011; Sideridis et al., 2013). Furthermore, the negative effects of bullying have been shown to extend into adulthood (Ciby & Raya, 2014). Consequently, bullying remains a critical issue in education. However, contrasting approaches to prevention have left questions pertaining to optimal prevention strategies. The disparity between school-wide approaches and social skill-based approaches to bullying prevention has shown the need for new research (Domino, 2013).

## **Problem Statement**

Bullying prevention programs that protect victims through school-wide culture change are prevalent in schools and research. However, results have been inconsistent for even the OBPP, which is the most researched school-wide approach (Bowllan, 2011; Hazelden Foundation, 2016b). Furthermore, school-wide approaches rarely assist bullying victims in learning social competencies that may be important for handling difficult social situations and developing self-efficacy (Kalman, 2013).

Several studies have supported the importance of victimized students learning social and emotional skills as assets for social confidence. Thornberg et al. (2013) asserted that repeatedly victimized students internalize a victim psychology that generates negative thought processes even when they are no longer being victimized. This victim psychology detrimentally influences victims in contexts outside of their interactions with bullies in ways that can last beyond childhood (Thornberg et al., 2013). A victim psychology might contribute explanation to some



inconsistent results of school-wide programs that primarily address social contexts and protecting students from bullying behaviors while neglecting social competence development for victims. Perhaps school-wide programs unintentionally promote a victim psychology by encouraging students to see themselves as powerless in bullying situations (I. Kalman, personal communication, July 6, 2017). Social skill-based, bullying prevention programs that emphasize social competence development provide a viable alternative to school-wide approaches (Domino, 2013; Jenson et al., 2013). Notably, Jenson et al. (2013) stated that social skill-based prevention may have the most positive effects on students who had been identified as victims, who constitute the primary concern of bullying prevention. Nevertheless, both Domino (2013) and Jenson et al. (2013) acknowledged limitations to the generalizability of their studies due to design and instrumentation. Domino (2013) specifically recommended that future studies should employ methodologies that investigate social skill-based approaches to bullying prevention by utilizing large samples and comparison group designs.

The problem is that social skill-based approaches to bullying prevention might contribute meaningfully to subduing bullying in schools. However, social skill-based programs that specifically train students in social and emotional skills related to the bullying problem are underrepresented in the literature.

### **Purpose Statement**

The purpose of this quantitative, quasi-experimental study was to investigate the effects of a social skill-based, resilience program on social skills, bullying, and victimization among students in Grades 3 through 6. The independent variable was the resilience program treatment, and the dependent variables were students' social skills as shown by the Social Skills Improvement System Social and Emotional Learning Edition student scale (SSIS SEL), and



bullying and victimization scores as shown by the Peer Interactions in Primary School Questionnaire (PIPSQ). In this study, the construct of bullying was defined in the following way: “A person is being bullied when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other persons” (Olweus, 1991, p. 413). The aforementioned definition includes the bully as the perpetrator of the actions, while the victim is the recipient of the actions. The resilience program studied in this research is a social skill-based approach to bullying that may help victims of bullying to make the bullying stop. Kalman (2010) described this social skill-based approach as empowerment that may solve the problem of victimization by teaching victims to act strategically according to psychologically supported methods rather than emotionally reacting to bullies. This shift may move a victim from being manipulated by a bully to being in a position of control (Kalman, 2010). The effects of the resilience program were tested on a group of third- through sixth-grade students via pretests-posttests. The pretest and posttest means were compared with paired samples *t* tests. The sample used in this study allowed for generalizing the effectiveness of the resilience program for improving social skills as well as decreasing bullying and victimization to a population of third through sixth grade students.

### **Significance of the Study**

The results of this study contributed to addressing the gap in the literature pertaining to bullying prevention programs that specifically empower the victims of bullying with social and emotional skills. Implications can assist school administrators and counselors in determining desirable aspects of bullying prevention programs.

Research that emphasizes training victimized students in social skills is needed as an underrepresented but growing category in the literature. Social skill-based approaches to



bullying prevention have importantly demonstrated decreases in the incidence of bullying (Domino, 2013). Furthermore, a significant, negative correlation has been identified between social strength and the incidence of bullying, thus lending additional justification to the social skill-based approach (Franks, Rawana, & Brownlee, 2013). Finally, Vasallo, Edwards, Renda, and Olsson (2014) reported that adolescent bullying victims who developed social skills following their victimization experienced less depression after high school graduation. The bullying prevention literature has both supported the viability of social skill-based approaches and called for rigorous future research (Domino, 2013; Jenson et al., 2013). Further study will give a more prominent voice to social skill-based approaches in the discourse as alternatives to school-wide approaches. Similarly, additional research will better inform school leaders regarding practices for empowering bullying victims as a part of addressing the problem of bullying in schools.

The resilience program studied in this research is uniquely suited to contribute to the aforementioned gap in the literature. However, at the time of this research the resilience program had not yet undergone rigorous testing. The resilience program does not emphasize general social skills that may not relate to overcoming victimization such as cooperative teamwork, leadership skills, or empathy. Instead, the program specifically teaches all students social and emotional skills that are necessary to improve relationships (I. Kalman, personal communication, February 6, 2017). Specifically, the program focuses on a skillset that is required to mitigate bullying and aggressive behavior (I. Kalman, personal communication, February 6, 2017). The purpose of this study was to measure the effects of the resilience program on students' self-reported social skills as well as the student-reported incidence of bullying and victimization among students in Grades 3 through 6. The results of this study



contributed to the literature on social skill-based, bullying prevention by assessing the effects of the resilience program on social skills, bullying, and victimization scores among third- through sixth-grade students. Students' academic and future adult lives are potentially influenced by bullying, and this investigation informed practice to empower the students who need it most (Center for Safe Schools, 2012; Thornberg et al., 2013).

### **Research Questions**

The research questions for this study were:

**RQ1:** Is there a difference in self-reported *social skills* scores of students in grades three through six before and after the students undergo a resilience program?

**RQ2:** Is there a difference in self-reported *bullying behavior* scores of students in grades three through six before and after the students undergo a resilience program?

**RQ3:** Is there a difference in self-reported *victimization* scores of students in grades three through six before and after the students undergo a resilience program?

### **Definitions**

1. *Resilience* – Working toward a solution to a problem using one's strengths (George, 2008).
2. *Bullying* – One or more individuals exposing someone to negative acts repeatedly over a period of time (Olweus, 1991).
3. *Victimization* – A student's experience of being the target of negative acts done repeatedly over a period of time by one or more individuals (Olweus, 1991).
4. *School-wide approach* – A collaborative effort among administrators, teachers, and students to prevent bullying behaviors in the school environment using expectations and consequences for behavior (Bradshaw, 2015; Olweus & Limber, 2010a).



5. *Social skill-based approach* – Training students in behaviors that support student efficacy in forming and maintaining positive, peer relationships; this approach often involves role playing to practice and reinforce social skills (Young, Boye, & Nelson, 2006).



## **CHAPTER TWO: LITERATURE REVIEW**

### **Introduction**

In this literature review, social and emotional intelligence learning theory (Bandura, 1971), supported by the theory of hierarchy of needs (Maslow, 1943), will be described as the philosophical framework that directs this bullying research. Evidence from the literature will be used to explain the construct of bullying, including characteristic descriptions of participants identified as victims, bullies, and bully/victims. The importance of the problem of bullying will be established, supporting the value of this bullying prevention research. Finally, an analysis of two contrasting approaches to bullying prevention will evaluate previously studied prevention strategies and their effectiveness. Following this analysis of the literature, a research gap pertaining to bullying will be described.

### **Conceptual or Theoretical Framework**

This bullying prevention research was conducted from a social and emotional learning theoretical framework (Bandura, 1971), which received support from hierarchy of needs theory (Maslow, 1943). Social and emotional learning can involve using a modeling approach to instruction in order to teach essential emotional competencies (Collaborative for Academic, Social, and Emotional Learning, 2005). These competencies include (a) self-awareness, (b) social awareness, (c) self-management, (d) relationship skills, and (e) responsible decision-making (Collaborative for Academic, Social, and Emotional Learning, 2005). Social and emotional learning theory explains that meaningful learning arises from effective social contexts, and the development of a small number of emotional skills may positively influence students in a wide variety of ways (Bandura, 1971; Collaborative for Academic, Social, and Emotional Learning, 2005). The application of this theory in interventions emphasizes strengths rather than



problems in a modeling or experience-based learning context (Greenberg, Kusche, & Riggs, 2004). In this regard, social and emotional learning theory compares with resilience theory as well as strengths-based counseling (George, 2008; Zimmerman et al., 2013). An approach to bullying that emphasizes social and emotional resilience is based on strength development (George, 2008). Consequently, bullying research based in social and emotional learning theory assists in satisfying students' psychological need for competency (Maslow, 1943).

Bullying research, directed by social and emotional learning theory, represents the minority of bullying prevention literature. Despite its underrepresentation, several researchers have described bullying from the perspective of social and emotional learning theory (Allen, 2013; Domino, 2013; Thornberg et al., 2013). According to Allen (2013), students described bullying as a game that involves competition among students for social status. This student perspective defines bullying as a drama of overreaction. In this drama, bullied students who demonstrate emotional competence by remaining calm gain status, whereas students who react emotionally lose status (Allen, 2013). Kalman (2013) supported that bullying is a social game by insisting that bullying occurs when some students are ill-equipped to successfully navigate teasing and/or aggressive forms of social interaction. According to Kalman (2013), these students are victimized because they neither understand the social rules that govern the bullying game, nor do they apply the skills of emotional control that assist in victory. Several researchers have also framed bullying as a natural social management tool, by which students communicate standards for acceptable behavior (Dixon, 2007; Thornberg & Knutsen, 2011). According to Durlak, Weissberg, Dymnicki, Taylor and Schellinger (2011), social and emotional theory insists that students can acquire internal and external resources to overcome personal challenges, such as bullying.



This bullying prevention research emphasized the development of students' emotional intelligence in a social learning context. According to Bandura (1971), behaviors are learned via observation and modeling or direct experience. Individuals witness or engage in behaviors, which elicit social feedback in the form of either reinforcement or punishment (Bandura, 1971). Bandura (1971) proposed that directly experiencing reinforcement or punishment for behaviors certainly contributes to learning however, "the process of acquisition can be considerably shortened by providing appropriate models. Under most circumstances, a good example is therefore a much better teacher than the consequences of unguided actions" (p. 5). Bullying experiences and bullying prevention training occur within social interactions and provide children with positive or negative reinforcement as described by Bandura (1971). Consequently, both the role-playing in bullying prevention program training and students' actual experiences with bullying were explained by social and emotional learning theory in this bullying prevention research.

Social learning theory constitutes an embedded framework in bullying prevention as both an explanation for bullying and a guide for prevention. The Center for Safe Schools (2012) identified the desires for dominance and attention as being common motivations for bullying behaviors. These motivations exemplify the reward element of social and emotional learning theory and situate bullying events within the social and emotional learning framework (Bandura, 1971). According to Bosworth and Judkins (2014), a social and emotional explanation of bullying demonstrates the need for prevention strategies to address behavioral norms among students. Additionally, the aforementioned understanding of bullying shows the importance of bullying victims learning both the emotional motivations of bullies as well as social skills that



specifically improve bullying situations (Fergus & Zimmerman, 2005; Wong, Chen, & Chen, 2013).

The design of the resilience program that was investigated in this research is partially explained by social and emotional learning theory. The application of a social and emotional learning framework to bullying prevention received further support from the theory of the hierarchy of human needs (Maslow, 1943). Maslow (1943) stated that real abilities or achievements produce the most stable feelings of self-efficacy. Only after such abilities and/or achievements produce subsequent feelings of self-efficacy can motivation emerge for learning and searching for meaning in life (Maslow, 1943). Maslow (1943) insisted that in general, lower motivations for competence and self-efficacy *must* be met before higher motivations for achievement and learning arise. Consequently, if a person has no feelings of self-esteem derived from competencies, that person will not be driven to realize his or her potential or acquire knowledge (Maslow, 1943). Implications are that feelings of inadequacy that may result from bullying threaten self-esteem and consequently, learning and achievement. However, protecting victims from bullying may not optimally address victims' need for self-esteem. In the context of this bullying prevention research, a social and emotional learning framework was associated with the theory of the hierarchy of needs in the perspective that only after learning the social skills needed to eliminate victimization can students develop the most stable form of self-esteem for pursuing academic excellence (Kalman, 2013, Maslow, 1943).

The resilience program that was the focus of this research was designed to emphasize the development of students' internal and external resources for social situations rather than offering to remove students' social challenges. Through modeling and role-play, which are based in social learning theory, the resilience program that was studied in this research relies on students'



capacity for learning and using new resources to overcome problems (Bandura, 1971, Kalman, 2010). This investigation of a resilience program contributed to the literature by producing results from an application of social and emotional learning theory to the problem of bullying. This study addressed the importance of developing bullying victims' social skills through modeling and role-play as an element of successful bullying prevention.

### **Summary**

This bullying prevention research was based in social and emotional learning theory and supported by the theory of hierarchy of needs (Bandura, 1971; Maslow, 1943). Children learn about bullying through social feedback that bullying situations produce (Bandura, 1971). The resilience program investigated in this research is supported by social learning theory because it models social strategy to help children improve their social competence (Bandura, 1971). The theory of hierarchy of needs explains that social competence supports self-esteem and achievement, which contributed to establishing the importance of this bullying prevention research (Maslow, 1943).

### **Related Literature**

The literature consists of a significant volume of research that has been conducted to understand the problem of bullying and evaluate solutions. This review of the literature will propose an explanation of the problem of bullying as well as descriptions of common characteristics among bullying victims, bullies, and those identified as both bullies and victims. The literature not only provides a thorough explanation of the nature of bullying, but also establishes the extent and severity of the problem of bullying, which will subsequently be described. Finally, contrasting perspectives on approaches to prevention will be analyzed for philosophical framework, methodology, and effectiveness. These analyses will be used to



recommend future research including an investigation of the resilience program that this research focused on.

### **Bullying Construct**

The nature of bullying as a social dynamic challenges the development of a simple understanding in the research (Mishna, 2004). According to Mishna (2004), potential bullying interactions may involve students, parents, and teachers viewing one situation through different lenses. For example, Mishna (2004) reported an instance where an alarmed parent perceived a situation as bullying, but balked when the supposedly victimized child viewed the situation as mere teasing.

Despite possessing complex elements, the literature supports a clear definition that was proposed by pioneering bullying researcher, Dan Olweus (Center for Safe Schools, 2012). According to Olweus (1991), “a person is being bullied when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other persons” (p. 413). This construct described bullying as deliberately harmful acts repeated over time by a person with more power against someone with less power (Center for Safe Schools, 2012; Olweus, 1993). The concept of power between individuals has been reportedly difficult to objectify (Mishna, 2004). However, Mishna (2004) showed that people generally perceive it to be some type of strength difference between individuals, such as age or size. According to Franks et al. (2013), in most bullying situations, student power involves the ability to successfully apply social skills. The aforementioned definition, proposed by Olweus, provides a common lens through which social situations among students may be viewed. Numerous studies (Franks et al., 2013; Hughes, 2014; Schultz, 2012) have supported this definition. Hughes (2014) described various types of bullying via meta-analysis. According to Hughes (2014), most bullying among children may be



categorized as verbal or relational. Physical harm and cyberbullying reports constituted the minority of student reports of bullying across studies (Hughes, 2014).

The bullying prevention literature has both described the construct of bullying as well as its harmful effects (Apel & Burrow, 2011; Franks et al., 2013; Hughes, 2014; Schultz, 2012; Sideridis et al., 2013; Thornberg et al., 2013). Sideridis et al. (2013) demonstrated that student reports of victimization produced significant disruptions to students' reading performance. Specifically, upon reaching a victimization threshold, a student with strong word decoding performed poorly on measures of reading comprehension, despite the fact that word decoding ability has been shown to correlate with reading comprehension ability (Sideridis et al., 2013). Apel and Burrow (2011) additionally showed that students victimized by bullying had a 100% increase in likelihood for engaging in risky behavior, such as gang participation and criminal activity. According to Apel and Burrow (2011), while compelling, these data were observational rather than experimental or quasi-experimental, and therefore support an associative, rather than a causal, relationship between victimization and risky behavior. Thornberg et al. (2013) critically noted that students victimized by bullying adopted self-perceptions that inhibited their confidence and social integration. The literature has demonstrably shown the various forms of harm associated with bullying victimization.

Despite evidence of the harm caused by bullying, some research opposes the conclusion that bullying always involves motivation to harm (Allen, 2013; Dixon, 2007; Jamal, Bonell, Harden, & Lorenc, 2015; Young et al., 2006). As was previously mentioned, Allen (2013) revealed a social game intent behind bullying as a potential alternative to bullying motivated by the intent to harm. However, Allen (2013) necessarily called for further research to investigate whether or not commonly victimized students recognize a reaction game essence of bullying.



Hughes (2014) analyzed bullying victim data and revealed that victims are likely to view external intervention as the solution of bullying. The problem facing students in a game view of bullying might be that not all students know that they are playing a game. Kalman (2013) asserted that much of what is considered bullying today may be explained as victims unknowingly and unnecessarily giving bullies repeated opportunities for wins by emotionally or timidly reacting to students who try to push their buttons.

While Allen (2013) defined bullying from a social game perspective, other researchers described the construct of bullying from a social management perspective as a dynamic that establishes and maintains norms within a group (Dixon, 2007; Jamal et al., 2015; Young et al., 2006). Dixon (2007) uniquely asserted that rather than a simple matter of peer cruelty, ostracism often serves as a social tool to manage behavior among people. From this perspective, exclusion might purposefully, although indirectly, communicate to a student that something said or done is not accepted by a group. Rather than intended as harm, such bullying would better be described as group communication or a social management dynamic (Dixon, 2007). Jamal et al. (2015) qualitatively described 24 teen girls' experiences with bullying with similar findings. According to Jamal et al. (2015), girls frequently identified bullying as a way to enforce gender-specific, behavioral expectations among the students in two all-girls schools. Specifically, students described the intent of bullying in their school cultures as a social tool to certify that girls wore feminine clothing, such as snapping bra straps to insure that a girl wore one (Jamal et al., 2015). Other bullying behaviors were reported as intended to maintain heterosexual norms among students (Jamal et al., 2015). For example, it was reported that being called lesbian was a reputation-threatening insult used by girls to pressure others into expressing attraction for certain types of boys (Jamal et al., 2015).



The description of bullying as a social management tool was supported by the manner in which the data diverged from commonly held notions regarding the construct of bullying. The Center for Safe Schools (2012) implied a relatively stable hierarchy of social power among students where some students have more power, and other students have less. According to Jamal et al. (2015), sexuality regulating behaviors did not follow bully-victim role distinctions, but were instead done by the victim at times, even if unequally (Jamal et al., 2015). These data did not follow the OBPP assertion that bullying victims cannot assert themselves (Center for Safe Schools, 2012). This lack of role clarity was problematic for teachers and administrators who attempted to discipline according to a clear understanding of bully versus victim roles (Jamal et al., 2015). While students certainly need guidance in the way they use social management actions, this alternative construct of bullying was not villainized in the research (Dixon, 2007; Jamal et al., 2015).

The social management perspective might align with data on teenagers' explanations of bullying, which at times starkly contrasted the OBPP perspective on bullying (Dixon 2007, Jamal et al., 2015). According to Thornberg and Knutsen (2011), a significant 42% of students identified obnoxious behavior on the part of the victims as the cause of their own bullying. Despite being outnumbered by student reports that the bully was at fault, the volume of responses that faulted the victim nevertheless merits discussion. Thornberg and Knutsen (2011) seemed to paint an alternative picture of the bullying construct that lent support to a social management view in which students bully in order to communicate that obnoxious behavior is not acceptable. Critically, the question of *which* 42% of students blamed victims was unanswered (Thornberg & Knutsen, 2011). Surely, students who bully would be expected to pass blame for their actions on to the victims. However, Solberg, Olweus, and Endresen (2007)



reported that in a sample of over 15,000 students, only 4.6% described themselves as bullies, while an additional 1.9% described themselves as both bullies and victims. These quantities fall far short of the 42% of students who blamed victims for their own ill treatment, which may imply that bullies are not the only students who assign responsibility for bullying to the behavior of the victims (Thornberg & Knutsen, 2011). The potential for victim responsibility, in some cases, may further support the social management perspective on bullying.

Dixon (2007) importantly emphasized the need for providing students with direction for using social management as an instrument of reducing unacceptable behavior among peers. Jamal et al. (2015) described unacceptable applications of social management by students pressuring one another regarding sexual orientation. Nevertheless, most seasoned teachers can likely recall a victim who simply needed to recognize when he or she was bothering other students to the point of frustrated exclusion or aggression. Despite the potential of the social management view as an alternative to the traditionally accepted *motivation* for bullying, it remains that bullying harms individuals (Apel & Burrow, 2011; Sideridis et al., 2013; Thornberg et al., 2013).

In addition to the commonly held perspective of bullying as harm that occurs between individuals of unequal power, the OBPP and many other programs asserted that the harm must be repeated (Olweus, 1991; Center for Safe Schools, 2012). However, Chan-Mok, Caponecchia, and Winder (2014) challenged the requirement that harassment must be repeated to qualify as bullying. Chan-Mok et al. (2014) proposed in a study of adult bullying in the workplace, that requiring aggression to be repeated in order to fit bullying criteria posed unacceptable risk to victims. Regarding the subject of adult, employee-to-employee bullying, the accepted definition for the bullying construct used by educators seemed inappropriate, according to Chan-Mok et al.



(2014). Workplace health and safety laws meant to protect employees simply did not harmonize with a bullying definition that required additional aggression to justify action on behalf of the victim (Chan-Mok et al., 2014). The fact that workplace bullying has been defined by repeated actions unacceptably implied that a singular harmful act may be ignored (Chan-Mok et al., 2014). While this rationale importantly contributed to the discourse of workplace bullying, it might be argued that a distinction ought to be made between workplace bullying among adults and school bullying among children. Thus, especially regarding the discourse on school bullying, the definition used by the OBPP that bullying is repetitive remains important and well established. This definition stands as a reference point in bullying discourse, research, and prevention (Center for Safe Schools, 2012; Hazelden Foundation, 2007).

Despite challenge in the research, the aforementioned definition used by the OBPP and many other prevention programs provides the most concise, useful criteria available for objectively defining and measuring bullying in schools. Various studies have confirmed the construct validity and reliability of instruments that measure bullying according to this definition (Olweus, 2007; Solberg & Olweus, 2003; Tarshis & Huffman, 2007). However, contrasting constructs have appeared in the literature. Rather than motivations based on intent to harm, these alternative explanations describe bullying that was used to gain social status, have fun, or enforce distinctions among social groups (Bacchini et al., 2015; Bradshaw, Waasdorp, O'Brennan, & Gulemetova, 2013; Dixon, 2007; Jamal et al., 2015; Wong et al., 2013). In still other instances, bullying was used to communicate group norms via aggression focused on specific behaviors rather than aggression focused on harming the individual (Thornberg & Knutsen, 2011).

The commonly held definition of the bullying construct as repeated, harmful actions between individuals who have unequal power remains a fixture in the discourse (Center for Safe



Schools, 2012). Additionally, an understanding of the nature of victims, bullies, and bully victims contributes to a thorough understanding of the bullying construct.

### **Characteristics of Victims**

The literature provides characteristics that consistently emerge among victims of bullying (Bacchini et al., 2015; Einarsen & Nielsen, 2015; Wong et al., 2013). These characteristics may be categorized as either unchangeable or changeable. Changeable victim characteristics may be skill-based or personal narratives. Based on an Italian study (n = 947), Bacchini et al. (2015) asserted that obesity increases a child's risk of being victimized by bullying behavior. Even bullying actions unrelated to a child's physical appearance were nevertheless perpetrated more often to heavier children than to children of normal weight (Bacchini et al., 2015). Bradshaw et al. (2013) supported the association between the relatively unchangeable trait of student obesity and victimization experiences, but added that students who differ in other unchangeable traits, such as race, also have an increased risk for experiencing victimization. Einarsen and Nielsen (2015) contributed to the list of unchangeable traits common among victimized students by adding student anxiety as a predictor of victimization experiences. The unchangeable characteristics that increase a child's risk of being bullied are of great concern because the victimized student has little or no control over such characteristics.

Despite reports of unchangeable characteristics that are common among victims, the clearly dominant, victim profile described in the literature consists of skill-based attributes (Rose, Simpson, & Moss, 2015). Rose et al. (2015) as well as Wong et al. (2013) identified communication skill deficiencies as the most prevalent, common thread among student participants who were victimized by bullying. Matthiesen and Einarsen (2007) lent support to this conclusion by describing adult bullying victims as consistently lacking social competence



and displaying low self-esteem. Eslea et al. (2004) asserted that students categorized as victims commonly reported lacking friends and displaying decreased satisfaction with playtime at school when compared with non-victimized students. Similarly, Kokkinos and Kipritsi (2012) described negative correlations between victimization and self-esteem among students.

The literature has shown a link between emotional skills and social skills in some bullying research (Hussein, 2013). Hussein (2013) included deficient emotional skills with deficient social skills as predictors of students' negative participation in bullying events. Hussein (2013) further specified that lacking emotional and social skills often predicted participation as the victims in bullying situations. Ciby and Raya (2014) added that inability to adapt to change emerged as an important commonality among adults who were victimized in the workplace. This association between inflexibility and victimization may not only indicate that inflexibility is a contributing cause of victimization, but also that inflexibility exacerbates perceived slights (Yeager, Trzesniewski, & Dweck, 2013). Yeager et al. (2013) conducted a study in which a growth mindset, which describes people as capable of learning, changing, and improving, was taught to students to determine if it would affect students' response to a perceived bullying incident. Students who were trained in the growth mindset, which is related to flexibility, responded to the perceived bully with more empathy and less latent aggression (Yeager et al., 2013). These data indicate that lacking emotional and social skills, such as flexibility, may be common, yet improvable traits among bullying victims.

Perhaps related to emotional and social skills among bullying victims, self-narratives play a part in the bullying prevention literature. Smorti and Ciucci (2000) asserted that victims commonly blame bullying on uncontrollable factors (i.e., social contexts and environments). Hughes (2014) alternatively reported that victimized students were more likely to identify



bystander intervention as the best solution for bullying. These perceptions, while different, both effectively remove responsibility and efficacy from victims in bullying situations. Victims operating from these perceptions maintain an external locus of control regarding their victimization, and consequently lack the capacity to effect bullying situations (Smorti & Ciucci, 2000). By contrast, Smorti and Ciucci (2000) revealed that bullies and uninvolved students were much more likely to identify people's choices as the root cause of bullying, which endows people with both responsibility and efficacy in bullying situations. In both studies, bullying victims' perceptions or narratives place responsibility for solving the bullying problem on people or circumstances outside of their own locus of control; thus, they relinquished their own power as well as potential for impacting bullying situations (Hughes, 2014; Smorti & Ciucci, 2000). According to Hughes (2014), bullies held a contrasting perception that victim assertiveness is the most viable remedy to the bullying problem. If victims commonly hold a perspective that abnegates responsibility and efficacy, then this perspective may contribute to the problem of bullying. The research showing that victims may unknowingly bear responsibility in some bullying situations creates a need for a new understanding of some victimization as well as new approaches to prevention (Thornberg & Knutsen, 2011). Social skill training for victims that specifically addresses bullying situations may constitute a viable strategy for helping victims to develop an internal locus of control toward bullying situations (Kalman, 2010). Both Hughes (2014) and Smorti and Ciucci (2000) showed that non-victims perceived people as possessing efficacy and responsibility, which perhaps establishes a common self-narrative among non-victims as well as a potential learning objective for victims in an effective bullying prevention strategy.



The renowned bullying researcher, Dan Olweus, was moved to engage in large-scale bullying prevention when three Norwegian boys demonstrated the most extreme and tragic expression of negative internal narrative by committing suicide in 1983 (Olweus & Limber, 2010b). Follow-up investigations regarding the youths' experiences implicated bullying as a major contributor to their suicidal ideations and actions, which spurred Olweus to intervene in schools (Olweus & Limber, 2010b). Thornberg et al. (2013) ventured deeper to describe victimized students' psychological identification with their social experiences. Over time, consistently victimized students began to adopt a *victimization identity* with thoughts that described themselves as not fitting in; this identification remained robust even when the victimization stopped (Thornberg et al., 2013).

Further contributing explanation to the self-narrative of non-bullied students, Garcia-Moya, Suominen, and Moreno (2014) described a construct called *sense of coherence*. Sense of coherence encompasses a measurable, psychological narrative (Garcia-Moya et al., 2014). This narrative describes social life as being understandable, identifies resources that could assist with overcoming obstacles, and ascribes value to the successful navigation of obstacles (Antonovsky, 1979; Garcia-Moya et al., 2014; Griffiths, Ryan, & Foster, 2011). Garcia-Moya et al. (2014) importantly noted that students with lower sense of coherence were more likely to experience victimization than students with higher sense of coherence. Beyond merely associating with the incidence of bullying, sense of coherence also endowed protective effects in the event of bullying (Garcia-Moya et al., 2014). According to Garcia-Moya et al. (2014), students with a lower sense of coherence who were bullied were more likely to display physically and psychologically negative symptoms than bullied students who had a higher sense of coherence. Harper et al. (2012) described different responses to obstacles, or levels of coping ability among



students. Harper et al. (2012) showed that students with higher coping skills were less affected by victimization when compared with students with low coping skills. Self-narratives, as perspectives on social life, might have significant effects on the likelihood that an individual will be victimized as well as the impact of that victimization (Garcia-Moya et al., 2014; Harper et al., 2012; Smorti & Ciucci, 2000).

In summary, the literature offers a portrait of victims, including common qualities beyond unchangeable attributes such as race. Victims of bullying often lack social and emotional skills and view themselves and life through an external locus of control (Hussein, 2013; Smorti & Ciucci, 2000). Victims may frequently develop self-identification with being victims in ways that drive their behavior (Thornberg et al., 2013). For example, a student who accepts a personal narrative that he or she does not fit in may be less likely to engage in friendly, social ways with other students. Consequently, it may be critical to the longitudinal effectiveness of bullying prevention efforts that bullying victims receive training focused on the development of social and emotional skills, as well as personal narratives that consist of an internal locus of control (Domino, 2013; Kalman, 2013). These social skills may assist individuals as they transition out of bully-free zones into the adult world where bullying remains a problem (Ferguson et al., 2011; Nielsen, Nielsen, Notelaers, & Einarsen, 2015; Schat & Frone, 2011; Sideridis et al., 2013; Volkova & Grishna, 2013).

### **Characteristics of Bullies**

Individuals who identify as bullies generally appear in lower numbers as compared with individuals who identify as victims according to Solberg et al. (2007). Solberg et al. (2007) showed that 4.6% of students ( $n = 15,000$ ) self-identified as bullies compared with 9.5% who self-identified as victims. Matthiesen and Einarsen (2007) similarly reported that 5.4% of over



5,000 employees self-identified as bullies, whereas 8.3% of employees self-identified as victims. While bullying victims often share traits, such as social incompetency and feelings of helplessness, bullying perpetrators generally possess common characteristics as well (Eslea et al., 2004; Hughes et al, 2014). Eslea et al. (2004) found that bullies involve themselves socially and enjoy time with other students to a greater extent than victimized students. Hughes (2014) showed across multiple bullying studies that bullies perceive victim assertiveness to be the best solution to bullying situations. Smorti and Ciucci (2000) added that bullies implicated personal choices of bullies and victims as the cause of bullying. Matthiesen and Einarsen (2007) showed that among adult bullies, most had higher levels of self-perceived aggressiveness, but did not lack social skills or self-esteem. By contrast, Dilmac (2009) stated that in some instances, bullies may be motivated by a desire to win the affection or social support of others in order to experience greater self-esteem. However, according to Matthiesen and Einarsen (2007), the commonly held idea that bullies lack self-esteem is generally unsupported. Instead, Wong et al. (2013) asserted that bullies victimize others because they perceive it to be fun. This bullying motivation most closely aligns with a social game description of bullying (Allen, 2013).

The perspective of bullies might pose a problem to schools. Bullies prefer the least-supervised areas and times when bullying other students (Hughes, 2014). Blosnich and Bossarte (2011) contributed that among a variety of school safety measures, including cameras monitoring student activity, only adult supervision associated with significant reductions in the incidences of specific types of bullying. Consequently, any approach to prevention that hinges upon adult intervention simply encourages bullies to play their victimization game on playgrounds, in bathrooms, in hallways, on buses, and in the cafeteria (Hughes, 2014). This element of bullies' strategy not only demands comprehensive supervision needs, but also uses significant



administrative resources in fact-finding, story investigations, consequence discretion, data management, and parent contacts (Hazelden Foundation, 2007).

In conclusion, the literature provides a set of characteristics that bullies often share in common. Chiefly, students who bully tend to value assertiveness and possess social skills, self-esteem, and aggressiveness (Hughes, 2014; Matthiesen & Einarsen, 2007). Psychologically, bullies seem to share an internal locus of control and apply that to other people and bullying situations (Smorti & Ciucci, 2000).

### **Characteristics of Bully/Victims**

A small, but consistently observed fraction of student bodies self-identifies as both regularly bullying other students and being bullied. Solberg et al. (2007) identified 1.9% of students in a study of over 15,000 who met these criteria. Matthiesen and Einarsen (2007) similarly identified 2.1% of employees who both bullied others and experienced victimization. This consistently small, yet present element of social bodies bears interesting and concerning qualities.

According to Matthiesen and Einarsen (2007), bullies possessed higher aggression whereas victims had lower self-esteem and social competence. However, bully/victims possessed all three qualities (Matthiesen & Einarsen, 2007). This unsettling mix of qualities characteristic of bully/victims poses unique hurdles for bullying prevention strategies to overcome.

### **Importance of School Bullying Prevention**

Despite the challenges involved in bullying prevention, the importance of such efforts is emphatically supported by evidence in the literature both for the prevalence and negative effects of bullying (Apel & Burrow, 2011; Brown et al., 2011; Ferguson et al., 2011; Garcia-Moya et al.,



2014; Limber, 2011; Rose et al., 2015). While results varied somewhat across bullying prevalence studies, a convergent theme, nevertheless, emerged that approximately 15% of students experience regular victimization (Garcia-Moya et al., 2014; Limber, 2011; Rose et al., 2015). Variation in results might be explained by differences in definitions used for bullying, sample sizes and types, survey types, data collection methods, and statistical variance. In spite of some variation, an overall assessment of bullying prevalence in the literature demonstrated that the problem of bullying consistently and significantly impacts both schools and workplaces (Karatza, Zyga, Tzlaferi, & Prezerakos, 2016; Rose et al., 2015).

Olweus (2005) reported on the *New National Initiative Project* in Norway that consisted of a massive, three-cohort bullying study. Olweus (2005) stated that initial bullying statistics revealed that 15.2% ( $n = 8,388$ ), 14% ( $n = 4,083$ ), and 13.2% ( $n = 8,238$ ) of students across the cohorts reported being victimized by bullying. These statistics represented the proportion of the Norwegian student population that experienced bullying and demonstrated consistency in the prevalence of victimization with robust cohort sizes that total over 20,000 students (Olweus, 2005). Rose et al. (2015) similarly conducted a large, prevalence study using three bullying assessments as well as three victimization assessments. Rose et al. (2015) evaluated a sample of 14,508 students to determine overall bullying and victimization as well as differences in incidence between students with and without disabilities. A notable result was that 15.1% of students reported high levels of victimization (Rose et al., 2015). This 15.1% prevalence rate compares well with the aforementioned data reported by Olweus (2005).

Garcia-Moya et al. (2014) contributed to the literature by conducting a large study of Spanish students ( $n = 7,580$ ) to investigate bullying prevalence and contributing factors among teenage students (mean age = 15.41). The data was collected using the Revised Olweus



Bully/Victim Questionnaire and revealed that approximately 15% of students were victimized at least two to three times per month (Garcia-Moya et al., 2014). A synthesis of these studies might conclude that approximately 15% of students report high levels of victimization (Garcia-Moya et al., 2014; Olweus & Limber, 2010a; Rose et al., 2015). This cross-study similarity could indicate a robust consistency and generalizability of the victimization experiences of approximately 15% of students.

Mok, Wang, Chen, Leung, and Chen (2014) conducted a comparably large study of the incidence of bullying among students in Grades 7 through 12 ( $n = 11,876$ ). Mok et al. (2014) used the Revised Olweus Bully/Victim Questionnaire to measure prevalence. The average, 7th through 12th grade student-reported prevalence of victimization was 9.3% (Mok et al., 2014). Solberg et al. (2007) also reported that 9.5% of students experienced victimization in a sample of nearly 15,000 students from Grades 5 through 9 (Mok et al., 2014). Mok et al. (2014) informatively analyzed prevalence rates according to grade level. The reports of students who were victimized two or three times per month decreased with age from 12.9% of 7th grade students, to 10% of 8th, 9.3% of 9th, 7.3% of 10th, 5% of 11th, and 3.3% of 12th grade students (Mok et al., 2014). Mok et al. (2014) recommended caution in drawing conclusions regarding age-related bullying trends due to the small effect sizes in the aforementioned data. However, Pelchar and Bain (2014) similarly supported an age-related trend of bullying decreases with increasing age among elementary school students by showing that fourth-grade students in their study reported significantly more victimization than did fifth-grade students.

A synthesis of prevalence data seems to include several prominent conclusions. First, *serious bullying* is often defined in the literature as occurring at a frequency of two or three times per month or more, and the incidence of serious bullying may range from 9% to 15% among



adolescent students (Garcia-Moya et al., 2014; Mok et al., 2014; Rose et al., 2015). Secondly, these prevalence rates may decrease with age (Mok et al., 2014; Pelchar & Bain, 2014). The range of data regarding the prevalence of bullying in schools perhaps raises questions about differences across samples and data collection procedures, but most importantly demonstrates that bullying universally afflicts children (Due et al., 2005). In spite of countless interventions through the last several decades beginning especially with Olweus's 1983, Norwegian implementation, the literature suggests that bullying continues to be a serious problem for approximately 9-15% of adolescent students (Olweus, 2005; Olweus & Limber, 2010a).

The significant prevalence of the bullying problem among students has generated research regarding the impact of bullying on victims (Due et al., 2005; Garcia-Moya et al., 2014; Olweus, 1993; Mok et al., 2014; Rose et al., 2015). The problem of victimization due to bullying has been shown to generate a range of negative effects among students who experience it (Apel & Burrow, 2011; Brown et al., 2011; Ferguson et al., 2011; Lacey, Cornell, & Konold, 2015). The modern movement to prevent bullying notably began with three adolescent suicides in Norway in 1982 that subsequently sparked a national campaign against bullying that eventually spread beyond Norway (Olweus, 1993; Olweus, 1994). This series of tragedies placed the problem of bullying at the forefront of modern school priorities (Olweus, 1993; Olweus, 1994).

Victimization due to bullying has been associated with a host of psychological problems among students (Ferguson et al., 2011; Volkova & Grishna, 2013). In a British study of 3,852 students, bullying was the top response given as the motivation for secondary students' choice to be home-schooled (Brown et al., 2011). Bullying was the third most given answer that parents provided (43%) as a reason that contributed to the choice to home-school secondary students



(Brown et al., 2011). Alarming, according to Ferguson et al. (2011), 71% of assessed school shooters perceived themselves to be victims of bullying. Volkova and Grishina (2013) lent support to these data by identifying a relationship between victimization and students' desire to restore feelings of power via violent acts. Apel and Burrow (2011) similarly showed that children are especially vulnerable to using destructive coping methods when responding to harassment. Apel and Burrow (2011) used the National Longitudinal Survey of Youth 1997 (NLSY97) to analyze data from over 1,500 adolescents. Gang participation, unlawful weapon possession, or physical assault were evaluated to identify associations between bullying victimization and high-risk behaviors among youth (Apel & Burrow, 2011). After controlling for potential confounders, Apel and Burrow's (2011) analysis showed that students' experiences of victimization associated with more than double the risk that a student would participate in a gang or engage in violent, illegal activity. The strength of the association between victimization and high-risk behavior among adolescents potently suggests that victimization harms students psychologically.

On a social level, Eslea et al. (2004) identified associations between victimization and student-reported lack of friends, dissatisfaction with playing experiences, and more isolation than other students, including bullies themselves. Through investigating the qualitative experiences of bullying victims, a *victim identification* was described and might be the most important consequence of school bullying. Thornberg et al. (2013) articulated a psychological progression of identity formation driven by students' victimization. In this grounded theory approach, data revealed that students adopted a victim-based identity that was characterized by deeply impactful, self-efficacy beliefs such as, "I just don't fit in" (Thornberg et al., 2013). Most disturbingly, these new identities remained intact even when the bullying had ended (Thornberg



et al., 2013). Hughes (2014) conducted a bullying meta-analysis that supported the idea of victim identification. Hughes (2014) concluded that victimized students experienced heightened levels of anxiety and depression as well as withdrawal and low self-concept. Tragically, students across multiple studies who exhibited these characteristics maintained these negative effects into adulthood (Hughes, 2014).

In addition to psychological consequences, victims of bullying experience negative academic effects (Hughes, 2014; Lacey et al., 2015; Sideridis et al., 2013). Hughes (2014) included decreased academic success on his list of variables that associated with victimization. Sideridis et al. (2013) measured the effects of victimization on students' reading performance by investigating previously established relationships between word and pseudoword decoding as well as between word decoding and reading comprehension. Victimization disrupted the linear association within each relationship, supporting the conclusion that victimization may inhibit students' cognition in unpredictable ways (Sideridis et al., 2013). This result especially held true for students with learning disabilities (Sideridis et al., 2013). The pervasive and insidiously negative nature of the bullying problem clearly positions it as having high priority among researchers and educators who are concerned about the psychological and academic well-being of students.

### **Cyberbullying**

In addition to providing an understanding of the prevalence and effects of school bullying, the bullying discourse has revealed other forms of bullying that occur. Hughes (2014) synthesized research and determined that most bullying may be described as verbal or relational, whereas less than 25% consists of cyberbullying (i.e., bullying that occurs via electronic, social tools). Safaria (2016) contrarily asserted that cyberbullying is not a small problem based on a



junior high sample. A large majority (80%) of students reported experiencing some cyber-victimization, and 12.7% reported experiencing cyber-victimization almost every day (Safaria, 2016). Despite a small sample ( $n = 102$ ), these student reports generate important questions about the problem that cyberbullying presents to schools and what schools can do about it (Safaria, 2016). Despite possibly playing a minor role in the overall incidence of bullying in some samples, cyberbullying presents a unique challenge to school systems (Corcoran & McGuckin, 2014). Furthermore, cyberbullying possesses potential for growth among bullying types as it may progress alongside the growth of social technology platforms. Corcoran and McGuckin (2014) insisted that schools are being unfairly involved in cyberbullying problems, which occur outside of school, but still influence the school environment.

The greatest challenge schools face due to cyberbullying consists of being thrust into dealing with bullying situations that did not occur in school, yet become the administration's problem and responsibility, nevertheless (Corcoran & McGuckin, 2014). Students bring the emotional baggage of victimization that hinders and distracts from learning, which constitutes a school priority (Corcoran & McGuckin, 2014). However, tremendous burden is placed on schools to engage effectively with bullying that does not occur during school or school-sponsored events (Corcoran & McGuckin, 2014). The nature of the cyberbullying problem presents a seemingly insurmountable problem to school bullying prevention programs. In addition to the problem of school bullying as described in the literature, research shows that bullying is also an important problem for adults in the workplace (Nielsen, Mattiesen, & Einarsen, 2010; Karatza et al., 2016).



## **Importance of Workplace Bullying Prevention**

Bullying is no longer described as just a part of growing up (Center for Safe Schools, 2012). Were it true that bullying exists exclusively in schools but suddenly vanishes upon high school graduation, perhaps culture and specifically, educators might more easily ignore the problem of school bullying. However, in addition to associating with serious detriment in the lives of students, the literature clearly establishes that bullying extends into the working world of adults (Nielsen et al., 2010; Karatza et al., 2016).

Nielsen et al. (2010) conducted a meta-analysis to determine the prevalence of workplace bullying. Nielsen et al. (2010) reported on studies that varied regarding measurement tools, definitions for bullying, as well as methods, which constitutes a challenge for identifying valid common themes across study data. Nevertheless, an examination of the issue of workplace bullying contributes meaningfully to the school bullying discourse. While school bullying data seemed to indicate that bullying decreases with student age, bullying prevalence among adults may reflect a stability in its incidence (Mok et al., 2014; Nielsen et al., 2010; Pelchar & Bain, 2014). Nielsen et al. (2010) accessed over 80 samples of employees to produce a calculated average of 14.6% of employees who reported being victimized by bullying at work. This percentage supports aforementioned school-age proportions with alarming similarity (Nielsen et al., 2010; Garcia-Moya et al., 2014; Olweus & Limber, 2010a; Rose et al., 2015). Other research-based, prevalence rates have added to the workplace prevalence discourse. Schat, Frone, and Kelloway (2006) estimated that 41% of the U.S. work force experiences bullying ( $n = 2508$ ). Hills, Joyce, and Humphreys (2011) reported on a sample of Australian doctors ( $n = 321$ ) showing that over 70% perceived themselves to be victimized by mistreatment. Rose et al. (2015) stated that these numbers more closely resemble the estimate of 60% of students who



experienced *some* rather than *frequent* victimization. Karatza et al. (2016) reported on a lower incidence of victimization in a study involving nursing professionals ( $n = 841$ ). Approximately 30% of surveyed nurses reported experiencing workplace victimization that produced negative perceptions of their workplace (Karatza et al., 2016).

Accounting for the potential uniqueness of particular work environments, Matthiesen and Einarsen (2007) surveyed over 5,000 employees across workplace types to assess bullying prevalence. Matthiesen and Einarsen (2007) stated that 8.3% of surveyed employees reported victimization with an additional 2.1% reporting both bullying others and being bullied themselves. This estimate perhaps established a more accurate view of the general picture of workplace bullying by using one sampling methodology across a large sample of many types of employment experiences. The 10.4% prevalence might indicate that the incidence of bullying declines to some extent from school experiences to those of the adult, working world.

In addition to prevalence rates, the literature has revealed that the effects of bullying on adults in the workplace include a variety of physically and psychologically detrimental symptoms (Nielsen et al., 2015; Einarsen & Nielsen, 2015; Lutgen-Sandvik, Hood, & Jacobson, 2016). In a workplace study of 1,291 Norwegian employees, Nielsen et al. (2015) identified that the odds of an employee developing suicidal ideation were twice as high for those who experienced workplace victimization as compared with those who did not experience workplace victimization. This observed association raises questions regarding directionality. Perhaps suicidal ideation within a personal narrative increases the likelihood that an employee will experience victimization. Nielsen et al. (2015) addressed this by assessing the association between suicidal ideation and subsequent bullying. This analysis failed to show a statistically significant association, supporting the conclusion that suicidal ideation in this longitudinal study



did not precipitate victimization, but rather, victimization made suicidal ideation more probable (Nielsen et al., 2015).

Increased stress among victimized employees emerged in multiple studies as another psychological effect of workplace victimization (Einarsen & Nielsen, 2015; Lutgen-Sandvik et al., 2016). Einarsen and Nielsen (2015) supported the association of workplace bullying with increased stress. Victimization experiences predicted elevated stress levels, even when measured by a five-year follow-up assessment (Einarsen & Nielsen, 2015). Matthiesen and Einarsen, (2007) similarly observed stress inducing effects that workplace bullying generated among employees. Lutgen-Sandvik et al. (2016) reported from a study of U.S. employees ( $n = 2846$ ) that even when employers emphasized treating employees positively in an encouraging overall culture, the stress-inducing effects of employee-to-employee victimization were not mitigated. According to Karatza et al. (2016), workplace victimization generates a variety of negative psychological health effects in addition to stress. Karatza et al. (2016) concluded that employee experiences of victimization associated with poorer overall mental health when compared to employees who were not victimized.

Several studies have focused investigations on the relationship between workplace victimization and job performance. Schat and Frone (2011) analyzed survey data from U.S. employees ( $n = 2376$ ) to measure the association between workplace bullying and decreased job performance as well as mediating factors. Schat and Frone (2011) showed a significant and negative effect of workplace bullying on employee job performance. Further analysis revealed that job satisfaction and personal health mediated the overall effect of bullying on job performance (Schat & Frone, 2011). Schat and Frone's (2011) study supported the psychological and physical effects of bullying contributing to decreased job performance among



employees. Valentine, Fleischman, and Godkin (2015) similarly identified a negative relationship between experiences of workplace victimization and job satisfaction. However, Valentine et al. (2015) added that experiences of workplace victimization eroded employee trust in the ethical values of the company itself. In the same way that victimization harms students psychologically and academically, the literature indicates that victimization may also harm adult employees psychologically and occupationally (Ferguson et al., 2011; Nielsen et al., 2015; Schat & Frone, 2011; Sideridis et al., 2013; Volkova & Grishna, 2013).

The prevalence of both school and workplace victimization indicates a need for investigating associations between victimization in childhood and subsequent victimization in adulthood. Smith, Singer, Hoel, and Cooper (2003) identified an increased risk of workplace victimization for those individuals who reported being victimized during their school experiences. Interestingly, the risk of subsequent victimization as adults was highest for those individuals who both bullied others and were bullied as children (Smith et al., 2003). However, Smith et al. (2003) acknowledged that despite statistically significant associations, many individuals who were victimized as children did not experience victimization in the workplace, and that contextual and environmental factors may have played a key role in determining which individuals went on to experience victimization as adults. Nevertheless, a link between childhood and adulthood victimization experiences might support that certain personal characteristics increase the risk of victimization. For example, Harvey, Heames, Richey, and Leonard (2006) described workplace victims as passive, socially isolated, less independent and resilient, and having low self-esteem and negative, fatalistic attitudes. Similarly, Maidaniuc-Chirila (2015) revealed a significant negative correlation between personal resilience and workplace victimization experiences among Romanian employees. These characteristics of adult



bullying victims strongly resemble previously mentioned characteristics of child bullying victims, particularly regarding deficiencies in social and emotional skills as well as an external locus of control (Hussein, 2013; Smorti & Ciucci, 2000).

These data indicate a need for further investigating characteristics common to victims, especially characteristics that consist of learnable skills and behaviors. This could critically inform practice in bullying prevention efforts such that childhood victims may avoid victimization as adults when they are no longer protected by a bully-free, school social structure. Assisting bullying victims in this way remains pertinent as anti-bullying, school social structures are often the goal of bullying prevention programs (Olweus & Limber, 2010b; O'Moore & Minton, 2005; Sideridis et al., 2013; Tsiantis et al., 2013). A synthesis of the research on the problem of bullying establishes the importance of developing approaches that optimally support bullying victims during and beyond the school-age season of their lives.

### **Framework and Effectiveness of School-Wide Approaches to Bullying Prevention**

The primary tenant of school-wide approaches to bullying prevention involves the perception of bullying as peer abuse that violates basic human rights (Hazelden Foundation, 2007). This principle drives the social restructuring strategy of the OBPP, which spearheads school-wide approaches in both research and practice (Hazelden Foundation, 2007, 2016c). As a consequence of viewing bullying as a violation of human rights, school-wide approaches insist that bullying victims lack the potential to navigate their own bullying situations, and that victims' self-esteem must be protected by the social system of the school (Center for Safe Schools, 2012). The school-wide strategy utilized by the OBPP as well as others, protects victims' self-esteem by raising awareness among all members of the school community and equipping staff and non-bullied students with systems as well as skills to prevent bullying



behaviors (Hazelden, 2007). The OBPP and other school-wide approaches' successes in reducing bullying and victimization have been well documented in the literature (Olweus & Limber, 2010b; O'Moore & Minton, 2005; Sideridis et al., 2013; Tsiantis et al., 2013). Success in such programs has been generated by creating cohesive, social contexts guided by values, rules, and community norms that protect and aid victims of bullying and/or developing effective punishments for the perpetrators of bullying (Hazelden Foundation, 2007). School-wide programs may be described either as prevention, which involve activities and education to decrease future bullying, and/or as intervention, which are designed for responding to bullying that has already occurred (Diamanduros, Downs, & Jenkins, 2008).

**Prevention.** Of all the school-wide approaches represented in the literature, the OBPP is the most thoroughly researched and cited (Hazelden Foundation, 2007). The OBPP consists of a highly organized prevention program that involves all stakeholders in a school community to raise awareness, teach empathy, and establish as well as consistently enforce consequences for bullying (Hazelden Foundation, 2007). Olweus and Limber (2010b) as well as Olweus (1997) reported on the initial success of the OBPP as a response to the tragic suicides of three Norwegian adolescents, whose deaths were linked to bullying. A longitudinal, two-year study of the initial OBPP implementation revealed reductions of 62% and 33% of self-reported victimization and bullying respectively after the first year (Olweus, 1997, 2007; Olweus & Limber, 2010b). Improvements increased to 64% and 53% reductions of self-reported victimization and bullying actions by the end of the second year (Olweus, 1997, 2007; Olweus & Limber, 2010b).

However, despite initial success, school-wide implementations in some subsequent studies failed to produce consistent and similarly large effects (Olweus & Limber, 2010b).



Possible explanations for inconsistent effects include social/cultural context of the implementations, differences among culturally diverse student bodies, and lack of program fidelity in follow-up implementations (Limber, 2011). Synthesis of OBPP implementations across contexts may importantly contribute to a thorough understanding of school-wide approaches generally.

Limber (2011) as well as Olweus (2007) reported on program implementations that demonstrated at least 20% to 40% reductions in student victimization due to bullying. As the OBPP expanded from its original implementation, lack of program fidelity was likely the cause of lower levels of effectiveness (Limber, 2011). For example, the Norwegian government provided an opportunity in 2000 for the OBPP to be tested across extraordinarily large samples of three cohorts consisting of students in 500 schools (Limber, 2011). This massive study of the OBPP demonstrated a 33% relative reduction in victimization (15.2% to 10.2%) in the first cohort ( $n = 8299$ ), with similar reductions in the other cohorts consisting of 34% (14% to 9.2% and 13.2% to 8.7%), according to Limber (2011). The results of this national study showed demonstrably that the OBPP reduces bullying when implemented with fidelity in Norwegian student samples. These data indicated the potential for the OBPP to reduce relative bullying by a third where it is completely and correctly employed however, implementations in other countries were reported to fall short of this potential.

Limber et al. (2004) reported disappointing findings in a study of the OBPP conducted across 18 South Carolina schools. The majority of the data showed second-year plateaus or regressions after improvements in the student-reported incidence of bullying during the first year of implementation (Limber et al., 2004). Similar to other implementations, first-year data included a relative reduction of 28% when treatment group decreases were compared with



control group increases in bullying (Limber et al., 2004). Limber et al. (2004) cited the challenge of acquiring community buy-in among parents, teachers, administrators, and students as an essential element of OBPP program success and possibly the reason that effectiveness regressed in the second year of the South Carolina implementations. Black (2007) contributed to this possible explanation when she measured average program fidelity to be a mere 48% in an OBPP study across nine inner-city schools in Philadelphia, PA. In low fidelity implementations, there was a 14% increase in student-reported bullying over the course of the study (Black, 2007).

Where the aforementioned programs experienced second-year regression or low fidelity, other studies showed similarly disappointing results of the OBPP (Smith, Pepler, & Rigby, 2004). Bowllan (2011) demonstrated inconsistent effects of the OBPP in a study involving seventh- and eighth-grade students. According to Bowllan (2011), eighth-grade students reported an overall increase in the incidence of bullying following the treatment implementation (Bowllan, 2011). Smith et al. (2004) conducted a major study of the OBPP in a southeastern U.S. sample of 1,968 students consisting of mostly African American students with low socioeconomic status (60-90% free or reduced lunch). OBPP implementations have demonstrated low fidelity, low effectiveness, or both in urban areas or among African American students (Smith et al., 2004). Reductions in self-reported victimization were 13%, 14%, and 13% across three treatment schools with a fourth treatment school reporting a 12% *increase* in self-reported, student victimization (Smith et al., 2004). Bauer, Lozano, and Rivara (2007) similarly showed the OBPP to produce disappointing results in an ethnically diverse student population. However, when analyzed by demographics, Bauer et al. (2007) reported that the OBPP decreased victimization by 28% among Caucasian students, whereas no such effect emerged from any other race or demographic. The reasons for this were not clear in either study



(Bauer et al., 2007; Smith et al., 2004). Nese et al. (2016) contributed that among program implementations similar to the OBPP, schools in urban areas and those with less well-established, state level support systems were most likely to abandon their program implementations. Nevertheless, the bullying prevention literature lacks a well-established explanation for OBPP effectiveness problems when implementations are conducted in urban or minority populations. While lacking effectiveness could in some cases be the result of poor program fidelity or failure to integrate with social norms among minority student groups, the anti-bullying research also inadequately addresses potential causes for OBPP efficacy problems among suburban, rural, and/or Caucasian student populations (Bauer et al., 2007; Bowllan, 2011; Olweus & Limber, 2010b; Smith et al., 2004).

Tsiantis et al. (2013) researched a school-wide program that shared characteristic similarities with the OBPP. The program involved conducting a series of workshops with students in order to increase awareness and build students' empathy (Tsiantis et al., 2013). The data demonstrated that reports of victimization decreased by 32.1% as a result of the program. Tsiantis et al. (2013) provided another example of a school-wide approach as well as support for the value and effectiveness of such approaches in decreasing victimization. From a theoretical perspective, Mc Guckin and Minton (2014) evaluated two approaches to bullying prevention in schools they described as ecosystemic. The common theme between both approaches involved positioning school staff in charge of affecting the school bullying culture (Mc Guckin & Minton, 2014). Mc Guckin and Minton (2014) described these approaches as useful and helpful to school officials for addressing the bullying problem.

Thorough research has been conducted on the effectiveness of school-wide approaches with mixed results (Bowllan, 2011; Smith et al., 2004). Nevertheless, many studies show



positive effects of school-wide bullying prevention strategies (Limber, 2011). School-wide approaches have remained prominent in the literature as well as school implementation (Hazelden Foundation, 2016b; Mc Guckin & Minton, 2014).

**Intervention.** The Positive Behavioral Interventions and Supports (PBIS) program emphasizes improving social context in a school-wide approach according to Bradshaw, Pas, Debnam, and Johnson (2015). The PBIS possess prevention elements, but adds intervention components involving specific responses to mitigate problems as they arise among students (Bradshaw et al., 2015). Bradshaw, Waasdorp, and Leaf (2012) showed via teacher ratings that the PBIS generated significant improvements in student behavior, social and emotional function, and prosocial behavior. Waasdorp, Bradshaw, and Leaf (2012) specifically evaluated the effects of PBIS on bullying and indicated that the program reduces bullying and peer rejection, especially when implemented with young (early elementary school) children.

Garandeau, Poskiparta, and Salmivalli (2014) reported on the prevention-only, KiVa Anti-Bullying Program. The KiVA program involves training school counselors to engage the bully after the incident with one of two different intervention strategies (Garandeau et al., 2014). One KiVA intervention is to confront the behavior forcefully with demands and threats of consequences, while the other entails inviting the bully to problem solve without assigning blame (Garandeau et al., 2014). Similar to the OBPP, the KiVA Anti-Bullying Program utilizes a school-wide approach to addressing the problem of bullying (Garandeau et al., 2014). However, KiVA processes exclusively intervene after an incident has occurred (Garandeau et al., 2014). Garandeau et al. (2014) reported that the KiVA effectively generated decreases in bullying by 83.2% and 72.5%. However, according to Garandeau et al. (2014), results might have been affected by student interest in pleasing the officials with their reports or simply not



acknowledging that a bullying situation continued. Furthermore, both of the KiVa intervention strategies showed less effectiveness with long-lasting bullying situations such as in cases where bullying had already gone on for more than a year (Garandeau et al., 2014).

Despite positive program impacts in numerous implementations, the development of victims' social strengths was not addressed by any of the aforementioned school-wide prevention or intervention approaches. This deficiency is characteristic of programs operating from a school-wide approach (Tsiantis et al., 2013). Instead, school-wide programs strategically protect students from bullying by altering the environment around them. This value-driven framework of protecting victims of bullying as a human rights violation unifies school-wide approaches (Center for Safe Schools, 2012).

### **Framework and Effectiveness of Social Skill-Based Approaches to Bullying Prevention**

The literature shows that school-wide approaches to bullying prevention share a social restructuring strategy (Hazelden Foundation, 2007, 2016c; Limber, 2011). Social skill-based approaches contrast the school-wide strategy by contributing an alternative perspective and strategy to bullying prevention efforts (Domino, 2013). Social skill-based bullying prevention interventions operate from the assertion that true self-esteem must be “soundly based upon real capacity, achievement...adequacy, for confidence in the face of the world” (Maslow, 1943, p. 381). As a contrast to the school-wide approach view that bullying victims need the protection of the social system, social skill-based approaches share a perspective based in social and emotional theory, which asserts that bullying victims can develop social competencies as a solution to bullying (Fergus & Zimmerman, 2005; Hughes, 2014; Wong et al., 2013).

Consequently, rather than protecting victims from bullying, which is the driving objective of



school-wide approaches, social skill-based approaches help students to develop the abilities that they need in order to achieve in the social arenas of their lives (Kalman, 2010).

Garner and Boulton (2016) asserted that students generally lack awareness that strategies exist that can equip victims to personally overcome bullying. The social and emotional framework for social skill-based approaches addresses this need for awareness in program curriculum learning objectives (Domino, 2013; Kalman, 2013). According to Domino (2013), social skill training constitutes the most suitable method for assisting victims to effect change in bullying situations. Just as school-wide programs have produced mixed results, social skill-based programs have demonstrated varying impacts (Battey & Ebbeck, 2013; Domino, 2013; Jenson et al., 2013).

**Take the lead.** Domino (2013) studied the effectiveness of Take the Lead (TTL), which is a 16-week social skill-based program. As an alternative to school-wide approaches, TTL trains students in numerous social skills including self-awareness, relationship skills, and problem-solving. While Thornberg and Knutsen (2011) proposed that victims' behavior often gives rise to their victimization, a program that trains bullying victims in social skills may address the potential problem of victims' behaviors. Domino (2013) reported on post hoc *t* test analyses of TTL participants' victimization scores on the Peer Relations Questionnaire (PRQ). According to Domino, (2013) victimization scores fell from a pretest mean of 2.48 to a posttest mean of 1.26, while the control group's mean victimization scores rose from 1.41 to 2.25. These data represented a statistically significant, 49% decrease in victimization observed in the treatment group compared to a 37% increase in control group mean victimization (Domino, 2013).



**Conflict resolution and peer mediation.** Focusing exclusively on social skills, Kasik and Kumcagiz, (2014) reported on the Conflict Resolution and Peer Mediation (CRPM) training program administered in a study of seventh-grade students' social skills. The results of a pretest-posttest analysis revealed that the program significantly improved both student self-efficacy and conflict resolution skills (Kasik & Kumcagiz, 2014). These results may show a way to help bullying victims to improve social situations strategically rather than blame bullying on circumstances, as is characteristic of victims' attitudes (Smorti & Ciucci, 2000). Improving and emphasizing students' social navigation skills may have assisted in the success of the CRPM. Similarly, Franks et al. (2013) further supported this conclusion by showing that students' development of social and emotional strengths associated with decreases in victimization. Training bullying victims in social skills may be an effective strategy for bullying prevention.

**Bullying prevention challenge course curriculum.** According to Battey and Ebbeck (2013), ropes course activities were creatively used to improve students' social skills in the Bullying Prevention Challenge Course Curriculum (BPCCC). The ropes course activities were designed to help students develop an awareness of bullying situations as well as confidence in themselves (Battey & Ebbeck, 2013). Qualitative investigation showed that students felt positively about their experiences and improved competencies due to the program (Battey & Ebbeck, 2013). Battey and Ebbeck (2013) concluded that building students' social skills may reduce bullying.

Approaches vary across social skill-based programs for bullying prevention. However, the unifying strategy of social skill development receives strong support from the literature (Levine & Tamburrino, 2014; Mitchell & Brendtro, 2013). Mitchell and Brendtro (2013) asserted that teaching students skills to effectively respond to bullying constitutes a necessary



component of reducing victimization. Levine and Tamburrino (2014) similarly insisted that students must be empowered to navigate bullying behavior. In addition to reducing bullying, social skill development has been shown to protect students from depression that lingers from childhood victimization experiences (Vassallo et al., 2014). Despite positive results reported in some studies, social skill-based programs have also failed to generate large decreases in bullying in other studies (Jenson et al., 2013).

**Youth matters.** Jenson et al. (2013) investigated the social skill-based Youth Matters (YM) prevention program to determine its effectiveness in reducing bullying among middle school students. Jenson et al. (2013) stated that the YM program teaches students social skills that are necessary for empathy as well as confidence. Jenson et al. (2013) concluded that social skill development decreased bullying behavior in school by empowering students and eliminating victim behaviors. However, the YM program exerted a small impact (Jenson et al., 2013). A mere 7% reduction in victimization sheds doubts on the practical effectiveness of the intervention and raises questions about the social skill-based strategy used (Jenson et al., 2013). A possible explanation for the small effects of this program could be that the social skill training strategy lacked specificity in training students to socially navigate bullying. Recommendations for future school-wide and social skill-based bullying prevention research have included a call for studies that investigate how programs affect bullying and victimization (Battey & Ebbeck, 2013; Cornell & Bradshaw, 2015; Domino, 2013).

In spite of social skill-based research that demonstrated only small effects on bullying, building social skills (competencies) in all students may have promising potential to reduce student victimization (Wong et al., 2013). Maslow (1943) used the following description to



describe the potential benefits when an individual experiences satisfaction of basic needs, such as competency:

They are the “strong” people who can easily weather disagreement or opposition, who can swim against the stream of public opinion and who can stand up for the truth at great personal cost. It is just the ones who have loved and been well loved, and who have had many deep friendships who can hold out against hatred, rejection or persecution. (p. 388)

Social skill-based approaches to bullying prevention consist of teaching for social and emotional competency (Domino, 2013).

Despite what social skill-based approaches to bullying prevention may do for students, such programs are underrepresented in the literature. Research testing a resilience program may meet this research need, because the resilience program that will be investigated in this research focuses exclusively on teaching students the social skills necessary to eliminate victimization. Such an investigation could also inform researchers and educators about the nature of the bullying dynamic in schools as well as optimal characteristics of approaches for reducing bullying.

### **Summary**

The goals of bullying prevention programs include protecting the psychological health and vitality of children (Center for Safe Schools, 2012). The literature provides an explanation of the construct of bullying as repeated harmful acts between individuals with unequal power (Olweus, 1993). Research also provides descriptions of characteristics common to victims, bullies, and bully/victims (Bacchini et al., 2015; Center for Safe Schools, 2012; Einarsen & Nielsen, 2015; Eslea et al., 2004; Franks et al., 2013; Hughes, 2014; Matthiesen & Einarsen, 2007; Schultz, 2012; Wong et al., 2013). Victims of bullying consistently possess personal



differences compared with peers and/or social skill deficiencies (Bradshaw et al., 2013; Rose et al., 2015; Wong et al., 2013). By contrast, individuals who bully tend to demonstrate higher levels of social skill, have higher self-esteem, and value assertiveness (Eslea et al., 2004; Hughes et al., 2014; Matthiesen & Einarsen, 2007). The literature establishes profoundly harmful effects of victimization due to bullying as victimization has been associated with student problems on social, psychological, and academic levels (Ferguson et al., 2011; Hughes, 2014; Sideridis et al., 2013; Volkova & Grishna, 2013). The literature strongly suggests that the problem of bullying with its effects do not disappear and may not diminish significantly in the working world of adults (Nielsen et al., 2010; Garcia-Moya et al., 2014; Olweus & Limber, 2010a; Rose et al., 2015). Adults who are bullied at work exhibit detrimental symptoms not unlike what children experience (Einarsen & Nielsen, 2015; Lutgen-Sandvik et al., 2016; Nielsen et al., 2015).

The prevalence of bullying victimization among children may occur in schools at rates that range from 9% to 15%, which helps to establish the significance of the problem of bullying; however, bullying prevalence may decrease with age (Garcia-Moya et al., 2014; Mok et al., 2014; Pelchar & Bain, 2014; Rose et al., 2015). While numerous programs exist to respond to bullying in schools, two primary approaches dichotomize the literature. School-wide approaches such as, the OBPP, KiVA, and YM, restructure school social systems to protect bullying victims (Garandeau et al., 2014; Jenson et al., 2013; Olweus & Limber, 2010a). By contrast, social skill-based programs, such as TTL, CRPM, and the resilience program that will be evaluated in this research, approach bullying by enhancing children's social skills, which supports individuals' social efficacy in a variety of circumstances (Domino, 2013; Kalman, 2010; Kasik & Kumcagiz, 2014). Despite the potential effectiveness of social skill-based approaches, school-wide approaches dominate prevention efforts (Cowie et al., 2006).



This bullying prevention research tested a resilience program by measuring its effects on self-described social skills, bullying, and victimization among students in Grades 3 through 6. The resilience program that was investigated was designed to help bullied students to improve their relationships with others as a mechanism to reduce bullying and enhance students' self-esteem (Kalman, 2010). An investigation of the effectiveness of this resilience program contributed meaningfully to the application of both social and emotional learning theory as well as the theory of hierarchy of needs to bullying prevention approaches and research (Bandura, 1971; Maslow, 1943). Evaluating the effectiveness of this resilience program provided evidence addressing the use of modeling-based social and emotional competency training to equip bullying victims to reduce or eliminate their own victimization. Research pertaining to bullying prevention programs that emphasize internal locus of control through social and emotional skill development represents a gap in the literature. While several studies (Domino, 2013; Kasik & Kumcagiz, 2014) have investigated social and emotional approaches to student learning, this research evaluated a resilience program that specifically teaches students how to avoid victimization through social behavior-based instruction (Kalman, 2010). The system of behaviors that children learn from the aforementioned resilience program was designed to provide victimized students with an internal locus of control for bullying situations. This unique program emphasis positioned an investigation of this resilience program to make a potentially significant contribution to the gap in the bullying prevention literature pertaining to social and emotional learning.



### **CHAPTER THREE: METHODS**

The problem of bullying creates a need for researchers and educators to intervene on behalf of children. The literature clearly shows that the prevalence of victimization includes high numbers of children and incidence nationwide as well as worldwide (Garcia-Moya et al., 2014; Nielsen et al., 2010; Olweus & Limber, 2010a; Rose et al., 2015). Furthermore, the negative effects of bullying on children and adults are well-established (Hughes, 2014; Karatza et al., 2016; Nielsen et al., 2010; Sideridis et al., 2013). Consequently, there is a need for investigating bullying prevention strategies that equip children to robustly navigate childhood and adulthood social situations. This research design provided data to describe the effectiveness of a social skill-based, resilience program that had yet to be studied at the time of this research.

#### **Design**

This bullying prevention study utilized a quasi-experimental, one-group, pretest-posttest design. This quantitative methodology collected social skill, bullying, and victimization data from third- through sixth-grade students. The resilience program that was evaluated by this research was the independent variable. The students' social skills as shown by the SSIS SEL student scale, and students' bullying and victimization scores as shown by the PIPSQ, both before and after the resilience program treatment, were the dependent variables. The purpose of this bullying prevention research design was to assess the effects of a resilience program on students' social skills as well as direct and indirect forms of bullying and victimization among students in grades three through six (Tarshis & Huffman, 2007).

Kitrungloadjanaporn, Phothong, and Precharattana (2018) used the one-group, pretest-posttest design to assess the effects of a science education curricular treatment. Analysis involved paired samples *t* tests to determine mean differences in physics understanding before



and after the curricular treatment for a sample of physics students (Kitrungloadjanaporn et al., 2018). Regarding the analysis of treatment effects in a one-group design, Gall, Gall, and Borg (2007) described the problem that, “without a measure of change, we cannot even determine whether (assessment data) improved over time, regardless of whether this change was due to the treatment or to some other variable” (p. 402). Gall et al. (2007) addressed this by recommending that a pretest-posttest data collection for the one-group design solves this problem. Despite the value added by a pretest-posttest evaluation of change, Gall et al. (2007) warned that assessment of student attitude, such as bullying/victimization reporting, is an example of research in which, “the pretest may react with the experimental treatment and thus affect the research results” (p. 391). Nevertheless, this bullying prevention research was rightfully constrained by the ethical requirement of providing all participants with the benefits of the resilience program, which a control group would not experience. Consequently, a pretest-posttest design was used to measure the effects of the resilience program rather than a comparison of control versus treatment groups.

The pretest-posttest measure of change within a group best assesses a treatment on a truly experimental, randomized group (Gall et al., 2007). However, the quasi-experimental approach effectively allows for assessing treatment effects in educational research where randomization is not viable (Gall et al., 2007). The quasi-experimental model that was utilized for this bullying prevention research involved the pretesting-posttesting of a third- through sixth-grade group of students from two separate schools. The pretest surveys assessed students’ social skills, bullying, and victimization. Student participants then experienced the resilience program that this research focused on. Finally, the sample was posttested with the same surveys for social skills, bullying, and victimization. The organization that owns the resilience program received



the data from the schools, which were subsequently retrieved for this bullying prevention research. This quasi-experimental model was the most appropriate approach for this quantitative study of the effects of the resilience program, because it allowed the researcher to measure the effects of the treatment on mean social skills, bullying, and victimization before and after the program.

### **Research Questions**

The research questions for this study were:

**RQ1:** Is there a difference in self-reported *social skills* scores of students in grades three through six before and after the students undergo a resilience program?

**RQ2:** Is there a difference in self-reported *bullying behavior* scores of students in grades three through six before and after the students undergo a resilience program?

**RQ3:** Is there a difference in self-reported *victimization* scores of students in grades three through six before and after the students undergo a resilience program?

### **Null Hypotheses**

The null hypotheses for this study were:

**H<sub>0</sub>1:** There is no statistically significant difference between the *social skills* scores of students in grades three through six before and after the students undergo a resilience program as shown by the SSIS SEL student form.

**H<sub>0</sub>2:** There is no statistically significant difference between the *bullying behavior* scores of students in grades three through six before and after the students undergo a resilience program as shown by the PIPSQ.



**H<sub>03</sub>:** There is no statistically significant difference between the *victimization* scores of students in grades three through six before and after the students undergo a resilience program as shown by the PIPSQ.

### **Participants and Setting**

For this quantitative, quasi-experimental bullying prevention study, the student participants were solicited via convenience sampling from private elementary schools located in the northeastern United States during the fall semester of the 2018-2019 school year. According to Gall et al. (2007), convenience sampling is acceptable due to the generally impractical process of randomization for methodologies in the field of education. The student participants were selected from schools within urban and suburban locations in a northeastern state. The third-through sixth-grade students were chosen because of instrument parameters, school and administrator willingness, school policy on publishing research, and demographic similarities. The use of this convenience sample of third- through sixth-grade students allowed this quantitative study to generalize to a population of third through sixth grade students with similar demographics.

For this study, 72 participants adequately completed the pretest and posttest for social skills and were included in the sample. The Q-Global scoring system designed to score the SSIS SEL student form deems forms acceptable if there are no more than four incorrectly or incompletely answered questions (Gresham & Elliot, 2017). The system assigns a value of 2 on a Likert scale scored from 0-3 for any question unanswered or incorrectly answered to mitigate the effects of unanswered or incorrectly answered questions on overall scores (Gresham & Elliot, 2017). Of the students who participated in the resilience program and consented to research participation, 67 correctly completed the bullying and victimization pretest and posttest. For the



social skills, bullying, and victimization analyses, the sample sizes exceeded the minimum of 52 for statistical analysis via paired samples *t* tests (Gall et al., 2007). Gall et al. (2007) asserted that paired samples *t* tests require 52 participants to test with a matching variable of  $r = 0.5$ . The paired samples *t* tests for this research tested for a medium effect size with a statistical power of 0.7 at the 0.05 alpha level (Gall et al., 2007).

The sample of students in Grades 3 through 6 were drawn from two private elementary schools. All consenting participants from the elementary schools were pretested and posttested. Data collection and analysis for the social skills pretest and posttest involved a sample of 72 students consisting of 43 boys and 29 girls. Of the students sampled, 45 were in sixth grade, 10 were in fifth grade, 7 in fourth, and 10 in third. Data collection and analysis for the bullying and victimization pretests and posttests involved a sample of 67 students consisting of approximately 41 boys and 26 girls. The sample consisted of 40 students in sixth, 9 in fifth, 10 in fourth, and 8 in third grade. All demographic information (i.e., gender, family income, academic ability, and discipline referrals) for the pretests and posttests was comparable due to the surveys being completed by the same student participants for both pre- and post-measures. Following both the acquisition of permission to retrieve data from the organization that owns the resilience program that was evaluated, and approval to research from Liberty University and the Institutional Review Board, procedures for this quantitative study commenced.

### **Instrumentation**

The PIPSQ is a 22-item instrument that was developed to measure third- through sixth-grade students' reports of victimization and bullying (Tarshis & Huffman, 2007). The PIPSQ analyzes victim and bully subscales both in direct and in indirect forms (Tarshis & Huffman, 2007). Student responses are recorded on a three-point Likert scale (Tarshis & Huffman, 2007).



The overall Cronbach alpha for the PIPSQ is 0.9, which shows excellent overall reliability as a quantitative measure of victimization and bullying (Gliner, Morgan, & Harmon, 2001; Tarshis & Huffman, 2007). The victim subscale includes direct forms such as physical harm and specific threats as well as indirect forms such as rumors and social exclusion (Tarshis & Huffman, 2007). Subscale reliability was assessed using both Spearman's rho and the intraclass coefficient (ICC) in order to guard against the Spearman's rho threat of false agreement (Tarshis & Huffman, 2007). The ICC was considered to be equivalent to Cronbach's alpha as an adequate measure of reliability (Shrout & Fleiss, 1979). According to Tarshis and Huffman (2007), reliability data for the victim subscale are 0.87 for Spearman's rho and 0.88 for the ICC. Additionally, Hussein (2013) stated that the PIPSQ has a Cronbach's alpha of 0.89 for the victim subscale.

According to Tarshis and Huffman (2007), the bully scale Spearman's rho was calculated as 0.76, while the ICC was calculated as 0.84. Furthermore, Hussein (2013) stated that the Cronbach's alpha for the bully subscale is 0.84. All reports were significant at  $p < 0.0001$  supporting the PIPSQ as being reliable (Tarshis & Huffman, 2007).

The PIPSQ was designed to meet research needs when studying bullying among third-through sixth-grade students (Tarshis & Huffman, 2007). Although other instruments, such as the OBVQ, have been used in research to measure student bullying, the PIPSQ is a quantitative instrument for measuring student bullying that has adequate psychometric properties published in a peer reviewed journal (Tarshis & Huffman, 2007).

The PIPSQ was used in several studies despite being a recently developed instrument, which supported its status as an appropriate tool for measuring the incidence of bullying in educational and psychological research (Hussein, 2010, 2013). Furthermore, aside from



psychometric assessment, the PIPSQ repeatedly surfaced as a well-established instrument in Vessey, Strout, DiFazio, and Walker's (2014) review of 31 instruments for measuring student bullying.

The composition of the PIPSQ is 22 questions using a three-point Likert scale that ranges from 0 (*never*) to 2 (*a lot*) (Tarshis & Huffman, 2007). Responses are as follows: never = 0, sometimes = 1, a lot = 2 (Tarshis & Huffman, 2007). A student's scaled score provides a measure of the degree to which victimization or bullying took place (Tarshis & Huffman, 2007). The potential range of scores from the victim scale is 0 to 24, and the range from the bully scale is 0 to 20 (Tarshis & Huffman, 2007). A score of 0 on the victim scale is the lowest possible score, which indicates that no victimization has taken place, while a score of 0 is also the lowest possible score on the bully scale, which indicates that no bullying had taken place (Tarshis & Huffman, 2007). A score of 24 is the highest score on the victim scale, which indicates that a high degree of victimization has taken place, while a score of 20 is the highest score on the bully scale, which indicates that a high degree of bullying has taken place (Tarshis & Huffman, 2007).

Implementing the PIPSQ involved utilizing a quiet classroom setting and allotting 15 minutes to complete the questionnaire, which exceeded the recommendation that third-grade students can complete it in 5 to 10 minutes (Tarshis & Huffman, 2007). Permission was acquired from Wolters Kluwer to use the PIPSQ to measure student bullying and victimization in this quantitative, quasi-experimental research.

The Social Skills Improvement System Social and Emotional Learning Edition (SSIS SEL) student form is a 46-item instrument that was developed to measure student social skills. The student form designed for assessment within the SSIS SEL that was used in this bullying prevention research was normed with students who are 8-18 years in age, which includes third-



through sixth-grade students (Gresham & Elliot, 2017). The student form was written at a second-grade reading level, making it well-adapted for the age range of this bullying prevention study (Gresham & Elliot, 2017). The SSIS SEL Student form analyzes students' self-awareness, self-management, social awareness, relationship skills, and responsible decision making as well as three academic abilities (Gresham & Elliot, 2017). Student responses are recorded on a four-point Likert scale.

The overall Cronbach alpha for the SSIS SEL is 0.94, which shows excellent overall reliability as a quantitative measure of social and emotional skills (Gresham & Elliot, 2017). The SEL subscales pertaining to social and emotional skills and their Cronbach alphas include: self-awareness (0.77), self-management (0.81), social awareness (0.82), relationship skills (0.85), and responsible decision making (0.72), which demonstrate acceptable reliability in all individual scales (Gresham & Elliot, 2017).

The SSIS SEL was used in its previous versions (SSIS-RS, and SSRS) in several studies; however, the SEL is the most recently developed and best performing version of the instrument (Gamst-Klaussen, Rasmussen, Svartdal, & Strømgren, 2016; Gresham & Elliot, 2017; Holloway, Long, & Biasini, 2018; Porter et al., 2017).

The 46 items on the SSIS SEL student form were designed using a four-point Likert scale that consists of a range including, "not true" (N), "a little true" (L), "a lot true" (A), and, "very true" (V), where, "not true" is the lowest score and, "very true" is the highest score (Elliot, 2017; Gresham & Elliot, 2017). A student's scaled raw scores on specific social and emotional skills may be evaluated in subscale form as well as combined and converted to an equal-interval standard score of social and emotional skill (Gresham & Elliot, 2017). This data provides a measure of social and emotional skills a student possesses across five domains (Gresham &



Elliot, 2017). The potential range of scores from the SSIS SEL convert from raw scores to standard scores with a mean of 100 and standard deviation of 15 where a combined standard score of 84 shows greater than one standard deviation below average social and emotional skills and a score of 116 shows greater than one standard deviation above average social and emotional skills (Gresham & Elliot, 2017). The lowest combined raw score is 200, representing severely deficient overall social and emotion skills, whereas the highest combined raw score is 800, representing an extremely high level of social and emotional competence (Gresham & Elliot, 2017). On any subscale of social and emotional skill, a standard score of 84 or lower combined with any item score of 0 indicates a specific competency deficit, whereas a standard score of 116 or higher combined with any item score of 3 indicates a specific competency strength (Gresham & Elliot, 2017).

Implementing the SSIS SEL involved utilizing a quiet classroom setting and allotting twenty minutes to complete the questionnaire, which met the recommendation that third grade students can complete it in ten to twenty minutes (Gresham & Elliot, 2017). Permission was acquired from NCS Pearson, Inc. by the researcher to use the SSIS SEL to measure students' social skills in this quantitative, quasi-experimental research.

### **Procedures**

Permission was obtained to retrieve data for analysis. Permission was then obtained from elementary school administrators to implement the resilience program curriculum as a program efficacy study with third- through sixth-grade students. Student participation included providing anonymous data via SSIS SEL and PIPSQ surveys administered as both pretests and posttests. Students completed pretests and posttests before and after participating in the resilience program implementation. Following the acquisition of school administrator permission, approval was



obtained from Liberty University and the IRB to begin this quantitative study.

Prior to data collection, consent was obtained from parents/guardians for third- through sixth-grade student participants in the northeastern U.S. elementary schools to participate in the research via pre-implementation and post-implementation surveys. Consent forms were distributed to families by being sent home with students prior to this quantitative research. Before pretest administration, program facilitators read students an informational letter and sent it home to parents (see Appendix B).

During the week of pretest administration, school staff sent the following letter to students who had not yet returned signed consent and assent. The letter was sent as a follow-up to remind students of the invitation to participate in research and the requirement of submitting consent/assent for those students who were interested in participating (see Appendix B).

The northeastern U.S. elementary schools' teachers and/or administrators collected the forms that were properly signed and returned. These forms were maintained by the teachers and/or administrators in order to create a list of students who were to participate via pre-implementation and post-implementation surveys. All consenting/assenting students were assigned an identification number, which was written by students or school staff on each survey taken in order for each student's pre-implementation and post-implementation surveys to be matched for data analysis. Students' names were not used to identify and/or match their surveys. The list of participating students with assigned identification numbers were not be revealed to the researcher. This list was not included in the research and will be destroyed after data collection is complete.

Student participants were pretested in January 2019, with the SSIS SEL and PIPSQ in their homerooms or classrooms during a 30-minute period prior to experiencing the resilience



curriculum (Gresham & Elliot, 2017; Tarshis & Huffman, 2007). Only students' assigned identification numbers identified their pretests for pretest-posttest matching in data analysis. Instrument administration and collection was done by the teachers and/or administrators.

An 8-week, resilience program implementation was facilitated with third- through sixth-grade student participants from January to March 2019. The fifteen, 25-45 minute lessons that constituted the program implementation were conducted by the teachers and/or administrators who received facilitation resources and training. Training for the facilitators consisted of instructional videos, and material resources consisted of a facilitator lesson manual. Resilience program administration was then delivered to students by the facilitators based on the instructional videos and resource manual.

Student participants were posttested with the SSIS SEL and PIPSQ in their homerooms or classrooms during a 30-minute period following the completion of the resilience program in March 2019 (Gresham & Elliot, 2017; Tarshis & Huffman, 2007). Only students' assigned identification numbers identified their posttests for pretest-posttest matching in data analysis. Instrument administration and collection was done by the teachers and/or administrators.

All data collection was anonymous and surveys were securely kept by school administrators. The surveys were mailed to the organization that owns the resilience program being studied in this research. The surveys were then retrieved by the researcher following data collection for analysis. The researcher scored the PIPSQ surveys according to author instructions, and the researcher scored the SSIS SEL surveys via the Q-Global online scoring system (Gresham & Elliot, 2017; Tarshis & Huffman, 2007). The researcher will securely and anonymously keep all surveys for the three-year period following the study's conclusion as mandated by Liberty University's IRB. The list of participating students that was used by the



school teachers, counselors, and/or administrators was destroyed immediately following the completion of all survey collection. All other documentation will be destroyed following the mandatory three-year period.

### **Data Analysis**

Data analysis for this quantitative, quasi-experimental model utilized both descriptive and inferential statistical methods. Descriptive statistics were used in analyzing participants' SSIS SEL and PIPSQ results to determine measures of central tendency such as means and standard deviations as well as minimum and maximum scores. These descriptive statistics for SSIS SEL results were analyzed via Q-Global Scoring software as well as Statistical Package for the Social Sciences (SPSS) software. The analyses of participants' before and after program, social skills survey results included self-awareness, self-management, social awareness, relationship skills, and responsible decision making. These categories constitute SSIS SEL subscales and were collectively reported as SSIS SEL composite scores. SPSS was also used to analyze and report descriptive statistics for participants' before and after program victimization and bullying PIPSQ subscales. Inferential statistics supported decision-making regarding the null hypotheses of this study.

Inferential statistics utilized descriptive statistics to determine whether a statistically significant difference in mean social skills, bullying, and/or victimization existed between pretests and posttests. Mean social skills, bullying, and victimization scores for both pretests and posttests were determined using SPSS. Mean scores were compared via paired samples *t* tests to detect mean differences in student-reported social skills, bullying, and victimization. Warner (2013) justified that paired samples *t* tests should be used "if the data come from a...repeated measures design" (p. 186).



For this bullying prevention research, eta squared ( $\eta^2$ ) was used to calculate effect size (Warner, 2013). The significance test was conducted using  $\alpha = 0.05$ . Levine's test was used to ensure the appropriateness of a parametric test for this study. According to Warner (2013), the assumptions tests for paired samples  $t$  tests included the following:

- (a) The assumption of a quantitative interval level of measurement was made based on the Likert scales used in the SSIS SEL and the PIPSQ.
- (b) The assumption of independent observations was applied to the data.
- (c) The assumption of an approximately normal distribution was applied to the data.
- (d) Levine's Test of Equality of Error Variance was used to determine if the assumption of equal variance would be applied to the data.



## CHAPTER FOUR: FINDINGS

### Overview

This investigation of the effectiveness of a resilience program was designed to evaluate the influence of a resilience program on the dependent variables of this study, which were social skills, bullying, and victimization. The measures of social skills, bullying, and victimization will be analyzed for descriptive statistics to determine pretest and posttest means, standard deviations, minimums, maximums, as well as other descriptors. Inferential statistics will then be used to describe differences in dependent variables between pretest measures and posttest measures. Paired samples *t*-test analyses will support decision-making regarding each research hypothesis, including descriptions of the differences in effect size between pretest and posttest means for each dependent variable measured.

### Research Questions

The research questions for this study were:

**RQ1:** Is there a difference in self-reported *social skills* scores of students in grades three through six before and after the students undergo a resilience program?

**RQ2:** Is there a difference in self-reported *bullying behavior* scores of students in grades three through six before and after the students undergo a resilience program?

**RQ3:** Is there a difference in self-reported *victimization* scores of students in grades three through six before and after the students undergo a resilience program?

### Null Hypotheses

The null hypotheses for this study were:



**H<sub>0</sub>1:** There is no statistically significant difference between the *social skills* scores of students in grades three through six before and after the students undergo a resilience program as shown by the SSIS SEL student form.

**H<sub>0</sub>2:** There is no statistically significant difference between the *bullying behavior* scores of students in grades three through six before and after the students undergo a resilience program as shown by the PIPSQ.

**H<sub>0</sub>3:** There is no statistically significant difference between the *victimization* scores of students in grades three through six before and after the students undergo a resilience program as shown by the PIPSQ.

### **Descriptive Statistics**

The descriptive statistics for pretest and posttest scores are reported in Table 1. Table 1 includes the pretest and posttest data from the social skills, bullying, and victimization dependent variables as measured by the SSIS SEL student form and the PIPSQ. The 72 (social skills sample) and 67 (bullying and victimization sample) pretest-posttest participants that were included in this data meet the requirement of 52 participants for paired samples *t* tests that analyze medium effect size (Gall et al., 2007).

### **Pretest Scores**

The SSIS SEL student form and PIPSQ were administered to students prior to the students experiencing an implementation of the program in order to measure student-reported social skills, bullying, and victimization prior to the resilience program influencing those variables among participating students.

**Social skills scores (SSIS SEL student form).** Data for social skills scores, measured via pretests of this bullying prevention research are displayed in Table 1. The pretest descriptive



statistics for social skills scores as measured by the SSIS SEL student form included a mean of 493.63 and a standard deviation of 48.58. The analysis of pretest social skills also included a median of 491 and a mode of 468. The social skills pretest frequency was 72.

Table 1

Descriptive Statistics for the Pretest and Posttest of Social Skills, Bullying, and Victimization

	N	Mean	Median	Mode	Standard Deviation
Social Skills Pretest	72	493.63	491	468	48.58
Social Skills Posttest	72	501.83	510	510 <sup>a</sup>	49.18
Bullying Pretest	67	1.69	1	0	2.01
Bullying Posttest	67	1.89	1	0	2.40
Victimization Pretest	67	4.63	3	1	4.39
Victimization Posttest	67	5.34	5	0	4.66

<sup>a</sup>Multiple modes exist. This is the smallest value shown.

**Bullying scores (PIPSQ).** Data for bullying scores, measured via pretests of this bullying prevention research are displayed in Table 1. The pretest descriptive statistics for bullying as measured by the PIPSQ included a mean of 1.69 and a standard deviation of 2.01. The analysis of pretest bullying scores also included a median of 1 and a mode of 0. The bullying scores pretest frequency was 67.

**Victimization scores (PIPSQ).** Data for victimization scores, measured via pretests of this bullying prevention research are displayed in Table 1. The pretest descriptive statistics for victimization as measured by the PIPSQ included a mean of 4.63 and a standard deviation of



4.39. The analysis of pretest victimization scores also included a median of 3 and a mode of 1. The victimization scores pretest frequency was 67.

### **Posttest Scores**

The SSIS SEL student form and PIPSQ were administered to students after the students experienced an implementation of the resilience program in order to measure the influence of the program on student-reported social skills, bullying, and victimization.

**Social skills scores (SSIS SEL student form).** Data for social skills scores, measured via posttests of this bullying prevention research are displayed in Table 1. The posttest descriptive statistics for social skills scores as measured by the SSIS SEL student form included a mean of 501.83 and a standard deviation of 49.18. The analysis of posttest social skills also included a median of 510 and a mode of 510. The social skills posttest frequency was 72.

**Bullying scores (PIPSQ).** Data for bullying scores, measured via posttests of this bullying prevention research are displayed in Table 1. The posttest descriptive statistics for bullying as measured by the PIPSQ included a mean of 1.89 and a standard deviation of 2.40. The analysis of posttest bullying scores also included a median of 1 and a mode of 0. The bullying scores posttest frequency was 67.

**Victimization scores (PIPSQ).** Data for victimization scores, measured via posttests of this bullying prevention research are displayed in Table 1. The posttest descriptive statistics for victimization as measured by the PIPSQ included a mean of 5.34 and a standard deviation of 4.66. The analysis of posttest victimization scores also included a median of 5 and a mode of 0. The victimization scores posttest frequency was 67.

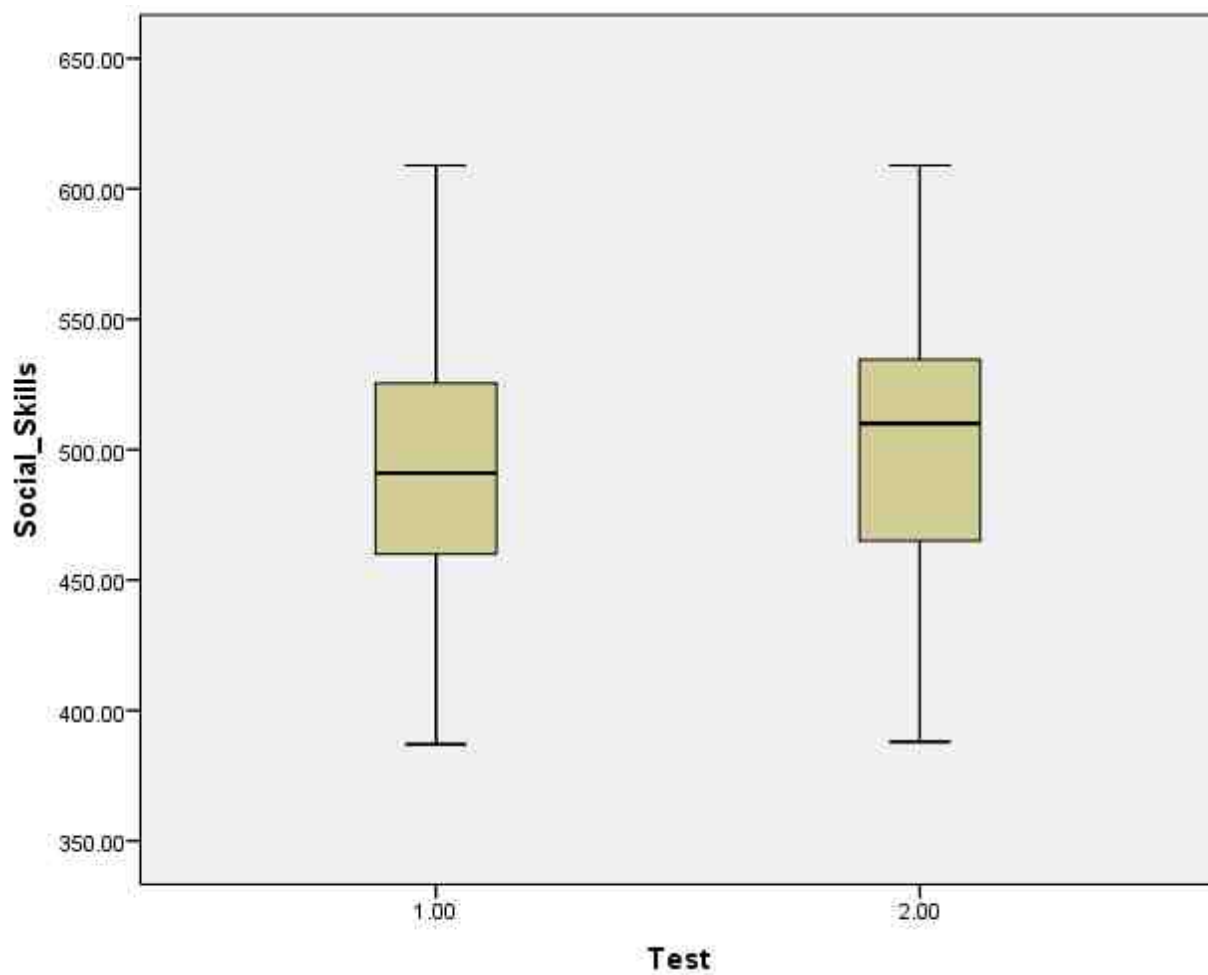


## Results

### Data Screening

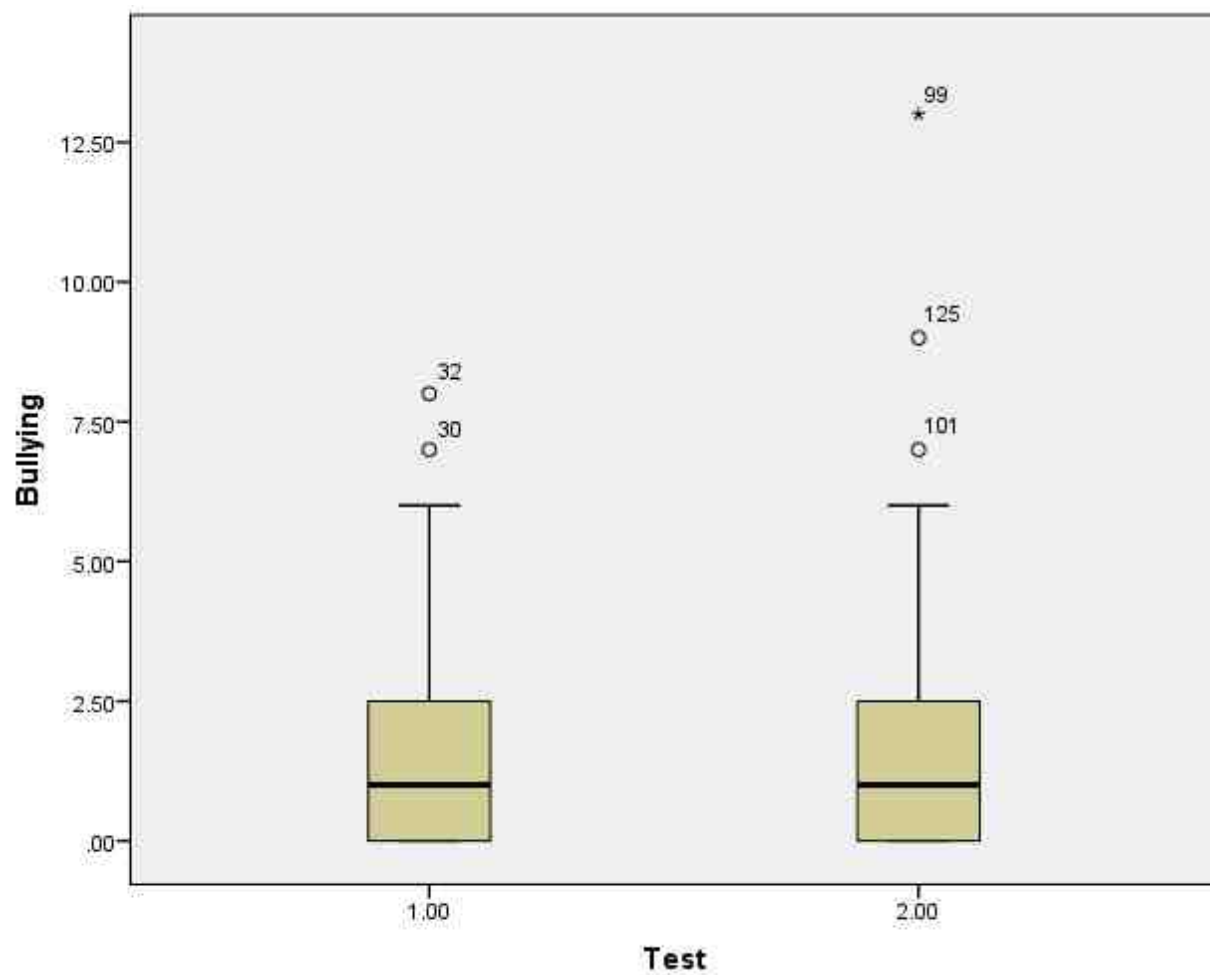
The data was screened for incorrectly, inadequately, and/or incomplete surveys as well as violations of  $t$  test assumptions. Figures 1-3 show the box and whiskers plots used to identify dependent variable outliers for social skills, bullying, and victimization pretests and posttests. There were no outlying means identified among social skills pretest and posttest scores. However, there were five and six outliers for bullying and victimization tests respectively, including an extreme outlier in both the bullying and victimization posttests. These scores were included in data analysis due to the importance of describing program effects on students who exhibit high levels of involvement in incidents of bullying. Figures 4-6 show the box and whiskers plots used to identify dependent variable outliers for mean differences in social skills, bullying, and victimization, respectively. Assumptions for the paired samples  $t$ -tests were described for each hypothesis test. Inadequately completed social skills (SSIS SEL) surveys or incomplete bullying/victimization (PIPSQ) surveys were deemed invalid and were not included in the data.





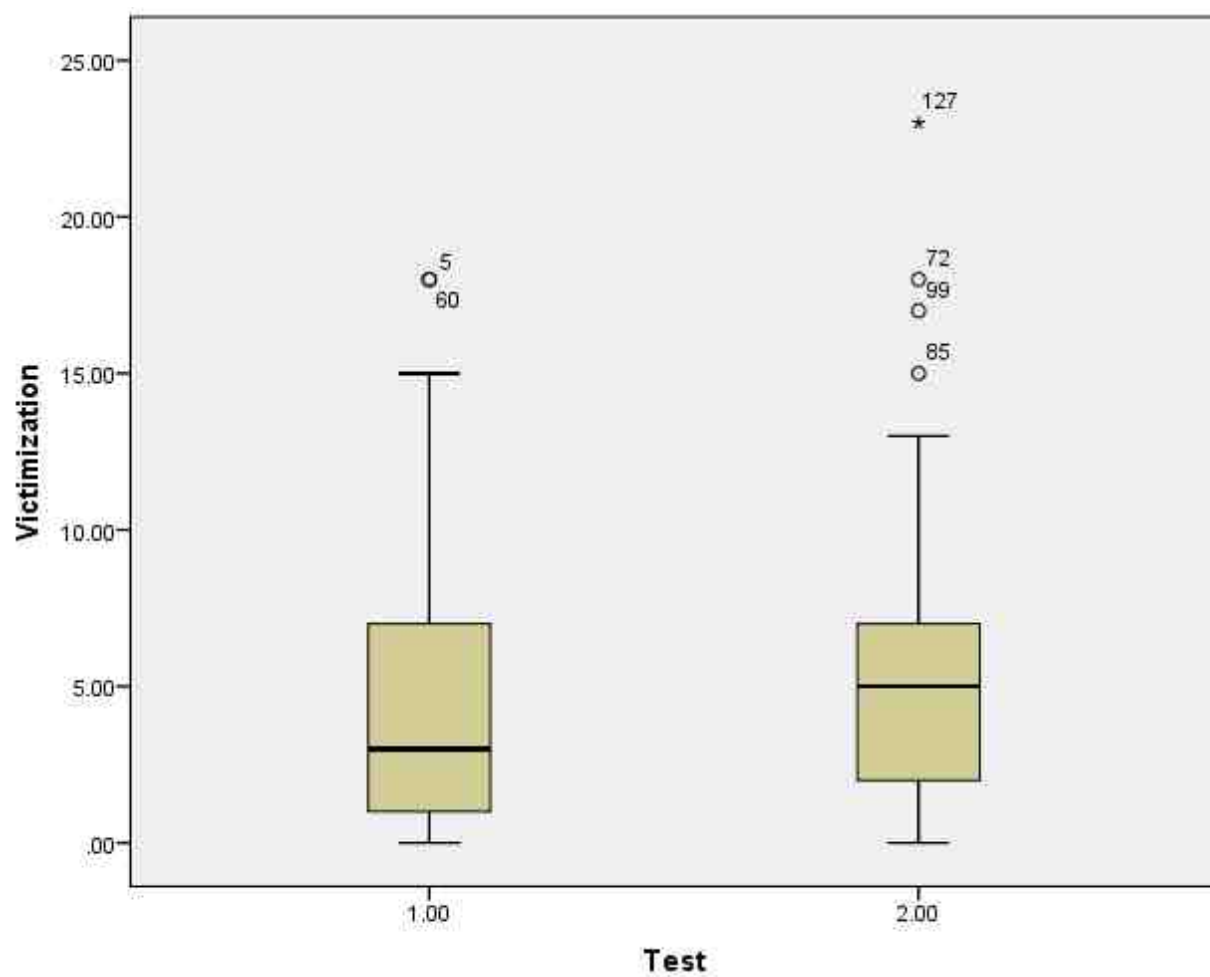
*Figure 1.* Box and whiskers plot for identifying outliers among mean social skill scores for the social skills pretest (1) and posttest (2).





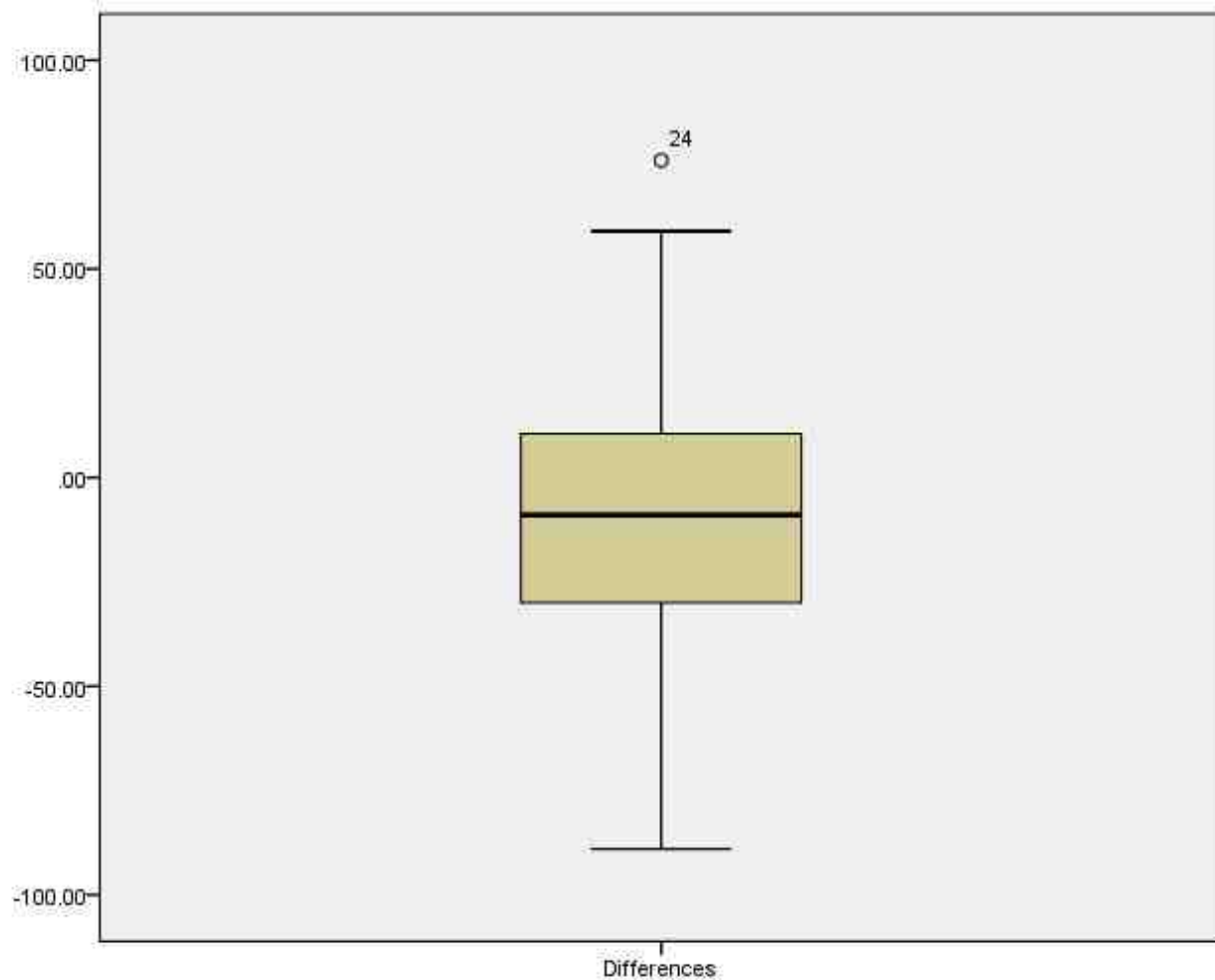
*Figure 2.* Box and whiskers plot for identifying outliers among mean bullying scores for the bullying pretest (1) and posttest (2).





*Figure 3.* Box and whiskers plot for identifying outliers among mean victimization scores for the bullying pretest (1) and posttest (2).





*Figure 4.* Box and whiskers plot for identifying outliers among mean social skill score differences.



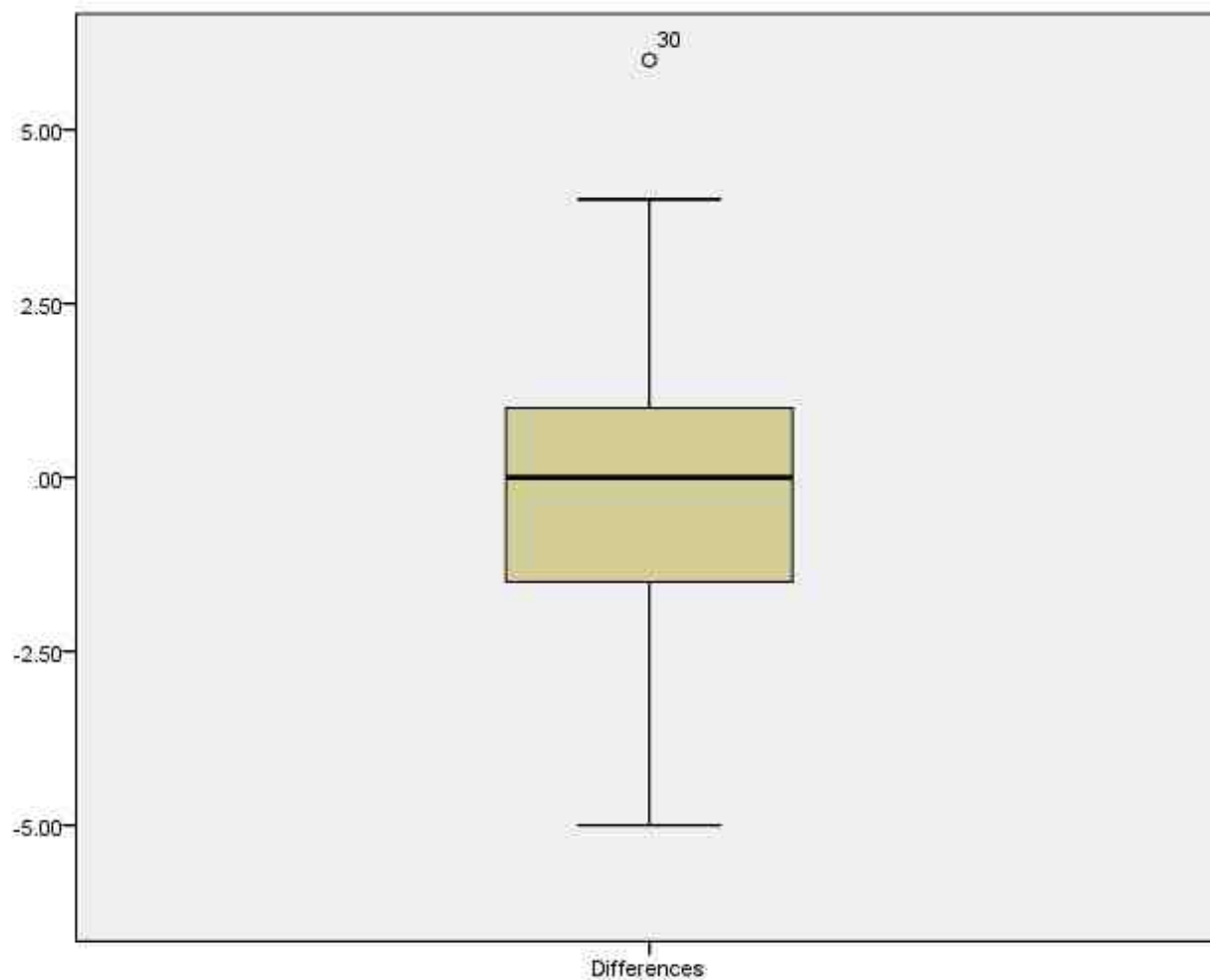


Figure 5. Box and whiskers plot for identifying outliers among mean bullying score differences.



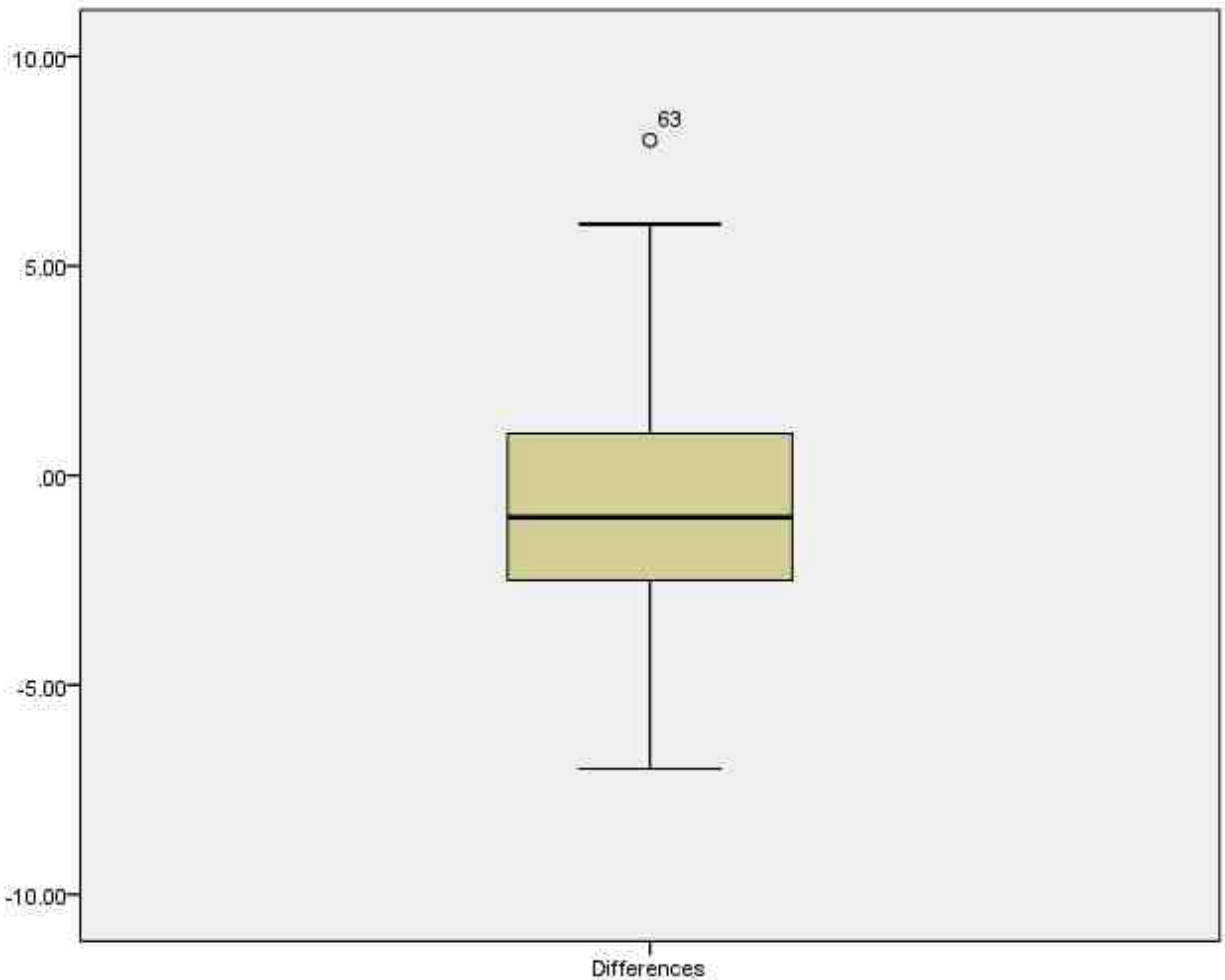


Figure 6. Box and whiskers plot for identifying outliers among mean victimization score differences.

### Null Hypothesis One: Social Skills

The first hypothesis stated that, there is no statistically significant difference between the *social skills* scores of students in Grades 3 through 6 before and after the students undergo a resilience program as shown by the SSIS SEL student form. A paired samples *t*-test was conducted to evaluate this hypothesis.

According to Warner (2013), the assumptions tests required for paired samples *t*-tests include the following:



- (a) The assumption of a quantitative interval level of measurement was made based on the Likert scale used in the SSIS SEL.
- (b) The assumption of independent observations was applied to the data.
- (c) The assumption of an approximately normal distribution was applied to the data.
- (d) Levine's Test of Equality of Error Variance was used to determine if the assumption of equal variance would be applied to the data.

The histogram of the social skills mean differences (see Figure 7) was examined for normality and Levine's Test of Equality of Error Variance was conducted to test for equal variance. The Levine's Test yielded an insignificant value of  $p = .73$ , which indicated that the assumption was tenable. Kolmogorov-Smirnov test of normality indicated  $p = .2$  as a lower bound of the true significance. The assumption of an approximately normal distribution was not violated by social skill mean difference data. The assumptions tests showed no violations for the mean social skills scores paired samples  $t$ -test analysis.



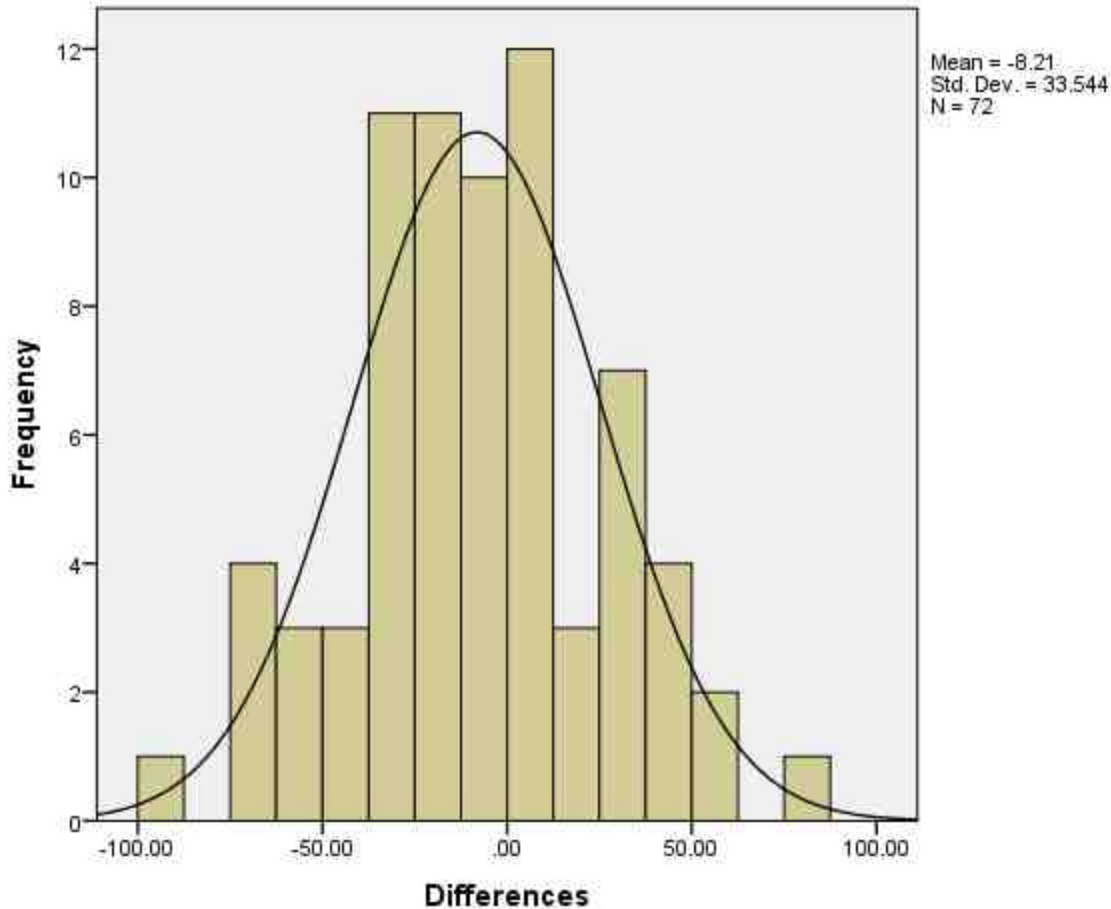


Figure 7. Social skills mean differences distributed and evaluated for normality.

The paired samples *t*-test analysis (see Table 2) for bullying showed that there was a statistically significant mean difference in student participants' social skills before ( $M = 493.63$ ,  $SD = 48.58$ ) versus after ( $M = 501.83$ ,  $SD = 49.18$ ) they experienced a resilience program;  $t(71) = 2.08$ ,  $p = .04$ ,  $df = 71$ , two-tailed. The alpha level of this test was set at .05 to measure a medium effect size. The effect size, calculated using eta squared ( $\eta^2$ ), was .06, which is a medium effect. Consequently, the data did not support the first null hypothesis of this bullying prevention research and required the researcher to reject the first hypothesis. There was a statistically significant, positive difference between the *social skills* scores of students in grades three through six before and after the students underwent a resilience program as shown by the



SSIS SEL student form. This analysis may show that the resilience program studied in this bullying prevention research improved students' social skills. The first null hypothesis, which stated that there is no statistically significant difference between the *social skills* scores of students in grades three through six before and after the students undergo a resilience program as shown by the SSIS SEL student form, was rejected.

Table 2

Paired Samples T-Test Analysis Comparing Pretest versus Posttest Mean Social Skills Scores

	Mean	Mean Difference (Post-Pre)	Standard Deviation	t	df	Sig. (2- tailed)
Social Skills (Post – Pre)		8.21	33.54	2.08	71	.04
Pretest	493.63					
Posttest	501.83					

### Null Hypothesis Two: Bullying

The second hypothesis stated that, there is no statistically significant difference between the *bullying behavior* scores of students in grades three through six before and after the students undergo a resilience program as shown by the PIPSQ. The statistical test conducted to evaluate this hypothesis was a paired samples *t*-test.

According to Warner (2013), the assumptions tests required for paired samples *t*-tests include the following:

- (a) The assumption of a quantitative interval level of measurement was made based on the Likert scale used in the PIPSQ.
- (b) The assumption of independent observations was applied to the data.
- (c) The assumption of an approximately normal distribution was applied to the data.



(d) Levine's Test of Equality of Error Variance was used to determine if the assumption of equal variance would be applied to the data.

The histogram of the bullying mean differences (see Figure 8) was examined for normality, and Levine's Test of Equality of Error Variance was conducted to test for equal variance. The Levine's Test yielded an insignificant value of  $p = .75$ . The Kolmogorov-Smirnov test of normality indicated  $p < .001$ . The assumption of an approximately normal distribution was violated by bullying mean difference data. The assumptions tests showed no violation for equality of error variance, but did show a violation of the assumption of normality for the mean bullying scores paired samples  $t$ -test analysis. However, Warner (2013) described paired samples  $t$ -tests as being robust against violations to the assumption of normal distribution, particularly when the paired sample sizes are equal and the samples are greater than 30. The paired samples  $t$ -tests comparing bullying means that were reported here have both equal and large (67) samples sizes.



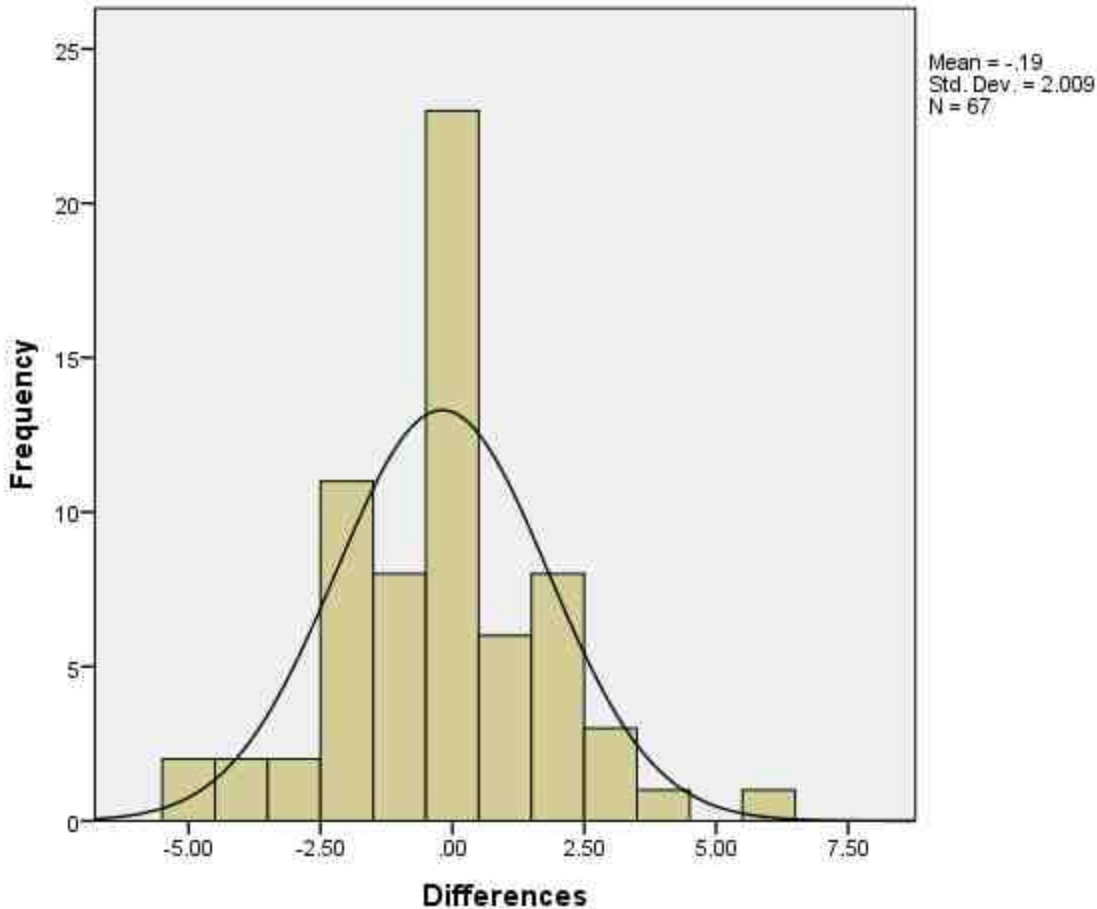


Figure 8. Bullying mean differences distributed and evaluated for normality.

The paired samples *t*-test analysis (see Table 3) showed that there was not a statistically significant mean difference in student participants' bullying before ( $M = 1.69$ ,  $SD = 2.01$ ) versus after ( $M = 1.88$ ,  $SD = 2.40$ ) they experienced a resilience program;  $t(66) = .79$ ,  $p = .43$ ,  $df = 66$ , two-tailed. The alpha level of this test was set at .05 to measure a medium effect size. The effect size, calculated using eta squared ( $\eta^2$ ), was .01, which is a small effect size. Consequently, the data supported the second null hypothesis of this bullying prevention research and required that the researcher fail to reject the second hypothesis. There was no statistically significant difference between the *bullying behavior* scores of students in grades three through six before and after the students underwent a resilience program as shown by the PIPSQ. These results



may show that the resilience program studied in this bullying prevention research did not improve students' bullying behaviors. The researcher failed to reject the second null hypothesis, which stated that there is no statistically significant difference between the *bullying behavior* scores of students in grades three through six before and after the students undergo a resilience program as shown by the PIPSQ.

Table 3

Paired Samples T-Test Analysis Comparing Pretest versus Posttest Mean Bullying Scores

	Mean	Mean Difference (Post-Pre)	Standard Deviation	t	df	Sig. (2- tailed)
Bullying (Post – Pre)		.19	2.01	.79	66	.43
Pretest	1.69					
Posttest	1.88					

### Null Hypothesis Three: Victimization

The third hypothesis stated that, there is no statistically significant difference between the *victimization* scores of students in grades three through six before and after the students undergo a resilience program as shown by the PIPSQ. The statistical test conducted to evaluate this hypothesis was a paired samples *t*-test.

According to Warner (2013), the assumptions tests required for paired samples *t* tests include the following:

- (a) The assumption of a quantitative interval level of measurement was made based on the Likert scale used in the PIPSQ.
- (b) The assumption of independent observations was applied to the data.
- (c) The assumption of an approximately normal distribution was applied to the data.



(d) Levine's Test of Equality of Error Variance was used to determine if the assumption of equal variance would be applied to the data.

The histogram of the victimization mean differences (see Figure 9) was examined for normality, and Levine's Test of Equality of Error Variance was conducted to test for equal variance. The Kolmogorov-Smirnov test of normality indicated  $p = .06$ . The assumption of an approximately normal distribution was violated. The Levine's Test yielded an insignificant value of  $p = .84$ . The assumptions tests showed no violation for equality of error variance, but did show a violation of the assumption of normality for the mean bullying scores paired samples  $t$ -test analysis.

According to Warner (2013), paired samples  $t$ -tests are robust against violations to the assumption of normal distribution, especially when equal, large sample sizes are paired. The paired samples  $t$  test used to evaluate mean bullying differences meet these standards.



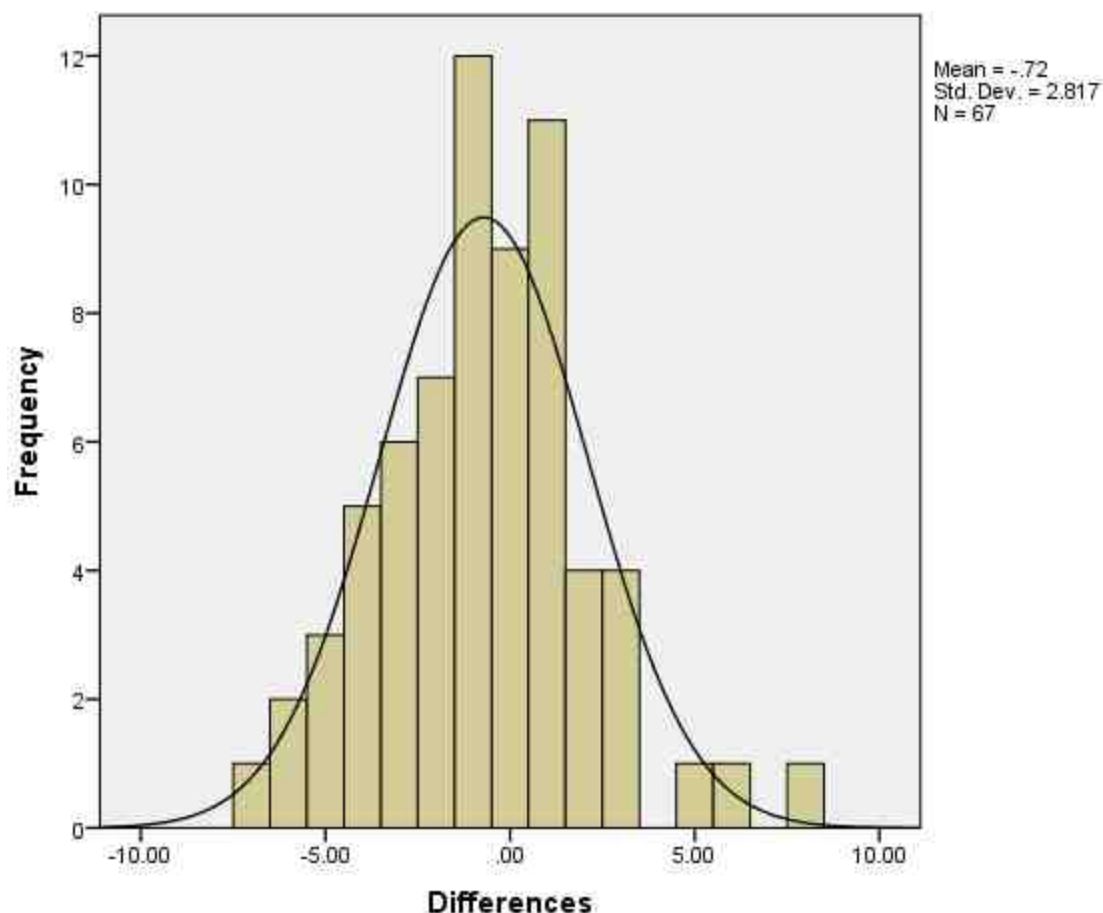


Figure 9. Victimization mean differences distributed and evaluated for normality.

The paired samples *t*-test analysis (see Table 4) showed that there was a statistically significant mean difference in student participants' victimization before ( $M = 4.63$ ,  $SD = 4.39$ ) versus after ( $M = 5.34$ ,  $SD = 4.66$ ) they experienced a resilience program;  $t(66) = 2.08$ ,  $p = .04$ ,  $df = 66$ , two-tailed. The alpha level of this test was set at .05 to measure a medium effect size. The effect size, calculated using eta squared ( $\eta^2$ ), was .06, which is a medium effect. Consequently, the data did not support the third null hypothesis of this bullying prevention research and required the researcher to reject the third hypothesis. There was a statistically significant difference between the *victimization* scores of students in grades three through six before and after the students underwent a resilience program as shown by the PIPSQ. These



results may show that the resilience program studied in this bullying prevention research increased students' victimization. The third null hypothesis, which stated that there is no statistically significant difference between the *bullying behavior* scores of students in grades three through six before and after the students undergo a resilience program as shown by the PIPSQ, was rejected.

Table 4

Paired Samples T-Test Analysis Comparing Pretest versus Posttest Mean Victimization Scores

	Mean	Mean Difference (Post-Pre)	Standard Deviation	t	df	Sig. (2- tailed)
Victimization (Post – Pre)		.72	2.82	2.08	66	.04
Pretest	4.63					
Posttest	5.34					



## CHAPTER FIVE: CONCLUSIONS

### Overview

Based on the pretest-posttest, quantitative analyses of social skills, bullying, and victimization data among participants, conclusions regarding the resilience program tested in this bullying prevention study will be made in Chapter Five. The conclusions of this research will include a discussion and suggested implications pertaining to the tested resilience program. The limitations of the study and its implications will be described and recommendations for future research will be made.

### Discussion

The purpose of this quantitative, quasi-experimental study was to determine the effects of a resilience program on social skills, bullying, and victimization among third through sixth grade students. In this bullying prevention research, the researcher investigated the effects of a resilience program on students' social skills, bullying, and victimization by evaluating change in pretest versus posttest SSIS SEL and pretest versus posttest PIPSQ scores. Paired samples *t*-tests were used to measure change from pretest to posttest among third- through sixth-grade student participant data. The inferential statistics showed no statistically significant effects of the resilience program on social skills, bullying, and victimization.

### Null Hypothesis One: Social Skills

The first null hypothesis tested in this bullying prevention research was that there is no statistically significant difference between the *social skills* scores of students in Grades 3 through 6 before and after the students undergo a resilience program as shown by the SSIS SEL student form. The findings of this bullying prevention research supported that the tested resilience



program influenced students' social and emotional skills and resulted in the researcher rejecting the first hypothesis.

Social and emotional skills may assist in mitigating peer-to-peer aggression (Hussein, 2013; Kalman, 2010; Yeager et al., 2013). The results of this study supported that the evaluated resilience program, which targets deficient social skills among victimized students, affects students' social skills. The social skills data collected in this bullying prevention research may indicate that the previously untested program is effective in successfully training students in social skills that the SSIS SEL student form was designed to assess. These results constitute support for theory that students and specifically bullying victims, can develop social and emotional competencies (Fergus & Zimmerman, 2005; Hughes, 2014; Wong et al., 2013). More broadly, the results of this bullying prevention study may add to the seminal theory of hierarchy of needs as an application of competence-based self-esteem that is specific to social competence (Maslow, 1943). Finally, evidence from this research also contributes to bullying prevention literature alongside other studies of social skill-based programs that have measured improvements in students' social skills (Battey & Ebbeck, 2013; Kasik & Kumcagiz, 2014).

Domino (2013) reported on significant decreases in victimization that resulted from social skills training; however, social skill improvement was not specifically measured as a potential contributor to decreased victimization according to Domino (2013). Nevertheless, it seems reasonable to conclude that social skill improvement played a role in the success of the social-skill based program studied by Domino (2013). Data collected in this bullying prevention investigation may fill a gap left by Domino's (2013) evaluation, because it showed social skill improvement following a social skill-based bullying prevention program.



### **Null Hypothesis Two: Bullying**

The second hypothesis stated that, there is no statistically significant difference between the *bullying behavior* scores of students in Grades 3 through 6 before and after the students undergo a resilience program as shown by the PIPSQ. The data caused the researcher to fail to reject the second hypothesis. The results indicated that the resilience program studied in this bullying prevention research did not decrease bullying among students.

The resilience program evaluated in this research utilizes a unique bullying prevention approach in that it does not explicitly train bullies to stop teasing others. Instead, the program trains victimized students to respond differently to peer-to-peer aggression. Furthermore, the curriculum of the resilience program tested in this research uniquely frames peer-to-peer aggression as socially normal, which may have made students feel *more* comfortable with teasing others. Several student participants indicated on their surveys for both bullying and victimization, that some of the measured actions were, “just joking.” This indicates the possibility that bullying *with the intent to harm* may have changed. However, the PIPSQ does not differentiate between teasing among friends and actions that students recognize to have harmful intentions. Finally, a difference in students’ choices to bully others is not explicitly pursued in the curriculum. Consequently, a difference in students’ choices to bully others would come from improving students’ understanding of peer-to-peer aggression or from the improved social skills among the victims within the student cultures of the participating schools.

As a contrast, TTL, which is another social skill-based approach to bullying prevention, was shown to successfully decrease bullying (Domino, 2013). TTL is a more holistic social skill-based approach, addressing not only the resilience of victims, but also empathy among students who bully (Domino, 2013). TTL provides students with prosocial alternatives to



bullying others (Domino, 2013). It may be that the resilience program tested in this research did not generate decreases in bullying due to its lack of emphasis on building empathy and prosocial behaviors for students who bully.

On the other hand, the lack of effectiveness demonstrated by this resilience program may have resulted from the underlying framework of school-wide approaches. The OBPP and others assert that bullying is a violation of human rights and that bullying victims are unable to improve their experiences with the aggression of more powerful peers (Center for Safe Schools, 2012; Hazelden Foundation, 2007). Perhaps the stable levels of bullying from pretest to posttest in this assessment of a resilience program resulted from the need for consistent school staff and/or bystander intervention and enforcement of anti-bullying school rules via effective consequences for bullies.

### **Null Hypothesis Three: Victimization**

The third hypothesis stated that, there is no statistically significant difference between the *victimization* scores of students in Grades 3 through 6 before and after the students undergo a resilience program as shown by the PIPSQ. The results of this research showed a difference in victimization when student participants' pretests and posttests were compared. Consequently, the researcher failed to reject the third hypothesis. This bullying prevention research did not support that the resilience program studied improves victimization. Instead, the results of this investigation indicated that victimization may have increased as a result of the resilience program.

The results of this bullying prevention research add to the conclusions of an investigation of the YM program (Jenson et al., 2013). Jenson et al. (2013) tested a social-skill based program on students' victimization, which resulted in a very small impact. Furthermore, these results



may contradict those of Domino (2013). While some social-skill based programs produced results in decreasing victimization among students (Domino, 2013; Franks et al., 2013; Kasik & Kumcagiz, 2014), this bullying prevention research contributes to research that raises questions regarding the potential of social-skill based programs (Jenson et al., 2013).

The increase in victimization generated by the resilience program studied in this research may have resulted from program deficits. On the other hand, it may be that the program implementation efficacy was influenced negatively by school staff implementation. Despite video portions of the resilience program curriculum, the attitudes and implementation fidelity of facilitators could still miscommunicate the essence and elements of the program. Furthermore, the program may have starkly contrasted school cultures steeped in school-wide bullying prevention frameworks. It might be that a program that spanned only a few months was unable to change victims' long-standing, self-identification as victims and/or beliefs that someone else should intervene to protect them in their peer-to-peer conflict (Thornberg et al., 2013).

As a contrast to potential program or implementation problems, it may be that the increase in victimization indicated program effectiveness. One of the ideas explicitly stated in the resilience curriculum is that when a victimized student begins using the social and emotional tools learned from the program lessons, it is likely that bullies will work *harder* for a period of time to elicit an emotional response. According to the program content, victimized students need to consistently demonstrate the socially and emotionally intelligent responses that they learn in order to discourage or even turn a bully sufficiently to cause them to change their actions. The increase in victimization measured in this research may show that students implemented the strategies, but had not yet implemented them for a long enough period of time to cause the desired change in victimization. Victimized students may also have applied the program skills



inconsistently, leading to bullies who work harder due to the recognition that it is more challenging but possible to elicit an emotional response from their victims.

### **Implication**

Due to showing significant program effects, this bullying prevention research may indicate that the resilience program tested consists of effective curriculum for improving social skills among students in Grades 3 through 6. The significant results of the program reported in this research may contribute broadly to supporting that social and emotional skills can be taught to students in a classroom setting. Furthermore, social skill development may have wide-reaching benefits in student's futures as social and emotional skill applies to numerous and diverse aspects of life. This implication may mean that this program could be beneficially used with children as a social skill development or social resilience program. This bullying prevention research supports other studies that have shown that social skill-based frameworks and programs can generate positive results (Domino, 2013; Fergus & Zimmerman, 2005; Hughes, 2014; Wong et al., 2013). However, due to showing no significant effects of a resilience program on bullying and significant negative effects on victimization, the results of this bullying prevention research may indicate that the resilience program tested does not consist of effective curriculum for decreasing bullying or victimization among students in Grades 3 through 6. This implication may mean that this program should not be used with children as a bullying prevention program. Based solely on this investigation into the resilience program studied, it is uncertain how the results were influenced by philosophical framework, curriculum, school facilitation, instrumentation, or sample characteristics. Nevertheless, the conclusion of this research contributes meaningfully to the bullying prevention literature. Being newly developed and previously untested, the resilience program studied in this research may still



require ongoing evaluation and revision prior to becoming as effective as applications of social skill-based theoretical frameworks can be.

Without further testing, conclusions regarding the true efficacy of the resilience program studied in this investigation are limited. However, the lack of positive results of the resilience program regarding bullying and victimization may contribute more broadly to raising doubts about the importance of social skills as an influential part of the problem of bullying. On one hand, numerous researchers have supported the value of social skills pertaining to curtailing victimization, or studies have showed negative correlation between social skills and victimization (Levine & Tamburrino, 2014; Mitchell & Brendtro, 2013). Nevertheless, it may be that some or all of victimized students lack the capacity to effect change in their bullying experiences (Center for Safe Schools, 2012). Despite measurements of improved social skills among participants, the increased victimization demonstrated by this study may imply that students experience more victimization if they attempt to navigate bullying experiences on their own. While the social skill development measured as a result of the resilience program studied in this research constitutes important student learning, the victimization increase measured following program implementation may raise concerns about entrusting the mitigation of bullying to the students who are victimized by it. The results of this bullying prevention research may indicate that the resilience program investigated should not be used with students in Grades 3 through 6 due to lack of program effectiveness in decreasing bullying and victimization among students.

Instead, approaches that combat bullying as a violation of human rights may bear the greatest potential for effectively addressing the problem of bullying (Hazelden Foundation, 2007). While the theory of hierarchy of needs remains a fixture in educational theory, it may be



that its application to the problem of bullying exceeds its boundaries of explanation (Maslow, 1943). Instead, perhaps the more thoroughly researched, more widely used school-wide approaches constitute better options for addressing the problem of bullying in schools.

Despite several poor evaluations, numerous researchers have nevertheless shown the OBPP, as a school-wide approach, to effectively reduce bullying (Olweus & Limber, 2010b; O'Moore & Minton, 2005; Sideridis et al., 2013; Tsiantis et al., 2013). The restructuring of social contexts within schools can holistically alter social norms such that students report less victimization experiences (Olweus, 1997, 2007; Olweus & Limber, 2010b). These results have been significant and longitudinally sustained (Olweus, 1997, 2007; Olweus & Limber, 2010b). Farrington and Ttofi (2009) ascribed importance to multi-faceted, school-wide approaches in a comprehensive meta-analysis of bullying prevention efforts. The data of this bullying prevention research did not contradict the assertion that best practice in bullying prevention includes a school-wide approach (Farrington & Ttofi, 2009).

As a contrast, while this bullying prevention research failed to show an association between increased social skills and decreased bullying or victimization, this relationship may exist and potentially contribute as a viable solution to the bullying problem. Despite the results of this bullying prevention study, numerous investigations have supported the value of social skills pertaining to curtailing victimization, and other studies have showed negative correlation between social skills and victimization (Levine & Tamburrino, 2014; Mitchell & Brendtro, 2013). An implication of this bullying prevention research is that schools and other youth-development institutions may improve students' social skills by adopting social and emotional learning curricula as applications of the theory of hierarchy of needs to students' social and emotional well-being (Maslow, 1943).



In addition to implications for youth workers' choices of curricula that address social skills and/or bullying, this investigation of a resilience program has implications for the nature of bullying as a construct. The widely recognized definition for bullying is the assertion of Olweus (1991) that, "a person is being bullied when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other persons" (p. 413). Inherent in this description of bullying is that its intent is for deliberate harm and that an unchangeable power imbalance exists between bully and victim (Center for Safe Schools, 2012; Olweus, 1993). The results of this bullying prevention research may support the idea that the imbalance of power inherent in bullying contexts cannot be altered. The resilience program tested in this research teaches students that bullies intend to provoke emotional responses from victims, which aligned with descriptions of bullying as a social game (Allen, 2013) and an explanation of bullying that included victim obnoxiousness as a cause (Thornberg & Knutsen, 2011). However, the increased victimization measured in this bullying prevention research may support the assertion that power imbalances between bully and victim cannot be altered. Consequently, the unaltered incidence of bullying and increase in victimization that resulted from the resilience program studied in this research may support the traditional understanding of the bullying construct.

### **Limitations**

There were limitations to the conclusions and generalizability of this bullying prevention research. The pretest-posttest design, while less problematic than other viable alternatives for data collection in this research, violated the recommendation that pretests may sensitize participants and influence results (Gall et al., 2007). Due to the inclusion of student attitude-related data, such as student-reported social skills, bullying, and victimization, the change in pretest-posttest data may not have accurately reflected the effects of the resilience program (Gall



et al., 2007). Instead, pretest sensitization coupled with several months spent learning about and discussing bullying and victimization may have yielded increases in student self-reports of bullying and victimization. Furthermore, despite the anonymous nature of data collection, student self-reports may have included bias explained by students wanting to portray themselves in an inaccurately positive light.

Perhaps the most important limitation is that it should be noted that multiple students indicated on their PIPSQ next to reports of bullying and victimization, “just joking.” These additions to the measures of bullying and victimization could not be quantified, and consequently could not be included as data due to the design of this bullying prevention research. However, these student responses may indicate that measured student actions were not accurately categorized by type of interaction. For example, the PIPSQ lacks clarity regarding the difference between teasing among friends and actions with intent to harm. One of the strengths of the resilience program tested in this research is that the curriculum clarifies that teasing is a very normal part of childhood interactions. The program curriculum shows students how to navigate both friendly teasing and bullying. A potentially significant limitation of this research is that the bullying and victimization measurements may have misidentified friendly teasing as bullying.

More broadly related to measurement, another limitation was the scope of measurement assessed by the instruments. While the SSIS SEL student form and the PIPSQ are reliable measures of the dependent variables of this bullying prevention research (Gliner et al., 2001; Gresham & Elliot, 2017; Tarshis & Huffman, 2007), other or additional measures may have provided a more comprehensive description of the effects of the resilience program. The use of other or different measures might have revealed more positive and/or larger effects of the program.



While limitations to drawing conclusions from the data were created by study design elements, aspects of the sampling process contributed limits to data generalizability as well. The sample of third- through sixth-grade students that was selected for this bullying prevention research was acquired via convenience sampling. Gall et al. (2007) described convenience sampling as an acceptable method of sample selection in the field of educational research due to the many instances that prohibit randomization. Nevertheless, convenience sampling required a quasi-experimental approach in this program efficacy study, which lacks the strength that a truly randomized experimental design could contribute to generating data pertinent to the hypotheses of this bullying prevention study.

In addition to the common limitation of convenience sampling, the sample studied in this research possessed an inherent imbalance in demographic data across grade levels. One of the participating northeastern U.S. schools involved third- through sixth-grade students, while the other participating school only involved sixth-grade students. Consequently, the data consisted of a disproportionately larger representation of sixth-grade student data compared with the third- through fifth-grade participating groups. Additionally, the limited age range and number of participants from the school that only involved sixth-grade participants may have contributed to discordant results between sites. Exacerbating this disparity, more of the surveys completed by younger students (i.e., third-grade students) were eliminated during data screening due to students failing to complete surveys correctly. These sample attributes limit the generalizability of this study to third- through fifth-grade students who were underrepresented in the third- through sixth-grade sample.

While problematic aspects of the student sample were a potential limitation of the conclusions of this study, unknown, school staff attributes may also contribute limitations.



School staff involved with facilitating the resilience program at both sites were provided the same training resources and procedural instructions. Nevertheless, there were likely differences in the implementations across sites and perhaps even differences in measures of program effects due to contrasts in facilitators' attitudes or social cultures between school settings. Overall, demographic imbalances and potential differences among facilitators between participating schools generated potential problems for generalizing the results to the population that the sample was selected to represent.

As a result of the specific sample of participants in this bullying prevention research, the generalizability of the data to a population constituted a limitation in this study. Only private school students from a northeastern state participated in the resilience program implementation and data collection. As a consequence of specific sample demographics, conclusions regarding the resilience program that was tested may not accurately apply to the much larger population of public school students nationally and abroad. While the resilience program evaluated by this research may influence social skills, bullying, and/or victimization among public school students, that conclusion cannot be asserted based on the sample tested in this study.

### **Recommendations for Future Research**

The results and implications of this bullying prevention study indicate that several study designs could add valuable insights to the bullying prevention literature. The implications of the resilience program evaluation conducted in this research point specifically to studies that could shed light on theoretical frameworks and program implementations for both social skill development and the problem of bullying among students.



### **Future Research: Social Skill Development**

The results of this research showed that the resilience program that was tested influenced student participants' social skills. However, the SSIS SEL student form is one measure of social skills, which may not describe the complete impact of the resilience program. Consequently, this newly developed resilience program merits follow-up evaluations via other social skills assessments. Furthermore, the resilience program tested takes a novel approach even among social skill-based prevention strategies that have been described in the literature (Battey & Ebbeck, 2013; Domino, 2013; Jenson et al., 2013; Kasik & Kumcagiz, 2014). Consequently, a new assessment of social skills that specifically measures social skills based on the objectives of the resilience program may be required to evaluate the resilience program with the greatest possible accuracy.

In addition to further quantitative testing focused on this resilience program, qualitative approaches may contribute descriptions of student experiences of the program such that social skill improvement may be explained. The lived experiences of students in the program may highlight program deficits or show the specific social skills that are more likely to be quantitatively improved by the program.

While the social skills variable tested in this research was shown to be affected by the resilience program, other, yet untested resilience or social skill-based bullying prevention programs may have the capacity to meaningfully inform bullying prevention research on the value of the effects of social skill improvement in bullying prevention. Lacking social skills have been shown to associate with victimization (Harper et al., 2012; Hussein, 2013; Rose et al., 2015; Wong et al., 2013; Yeager, Trzesniewski & Dweck, 2013). However, despite TTL, a social skill-based bullying prevention program, being shown to decrease victimization, it was not



measured for social skill improvement (Domino, 2013). Future research that contributes to the literature regarding theoretical frameworks, curricula, and learning models that influence students' social skills related to the problem of bullying may improve social skill-based, bullying prevention efforts.

### **Future Research: Bullying Prevention**

Social skill-based approaches to bullying prevention have demonstrated reductions to the incidence of bullying among students (Domino, 2013; Kasik & Kumcagiz, 2014). However, this research that tested a social skill-based, resilience approach did not support that the program influenced bullying and victimization among students. This study joins studies that described little or no effects of social skill-based programs on the problem of bullying (Jenson et al., 2013). Based on these mixed results and the current underrepresentation of social skill-based approaches to bullying prevention in the literature, there is a need for further study.

Social skill-based approaches to bullying prevention need to undergo additional testing on larger and more generalizable samples. This bullying prevention research utilized a sample size of 67 from private school students in a northeastern state for the measurements of bullying and victimization. The resilience program studied in this research in addition to other social skill-based programs merit investigations into implementations with large groups of students in much more demographically diverse contexts. Furthermore, qualitative research that investigates how this resilience program as well as others affect students' social and emotional experiences with bullying could contribute meaningfully to the story of social skill-based bullying prevention (Battey & Ebbeck, 2013; Cornell & Bradshaw, 2015; Domino, 2013). Data from such studies could inform program developers regarding potential program improvement. Conclusions from



social skill-based bullying prevention studies involving larger, more diverse samples could also assist school leaders in determining optimal approaches to bullying prevention within schools.

In addition to future studies that evaluate social skill-based approaches to bullying prevention, future research should also further assess the effects and nature of school-wide bullying prevention. The theoretical framework of this bullying prevention research included describing school-wide approaches being founded on the idea that victims cannot impact their victimization experiences, whereas social skill-based approaches base programming on the capacity of victims to learn to influence their experiences of victimization (Center for Safe Schools, 2012; Fergus & Zimmerman, 2005; Hughes, 2014; Wong et al., 2013). However, at the time of this bullying prevention research, the bullying prevention literature lacks qualitative investigations that compare the impact of school-wide versus social skill-based approaches on victims of bullying by measuring psychological variables, such as locus of control. A study comparing the psychological effects of these two theoretically dichotomous approaches could importantly inform future prevention efforts. Such studies could reveal program impacts on bullying victims beyond the incidence of victimization.

### **Importance of Future Research**

The problem of bullying remains salient among the issues pertinent to the well-being of young people (Apel & Burrow, 2011; Brown et al., 2011; Ferguson et al., 2011; Garcia-Moya et al., 2014; Limber, 2011; Rose et al., 2015). Consequently, there remains a pressing need to further develop our understanding of the problem of bullying and develop effective approaches to mitigating its incidence and influence among children. The effects of victimization due to bullying have been shown to have negative consequences for children's psychological, social, and academic welfare (Eslea et al., 2004; Ferguson et al., 2011; Hughes, 2014; Lacey et al.,



2015; Sideridis et al., 2013; Thornberg et al., 2013; Volkova & Grishna, 2013). Such effects may regularly and significantly influence 9% to 15% of students around the world (Garcia-Moya et al., 2014; Mok et al., 2014; Rose et al., 2015). Furthermore, victimization and its detrimental effects may extend into adult life for many individuals (Nielsen et al., 2010; Karatza et al., 2016).

This bullying prevention research investigated a resilience program that may equip victims of bullying with the social and emotional skills. This, and other programs that use resilience or social skill-based approaches merit further tests. Such tests could quantitatively and qualitatively describe resilience or social skill-based programs' influence on victims of bullying. Being the first study of the resilience program tested in this research, follow-up investigations are needed. These future investigations should focus not only on the quantitative effects of the resilience program, but also the qualitatively described, lived experiences of victimized students who undergo the program. Follow-up research into the resilience program studied in this bullying prevention research should also study the program in other samples (i.e., public schools, rural, suburban, and urban groups, diverse ethnic backgrounds, large groups across grade levels, and varying economic backgrounds). Utilizing different samples would build the generalizability of conclusions regarding the resilience program studied in this research.

More broadly, as of the writing of this bullying prevention study, results of school-wide approaches to bullying prevention constitute the most common thinking and efforts toward addressing the problem of bullying (Cowie et al., 2006). Social skill-based approaches and effects supplement studies of school-wide approaches in the literature (Domino, 2013; Kalman, 2010; Kasik & Kumcagiz, 2014). In lieu of the varying effectiveness data generated by studies of both school-wide and social skill-based approaches to the problem of bullying, there remains a



need for studies to provide predictability to prevention program effects through repeated, high fidelity implementations (Bowlan, 2011; Jenson et al., 2013; Smith et al., 2004). Furthermore, there remains a need for future research to contribute to the literature describing the qualitative nature of the bullying construct and the psychological influence of different prevention approaches on victims of bullying (Battey & Ebbeck, 2013; Cornell & Bradshaw, 2015; Domino, 2013).

Consequently, the problem of bullying and comparisons of different frameworks and strategies that address bullying merit further study. Future research may further develop the ways that bullying can be understood across the fields of psychology and education. Further study may also lend data toward comparing the quantitative and qualitative effects that the prevention approaches and programs have on the victims of bullying. Building a more robust body of literature may then better equip the people and institutions that serve youth to effectively address the problem of bullying. Improvements in addressing bullying might enrich the lives of generations to come, freeing the personal potential of children who would otherwise be hindered by victimization (Maslow, 1943).



## References

- Allen, K. P. (2013). Understanding bullying in an affluent, academically rigorous US high school: A grounded theory analysis. *Journal of Human Behavior in the Social Environment*, 23(4), 413-436. doi:10.1080/10911359.2013.771523
- Antonovsky, A. (1979). *Health, stress, and coping*. San Francisco, CA: Jossey-Bass.
- Apel, R., & Burrow, J. D. (2011). Adolescent victimization and violent self-help. *Youth Violence and Juvenile Justice*, 9(2), 112-133. doi:10.1177/1541204010376939
- Bacchini, D., Licenziati, M. R., Garrasi, A.C., Corciulo, N., Driul, D., Tanas, R., ... Valerio, G. (2015). Bullying and victimization in overweight and obese outpatient children and adolescents: An Italian multicentric study. *PLoS One*, 10(11), 1-13. doi:10.1371/journal.pone.0142715
- Bandura, A. (1971). *Social learning theory*. NY: General Learning Press.
- Battey, G. J., & Ebbeck, V. (2013). A qualitative exploration of an experiential education bully prevention curriculum. *Journal of Experiential Education*, 36(3), 203-217. doi:10.1177/1053825913489102
- Bauer, N., Lozano, P., & Rivara, F. (2007). The effectiveness of the Olweus Bullying Prevention Program in public middle schools: A controlled trial. *Journal of Adolescent Health*, 40(3), 266-274. doi:10.1016/j.jadohealth.2006.10.005
- Black, S. (2007, October). Evaluation of the Olweus Bullying Prevention Program: How the program can work for inner city youth. In *Proceedings of Persistently Safe Schools: The 2007 National Conference on Safe Schools* (pp. 25-35). Retrieved from <https://www.ncjrs.gov>



- Blosnich, J., & Bossarte, R. (2011). Low-level violence in schools: Is there an association between school safety measures and peer victimization? *Journal of School Health, 81*(2), 107-113. doi:10.1111/j.1746-1561.2010.00567.x
- Bosworth, K., & Judkins, M. (2014). Tapping into the power of school climate to prevent bullying: One application of schoolwide positive behavior interventions and supports. *Theory into Practice, 53*(4), 300-307. doi:10.1080/00405841.2014.947224
- Bowllan, N. M. (2011, April). Implementation and evaluation of a comprehensive, school-wide bullying prevention program in an urban/suburban middle school. *Journal of School Health, 81*(4), 167-173. doi:10.1111/j.1746-1561.2010.00576.x
- Bradshaw, C. P. (2015). Translating research to practice in bullying prevention. *American Psychologist, 70*(4), 322. doi:10.1037/a0039114
- Bradshaw, C. P., Pas, E. T., Debnam, K. J., & Johnson, L. S. (2015). A focus on implementation of positive behavioral interventions and supports (PBIS) in high schools: Associations with bullying and other indicators of school disorder. *School Psychology Review, 44*(4), 480-498. doi:10.17105/spr-15-0105.1
- Bradshaw, C. P., Waasdorp, T. E., & Leaf, P. J. (2012). Effects of school-wide positive behavioral interventions and supports on children. *Pediatrics, 130*(5), 1136-1145. doi:10.1542/peds.2012-0243
- Bradshaw, C. P., Waasdorp, T. E., O'Brennan, L. M., & Gulemetova, M. (2013). Teachers' and education support professionals' perspectives on bullying and prevention: Findings from a National Education Association study. *School Psychology Review, 42*(3). Retrieved from <http://naspjournals.org/?code=naps-site>



- Brown, V., Clery, E., & Ferguson, C. (2011). Estimating the prevalence of young people absent from school due to bullying. *National Centre for Social Research, 1*, 1-61. Retrieved from <http://natcen.ac.uk>
- Bullies2Buddies. (2016). *Bullies to Buddies golden rule school bullying prevention program*. Retrieved from <http://bullies2buddies.com/what-we-do/school-empowerment-training-program/>
- Campbell, D. T., & Stanley, J. C. (1963). Experimental and quasi-experimental designs for research. In N. L. Gage (Ed.), *Handbook on teaching*. Retrieved from [www.sfu.ca](http://www.sfu.ca)
- Center for Safe Schools. (2012). *Pennsylvania bullying prevention toolkit*. Retrieved from [http://www.safeschools.info/bp\\_toolkit.pdf](http://www.safeschools.info/bp_toolkit.pdf)
- Chan-Mok, J. O., Caponecchia, C., & Winder, C. (2014, June). The concept of workplace bullying: Implications from Australian workplace health and safety law. *Psychiatry, Psychology & Law, 21*(3), 442-456. doi:10.1080/13218719.2013.829399.
- Ciby, M., & Raya, R. P. (2014). Exploring victims' experiences of workplace bullying: A grounded theory approach. *Vikalpa, 39*(2), 69-82. Retrieved from <https://us.sagepub.com/en-us/nam/vikalpa/journal202413>
- Collaborative for Academic, Social, and Emotional Learning. (2005). *Safe and sound: An educational leader's guide to evidence-based social and emotional learning programs—Illinois edition*. Retrieved from <http://www.casel.org/safe-and-sound-an-educational-leaders-guide-to-evidence-based-social-and-emotional-learning-sel-programs/>
- Corcoran, L., & Mc Guckin, C. (2014). Addressing bullying problems in Irish schools and in cyberspace: A challenge for school management. *Educational Research, 1*-17. doi:10.1080/00131881.2013.874 150



- Cornell, D., & Bradshaw, C. P. (2015). From a culture of bullying to a climate of support: The evolution of bullying prevention and research. *School Psychology Review*, 44(4), 499-503. doi:10.17105/spr-15-0127.1
- Cowie, H., Jennifer, D., Chankova, D., Poshtova, T., Deklerck, J., Deboutte, G., Ertesvåg, S. K., ... Sanchez, V. (2006). VISTA: Violence in schools training action. Retrieved from <http://www.vista-europe.org/index.php>
- Diamanduros, T., Downs, E., & Jenkins, S. (2008). The role of school psychologists in the assessment, prevention, and intervention of cyberbullying. *Psychology in the Schools*, 45(8), 693-704. doi:10.1002/pits.20335
- Dilmac, B. (2009). Psychological needs as a predictor of cyber bullying: A preliminary report on college students. *Educational Sciences: Theory & Practice*, 9(3), 1307-1325. Retrieved from <http://www.estp.com.tr/>
- Dixon, R. (2007). Ostracism: One of the many causes of bullying in groups? *Journal of School Violence*, 6(3), 3-26. doi:10.1300/J202v06n03\_02
- Domino, M. (2013). Measuring the impact of an alternative approach to school bullying. *Journal of School Health*, 83(6), 430-437. doi:10.1111/josh.12047.
- Due, P., Holstein, B. E., Lynch, J., Diderichsen, F., Gabhain, S. N., Scheidt, P., & Currie, C. (2005, March). Bullying and symptoms among school-aged children: International comparative cross section study in 28 countries. *The European Journal of Public Health*, 15(2), 128-132. doi:2048/10.1093/eurpub/cki105
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-



- based universal interventions. *Child development*, 82(1), 405-432.  
doi:10.1111/j.14678624.2010.01564.x
- Einarsen, S., & Nielsen, M. (2015, February). Workplace bullying as an antecedent of mental health problems: A five-year prospective and representative study. *International Archives of Occupational & Environmental Health*, 88(2), 131-142. doi:10.1007/s00420-0140944-7
- Elliot, S. N. (2017). *Use of the new SSSIS Social-Emotional Learning Edition classwide intervention program*. Retrieved from <http://downloads.pearsonclinical.com/videos/041117-ssis-sel/SSIS-SEL-CIP-Webinar-Handout-041117.pdf>
- Eslea, M., Menesini, E., Morita, Y., O'Moore, M., Mora-Merchán, J., Pereira, B. O., & Smith, P. K. (2004). Friendship and loneliness among bullies and victims: Data from seven countries. *Aggressive Behavior*, 30, 71-83. doi:10.1002/ab.20006.
- Farrington, D. P., & Ttofi, M. M. (2009). Reducing school bullying: Evidence-based implications for policy. *Crime & Justice*, 38, 281–345. Retrieved from <http://www.press.uchicago.edu>
- Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review of Public Health*, 26(1):399-419. doi:10.1146/annurev.publhealth.26.021304.144357
- Ferguson, C. J., Coulson, M., & Barnett, J. (2011). Psychological profiles of school shooters: Positive directions and one big wrong turn. *Journal of Police Crisis Negotiations*, 11, 141-158. doi:10.1080/15332586.2011.581523
- Franks, J., Rawana, E., & Brownlee, K. (2013). The relationship between strengths in youth bullying experiences at school. *Educational & Child Psychology*, 30(4), 44-58. Retrieved



from <http://www.bps.org.uk/publications/member-network-publications/member-publications/educational-child-psychology>

- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An introduction* (8th ed.). Boston: Pearson.
- Gamst-Klaussen, T., Rasmussen, L. P., Svartdal, F., & Strømngren, B. (2016). Comparability of the Social Skills Improvement System to the Social Skills Rating System: A Norwegian study. *Scandinavian Journal of Educational Research*, 60(1), 20-31. doi:10.1080/00313831.2014.971864
- Garandeau, C. F., Poskiparta, E., & Salmivalli, C. (2014). Tackling acute cases of school bullying in the KiVa Anti-Bullying Program: A comparison of two approaches. *Journal of Abnormal Child Psychology*, 42, 981-991. doi:10.1007/s10802-014-9861-1
- García-Moya, I., Suominen, S., & Moreno, C. (2014). Bullying victimization prevalence and its effects on psychosomatic complaints: Can sense of coherence make a difference? *Journal of School Health*, 84(10), 646-653. doi:10.1111/josh.12190
- Garner, I. W., & Boulton, M. J. (2016). Adolescent's unambiguous knowledge of overcoming bullying and developing resilience. *Journal of Occupational Therapy, Schools & Early Intervention*, 9(2), 199-207. doi:10.1080/19411243.2016.1162761
- George, C. M. (2008). Solution-focused therapy: Strength-based counseling for children with social phobia. *Journal of Humanistic Counseling, Education & Development*, 47(2), 144-156. doi: 10.1002/j.2161-1939.2008.tb00054.x
- Gliner, J. A., Morgan, G. A., & Harmon, R. J. (2001, April). Measurement reliability. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40 (4), 486-488. doi:10.1097/00004583-200104000-00019



- Greenberg M., Kusche C., Riggs N. (2004). The PATHS curriculum: Theory and research on neurocognitive development and school success. In J.E. Zins, R.P. Weissberg, M. Wang, H.J. Walberg (Eds.), *Building academic success on social and emotional learning: What does the research say?* (pp. 170-188). New York, NY: Teachers College Press.
- Gresham, F. M., & Elliot, S. N. (2017). *SSIS SEL edition manual*. Bloomington, MN: NCS Pearson.
- Griffiths, C. A., Ryan, P., & Foster, J. H. (2011). Thematic analysis of Antonovsky's sense of coherence theory. *Scandinavian Journal of Psychology*, 52(2), 168-173.  
doi:10.1111/j.1467-9450.2010.00838.x
- Harper, C. R., Parris, L. N., Henrich, C. C., Varjas, K., & Meyers, J. (2012). Peer victimization and school safety: The role of coping effectiveness. *Journal of School Violence*, 11, 267-287. doi:10.1080/15388220.2012.706876
- Harvey, M. G., Heames, J. T., Richey, R. G., & Leonard, N. (2006). Bullying: From the playground to the boardroom. *Journal of Leadership & Organizational Studies*, 12(4), 1-11. Retrieved from <http://journals.sagepub.com/home/jlo>
- Hawker, D. S. J., & Boulton, M. J. (2000, May). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 41(4), 441-455.  
doi:10.1111/1469-7610.00629
- Hazelden Foundation. (2007). *Olweus bullying prevention program scope and sequence report*. Retrieved from [http://www.violencepreventionworks.org/public/olweus\\_scope.page](http://www.violencepreventionworks.org/public/olweus_scope.page)
- Hazelden Foundation. (2016a). A brief history of the Olweus Bullying Prevention Program. Retrieved from [http://www.violencepreventionworks.org/public/olweus\\_history.page](http://www.violencepreventionworks.org/public/olweus_history.page)



- Hazelden Foundation. (2016b). Frequently asked questions. Retrieved from [http://www.violencepreventionworks.org/public/olweus\\_history.page](http://www.violencepreventionworks.org/public/olweus_history.page)
- Hazelden Foundation. (2016c). *Olweus Bullying Prevention Program*. Retrieved from [http://www.violencepreventionworks.org/public/olweus\\_bullying\\_prevention\\_program.page](http://www.violencepreventionworks.org/public/olweus_bullying_prevention_program.page)
- Hills, D. J., Joyce, C. M., & Humphreys, J. S. (2011). Prevalence and prevention of workplace aggression in Australian clinical medical practice. *Australian Health Review*, 35, 253–261. doi:10.1071/AH10983
- Hughes, S. (2014). Bullying: What speech-language pathologists should know. *Language, Speech, and Hearing Services in Schools*, 45(1), 3-13. doi:10.1044/2013\_LSHSS-13-0013
- Holloway, J. M., Long, T. M., & Biasini, F. (2018). Relationships between gross motor skills and social function in young boys with Autism Spectrum Disorder. *Pediatric Physical Therapy*, 30(3), 184-190. doi:10.1097/PEP.0000000000000505
- Hussein, M. H. (2010). The Peer Interaction in Primary School Questionnaire: Testing for measurement equivalence and latent mean differences in bullying between gender in Egypt, Saudi Arabia, and the USA. *Social Psychology of Education: An International Journal*, 13(1), 57-76. doi:10.1007/s11218-009-9098-y
- Hussein, M. H. (2013). The social and emotional skills of bullies, victims, and bully-victims of Egyptian primary school children. *International Journal of Psychology*, 48(5), 910-921. doi:10.1007/s11218-009-9098-y



- Jamal, F., Bonell, C., Harden, A., & Lorenc, T. (2015, June). The social ecology of girls' bullying practices: Exploratory research in two London schools. *Sociology of Health & Illness*, 37(5), 731-744. doi:10.1111/1467-9566.12231.
- Jenson, J. M., Brisson, D., Bender, K. A., & Williford, A. P. (2013). Effects of the Youth Matters prevention program on patterns of bullying and victimization in elementary and middle school. *Social Work Research*, 37(4), 361-372. doi:10.1093/swr/svt030
- Kalman, I. C. (2010, February 20). *The true meaning of the golden rule: Love your bullies* [Web log post]. Retrieved from <http://bullies2buddies.com/the-true-meaning-of-the-golden-rule-love-your-bullies/>
- Kalman, I. C. (2013). Why psychology is failing to solve the problem of bullying. *International Journal on World Peace*, 30(2), 71-97.
- Karatza, C., Zyga, S., Tzlaferi, S., & Prezerakos, P. (2016, March). Workplace bullying and general health status among the nursing staff of Greek public hospitals. *Annals of General Psychiatry*, 15, 1-7. doi:10.1186/S12991-016-0097-Z.
- Kasik, N. C., & Kumcagiz, H. (2014). The effects of the conflict resolution and peer mediation training program on self-esteem and conflict resolution skills. *International Journal of Academic Research*, 6(1), 179-186. doi:10.7813/2075-4124.2014/6-1/B.25
- Kitrungleadjanaporn, P., Phothong, A., & Precharattana, M. (2018). Seesaw balancing: A hands-on model to understand moment of force in classroom. *Applied Mechanics and Materials*, 879, 269–275. doi:10.4028/www.scientific.net/AMM.879.269
- Kokkinos, C. M., & Kipritsi, E. (2012). The relationship between bullying, victimization, trait emotional intelligence, self-efficacy and empathy among preadolescents. *Social Psychology of Education*, 15(1), 41-58. doi:10.1007/s11218-011-9168-9



- Lacey, A., Cornell, D., & Konold, T. (2015, August). The relations between teasing and bullying and middle school standardized exam performance. *Journal of Early Adolescence*, 37(2), 192-221. doi:10.1177/0272431615596428
- Levine, E., & Tamburrino, M. (2014). Bullying among young children: Strategies for prevention. *Early Childhood Education Journal*, 42(4), 271-278. 1-8. doi:10.1007/s10643-013-0600-y
- Limber, S. P. (2011). Development, evaluation, and future directions of the Olweus Bullying Prevention Program. *Journal of School Violence*, 10(1), 71-87. doi:10.1080/15388220.2010.519375
- Limber, S. P., Nation, M., Tracy, A. J., Melton, G. B., & Flerx, V. (2004). Implementation of the Olweus Bullying Prevention Program in the Southeastern United States. In P. K. Smith, D. Pepler, & K. Rigby (Eds.), *Bullying in schools: How successful can interventions be?* (pp. 55–79). Cambridge, England: Cambridge University Press.
- Lutgen-Sandvik, P., Hood, J. N., & Jacobson, R. P. (2016). The impact of positive organizational phenomena and workplace bullying on individual outcomes. *Journal of Managerial Issues*, 28(1-2), 30-49. Retrieved from <http://www.pittstate.edu/business/journal-of-managerial-issues/index.dot>
- Maidaniuc-Chirila, T. (2015, March). The mediation role of resilience on the relationship between workplace bullying and Romanian employees' strain. *Revista de Cercetare si Interventie Sociala*, 48, 120-133. Retrieved from <http://www.rcis.ro>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396. doi:10.1037/h0054346



- Matthiesen, S. B., & Einarsen, S. (2007, November). Perpetrators and targets of bullying at work: Role stress and individual differences. *Violence and Victims*, 22(6), 735-753.  
Retrieved from <http://www.springerpub.com/journals/violence-and-victims.html>
- Mc Guckin, C., & Minton, S. J. (2014). From theory to practice: Two ecosystemic approaches and their applications to understanding school bullying. *Australian Journal of Guidance and Counselling*, 24(1), 1-13. doi:10.1017/jgc.2013.10
- Mishna, F. (2004). A qualitative study of bullying from multiple perspectives. *Children & Schools*, 26(4), 234-247. doi:10.1093/cs/26.4.234
- Mitchell, M. L., & Brendtro, L. K. (2013). Victories over violence: The quest for safe schools and communities. *Reclaiming Children and Youth*, 22(3), 5-11. Retrieved from <http://reclaimingjournal.com>
- Mok, M. M. C., Wang, W. C., Cheng, Y. Y., Leung, S. O., & Chen, L. M. (2014). Prevalence and behavioral ranking of bullying and victimization among secondary students in Hong Kong, Taiwan, and Macao. *Asia-Pacific Education Researcher*, 23(3), 757-767.  
doi:10.1007/s40299-013-0151-4
- Nese, R., McIntosh, K., Nese, J., Hoselton, R., Bloom, J., Johnson, N., ... Ghemraoui, A. (2016). Predicting abandonment of school-wide positive behavioral interventions and supports. *Behavioral Disorders*, 42(1), 261-270. doi:10.17988/BD-15-95.1
- Nielsen, M. B., Matthiesen, S. B., & Einarsen, S. (2010). The impact of methodological moderators on prevalence rates of workplace bullying. A meta-analysis. *Journal of Occupational & Organizational Psychology*, 83(4), 955-979.  
doi:10.1348/096317909X481256



- Nielsen, M. B., Nielsen, G. H., Notelaers, G., & Einarsen, S. (2015, November). Workplace bullying and suicidal ideation: A 3-wave longitudinal Norwegian study. *American Journal of Public Health, 105*(11), 23-27. doi:10.2105/AJPH.2015.302855
- Olweus, D. (1991). Bully/victim problems among schoolchildren: Basic facts and effects of a school based intervention program. In D. Pepler, & K. Rubins (Eds.), *Development and treatment of childhood aggression* (pp. 411-448). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. NY: Blackwell.
- Olweus, D. (1994). Annotation: Bullying at school: Basic facts and effects of a school based intervention program. *Journal of Child Psychology and Psychiatry, 35*(7), 1171-1190. doi:10.1007/BF03172807
- Olweus, D. (1997). Bully/victim problems in school: Facts and intervention. *European Journal of Psychology of Education, 12*(4), 495-510. Retrieved from <http://www.episcenter.psu.edu>
- Olweus, D. (2005). A useful evaluation design, and effects of the Olweus Bullying Prevention Program, *Psychology, Crime & Law, 11*(4), 389-402. doi:10.1080/10683160500255471
- Olweus, D. (2007). Olweus bullying questionnaire standard school report. Retrieved from [www.violencepreventionworks.org](http://www.violencepreventionworks.org)
- Olweus, D., & Limber, S. P. (2010a). Bullying in school: Evaluation and dissemination of the Olweus Bullying Prevention Program. *American Journal of Orthopsychiatry, 80*(1), 124-134. doi:10.1111/j.1939-0025.2010.01015.x
- Olweus, D., & Limber, S. P. (2010b). The Olweus Bullying Prevention Program: Implementation and evaluation over two decades. In S. R. Jimerson, S. M. Swearer, & D.



- L. Espelage (Eds.), *The handbook of school bullying: An international perspective* (pp. 377–402). New York, NY: Routledge.
- O'Moore, A. M., & Minton, S. J. (2005). Evaluation of the effectiveness of an anti-bullying programme in primary schools. *Aggressive Behavior*, 31(6), 609-622.  
doi:10.1002/ab.20098.
- Pack, C., White, A., Raczynski, K., & Wang, A. (2011). Evaluation of the safe school ambassadors program: A student-led approach to reducing mistreatment and bullying in schools. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 84(4), 127-133. doi:10.1080/00098655.2011.564974
- Pelchar, T. K., & Bain, S. K. (2014). Bullying and victimization among gifted children in school-level transitions. *Journal for the Education of the Gifted*, 37(4), 319-336.  
doi:10.1177/0162353214552566
- Porter, S., McConnell, T., McLaughlin, K., Lynn, F., Cardwell, C., Braiden, H., & ... Jack, K. (2017). Music therapy for children and adolescents with behavioral and emotional problems: A randomized controlled trial. *Journal of Child Psychology & Psychiatry*, 58(5), 586-594. doi:10.1111/jcpp.12656
- Risser, S. D. (2013). Relational aggression and academic performance in elementary school. *Psychology in the Schools*, 50(1), 13-26. doi:10.1002/pits.21655
- Rose, C. A., Simpson, C. G., & Moss, A. (2015). The bullying dynamic: Prevalence of involvement among a large-scale sample of middle and high school youth with and without disabilities. *Psychology in the Schools*, 52(5), 515-531. doi:10.1002/pits.21840
- Safaria, T. (2016). Prevalence and impact of cyberbullying in a sample of Indonesian junior high school students. *Turkish Online Journal of Educational Technology*, 15(1), 82-91.



- Schat, A. C., & Frone, M. R. (2011). Exposure to psychological aggression at work and job performance: The mediating role of job attitudes and personal health. *Work & Stress*, 25(1), 23-40. doi:10.1080/02678373.2011.563133
- Schat, A. C., Frone, M. R., & Kelloway, E. K. (2006). *Handbook of workplace violence*. Thousand Oaks, CA: Sage Publications.
- Schultz, D. (2012). Help me put bullying on ice. *Journal for Quality & Participation*, 35, 12-14. Retrieved from <http://asq.org/pub/jqp/>
- Shrout, P. E., & Fleiss, J. L. (1979). Intraclass correlations: Uses in assessing rater reliability. *Psychological Bulletin*, 86(2), 420. Retrieved from <http://www.apa.org/pubs/journals/bul/index.aspx>
- Sideridis, G. D., Antoniou, F., Stamovlasis, D., & Morgan, P. L. (2013). The relationship between victimization at school and achievement: The cusp catastrophe model for reading performance. *Behavioral Disorders*, 38(4), 228-242. Retrieved from <http://journals.sagepub.com/home/bhd>
- Solberg, M. E., & Olweus, D. (2003). Prevalence estimation of school bullying with the Olweus Bully/Victim Questionnaire. *Aggressive Behavior*, 29(3), 239-268. doi:10.1002/ab.10047
- Solberg, M. E., Olweus, D., & Endresen, I. M. (2007). Bullies and victims at school: Are they the same pupils? *British Journal of Educational Psychology*, 77(2), 441-464. doi:10.1348/000709906X105689
- Smith, P. K., Pepler, D., & Rigby, K. (2004). *Bullying in schools: How successful can interventions be?* Cambridge University Press.



- Smith, P. K., Singer, M., Hoel, H., & Cooper, C. L. (2003). Victimization in the school and the workplace: Are there any links? *British Journal of Psychology*, 94(2), 175-188.  
doi:10.1348/000712603321661868
- Smorti, A., & Ciucci, E. (2000). Narrative strategies in bullies and victims in Italian schools. *Aggressive behavior*, 26(1), 33-48.  
doi:10.1002/(SICI)10982337(2000)26:1<33::AID-AB3>3.0.CO;2-Y
- Tarshis, T. P., & Huffman, L. C. (2007, April). Psychometric properties of the Peer Interactions in Primary School (PIPS) Questionnaire. *Journal of Developmental & Behavioral Pediatrics*, 28(2), 125-132. doi:10.1097/01.DBP.0000267562.11329.8f
- Thornberg, R., Halldin, K., Bolmsjö, N., & Petersson, A. (2013). Victimising of school bullying: A grounded theory. *Research Papers in Education*, 28(3), 309-329.  
doi:10.1080/02671522.2011.641999
- Thornberg, R., & Knutsen, S. (2011). Teenagers' explanations of bullying. *Child & Youth Care Forum*, 40(3), 177-192. doi:10.1007/s10566-010-9129-z.
- Tsiantis, A. C. J., Beratis, I. N., Syngelaki, E. M., Stefanakou, A., Asimopoulos, C., Sideridis, G. D., & Tsiantis, J. (2013). The effects of a clinical prevention program on bullying, victimization, and attitudes toward school of elementary school students. *Behavioral Disorders*, 38(4), 243-257. doi:10.1177/019874291303800406
- Valentine, S., Fleischman, G., & Godkin, L. (2015). Rogues in the ranks of selling organizations: Using corporate ethics to manage workplace bullying and job satisfaction. *Journal of Personal Selling & Sales Management*, 35(2), 142-163.  
doi:10.1080/08853134.2015.1010542.



- Vassallo, S., Edwards, B., Renda, J., & Olsson, C. A. (2014). Bullying in early adolescence and antisocial behavior and depression six years later: What are the protective factors? *Journal of School Violence*, 13(1), 100-124.  
doi:10.1080/15388220.2013.840643.
- Vessey, J., Strout, T. D., DiFazio, R. L., & Walker, A. (2014). Measuring the youth bullying experience: A systematic review of the psychometric properties of available instruments. *Journal of School Health*, 84(12), 819-843. doi:10.1111/josh.12210
- Volkova, E. N., & Grishina, A. V. (2013). Estimation of the violence expansion in the educational environment of a school. *Psychological Science & Education*, (6). Abstract reviewed from: <http://psyjournals.ru/>
- Waasdorp, T. E., Bradshaw, C. P., & Leaf, P. J. (2012). The impact of schoolwide positive behavioral interventions and supports on bullying and peer rejection: A randomized controlled effectiveness trial. *Archives of Pediatrics & Adolescent Medicine*, 166(2), 149-156. doi:10.1001/archpediatrics.2011.755
- Warner, R. (2013). *Applied statistics: From bivariate through multivariate techniques* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Wong, C., Cheng, Y., & Chen, L. (2013). Multiple perspectives on the targets and causes of school bullying. *Educational Psychology in Practice*, 29(3), 278-292.  
doi:10.1080/02667363.2013.837030.
- Yeager, D. S., Trzesniewski, K. H., & Dweck, C. S. (2013). An implicit theories of personality intervention reduces adolescent aggression in response to victimization and exclusion. *Child Development*, 84(3), 970-988. doi:10.1111/cdev.12003



- Young, E. L., Boye, A. E., & Nelson, D. A. (2006). Relational aggression: Understanding, identifying, and responding in schools. *Psychology in the Schools, 43*(3), 297-312. doi:10.1002/pits.20148
- Young-Jones, A., Fursa, S., Byrket, J. S., & Sly, J. S. (2015). Bullying affects more than feelings: The long-term implications of victimization on academic motivation in higher education. *Social Psychology of Education: An International Journal, 18*(1), 185-200. doi:10.1007/s11218-014-9287-1
- Zimmerman, M. A., Stoddard, S. A., Eisman, A. B., Caldwell, C. H., Aiyer, S. M., & Miller, A. (2013). Adolescent resilience: Promotive factors that inform prevention. *Child Development Perspectives, 7*(4), 215-220. doi:10.1111/cdep.12042



**APPENDIX A: IRB Approval and Investigator Agreement****LIBERTY UNIVERSITY**  
INSTITUTIONAL REVIEW BOARD

December 31, 2018

Brian Bain

IRB Approval 3625.123118: The Effects of a Resilience Program on Social Skills, Bullying, and Victimization Among Students in Grades Three Through Six

Dear Brian Bain,

We are pleased to inform you that your study has been approved by the Liberty University IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Your study falls under the expedited review category (45 CFR 46.110), which is applicable to specific, minimal risk studies and minor changes to approved studies for the following reason(s):

Your study involves surveying or interviewing minors, or it involves observing the public behavior of minors, and you will participate in the activities being observed.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,



**G. Michele Baker, MA, CIP**  
*Administrative Chair of Institutional Research*  
**The Graduate School**

**LIBERTY**  
UNIVERSITY.  
*Liberty University | Training Champions for Christ since 1971*



### INVESTIGATOR AGREEMENT & SIGNATURE PAGE\*

**BY SIGNING THIS DOCUMENT, THE INVESTIGATOR AGREES:**

1. That no participants will be recruited or entered under the protocol until the Investigator has received the final approval or exemption email from the chair of the Institutional Review Board.
2. That no participants will be recruited or entered under the protocol until all key personnel for the project have been properly educated on the protocol for the study.
3. That any modifications of the protocol or consent form will not be initiated without prior written approval, by email, from the IRB and the faculty mentor/chair, except when necessary to eliminate immediate hazards to the participants.
4. The PI agrees to carry out the protocol as stated in the approved application: all participants will be recruited and consented as stated in the protocol approved or exempted by the IRB. If written consent is required, all participants will be consented by signing a copy of the approved consent form.
5. That any unanticipated problems involving risks to participants or others participating in the approved protocol, which must be in accordance with the Liberty Way (and/or the Honor Code) and the Confidentiality Statement, will be promptly reported in writing to the IRB.
6. That the IRB office will be notified within 30 days of a change in the PI for the study.
7. That the IRB office will be notified within 30 days of the completion of this study.
8. That the PI will inform the IRB and complete all necessary reports should he/she terminate University Association.
9. To maintain records and keep informed consent documents for **three years** after completion of the project, even if the PI terminates association with the University.
10. That he/she has access to copies of 45 CFR 46 and the Belmont Report.

Brian J. Barn  
Principal Investigator (Print)

[Redacted Signature]  
Principal Investigator (Signature)

12/7/18  
Date

\_\_\_\_\_  
Co-Investigator (Print)

\_\_\_\_\_  
Co-Investigator (Signature)

\_\_\_\_\_  
Date

**FOR STUDENT PROPOSALS ONLY:**

**BY SIGNING THIS DOCUMENT, THE FACULTY MENTOR/CHAIR AGREES:**

1. To assume responsibility for the oversight of the student's current investigation, as outlined in the approved IRB application.
2. To work with the investigator, and the Institutional Review Board, as needed, in maintaining compliance with this agreement.
3. To monitor email contact between the Institutional Review Board and principle investigator. Faculty mentors/chairs are cc'ed on all IRB emails to PIs.
4. That the principal investigator is qualified to perform this study.
5. **That by signing this document you verify you have carefully read this application and approve of the procedures described herein, and also verify that the application complies with all instructions listed above. If you have any questions, please contact our office ([irb@liberty.edu](mailto:irb@liberty.edu)).**

Rebecca Lunde

\_\_\_\_\_  
Faculty Mentor/Chair (Print)

[Redacted Signature]  
Faculty Mentor/Chair (Signature)

12/6/18

\_\_\_\_\_  
Date

\*The Institutional Review Board reserves the right to terminate this study at any time if, in its opinion, (1) the risks of further experimentation are prohibitive, or (2) the above agreement is breached.



## APPENDIX B: Informed Consent, Assent, and Recruitment Letters

The Liberty University Institutional  
Review Board has approved  
this document for use from  
12/31/2018 to 12/30/2019  
Protocol # 3625.123118

### PARENT/GUARDIAN CONSENT FORM

#### The Effects of a Resilience Program on Social Skills, Bullying, and Victimization Among Students in Grades Three Through Six

Your child is invited to participate in a research study. This research study is being conducted by Brian Bain, a doctoral candidate in the School of Education at Liberty University. Your child was selected as a possible participant because he or she is a third, fourth, fifth, or sixth grade student who will be participating in the [REDACTED] at [REDACTED] [REDACTED] during the 2018-2019 school year. Please read this form and ask any questions you may have before agreeing to allow him or her to be in the study.

#### *Why is this study being done?*

The purpose of this study is to determine if there is a difference between the social skills and bullying/victimization of third through sixth grade students before and after participating in the [REDACTED]

#### *What will my child/student be asked to do?*

If you agree to allow your child to be in this study, he or she will be asked to do the following things:

1. Complete a social skills survey and a bullying/victimization survey. The two surveys combined should take about 30 minutes.
2. Participate as fully as possible in the [REDACTED] which will be facilitated at [REDACTED] by school staff during the 2018-2019 school year.
3. Complete the same social skills survey and bullying/victimization survey after finishing the program. It will again take about 30 minutes to complete the two surveys.

#### *What are the risks and benefits of this study?*

**Risks:** The risks involved in this study may involve the risk that your child will become upset while taking a survey due to thinking about an unpleasant social situation or bullying experience. Otherwise, the risks involved in this study are minimal, which means they are equal to the risks your child would encounter in everyday life.

**Benefits:** Participants should not expect to receive a direct benefit from taking part in this study. However, participants in the [REDACTED] may receive valuable knowledge that will help them to improve their peer-to-peer relationships and avoid being bullied by other children. Participation in the study by completing surveys *is not* required to participate in the program.

Benefits to society include evidence for how effective the [REDACTED] is at helping children to improve their peer-to-peer relationships and not be bullied. This evidence may encourage other schools to use the program to help students with peer-to-peer relationships and the problem of bullying.

#### *Will my child be compensated for participating?*

Your child will not be compensated for participating in this study.



The Liberty University Institutional  
Review Board has approved  
this document for use from  
12/31/2018 to 12/30/2019  
Protocol # 3625.123118

***How will my child's personal information be protected?***

The records of this study will be kept private. Research records will be stored securely and only the researcher and [REDACTED] will have access to the records.

- Participating students will be instructed NOT to put their names on their surveys. Students will include their age or grade, sex, and a school staff-assigned identification number on their surveys. The identification number will link a student's pre-program surveys with that student's post-program surveys for the purpose of data analysis. There will be a list of participating students' names and identification numbers that will be created by [REDACTED] staff and kept securely in a locked filing cabinet at [REDACTED] until data collection is complete. The linking list will be destroyed after all data has been collected. Participant responses will remain anonymous to the researcher.
- The surveys will then be sent to [REDACTED] where they will be kept in a locked file cabinet. Finally, the surveys will be sent to the researcher, who will keep them in a locked file cabinet. After the three year, mandatory period of maintaining the data, the researcher will destroy all data in a shredder. The data will be used in the researcher's dissertation and may be used in future journal article publications of the effectiveness of the [REDACTED]. The data may be used in future presentations to support the effectiveness of the [REDACTED].

***Is study participation voluntary?*** Participation in this study is voluntary. Your decision whether or not to allow your child to participate will not affect his or her current or future relations with Liberty University, [REDACTED] or [REDACTED]. If you decide to allow your child to participate, he or she is free to not answer any question or withdraw at any time without affecting those relationships.

***What should I or my child do if I decide to withdraw him or her or if he or she decides to withdraw from the study?*** If you choose to withdraw your child or if your child chooses to withdraw from the study, he or she should inform the researcher that he or she wishes to discontinue participation prior to submitting the study materials. Your child's responses will not be recorded or included in the study.

***Whom do I contact if my child or I have questions or problems?***

The researcher conducting this study is Brian Bain. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at [REDACTED] or [REDACTED]. You may also contact the researcher's faculty adviser, Dr. Rebecca Lunde, at [REDACTED].

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at [irb@liberty.edu](mailto:irb@liberty.edu). **Please notify the researcher if you would like a copy of this information for your records.**

Signature of Parent

[REDACTED]

Signature of Investigator

Date

12/13/2018  
Date



The Liberty University Institutional  
Review Board has approved  
this document for use from  
12/31/2018 to 12/30/2019  
Protocol # 3625.1231.18

## **ASSENT OF CHILD TO PARTICIPATE IN A RESEARCH STUDY**

### **What is the name of the study and who is doing the study?**

The Effects of a Resilience Program on Social Skills, Bullying, and Victimization Among Students in Grades Three Through Six  
Brian Bain, Liberty University

### **Why am I doing this study?**

I am studying a friendship skills program to see if it helps students to avoid being bullied.

### **Why am I asking you to be in this study?**

You are being asked to be in this study because you are a third, fourth, fifth, or sixth grade student who will be in the [REDACTED] at school this year. I would like you to fill out forms that ask you about your friendship skills and bullying that happens in your life so that I can find out if the program is helpful.

### **If you agree, what will happen?**

If you are in this study, you will answer questions on two forms that will take about thirty minutes. You will fill out these forms both before and after you go through the program.

### **Do you have to be in this study?**

No, you do not have to be in this study. If you want to be in this study, then tell the researcher. If you don't want to, it's OK to say no. The researcher will not be angry. You can say yes now and change your mind later. It's up to you.

### **Do you have any questions?**

You can ask questions any time. You can ask now. You can ask later. You can talk to the researcher. If you do not understand something, please ask the researcher to explain it to you again.

Signing your name below means that you want to be in the study.

---

Signature of Child

Date

The researcher conducting this study is Brian Bain. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at [REDACTED] You may also contact the researcher's faculty advisor, Dr. Rebecca Lundee, [REDACTED]

Liberty University Institutional Review Board,  
1971 University Blvd, Green Hall 2845, Lynchburg, VA 24515



12/13/2018

Dear Parents/Guardians:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The purpose of my research is to test the effects of [REDACTED] on students' social skills and bullying, and I am writing to invite your child to participate in my study.

If you are willing to allow your child to participate, he or she will be asked to take two surveys before and after participating in the [REDACTED]. It should take approximately thirty minutes before the program and thirty minutes again after the program to complete the procedures listed. Your child's participation will be completely anonymous to the researcher.

If you choose to allow your child to participate, please sign the attached consent document, have your child sign the attached assent document, and have your child return both signed documents to his or her teacher. The consent and assent documents contain additional information about my research.

Sincerely,

Brian Bain  
Science Teacher and Doctoral Student



12/13/2018

Dear Parents:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree and to better understand bullying. Last week a letter was sent home inviting your child to participate in a research study. This follow-up letter is being sent to remind you to return the consent and assent form if you would like your child to participate and have not already done so. The deadline for participation is \_\_\_\_\_.

If your child to participates, he or she will be asked to take two surveys before and after participating in the [REDACTED]. It should take approximately thirty minutes for him or her to complete the surveys each time (before and after the program). Your child's participation will be completely anonymous to the researcher.

If you choose to allow your child to participate and have not already done so, please sign the attached consent document, have your child sign the attached assent document, and have your child return the signed documents to his or her teacher. The consent documents contain additional information about my research.

Sincerely,

Brian Bain  
Science Teacher and Doctoral Student



## APPENDIX C: Agreement of Data Release

### AGREEMENT

THIS AGREEMENT dated the 11/20/18 day of November, 2018, between BRIAN BAIN, of [REDACTED] hereinafter referred to as ("Recipient", and [REDACTED] hereinafter referred to as ("Provider").

WHEREAS, Recipient is a candidate for a Doctorate in Education from Liberty University and is writing his dissertation on The Effects of a Resilience Program on Social Skills, Bullying, and Victimization Among Students in Grades Three Through Six, and

WHEREAS, Provider has non-HIPAA and non-identifying Data regarding the results of social skills and bullying surveys, and

WHEREAS, Recipient desires to obtain, review, utilize, and publish the Data and results for his dissertation requirement for Liberty University, and

WHEREAS, Recipient requires confirmation from Provider prior to receipt that Provider will release the subject Data to enable him to proceed with his dissertation project, and

WHEREAS, Recipient and Provider have reached this agreement and have taken all action required to enter this agreement.

NOW, THEREFORE, as a condition of the Provider's furnishing the described Data to Recipient and as a means of Provider authorizing the use and disclosure to Recipient, for and in consideration of the mutual covenants hereinafter set forth herein, and for other good and valuable consideration, the parties intending to be legally bound hereby, agree as follows:

1. **Term.** This agreement shall commence on its execution date and continue through the completion of Recipient's dissertation process.
2. **Provider's Obligations.** Provider shall:
  - a. Provide its Data to Recipient from its Resilience Program including the results of social skills and bullying surveys within one week of Provider obtaining or compiling such data.
  - b. Permit Recipient unlimited use of the provided Data for dissertation and journal publication only, and understand Recipient requires this Data to complete his dissertation.
3. **Recipient's Obligations.** Recipient shall:





- a. Use and disclose the Data for his dissertation on The Effects of a Resilience Program on Social Skills, Bullying, and Victimization Among Students in Grades Three Through Six.
  - b. Keep the name of the Provider confidential and not release the name of the corporation from which he obtained the Data.
4. **No Revocation.** Once this agreement is signed, Provider shall deliver the Data to Recipient, and this agreement may not be revoked or terminated for any reason. Recipient requires the use of this Data for his dissertation with Liberty University. Thus, once this agreement is signed, Provider cannot in any way limit the use of this Data by Recipient or refuse to release the Data as agreed.
5. **Acts of God.** Provider shall not be responsible for any failure or delay in the performance of its obligations under this Agreement arising out of, or caused directly or indirectly by acts of God, earthquakes, fires, floods, wars, civil or military disturbances, governmental actions or other circumstances beyond its reasonable control.
6. **Privacy and Non-Release of Protected Information.** It is the intention of both Recipient and Provider that no protected health information, personal identifying information, education records, customer record information, confidential personnel information, proprietary Data, or any other information deemed confidential or protected pursuant to HIPAA or Federal or State Privacy Acts, will be included in the Data provided by Provider to Recipient. In the event that any such information is provided in the Data sent from Provider, Recipient shall immediately inform Provider, return all such Data, comply with any Federal or State laws unintentional use of disclosure of protected health information.
7.
8.
9. **Severability.** If any term, covenant or provision of this agreement shall be determined to be invalid or unenforceable, such provision shall not affect the remaining provisions of this agreement which will remain in full force and effect.





IN WITNESS WHEREOF, the parties hereto have executed this agreement on the date hereinabove stated.

WITNESS:



Recipient:



Brian Bain

WITNESS:



Provider:



Executive Director





1. **Duration of License:** Permission is granted for a one-time use only. Rights cannot be used to apply to future reproductions, additions, re-revisions, or other derivative works. This permission shall be effective as of the date of execution by the parties for the maximum period of 12 months and should be renewed after the term expires:
- When content is to be reproduced in a book or journal the validity of this agreement should be the life of the book edition or journal issue.
  - When content is featured for use on a website, internet, or any publicly accessible site not including a journal or book, you agree to remove the material from such site after 12 months, or request to renew your permission license.
2. **Credit Line:** A credit line must be prominently placed and include: For book (source: the author(s), title of book, edition, copyright holder, year of publication. For journal content: the author(s), title of article, title of journal, volume number, issue number, inclusive pages and website URL to the journal page. If a journal is published by a learned society the credit line must include the details of that society.
3. **Watermarking:** The licensee warrants that the material shall not be used in any manner which may be considered derogatory to the title, content, authors of the material, or to Wolters Kluwer Health, Inc.
4. **Indemnity:** You hereby indemnify and hold harmless Wolters Kluwer Health, Inc. and its respective officers, directors, employees and agents, from and against any and all claims, costs, proceedings or demands arising out of your unauthorized use of the Licensed Material.
5. **Geographical Scope:** Permission granted is non-exclusive and is valid throughout the world in the English language and the languages specified in the license.
6. **Copy of Content:** Within Kluwer Health, Inc. cannot supply the requester with the original artwork, high-resolution images, electronic files or a clean copy of content.
7. **Validity:** Permission is valid if the licensed material is original to a Wolters Kluwer Health, Inc. imprint (J.B. Lippincott, Lippincott-Raven Publishers, Williams & Wilkins, Lee & Febiger, Harvet, Rapid Science, Little Brown & Company, Harper & Row Medical, American Journal of Nursing Co., and Urban & Schwarzenberg - English Language, Raven Press, Paul Hoeber, Springhouse, Ovid, and the Anatomical Chart Company).
8. **Third Party Material:** This permission does not apply to content that is credited to publications other than Wolters Kluwer Health, Inc. or its imprints. For images credited to non-Wolters Kluwer Health, Inc. books or journals, you must obtain permission from the source referenced in the figure or table legend or credit line before making any use of the image(s), table(s) or other content.
9. **Adaptations:** Adaptations are prohibited by copyright. For images that have been adapted, permission must be sought from the rightsholder of the original material and the rightsholder of the adapted material.
10. **Modifications:** Wolters Kluwer Health, Inc. material is not permitted to be amplified or adapted without written approval from Wolters Kluwer Health, Inc. with the exception of text size or color. The adaptation should be credited as follows: Adapted with permission from Wolters Kluwer Health, Inc. (the author(s), title of book, edition, copyright holder, year of publication) or (the author(s), title of article, title of journal, volume number, issue number, inclusive pages and website URL to the journal page).
11. **Full Text Articles:** Reproduction of full articles in English is prohibited.
12. **Branding and Marking:** So (drug name, trade name, drug logo), or trade logo can be included on the source page or material borrowed from *Diagnosis of the Colon & Rectum, Plastic Reconstructive Surgery, Obstetrics & Gynecology (The Green Journal), Critical Care Medicine, Pediatric Critical Care Medicine, the American Heart Association publications and the American Academy of Neurology publication.*
13. **Open Access:** Unless you are publishing content under the open Creative Commons license, the following statement must be added when reprinting material in Open Access journals: "The Creative Commons license does not [redacted] You of the material in any format is prohibited without written permission from the publisher, Wolters Kluwer Health, Inc. Please contact [redacted] for further information."
14. **Translations:** The following disclaimer must appear on all translated content: Wolters Kluwer Health, Inc. and its imprints take no responsibility for the accuracy of the translation from the published English original and are not liable for any errors which may occur.
15. **Published Ahead of Print (PAP):** Articles in the PAP stage of publication can be cited using the online publication date and the unique DOI number.
- Abstract: Articles appearing in the PAP section have been peer-reviewed and accepted for publication in the relevant journal and posted online before print publication. Articles appearing in PAP may contain statements, opinions, and information that have errors in facts, figures, or interpretation. Any final changes or inaccuracies will be made at the time of print publication and will be reflected in the final electronic version of the issue. Accordingly, Wolters Kluwer Health, Inc., the editors, authors and their respective employers are not responsible or liable for the use of any such statements or including data, opinion or information contained in the articles in this section.
16. **Termination of Contract:** Wolters Kluwer Health, Inc. must be notified within 90 days of the original license date if you opt not to use the requested material.
17. **Waived Permission Fee:** Permission fees that have been waived are not subject to future waivers, including similar requests or renewing a license.
18. **Consent or Permission:** You may exercise these rights beyond immediately upon issuance of the license, however until full payment is received either by the publisher or our authorized vendor, this license is not valid. If full payment is not received on a timely basis, then any license previously granted shall be deemed automatically revoked and shall be void as if never granted. Further, in the event that you breach any of these terms and conditions or any of Wolters Kluwer Health, Inc.'s other filing and payment terms and conditions, the license is automatically revoked and shall be void as if never granted. Use of materials as described in a licensed feature, as well as any use of the materials beyond the scope of an unrevoked license, may constitute copyright infringement and publisher reserves the right to take any and all action to protect its copyright in the materials.
19. **SEM Signature Only:** Any permission granted for a particular item will apply to subsequent editions and for editions in other languages, provided such editions use the same work as a whole in title and its text involves the signature explanation of the potential illustrations or examples. Please view [redacted]
20. **Consent or Permission:** LICENSOR further represents and warrants that, to the best of its knowledge and belief, LICENSEE's contemplated use of the content is not prohibited in LICENSOR does not infringe any valid rights to any third party.
21. **Breach:** If LICENSEE fails to comply with any provisions of this agreement, LICENSOR may serve written notice of breach of LICENSEE and, unless such breach is fully cured within fifteen (15) days from the receipt of notice by LICENSEE, LICENSOR may, at its option, serve notice of cancellation on LICENSEE, whereupon this Agreement shall immediately terminate.
22. **Assignment:** Licensee's interest hereunder by the LICENSOR shall not be assigned or granted in any manner conveyed to any third party by the LICENSEE without the consent in writing to the LICENSOR.
23. **Governing Law:** The laws of The State of New York shall govern interpretation of this Agreement and all rights and liabilities arising hereunder.
24. **Entirety:** If any provision of this Agreement shall be found unenforceable or otherwise legally unenforceable, all other conditions and provisions of this Agreement shall remain in full force and effect.



## Re: Permissions Request



Licensing, -

[Redacted]

THU, Oct 4, 2018, 6:19 PM   

to me

Dear Mr. Bain,

Permission to use a Pearson assessment is inherent in the qualified purchase of the test materials in sufficient quantity to meet your research goals. In any event, Pearson has no objection to you using the SIS<sup>®</sup> Social-Emotional Learning Edition (SIS-SEL) and you may take this email response as formal permission from Pearson to use either test in its as-published formats in your student research upon purchase qualification.

The SIS-SEL is a sensitive clinical assessments that require a high degree (B level) to purchase, administer, score and interpret. They also represent Pearson copyright and trade secret material. As such, Pearson does not permit photocopying or other reproduction of our test materials by any means and for any purpose when they are readily available in our catalog. Consequently, you may not simply reproduce the SIS-SEL test forms. If you do not yet meet the purchase qualifications, your professor or faculty supervisor may assist you by lending their qualifications.

Our long term publishing agreements with test authors does not permit us to provide sample test form or to grant permissions free of charge. All test materials must be purchased.

Your source to qualify for and purchase the SIS-SEL test materials you need is our Pearson Assessment online catalog. Please visit the following link to the product page:

For the SIS-SEL:

[Redacted]

To learn more about and apply for Pearson's Research Assistance Program (RAP), please follow this link

[Redacted]

Finally, because of test security concerns, permission is not granted for appending tests to theses, dissertations, or reports of any kind. You may not include any actual assessment test items, discussion of any actual test items or inclusion of the actual assessment product in the body or appendix of your dissertation or thesis. You are only permitted to describe the test, its function and how it is administered, and discuss the fact that you used the test, your analysis, summary statistics, and the results.

Regards,

[Redacted]

Management Analyst



**APPENDIX E: Permissions for Data Collection**

November 19, 2018

To The Liberty University Institutional Review Board:

As the administrator of [REDACTED] I give Brian Bain permission to conduct research pertaining to the [REDACTED] with [REDACTED] students during the 2018-2019 school year. He may gain written consent/assent from and survey students at [REDACTED] to collect data for this research.

Sincerely,

A black rectangular redaction box covering a signature.

Supervising Principal

A large black rectangular redaction box covering several lines of text at the bottom of the page.



[REDACTED]

December 1, 2018

To The Liberty University Institutional Review Board:

As the administrator of [REDACTED] I give Brian Bain permission to conduct research pertaining to the [REDACTED] with [REDACTED] Students in grades three through six during the 2018-2019 school year. He may gain written consent/assent from and survey students at [REDACTED] to collect data for this research.

Should you have any questions or need to speak with me further, please call me at [REDACTED]

Thank you,

[REDACTED]

*Administrator*

[REDACTED]