PROMOTING SOCIAL-EMOTIONAL COMPETENCY THROUGH QUALITY TEACHING PRACTICES: THE IMPACT OF CONSULTATION ON A MULTIDIMENSIONAL TREATMENT INTEGRITY MODEL OF THE *STRONG KIDS* PROGRAM

by

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This dissertation study investigated the impact of brief teacher consultation on teachers' implementation fidelity, quality of implementation, and student responsiveness during the *Strong Kids* social-emotional learning curriculum. Additional outcome measures included teachers' self-efficacy and teachers' perceptions of social validity of the *Strong Kids* program. Participants included six teachers, three of whom were randomly assigned to the treatment group and three of whom were randomly assigned to the control group. Teachers in the treatment group received brief performance feedback consultation for six out of the twelve *Strong Kids* lessons; whereas, teachers in the

control group did not receive consultation, but instead were given a frequently asked questions sheet that provided them with general information about the curriculum.

Results of the study indicated an increase in implementation fidelity for the teachers receiving performance feedback consultation and a decrease in implementation fidelity for the teachers who did not receive performance feedback. The data did not indicate any substantial effects for the consultation group teachers with respect to quality of implementation or student responsiveness. Overall, teachers in both the treatment and control groups had positive attitudes toward social-emotional learning and the curriculum. Both groups of teachers also reported similar negative attitudes regarding the curriculum. For example, both groups of teachers felt that the lessons took too long to implement within a given class period. Implications of this study for future research and practice are discussed.

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CHAPTER I

PROBLEM STATEMENT

Research indicates that up to twenty percent of children and adolescents suffer from an impairing emotional or behavioral problem. Many of these problems emerge at different points over the course of child and adolescent development (Kazdin, 2004). Fortunately, many of these problems are preventable through early intervention and prevention efforts (World Health Organization, 2000). In response to the increasing need for mental health preventive interventions in schools, the state of Illinois passed the Illinois Children's Mental Health Act in 2003. Since then, the state of New York and school districts across the country have promoted the use of universal school-based social and emotional prevention programming. These policy decisions have been instituted primarily based upon the yield of findings from the past twenty years of research in prevention science, child development, and education.

The adoption of the three-tiered model of prevention within the field of education has made a significant impact in schools' abilities to efficiently address children's academic, behavioral, and mental health problems (Merrell & Buchanan, 2006). The public health prevention science model incorporates a three-tiered approach for delivering a continuum of services to children at all levels of need. *Universal, or primary preventive interventions*, target an entire population that has not been identified based on individual risk. *Targeted, or secondary preventive interventions*, focus on population subgroups that have been identified as at-risk for developing a problem or disorder.

Tertiary preventive interventions, address the needs of high-risk individuals who exhibit detectable symptoms of a problem or disorder (Weissberg, Kumpfer, & Seligman, 2003). What makes the public health triangle a useful framework for schools is that it organizes interventions on a continuum; therefore, the level of intervention intensity is matched to the level of student need (Sugai, Horner, Dunlap, Hieneman, Lewis, & Nelson, 2000). For example, universal preventive interventions are less intensive and require fewer resources for implementation than targeted preventive interventions. Subsequently, tertiary interventions are the most intensive in terms of resources needed for implementation.

Throughout the past two decades, research in child development and prevention science has demonstrated that universal and selective prevention programs can substantially reduce rates of problem behavior, as well as promote resiliency, further reducing risk in child and adolescent populations (Greenberg, 2004). In addition, research has identified a number of empirically validated classroom curricula that have been shown to reduce behavioral problems and increase protective factors through the direct teaching of social and emotional skills (Durlak & Wells, 1997; Elias & Weissberg, 2000; Greenberg, Weissberg, O'Brien, Zins, Fredericks, Resnik, & Elias, 2003).

Despite the progress that has been made in the area of evidence-based mental health programming, much of the research has been conducted within an *efficacy*-based research paradigm, with very few studies taking a further step to measure the *effectiveness* of these programs in natural settings under "real-world" conditions.

Efficacy-based research trials focus on identifying efficacious treatments through the use of homogeneous, well-controlled settings and the elimination of potentially confounding variables (Glasgow, Vogt, & Boles, 1999). Although this approach is necessary to ensure a treatment is efficacious and to increase the internal validity of a treatment, it does not provide information related to how a treatment works when implemented in a variety of different contexts. Effectiveness studies, on the other hand, are executed in applied settings where the focus is on practical applications rather than on maintaining rigorous experimental control (Merrell & Buchanan, 2006). Since effectiveness studies are implemented in diverse settings with heterogeneous samples, the effect of an intervention may be confounded with contextual variables limiting a study's internal validity. However, because effectiveness studies are implemented in applied settings, these studies demonstrate high external validity or the ability to generalize the effects of the intervention across similar applied settings.

When conducting preventive intervention research, it is imperative one distinguishes between efficacy and effectiveness research and the implications that can be drawn from each. The RE-AIM Framework, a model derived from the fields of public health and disease prevention, provides a systematic and multifaceted approach for selecting interventions by considering not just the efficacy of an intervention, but other elements that can impact intervention effects in applied settings (Glasgow, McKay, Piette, & Reynolds, 2001; Glasgow, Lichenstein, & Marcus, 2003; Glasgow, 2003). The five dimensions incorporated in the RE-AIM framework are as follows: (a) *Reach*: The

reach of an intervention describes what proportion of the target population participated in the intervention; (b) *Efficacy*: The efficacy of an intervention is defined as an intervention's impact on a specified outcome criteria if the intervention was implemented as intended; (c) *Adoption*: Adoption refers to the target settings or organizations that may adopt a given intervention; (d) *Implementation*: Implementation refers to consistency and quality of delivery of the intervention while an intervention is being implemented in real-world settings; and (e) *Maintenance*: Maintenance refers to how well the intervention effects are maintained in individuals or organizations over time. By considering each of these dimensions, intervention researchers and practitioners can develop an understanding of how these dimensions impact intervention effects when implemented in real-world contexts. This understanding will potentially lead to the increased selection of effective and realistic interventions in applied contexts, particularly schools.

Because universal preventive interventions are intended for use with large numbers of people in diverse settings, understanding how a treatment operates in applied or naturalistic contexts is critical. Additionally, preventive interventions often are implemented with limited resources to maximize the reach of preventive services. Resource limitations can impede the ability for a treatment to be implemented as it was intended in a research context (Dane & Schneider, 1998). In order to continue to bridge the research-to-practice gap, it is imperative researchers not only assess the efficacy, but also the effectiveness of school-based universal mental health prevention programs.

In applied settings, measuring treatment integrity or fidelity is a central aspect of evaluating program effectiveness. The term *treatment integrity* or *treatment fidelity* refers to the degree to which an intervention is implemented as intended (Gresham, 1989). The monitoring of integrity provides data regarding the extent to which an intervention is being applied according to design, which can then be used to determine whether modifications are needed to improve effectiveness (Power, et al., 2005). Measuring treatment integrity in applied settings strengthens a researcher's ability to attribute findings to the intervention, as opposed to extraneous variables in the environment. In addition, with mental health-based preventive interventions being implemented in numerous schools and classrooms, measuring treatment integrity facilitates the replication and evaluation of these interventions across a variety of different settings.

Given the strong empirical relationship between treatment integrity and the effectiveness of preventive interventions, it is surprising that relatively few program evaluations adequately monitor treatment integrity (Fixen et al., 2005; Gresham & Gansle, 1993; Lane, Bocian, MacMillan, & Gresham, 2004; Power, Blom-Hoffman, Clarke, Riley-Tillman, Kelleher, & Manz, 2005). In addition, those evaluations that do take into consideration treatment integrity often view and monitor it as a unitary construct.

In evaluating intervention effectiveness, several researchers have advocated for the systematic examination of multiple dimensions of treatment integrity (Moncher & Prinz, 1991; Dusenbury, Brannigan, Falco, & Hansen, 2003). In their review of primary

and secondary prevention programs, Dane and Schneider (1998) presented a model for assessing treatment integrity that includes several components: (a) program adherence, (b) quality of delivery; (c) participant responsiveness; (d) exposure or dosage; and (e) program differentiation. These authors suggested that each of these components addresses either a quantity or content dimension, or a quality or process dimension of treatment integrity. The *quantity* dimension refers to how much of the intervention is implemented; whereas, the *quality* dimension refers to how well the intervention is delivered. Defining treatment integrity in terms of both quantity and quality of implementation provides researchers and practitioners with a more accurate understanding of the independent variable and the mechanisms by which it impacts the targeted outcomes. Having a more accurate and comprehensive understanding of the complexities of a treatment under varying conditions aids in the replication and scaling up of treatment implementation across a variety of contexts (Domitrovich & Greenberg, 2000; Noell, Gresham, & Gansle, 2002; Elias, Zins, Graczyk, & Weissberg, 2003).

With the increasing utilization of evidence-based prevention and intervention programming in school settings, it is critical to understand the complexities of program implementation under real-world conditions, as well as feasible methods for maintaining high levels of treatment implementation over time (Han & Weiss, 2005). Teachers are asked to implement social and emotional preventive interventions in classroom settings in order to maximize resources and integrate positive social and emotional development into the general classroom curricula. However, few teachers are provided training specifically

related to the delivery of social and emotional learning instruction. Additionally, the multifaceted nature of classroom environments suggests that there may be various components of treatment integrity impacting the effectiveness of these preventive interventions; therefore, multiple dimensions of treatment integrity should be evaluated.

Several research studies within the field of applied behavior analysis suggest that consultation involving performance feedback technology increases teacher's treatment integrity (Noell, et al., 2000). Performance feedback technology involves directly monitoring a behavior and providing feedback to the individual regarding that behavior to facilitate behavior change. However, the majority of the research studies have only measured the impact of these components on program adherence, without considering additional dimensions of treatment integrity or other variables impacting teachers' treatment fidelity, such as self-efficacy and program acceptability. Moreover, these research studies have not evaluated teacher implementation of packaged universal prevention programs. To date, no research study has been identified that measured the impact of teacher consultation on multiple dimensions of treatment integrity during the implementation of a school-based preventive mental health intervention.

To expand upon current research in the field of school-based mental health prevention, the present study addressed several critical factors related to ensuring a high level of program implementation in natural settings. The current study assessed the impact of performance feedback on *multiple* dimensions of teacher implementation of the *Strong Kids* social-emotional learning program. Furthermore, the present study evaluated

the impact of consultation on teachers' perceptions of their self-efficacy and their perceptions of the social validity of the *Strong Kids* program.

The following research questions were addressed in this investigation: (1) What is the impact of teacher consultation using performance feedback on teachers' (a) implementation adherence of the Strong Kids program, (b) quality of implementation of the Strong Kids program, (c) perceptions of self-efficacy, and (d) engagement of students during the Strong Kids program and (2) Do teachers in the treatment condition (teacher consultation with performance feedback) view the Strong Kids program as more socially valid than the teachers in the control condition?

CHAPTER II

LITERATURE REVIEW

The purpose of this section is to provide a review of the current literature relevant to this study. This section provides a review of three major components related to the present study: (a) the social-emotional learning research, (b) treatment integrity, and (c) factors impacting treatment integrity. The following literature review is not intended to be exhaustive, but sufficient to provide readers with an understanding of the conceptual framework upon which the study is based. The literature included in this brief review was obtained through searches of multiple electronic search engines, including Psych Info, Article First, and ERIC. Key words for the searches included but were not limited to "treatment fidelity," "performance feedback," and "social-emotional learning." Date constraints limited the present literature review to include research published through December 2007.

School-wide Prevention of Emotional and Behavioral Problems

Mental Health Needs of Youth

A large percentage of youth are in need of emotional and behavioral support. According to the New Freedom Commission on Mental Health (2003), one in five children have a diagnosable mental disorder. In addition, one in ten youth has serious emotional or behavioral problems that are severe enough to impair their functioning at home, school, or in the community. Many children and adolescents meet the diagnostic

criteria for two or more psychological disorders. For example, among adolescents with a diagnosis of substance abuse, more than seventy percent meet criteria for other disorders (Kazdin & Weisz, 2004). Unfortunately, due to limited access to health care 75 to 80% of children in need of mental health services do not receive them (Kataoka, Zhang, & Wells, 2002).

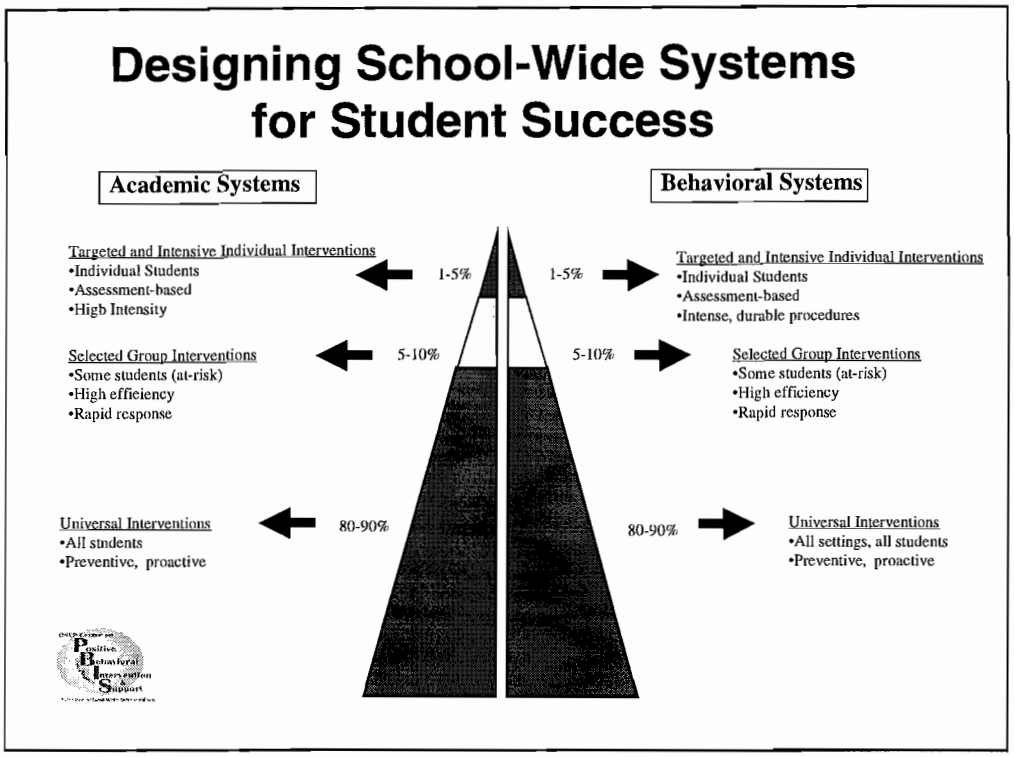
During the onset of adolescence, there is a documented increase in the number of at-risk behaviors among many youths, including substance use, truancy, and risky sexual behavior (Kazdin & Weisz, 2004). Additionally, there is a documented increase in the prevalence of depression and suicidal behavior (Lewinsohn, Clarke, Seeley, & Rohde, 1994). These behaviors increase the likelihood of negative psychological, social, and health outcomes, and warrant the need for school-based interventions aimed at decreasing problem behaviors and explicitly teaching students' positive social and emotional skills.

A Public Health Service Delivery Model

From an epidemiological perspective, the school context is an optimal environment for instituting prevention and early intervention efforts given the large number of children available to receive services. Students enter school with a broad range of skills and deficits. In order for schools to successfully and efficiently meet the academic and mental health needs of *all* students, prevention and intervention efforts must be implemented along a continuum. The public health model of disease prevention, often show in a "triangle" form (figure 1) represents a useful framework for schools to organize academic and social and emotional interventions along a continuum, where the

level of intervention intensity is matched to the level of student need (Greenberg, Domitrovich, & Bumbarger, 2001).

Figure 1. Designing school-wide systems for student success



In an optimal school setting, universal preventive interventions applied to all students would address the needs of 80-90% of the student population. Selected interventions applied to students at-risk for future problems would address the needs of 5-10% of the student population. Indicated intensive interventions applied to students in need of individualized support would address the needs of 1-5% of the student population, those with the most intense needs (PBIS, 2006).

According to the public health model of prevention and intervention, the manner in which services are delivered is both resource-efficient and effective in terms of reducing the numbers of students in need of intensive, individualized support. Considering schools' limited resources, universal preventive interventions can be the most powerful in terms of addressing the needs of a large number of students with few resources needed for implementation. With the use of evidence-based tier-one universal prevention efforts, schools can produce a positive public health impact by reducing the number of children at risk for future problems.

Universal Social-Emotional Learning Programs

Schools and classrooms are contexts in which learning takes place through the complex social interactions between students and teachers. Students who are taught how to maintain positive relationships with their peers and teachers tend to be more successful in school environments, whereas, students who struggle to maintain positive relationships in school are more likely to exhibit problem behavior and emotional incompetence (Zins, Bloodworth, Weissberg, & Walberg, 2004). Research indicates that students who exhibit problem behavior and emotional incompetence in school are at greater risk for experiencing alienation, aggression, and academic failure (Zins, Bloodworth, Weissberg, & Walberg, 2004). Furthermore, both Durlak and Wells (1997) and Durlak and Weissberg's (2007) meta-analyses demonstrate a convergence of research indicating that the systematic integration of interventions targeting social and emotional skills in school settings results in numerous socially-valid outcomes in relation to student academic

achievement, the development of prosocial behavior, and emotional development. Given the link between social and emotional competence and school success and the number of students entering school at risk for social and emotional problems, educators have begun integrating social and emotional learning (SEL) prevention programs into the general education curriculum.

SEL is a comprehensive framework, which includes both systematic social and emotional instruction for all levels of student need and the establishment of environments that support, reinforce, and extend instruction beyond the classroom, promoting generalization of skills across contexts (Payton, et al., 2000). Universal SEL programming incorporates the teaching of social competencies that simultaneously reduce risk and promote wellness, resulting in the prevention of problem behaviors and promotion of student engagement in learning (Collaborative for Academic and Social-Emotional Learning, 2006).

Universal preventive SEL instruction provides students with the skills to recognize and manage their emotions and behavior, develop caring and concern for others, make responsible decisions, establish positive relationships, and effectively handle challenging situations (Elias, et al., 1997). Integrating systematic social and emotional instruction within a positive and nurturing ecological context provides students with a foundation from which they can successfully develop social competence and increase their academic success despite environmental adversity.

Key Features Defining Quality SEL Programs

Since 1997, the Collaborative for Academic, Social, and Emotional Learning (CASEL) has been working towards developing a set of standards for comprehensive school-based SEL programming. The following features have been identified by CASEL as key components of quality comprehensive SEL programming. Universal SEL programs should address multiple domains, including individual skill development and the creation of positive learning environments. Systematic and sequential SEL programming should occur from preschool through high school, with a focus on early intervention and prevention. Culturally and developmentally appropriate emotional and behavioral supports are a critical element of quality SEL preventive programming. Lastly, universal SEL initiatives must include ongoing monitoring and evaluation of implementation for continuous improvement (Lopez & Salovey, 2004; Greenberg, Weissberg, O'Brien, et al., 2003; Greenberg, et al., 2000).

Peyton et al. (2000) presented criteria based on theory, research and best practice that identified key program features of quality universal SEL programs. The program features described in their article emphasized curriculum design, as well as educator preparation and support, and program evaluation. Regarding curriculum design, SEL programs should include instruction in and opportunities to practice and apply an integrated set of cognitive, affective, and behavioral skills. The skills addressed in SEL curricula should be based on a clearly articulated conceptual framework or theory guided by research. All universal SEL curricula should include structured manuals and

standardized measures to support valid and reliable program implementation. Additionally, quality SEL programs should follow a consistent lesson plan format for further ease of implementation.

In terms of educator preparation and support, Peyton et al.'s (2000) recommendations for best practice included formal training to enable teachers to comfortably implement the program in their classrooms and schools. The authors further suggested that quality SEL programs should include *ongoing teacher assistance* to aid teachers in successfully implementing the programs and to enhance their ability to resolve any implementation issues that may arise. Program evaluation was also determined to be a key component to quality SEL programs. According to the authors, a key feature of program evaluation included the use of implementation data to assess whether a program was being implemented as intended. In their comprehensive review of the implementation research literature, Fixen, Naoom, Blase, Friedman, & Wallace (2005) concluded that program implementation appeared most successful when frequent training, coaching, and performance assessments were incorporated and utilized. These relevant findings held true across a variety of domains, including education, mental health, and child welfare.

Strong Kids Curriculum: An Exemplar of School-Based SEL

The *Strong Kids* curriculum is a universal SEL program developed by Merrell and colleagues as part of the Oregon Resiliency Project at the University of Oregon (Merrell, et al., 2007). The program for elementary-age students, who are the focus of this study, includes 12 lessons designed specifically for teaching social and emotional skills and promoting resiliency for children in grades K-12. Each lesson incorporates elements of behavioral, affective, and cognitive principles to aid in both teaching and mastering key concepts and skills. The curriculum includes different versions tailored to the developmental levels of each age group: *Strong Start* (Merrell, Parisi, & Whitcomb, 2007a) for grades K-2, *Strong Kids* (Merrell, Carrizales, Feuerborn, Gueldner, & Tran, 2007b) for grades 3-5, *Strong Kids* (Merrell, Carrizales, Feuerborn, Gueldner, & Tran, 2007c) for grades 6-8, and *Strong Teens* (Merrell, Carrizales, Feuerborn, Gueldner, & Tran, 2007d) for grades 9-12. The curriculum design integrates research-based teaching practices illustrated by the sequencing, pacing, and structure of each lesson. In addition, the program includes a scripted manual for ease of implementation and evaluation tools designed to measure students' social and emotional outcomes related to the goals of the *Strong Kids* program.

Several research studies conducted using the *Strong Kids* curriculum have shown positive results in terms of significant increases in students' knowledge of SEL concepts and skills (e.g., Castro-Olivo, 2006; Gueldner, 2006; Merrell, Juskelis, Tran, & Buchanan, in press). Additionally, research has also demonstrated significant reductions

in internalizing problem symptoms for students exposed to the curriculum (Feuerborn, 2004). A number of studies have also measured treatment fidelity in terms of teacher adherence to program components (Castro-Olivo, 2006; Gueldner, 2006; Tran, 2007) and one study to date has measured quality of teacher delivery of the *Strong Kids* program (Tran, 2007).

The Importance of Measuring Treatment Integrity

Treatment Integrity: A Critical Component of Process Evaluations

> "A process evaluation involves gathering data to assess the delivery of programs...Accordingly, before measuring outcomes, a comprehensive evaluation should specify the program components that are supposed to be implemented and then identify which ones are actually delivered" (Domitrovich & Greenberg, 2000, p. 195).

In the last several years, policy makers have begun strongly advocating for the use of evidence-based practices in school settings. Evidence-based practices refer to interventions that, through empirical research, have been shown to improve outcomes (Beinecke, 2006). Because evidence-based interventions have been documented to be efficacious, schools often adopt these programs assuming they will result in positive outcomes for students. However, the manner in which a program is implemented is a critical factor influencing intervention outcomes, particularly in applied settings (Mortenson & Witt, 1998; Noell, Witt, Slider, Cornell, Gatti, & Williams, 2005). To illustrate this point, Gresham and Gansle's (1993) meta-analysis of school-based behavioral interventions found that regardless of how treatment outcomes were

measured, the level of treatment outcome was positively associated with the level of treatment integrity. Therefore, the more teachers adhered to the treatment protocol and implemented the treatment as designed, the greater the amount of student behavior change.

The term *treatment integrity* or *treatment fidelity* refers to the degree to which an intervention is implemented as intended (Gresham, 1989). Attaining treatment integrity is a methodological issue that has significant implications for internal and external validity and the statistical power of implementation studies. The interpretation of treatment outcomes partly depends on the strength of the evidence for treatment integrity (Moncher & Prinz, 1991). For example, if significant results are found, but fidelity is not measured, the outcome could be due to an effective treatment or unknown factors added to the treatment. The same goes for a study where non-significant results are found. The internal validity of a study is compromised if there is no way of knowing the functional relation between the independent variable and the dependent variable. The issue of treatment fidelity pertains to external validity, particularly when referring to treatment replication in applied settings. Program replication is compromised when treatments are inadequately defined and shifts in implementation occur without documentation. In schools, where teachers and staff often implement preventive interventions, shifts in program delivery often occur given the broad range of teachers' skill levels. When interventions are modified in unknown ways, it becomes difficult to accurately evaluate the utility of the originally designed intervention (Lane, et al., 2004).

Finally, without clear documentation of program delivery, it is difficult to determine whether a program's results were due to the actual program components or other confounding variables, such implementer effects. (Power, et al., 2005).

A Multidimensional Treatment Integrity Model

Given the wealth of evidence linking treatment integrity to program outcomes, the paucity of program evaluations that monitor treatment integrity is astounding (Gresham & Gansle, 1993; Lane, et al., 2004; Power, et al., 2005; Gottfredson & Gottfredson, 2002). Furthermore, those evaluations that do consider treatment integrity tend to only measure one aspect of fidelity, such as program adherence. In applied settings, implementation often varies due to resource limitations, differing skill levels of program implementers, and the multifaceted quality of natural environments (Dane & Schneider, 1998). Due to the variability of implementation in applied settings, researchers have begun to consider multiple dimensions of treatment integrity.

Dane and Schneider (1998) presented a multidimensional treatment integrity model incorporating several components of treatment integrity: (a) program adherence, (b) quality of delivery, (c) participant responsiveness, (d) exposure or dosage, and (e) program differentiation. These authors suggested that each of these components addresses either a content or quantity dimension, or a process or quality dimension of treatment integrity. The quantity dimension refers to how much of the intervention is implemented; whereas, the quality dimension refers to how well the intervention is delivered. Defining treatment integrity in terms of both quantity and quality of

implementation provides researchers and practitioners with a more accurate depiction of the independent variable and the mechanisms by which it impacts the dependent variable.

Figure 2. An index of multiple dimensions of treatment integrity. (Sources: Power, et al., 2005; Dane & Schneider, 1998; Gresham, et al., 1993)

Dimensions of Integrity	
Quantity/Content: How much of the intervention was implemented?	**Quality/Process:** How well was the intervention implemented?
(a) *Program Adherence*- the extent to which specific program objectives are implemented	(a) *Quality of implementation*- the quality of the interventionist's delivery of the program
(b) *Exposure or dosage*- the number, length, or frequency of sessions implemented	(b) *Participant compliance*- the level of participants' engagement in the intervention
(c) *Program differentiation*- the extent to which program components are implemented and extraneous components are excluded during implementation	

Most researchers simply monitor quantity aspects of treatment integrity, such as adherence or dosage; however, research has shown that program effectiveness is a function of the quality of implementation (Gottfredson & Gottfredson, 2002). A study by Silvia and Thorne 1997 (as cited in Gottfredson & Gottfredson, 2002) found that the level of implementation of school-based preventive interventions was remarkably variable, reporting that both the amount and quality of program delivery varied among classrooms within and between schools. In addition, teachers reported that they had received inadequate training and did not feel comfortable teaching the material. Another example of the variation in implementation quality is a study conducted by Tran (2007).

In this study, teachers' quality of program delivery varied dramatically, even if they fully implemented all of the program components. Direct observations of teacher and student behavior suggested that teachers could adhere to the program content, while maintaining a low level of implementation quality. With research suggesting that program effectiveness is a function of implementation quality, it is critical that researchers monitor both quantity and quality aspects of fidelity. According to Domitrovich and Greenberg, "Greater attention must be given to both the measurement of dosage (quantity) and the quality and fidelity of intervention delivery, especially as empirically validated prevention programs begin to 'go to scale' (Domitrovich & Greenberg, 2000, p.194).

Factors Impacting Treatment Integrity

With an abundance of literature linking SEL and academic achievement (Zins, Bloodworth, Weissberg, & Walberg, 2004; Zins, Walberg, & Weissberg, 2004; Elias, 2003), schools are beginning to incorporate universal SEL prevention programming to address students' social and emotional competency and emotional resiliency. Due to limited resources within schools, teachers often take on the role of implementers of these programs within the classroom setting (Han & Weiss, 2005). In many cases, schools provide teachers with program manuals and expect them to implement the programs with adequate amounts of fidelity, yet affording them insufficient training and support. The following sections address three key factors impacting teachers' treatment integrity of universal SEL prevention programs: (a) consultation as a means of providing teachers

with SEL implementation support, (b) teachers' self-efficacy and its relation to treatment integrity of SEL programs, and (c) teachers perceptions of social validity of SEL programs.

Consultation and Treatment Integrity within Universal SEL Programming

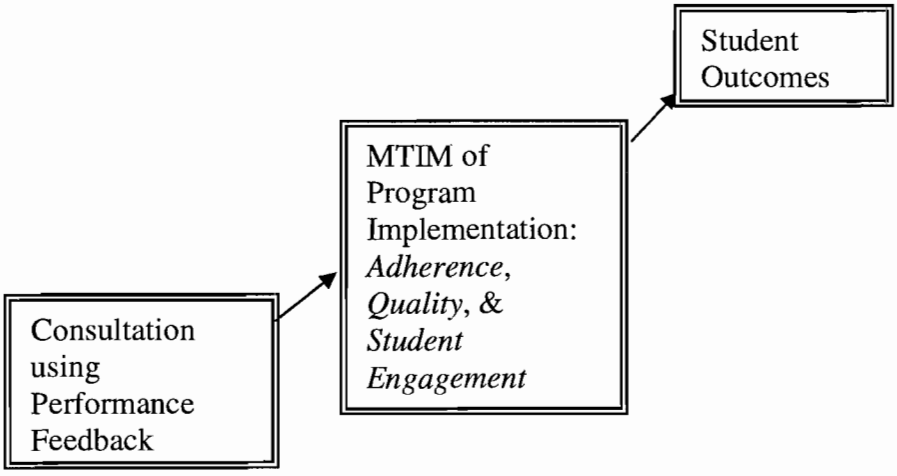
Throughout the educational and behavioral literature, consultation has been shown to be an effective method for providing implementation support for teachers (Bramlett & Murphy, 1998; Gersten, Chard, & Baker, 2000; Idol, Paolucci-Whitcomb, & Nevin, 1995; Kratochwill & Pittman, 2002; Maag, 1992). School-based consultation is an indirect service-delivery model where a consultant (e.g., school psychologist) provides services to a consultee (e.g., teacher) in order to indirectly impact student outcomes (Bramlett & Murphy, 1998). Consultation can be an effective and efficient model of service delivery, particularly within a prevention framework, as the main goal is to build the skills of teachers so they can continuously improve student outcomes. Research studies have shown that providing teachers with ongoing consultation services following training increases their degree of program implementation (Noell, et al., 2000).

Several studies where consultation has demonstrated significant effects for increasing treatment integrity have been within the applied behavior analysis literature and have incorporated performance feedback (Jones, Wickstrom, & Friman, 1997; Noell, et al., 1997; Mortenson & Witt, 1998; Noell & Witt, 1999; Noell, et al., 2000). According to Noell et al. (2005), performance feedback "consists of monitoring a behavior that is the focus of concern, and providing feedback to the individual regarding that behavior"

(Noell, et al., 2005 p. 88). The performance feedback technology has been extensively researched in institutional settings as a method of initiating and maintaining adult behavior change (Alvero, Bucklin, & Austin, 2001; Balcazar, Hopkins, & Suarez, 1985). Consultation incorporating performance feedback elements, such as graphic displays of performance and goal setting, has been used with teachers to increase treatment integrity, subsequently leading to improved student outcomes (Mortenson & Witt, 1998). In addition, the efficiency and practicality of performance feedback compared to other models of consultation has been documented in terms of the number of feedback sessions needed for positive effects. In their study, Mortenson and Witt (1998) found that weekly performance feedback sessions resulted in increases in teachers' treatment integrity, as well as student performance. This efficient and effective method of consultation could prove an invaluable resource for teachers implementing a classroom-based SEL curriculum.

The present study expands upon the existing consultation literature by assessing whether performance feedback impacts three dimensions of treatment integrity: (a) program adherence, (b) quality of program delivery, and (c) student engagement in the program. To date, no study has analyzed the impact of consultation incorporating performance feedback on multiple dimensions of treatment integrity. Furthermore, few studies have tested the impact of an efficient consultation model for teachers implementing universal SEL programs within the general education population. Figure 3 provides the conceptual model for the present study.

Figure 3. Conceptual model for linking consultation to student outcomes through a multidimensional treatment integrity model (MTIM) of program delivery.



The Relationship Between Consultation and Teachers' Self-efficacy

In addition to addressing the relationship between consultation and teachers' treatment integrity of the *Strong Kids* program, the present study also proposes to measure teachers' self-efficacy within the context of general education SEL instruction. Tschannen-Moran and Woolfolk Hoy, (2001) defined the term teacher self-efficacy as a teacher's "judgment of his or her capabilities to bring about desired outcomes of student engagement and learning." (p. 783). Early research on teacher self-efficacy was influenced predominantly by locus of control theory and by Bandura's social learning theory. Bandura (1994) discussed teacher self-efficacy in terms of triadic reciprocality, in which teacher's efficacy beliefs were a function of the dynamic relationship between

environment, behavior, and personal factors. Tschannen-Moran and colleagues (1998) further defined Bandura's conceptualization of teacher self-efficacy as a teacher's analysis of the teaching task and their assessment of their personal teaching skill or competence in relation to the components of the teaching task.

Bandura (1997) proposed four general sources for enhancing teacher self-efficacy: (a) mastery experiences, (b) verbal persuasion, (c) vicarious experiences, and (d) physiological arousal. Of these four sources, mastery experiences are considered the most powerful influences on self-efficacy, as they provide direct feedback regarding a teacher's capabilities (Henson, 2002). Considering these general sources of efficacy enhancement, one can presume that through teacher training and consultation, teacher self-efficacy can likely be improved. Coladarci and Breton (1997) conducted a correlational study assessing the relation between resource teachers' self-efficacy and the frequency and utility of instructional support that the teachers reported receiving. This study found that teachers who felt their supervision was useful tended to report a higher sense of teacher efficacy than those who reported less-positive views of the supervision they received (Coladarci & Breton, 1997). Given the limitations of that study, the authors were not able to conclude further information on the relation between teacher self-efficacy and instructional support. The present study expands upon Coladarci and Breton's study and current self-efficacy research by conducting a controlled experiment on the impact of consultation on teacher self-efficacy within the instructional context of a universal SEL intervention.

Evaluating Teachers' Acceptability of the Strong Kids Program and the Consultation Process

A final construct this study aimed to measure was teachers' acceptability of both the *Strong Kids* program and the consultation model employed to enhance treatment integrity. Teachers' beliefs about the feasibility and acceptability of an intervention or consultation process directly influence the extent to which procedures are implemented as intended or whether a teacher engages in the consultation process. Wolf (1978) defined teachers' beliefs about a treatment's feasibility and acceptability as social validity. In treatment effectiveness studies, social validity or treatment acceptability is seen as a critical element to assess. Additionally, Rounsaville, Carroll, and Onken 2001 suggest conducting intervention development studies, it is important to also assess the intervention's social validity, particularly if it is designed for implementation in an applied or naturalistic setting. Therefore, the present study aimed to assess teachers' acceptability of both the *Strong Kids* program and the consultation process.

CHAPTER III

METHOD

Design

A stage Ib *feasibility* experimental design (Rounsaville, Carroll, & Onken, 2001) was employed for this study. According to the Stage Model of Behavioral Therapies research, three divisions or stages make up a rigorous scientific process that guides the development of interventions from efficacy trials through effectiveness studies (Rounsaville, et al.). Stage Ib research consists of modifying a new intervention based on observations and findings from previous stage I pilot tests, and further evaluating the intervention with the modifications. Expanding upon previous *Strong Kids* research employing a brief consultation model (e.g. Gueldner, 2006), the present study utilized teacher consultation during the *Strong Kids* program and measured its impact on teacher implementation, student engagement, teacher self-efficacy, and teacher acceptability of both the *Strong Kids* program and the consultation process.

The current study employed an experimental design with random assignment to conditions. Teachers were randomly assigned to one of two conditions: consultation vs. no consultation. There were a total of six dependent variables: (a) teachers' *Strong Kids* implementation adherence, (b) teachers' quality of *Strong Kids* implementation, (c) teachers' perceptions of self-efficacy, (d) student engagement during *Strong Kids*, (e) teachers' perceptions of social validity of *Strong Kids*, and (f) teachers' perceptions of

social validity of the consultation process. Teachers were assessed at pretest and twelve weeks later at posttest (see figure 4).

Figure 4. Research Design

Tx	R	O	X	O
Ctl	R	O		O

Participants and Setting

Participants were selected from the existing 6th grade at Cascade Middle School in the Bethel Public School District, located in Eugene, Oregon. Eugene is located in the Willamette Valley in western Oregon and has a population of approximately 140,000. The six 6th grade teachers who participated in the study varied in terms of their gender, number of years of teaching experience, as well as their highest degree earned. Out of the six teachers, two were males, three had two years of teaching experience, three had 18 or more years of teaching experience, three had bachelors degrees and three had masters degrees. All of the six teachers were Caucasian.

Cascade Middle School adopted the *Strong Kids* program as their universal enrichment intervention for all 6th grade students and each lesson was taught during the students' 50-minute first period Language Arts class. Teachers were selected based on their willingness to participate in this study. Teachers were randomly assigned to

treatment or control groups using a matched assignment procedure based on three variables: (a) their pre-test efficacy scores, (b) their number of years of teaching experience, and (c) gender.

The consultant was the student researcher, a school psychology doctoral candidate whose research focus is school-based mental health and behavioral and emotional supports for students. The consultant had three years of experience working with teachers to support students' social and emotional well-being both in general and special education settings. In addition, the consultant had extensive experience with the *Strong Kids* curriculum including the conceptual framework upon which it was developed.

Independent Variable

Six teachers were randomly assigned to either the treatment group (Consultation) or the control condition (No Consultation). For 12 weeks, teachers in both the treatment and control conditions implemented the *Strong Kids* curriculum during the first period language arts class on Monday mornings. Both the treatment and control group teachers received the equivalent of a full-day training prior to implementing *Strong Kids*.

No consultation. Teachers in the control group received a standard "Frequently Asked Questions" handout prior to implementing the *Strong Kids* program. The handout provided the teachers with general information regarding implementation of the curriculum, as well as the contact information for the student researcher in case of an emergency.

Consultation. Teachers assigned to the treatment group received periodic consultation in which the student researcher delivered performance feedback through the presentation of graphed adherence, quality, and student responsiveness data. The consultation session included the following components in this order: (a) asking the teacher for his/her general perceptions of their instruction of the lesson; (b) providing the teacher with three specific praise statements related to the teacher's behavior during the instruction of the lesson; (c) presenting a graphic display of the teacher's lesson adherence, quality of lesson delivery, and the overall engagement of the students during the lesson; (d) discussing with the teacher any barriers that prevented him/her from implementing the lesson with a higher degree of integrity or quality; and (e) collaboratively devising a plan for increasing the level of lesson adherence, quality of lesson delivery, or student engagement. A proactive plan was then developed based on the observational data of teacher instruction and included various activities, such as reviewing the following *Strong Kids* lesson and instructing the teacher on the key components to cover with the class, or providing the teacher with suggestions for engaging the students (i.e., increasing the number of opportunities to respond throughout the lesson). The duration of each consultation session was 15 minutes. During weeks when no consultation occurred, the student researcher contacted the teacher once via electronic mail to provide ongoing implementation support.

Dependent Variables and Measures

There were five dependent variables analyzed in this study: (a) the social validity of the *Strong Kids* program; (b) teacher perceptions of self-efficacy; and (c) three measures of teachers' treatment fidelity of the *Strong Kids* program, teacher's lesson adherence, teacher's quality of implementation, and student engagement.

Social validity measures. Teacher's attitudes toward the *Strong Kids* program were measured through the *Strong Kids Social Validity Scale*, an experimental 32-item questionnaire. This brief questionnaire is based on Wolf's (1978) principles for assessing social validity. Teachers answered questions across five domains: (a) the alignment of goals between the teachers and the curriculum, (b) the acceptability of the procedures used to implement the curriculum, (c) teachers' satisfaction with the results of the curriculum, (d) the feasibility of implementing the program, the importance of implementing the program and the teachers' confidence in implementing the program, and (e) open-ended questions regarding teachers' general opinions about the program including their likes and dislikes. The questions were worded using a 5-point Likert-type scale. For example, when asked the question, " It is important to implement *Strong Kids?*," the teacher responded in one of five ways: (a) strongly disagree, (b) disagree, (c) neutral, (d) agree, and (e) strongly agree. For the open-ended questions, teachers were asked to provide a written response.

Post-test surveys were conducted with teachers in both the treatment and control conditions and consisted of open-ended questions regarding teachers' beliefs about SEL, teachers' efficacy with regard to teaching SEL concepts, teachers' overall perceptions of the *Strong Kids* program, and for teachers in the treatment group, their general perceptions of the consultation process.

Treatment integrity measures. Treatment integrity of teachers in both the treatment and control groups were measured to determine whether consultation impacts the level of teachers' adherence to the *Strong Kids* lessons, the quality of their instruction during the delivery of the lessons, and the students' engagement during the lessons. The following dimensions of treatment integrity were measured: lesson adherence, quality of instruction, and student engagement. Treatment integrity was measured for six of the twelve *Strong Kids* lessons (lessons 2, 3, 5, 7, 8, 10) and data were collected through direct observations conducted by trained graduate students from the University of Oregon. Trained observers collected data throughout the entire duration of a *Strong Kids* lesson (about 45-50 minutes) and the observers were blind to the condition of the classroom (consultation or no consultation). Adherence data were collected using a checklist containing key components for each lesson (see Appendix D). Data collectors endorsed each observed component by placing a check in the box next to the component. Quality of implementation and student engagement data were collected through direct observation using a Likert-type rating scale and items measuring each of these constructs were included in an overall treatment integrity form. Quality of implementation data

included items such as "teacher-provided positive feedback" and "number of opportunities for students to respond and engage in the material". The response categories for quality of implementation measure were as follows: 1 = None or Almost None, 2 = Some, and 3 = Almost All or All. Student engagement items consisted of student behaviors, such as "student participation" and "on-task behavior" and were also rated using a 3-point rating scale. The response categories for the student engagement measure were as follows: 1 = None or Almost None, 2 = Some, and 3 = Almost All or All.

The teacher efficacy measure used for this study was the *Teacher Sense of Efficacy Scale* (Tschannen-Moran & Woolfolk Hoy, 2001). This measure is a 24-item brief questionnaire that is purported to measure three constructs of teacher efficacy: (a) efficacy in student engagement, (b) efficacy in instructional practices, and (b) efficacy in classroom management. The authors developed the questionnaire by enhancing an unpublished teacher efficacy instrument developed by Bandura (1977, 1994). The items included in the measure are based on the authors' theory that teacher efficacy is "a joint, simultaneous function of a teacher's analysis of the teaching task and his or her assessment of his or her personal teaching competence or skill" (Henson, 2002, p. 140). Results from confirmatory factor analyses indicate that the measure has strong reliability coefficients of .91, .90, and .87 for the observed scores. Additionally, 58.47% of the association between the three factors was explained (Henson, 2002).

Training of Direct Observation Data Collectors

The student researcher trained the student observers in data collection procedures. Data collection training was conducted using in vivo examples in which student observers watched the student researcher implement *Strong Kids* lessons and recorded the researcher's program adherence. The lead researcher and student observers discussed individual occurrences of behavior and whether or not they should have been recorded on the implementation protocol. The student observers then independently scored examples, without any assistance from the lead researcher. The training data was then analyzed using inter-observer agreement to estimate the extent to which each student observer consistent with the lead researcher. Training continued until inter-observer agreement reached a minimum of 85% for each student data collector as determined by total percent agreement.

Inter-Observer Reliability of Treatment Integrity Measure

Inter-observer reliability for the treatment integrity measure was assessed for two of the six direct observation sessions (33%) in which treatment integrity data was collected through direct classroom observation for each teacher. Both the student researcher and graduate students trained in the *Strong Kids* program served as inter-observer reliability data collectors. For each of the two lessons, inter-observer reliability was calculated as the total percent agreement by dividing the number of agreements (where both student observers record the same components), by the number of agreements plus disagreements and multiplying by 100. The median inter-observer

agreement between data collectors for all components of fidelity combined (component, quality, and student responsiveness) across treatment and control conditions was 88%.

Scoring Procedures for Dependent Variables

For the *Strong Kids Social Validity Scale,* teacher responses were tabulated for each condition and reviewed for content patterns. Teacher responses on the *Teacher Sense of Efficacy Scale* were summed and means were calculated. For the post-test surveys, teacher responses were compiled and grouped according to themes, using a typological methodology derived from qualitative analysis procedures (Hatch, 2002).

Procedures

Recruitment. The student researcher recruited teacher participants by initially contacting district Positive Behavior Support (PBS) personnel within the Eugene/Springfield area. Once initial contact was made with the PBS coordinator for the Bethel School District, the student researcher received a contact within Cascade Middle School and subsequently met with the co-principal and counselor. After learning about the *Strong Kids* program and the research study, the Cascade Middle School team adopted the *Strong Kids* program for the entire 6th grade and agreed to participate in the research study. Once Cascade Middle School agreed to participate in the study, the student researcher sent each teacher a recruitment letter via electronic mail (See Appendix L).

Consent procedures. Active teacher consent for participation was obtained. Each teacher who agreed to participate in the study was given a teacher consent letter to sign and return to the student researcher.

Training of teachers. A half-day training session occurred for all teachers participating in the study. Training consisted of a conceptual overview of the *Strong Kids* program and an introduction to the curriculum. Key features of the curriculum and lesson format were discussed. Additionally, teachers had the opportunity to observe examples and non-examples of lesson implementation, discuss their observations, and then role-play different lesson components. Sufficient time was allocated for question and answer throughout the training.

Control group (no consultation). Teachers received a "frequently asked questions" handout with the student researcher's contact information prior to implementing lesson one of the *Strong Kids* program (see Appendix C). Teachers were asked not to contact the student researcher, unless in an emergency situation. Each teacher implemented one lesson per week.

Treatment group (consultation with performance feedback). As stated previously, teachers randomly assigned to the treatment group received individual consultation with the student researcher. Performance feedback occurred for 50% (6 out of 12) of total lessons implemented. Previous research has assessed varying rates of performance feedback, from daily or 100% of sessions (Witt, et al. 1997) to weekly sessions (Mortenson & Witt, 1998). Based on Mortenson & Witt's study, where weekly

performance feedback resulted in increases in teacher fidelity and student outcomes, the present study's 50% rate of performance feedback was considered reasonable, particularly when accounting for the semi-scripted format of the curriculum lessons. Performance feedback sessions were distributed among the first few lessons with subsequent sessions tapering off toward the latter part of the curriculum. On the Wednesday following the implementation of lessons 2, 3, 5, 7, 8, and 10, the student researcher met with each teacher in the treatment group for 15 minutes during their preparation time to deliver performance feedback. During implementation weeks when no consultation occurred (lessons 1, 4, 6, 9, 11, and 12), the student researcher contacted the teacher via electronic mail or phone to provide ongoing implementation support by asking teachers about issues that arose during lesson implementation and providing possible suggestions for ameliorating barriers or problems related to implementation.

Integrity of performance feedback sessions. A trained student data collector observed each performance feedback session. The trained observer used a check-list (see Appendix P) to observe whether or not the student researcher implemented each component of the consultation session with fidelity. Inter-observer agreement checks were conducted for two out of the six (33%) consultation sessions. The inter-observer agreement was 100% for all consultation sessions.

CHAPTER IV

RESULTS

This chapter includes a description of the analyses used to evaluate the data for this study and the results for the analyses. Results are reported in order of research question proposed.

Data Analysis

The present study was designed to answer the following questions: (a) What is the impact of teacher consultation using performance feedback on teachers' implementation adherence of the *Strong Kids* program? (b) What is the impact of teacher consultation using performance feedback on teachers' quality of implementation of the *Strong Kids* program? (c) What is the impact of performance feedback on student engagement during the *Strong Kids* program? (d) What is the impact of teacher consultation using performance feedback on teachers' perceptions of self-efficacy? (e) Do teachers in the treatment condition (teacher consultation with performance feedback) view the *Strong Kids* program as more socially valid than the teachers in the control condition?

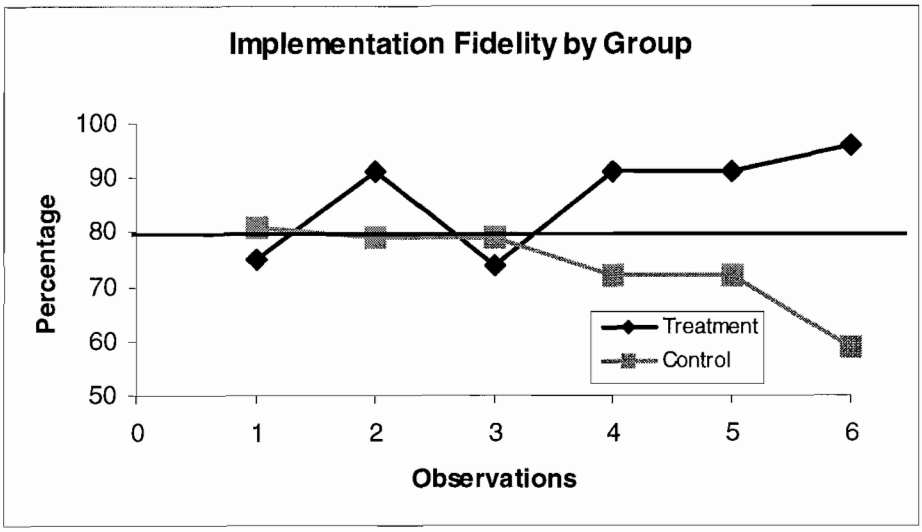
Descriptive statistics were employed to analyze the quantitative dependent variables. Percentages of teachers' levels of treatment fidelity were calculated and trend analysis was used to assess change in levels of treatment fidelity over time. The results of these analyses were considered for levels, trends, and unique features. Because of the design and number of participants involved, inferential statistics or the use of tests of significance were not appropriate given the low statistical power. For assessing the

qualitative measures, information was coded using a typological methodology and emerging themes were grouped and described in detail.

Impact of Consultation on Teachers' Implementation Adherence of the Strong Kids Program

The effects of the experimental manipulation of consultation using performance feedback were evaluated on teachers' implementation adherence to the lesson components of the *Strong Kids* program. The data presented in Figure 5 show the average percentages of implementation adherence for both the treatment group and control group. From the third performance feedback session, the data show an increasing trend in adherence to lesson components for the treatment group whereas for the control group, the data show a decreasing trend in adherence to lesson components. Additionally, implementation for the treatment group met or exceeded 80% for four out of the six lessons observed; whereas, implementation for the control group met or exceeded 80% only for the first lesson observed, showing an overall level difference between the two groups.

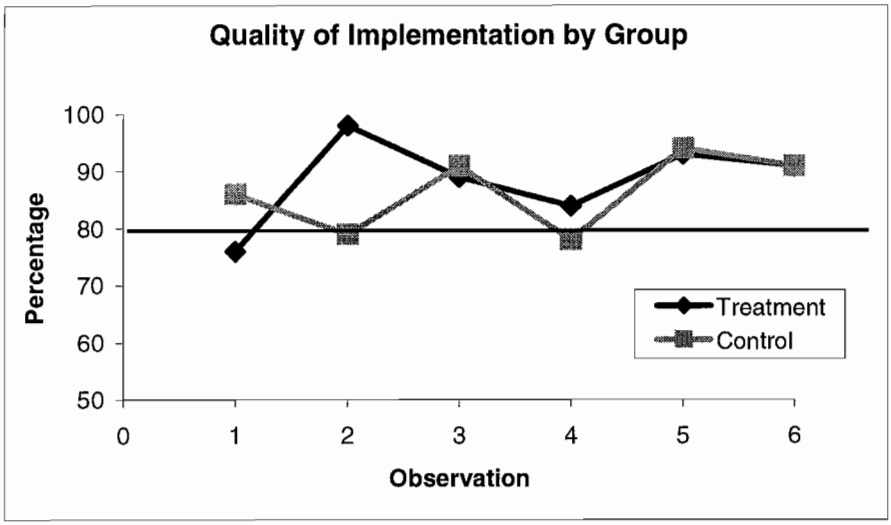
Figure 5. Implementation fidelity by group



Impact of Consultation on Teachers' Quality of Implementation of the Strong Kids Program

The effects of the experimental manipulation of consultation using performance feedback were evaluated on teachers' quality of implementation of the *Strong Kids* lessons. The data presented in Figure 6 show the average percentages of quality of implementation for both the treatment group and control group. The data presented in Figure 6 show no change in quality of implementation over time for both the treatment and control groups.

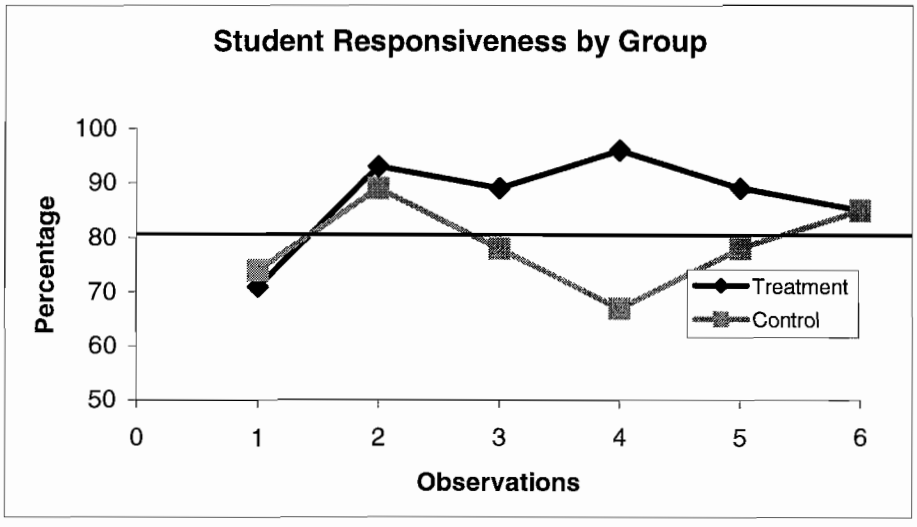
Figure 6. Quality of implementation by group



Impact of Consultation on Student Engagement During the Strong Kids Program

The effects of the experimental manipulation of consultation using performance feedback were evaluated on student engagement during the implementation of the *Strong Kids* lessons. The data presented in Figure 7 show the average percentages of student engagement for both the treatment group and control group. The data in Figure 7 show that for three of the lessons, students in the treatment group were observed as having a higher average percentage of engagement than students in the control group. Additionally, student engagement for the treatment group met or exceeded the 80% feasibility benchmark for five out of the six lessons observed; whereas, student engagement for the control group met the 80% feasibility benchmark for only two out of the six lessons observed.

Figure 7. Student responsiveness by group



Impact of Consultation on Teachers' Perceptions of Self-Efficacy

To answer the question 'what is the impact of consultation on teachers' perceptions of self-efficacy?' the *Teacher Sense of Efficacy Scale* (TSES) was administered to teachers in both the treatment and control groups at two time points, one prior to the implementation of *Strong Kids* and one following the implementation of *Strong Kids*. The scores for each teacher at both pre and post-test are displayed in Table 1 according to three factors, efficacy in engagement of students, efficacy in instructional strategies, and efficacy in classroom management. It should be noted that one of the teachers in the treatment group went on maternity leave prior to taking the post-test, therefore, her score was not included in the post-test mean for the treatment group. The overall mean scores for the treatment group decreased at post-test; whereas, the overall mean scores for the control group stayed relatively the same.

The overall self-efficacy mean score for the normative group is 7.1; therefore, compared to the normative sample, both the treatment and control groups self-efficacy scores were above the normative mean at pre-test, however, the treatment group's mean fell below the normative mean at post-test.

Table 1

Teachers' raw scores on the Teacher Sense of Efficacy Scale

	Treatment		Control	
	Pre	Post	Pre	Post
Engagement				
T1	6.5	5.3	7.5	6.5
T2	7.5	7	7	6.3
T3	7.8	.	8	7.3
Mean	7.3	6.3	7.5	6.8
Instruction				
T1	7.5	6.8	7	7.3
T2	7.8	8.3	7.8	7.5
T3	8.5	.	8.5	8.3
Mean	8	7.3	8	7.8
Management				
T1	8.5	6.8	30	8.5
T2	8.3	7.8	8.5	7
T3	7.8	.	8.3	7.8
Mean	8.3	7.3	8	8
Total				
T1	7.5	6.3	7.3	7.4
T2	7.8	7.7	7.8	6.9
T3	8	.	8	7.8
Mean	7.8	7	7.7	7.7

Impact of Consultation on the Social Validity of the Strong Kids Program

The impact of consultation on teachers' perceptions of social validity of the *Strong Kids* program was assessed at post-test with the *Strong Kids Social Validity Survey* and an additional questionnaire consisting of open-ended questions. The survey incorporated questions pertaining to several aspects of social validity: (a) the alignment of goals between teachers and the curriculum, (b) teachers' acceptability of procedures, (c) teachers' satisfaction with results of the curriculum, and (d) teachers' perceptions of the feasibility and importance of the curriculum and their confidence in implementing the curriculum.

All six teachers who implemented the curriculum completed both the survey and questionnaire. A qualitative analysis was conducted in which teachers' responses were reviewed and coded across treatment and control conditions.

Alignment of curriculum goals to teachers' goals. The three teachers assigned to the control condition were in 100% agreement in their responses to all four questions in this area. All three teachers were in "strong agreement" in the following areas: (a) it is important for students to have knowledge regarding coping skills for their use during difficult times; (b) it is feasible for a teacher to instruct students on coping skills; (c) it is important for students to experience fewer social, emotional, and behavioral problems; and (d) it is feasible for a teacher to provide early intervention instruction in an effort to help students experience fewer emotional problems.

The three teachers assigned to the treatment condition were in 50% agreement in their responses to the four questions in this area. Two teachers "strongly agreed" that it is important for students to have knowledge regarding coping skills for their use during difficult times; whereas, one teacher "agreed" to this statement. All three teachers "agreed" in the following two areas: (a) that it is feasible for a teacher to instruct students on coping skills and (b) that it is important that students experience fewer social, emotional, and behavioral problems. Two teachers "agreed" that it is feasible for a teacher to provide early intervention instruction in an effort to help students experience fewer emotional problems, whereas, one teacher "strongly agreed" with that statement.

Acceptability of procedures. The three teachers assigned to the control condition were in 100% agreement on one out of nine items regarding the acceptability of procedures. All three teachers were in "strong agreement" that they found it helpful to have materials, including transparencies, in-class handouts, and homework handouts prepared and provided for them. In the following areas, the three teachers' answers differed from "strong agreement" to "agreement": (a) it was helpful having scripted lessons; (b) there were an acceptable number of lessons in the curriculum; and (c) they felt satisfied with the pre-service training they received. In the following areas, the three teachers' answers differed from "disagree" to "strongly agree": (a) their belief it took an acceptable amount of time to prepare for each lesson; (b) their belief it took an acceptable amount of time to teach each lesson; and (c) their belief it took an acceptable amount of time to teach all of the lessons. The three teachers ranged from "neutral" to "agree"

regarding their belief that their students were interested in the lessons. In terms of needing more training to better teacher the program, one teacher "agreed" that they needed more training and two teachers "disagreed" that they needed more training to better teach the program.

The three teachers assigned to the treatment condition were in 100% agreement on two out of the nine items. All three teachers reported that they "strongly agreed" that it was helpful to have materials, including transparencies, in-class handouts, and homework handouts prepared and provided for them. All three teachers reported that they "disagreed" that it took an acceptable amount of time to implement each lesson. On the remaining seven items, the teachers varied in terms of their perceptions of acceptability of curriculum implementation. Regarding having scripted lessons, one teacher was in "disagreement" that it was helpful to have scripted lessons, whereas, the other two teachers in the treatment group "agreed" and "strongly agreed" that having scripted lessons was helpful. Two out of the three teachers "disagreed" that it took an acceptable amount of time to prepare for each lesson, whereas, one teacher "agreed" that it took an acceptable amount of time to prepare for each lesson. Two out of the three teachers "disagreed" that it took an acceptable amount of time to teach all of the lessons, whereas, one teacher "agreed" that it took an acceptable amount of time to teach all of the lessons. Two out of the three teachers "agreed" that their students were interested in the lessons, whereas, one teacher neither "agreed" nor "disagreed" to that statement. The teachers also differed in terms of their perceptions regarding needing additional training

to better teach the program. Two teachers "disagreed" that they needed more training to better teach the program, whereas, one teacher "agreed" that they needed more training to better teach the program. One teacher neither "agreed" nor "disagreed" when asked if they were satisfied with the pre-service training they received, whereas, two out of the three teachers "agreed" that they were satisfied with the pre-service training they received.

Satisfaction with results. The teachers in the control condition had varying responses regarding their satisfaction with the results of the *Strong Kids* program. One teacher consistently reported that they were not satisfied with the results of the program, nor did they observe any changes in students' behavior, either during the course of or following implementation of the program. The other two teachers in the control condition had 100% agreement on five out of the six items. Both of these teachers "agreed" to the following items: (a) they were satisfied with the knowledge that students' demonstrated during the course of implementing the program; (b) they were satisfied with the problem-solving skills that students demonstrated during the course of implementing the curriculum; and (c) they were satisfied with students' overall demonstration of positive emotion during the course of implementing the curriculum. Both teachers reported observing an increase in both students' knowledge and problem-solving skills.

The teachers in the treatment condition were in 100% agreement on four out of the six items. The three teachers reported that they "agreed" on the following items: (a) they were satisfied with the knowledge that students' demonstrated during the course of

implementing the program and (b) they were satisfied with students' overall demonstration of positive emotion during the course of implementing the program. All three teachers also reported observing both an increase in students' knowledge and an increase in students' demonstration of positive emotion. Two teachers "agreed" that they were satisfied with the problem-solving skills that students' demonstrated during the course of implementing the program, whereas, one teacher neither "agreed" nor "disagreed" with that statement.

Feasibility, importance, and confidence. Two of the teachers in the control condition ranged from "agree" to "strongly agree" on all of the items in this section. One teacher "agreed" with each item and one teacher "strongly agreed" with each item. The third teacher "strongly agreed" to the first two items: (a) it is feasible to implement *Strong Kids* in my classroom and (b) it is important to implement *Strong Kids*. This teacher "agreed" to the following three items: (a) it is feasible for me to spend 15 minutes of prep time prior to implementing *Strong Kids*; (b) it is important for me to spend 15 minutes of prep time prior to implementing *Strong Kids*; and (c) I feel confident in implementing the *Strong Kids* curriculum. This teacher responded as "neutral" to the item, I believe I was effective at teaching the *Strong Kids* curriculum.

The teachers in the treatment condition were in 100% agreement in their responses on the first two items. All three teachers responded in "agreement" that they (a) believed it to be feasible to implement *Strong Kids* in their classrooms and (b) believed it

to be important to implement *Strong Kids*. One teacher responded that they "strongly disagreed" that it was feasible to spend 15 minutes of prep time prior to implementing *Strong Kids*. This same teacher also responded that they "strongly disagreed" that it was important to spend 15 minutes of prep time prior to implementing *Strong Kids*. This teacher also wrote that they needed between 45 minutes and 1 hour to prepare to implement *Strong Kids*, suggesting that the teacher did not agree with the amount of time (15 minutes) included in the questions. One teacher responded that they "agreed" it was feasible to spend 15 minutes of preparation time prior to implementing *Strong Kids* and one teacher "disagreed" that it was feasible to spend 15 minutes of preparation time prior to implementing *Strong Kids*. However, these two teachers responded that they "strongly agreed" that it was important to spend 15 minutes of prep time prior to implementing *Strong Kids*. One teacher "strongly agreed" with the following statements: (1) I feel confident in implementing the *Strong Kids* curriculum and (2) I believe I was effective at implementing the *Strong Kids* curriculum. One teacher "agreed" with these prior statements and one teacher responded as "neutral" to these prior statements.

Additional Social Validity Questionnaire

The additional social validity questionnaire consisted of open-ended questions across four domains of social validity: (a) teachers' acceptability of procedures; (b) teachers' satisfaction with the results of the curriculum; (c) the feasibility of implementing a social and emotional learning curriculum; and (c) teachers' self-efficacy related to addressing social and emotional issues with students. Using a qualitative

typological coding procedure, teachers' responses were reviewed, coded according to domain, and summarized for both the treatment and control conditions.

Acceptability of Procedures

Based on the responses of the teachers in the treatment condition, these teachers felt that the topics covered in each lesson were relevant to 6th grade students. These teachers also reported that the curriculum "lacked hands-on activities" and was "in need of a variety of activities." Regarding consultation, these teachers reported that the consultation process was helpful in many ways, particularly having goals to focus on each week, knowing what steps to take to improve their fidelity, and problem-solving around implementation issues they encountered.

The teachers in the control condition reported that the content of the lessons were relevant to their 6th grade students. Teachers in the control condition also reported that the lessons were "time consuming" and there was "not sufficient time to engage students in meaningful discussions."

Satisfaction with Results

Teachers in the treatment condition believed that their students "benefited from being exposed to the new vocabulary" and subsequently, "gained self-awareness related to their emotions." Teachers in the treatment group also observed that students were less reactive in social situations and exhibited fewer "knee-jerk" reactions. All three teachers reported that their students seemed more comfortable sharing their feelings following implementation of the curriculum.

Teachers in the control condition believed that their students benefited the most from the instruction on goal setting and thinking errors, as well as being able to share their personal stories within the structured context of the curriculum. Two teachers reported observing students exhibiting more emotional awareness following implementation of the curriculum, whereas, one teacher had not observed any behavior changes in their students following implementation of the curriculum.

Feasibility

Teachers in the treatment condition found the curriculum easy, but relatively time-consuming to implement. All teachers reported that having the materials organized and prepared and having the sample scripts made implementation easier.

Teachers in the control condition reported that the curriculum was relatively easy to implement, but found it challenging to complete each lesson within a 45-minute class period. Teachers in the control group reported various challenges they encountered with the curriculum, including the pacing of lessons, being sufficiently prepared ahead of time, and engaging the students throughout each lesson. Teachers in the control condition reported that having the scripts and materials organized and provided eased the challenges of implementation.

Self-efficacy of Addressing the Social-Emotional Skills of their Students

Teachers in the treatment condition reported they felt most effective at keeping their students engaged throughout the lessons. Prior to implementing *Strong Kids*, teachers in the treatment group reported no feeling confident about teaching social and

emotional skills to their students. Teachers in the treatment condition believed they "learned a lot from the process," "can provide clear examples demonstrating social and emotional skills to their students," and now "know how to broach social and emotional issues with their students."

Teachers in the control condition believed they were successful at providing real-world examples of related to the specific lessons in which their students could relate. All three teachers in the control condition felt confident about teaching their students social and emotional skills prior to implementing the curriculum. Following the curriculum, the teachers reported no change in their feelings of preparedness to teach social and emotional skills to their students.

CHAPTER V

DISCUSSION

This concluding chapter includes a summary of the main findings from this study and an interpretation of these findings. This discussion is organized according to the research questions proposed. Limitations are reviewed and implications of the study pertaining to future research and practical implications are addressed.

Summary of Main Findings

The purpose of this study was to utilize a stage 1b feasibility research design to investigate the impact of performance feedback consultation on the implementation of a research-based social-emotional learning curriculum in an applied setting. Specifically, the study evaluated the impact of performance feedback on multiple dimensions of treatment fidelity, including teachers' implementation adherence, the quality of teachers' implementation, and students' engagement while the curriculum was being delivered. The study also assessed the impact of performance feedback on teachers' perceptions of self-efficacy. Finally, this study evaluated whether teachers receiving performance feedback consultation viewed the *Strong Kids* curriculum as more socially valid than the teachers not receiving performance feedback consultation.

Overall, the treatment fidelity data varied across the three dimensions measured for both the treatment and control conditions. There were differential trends for both the treatment and control conditions for implementation adherence; however, similar trends in the data were not observed for the quality of implementation measure or the measure

of student engagement. Limitations in instrumentation prevented the researcher from drawing meaningful conclusions for teacher perceptions of self-efficacy for addressing students' social and emotional issues. Consultation did not appear to have a significant effect on teachers' perceptions of the social validity of the *Strong Kids* program, as the data were consistent across both treatment and control groups.

Impact of Consultation on Teachers' Implementation Adherence of the Strong Kids Program

Regarding treatment fidelity in intervention research, adherence tends to be the dimension of fidelity most often measured and has been linked to student outcomes in behavioral consultation research (Gresham & Gansle, 1993; Lane, Bocian, MacMillan, & Gresham, 2004; Power, Blom-Hoffman, Clarke, Riley-Tillman, Kelleher, & Manz, 2005; Gottfredson & Gottfredson, 2002). Additionally, Fixen, Naoom, Blase, Friedman, and Wallace (2005) concluded from their comprehensive study that program implementation appeared most successful when frequent training, coaching, and performance assessments were incorporated and utilized. A visual analysis of the implementation adherence data indicated that the implementation adherence for teachers receiving consultation improved over time, whereas, the opposite occurred for the teachers not receiving consultation support. Subsequently, teachers receiving consultation implemented the curriculum on average at a higher percentage (86%) than teachers not receiving consultation (73%).

These data may indicate a potential adherence effect from receiving performance feedback consultation, which may have led to improvements throughout the course of the

curriculum (see Figure 5). Additionally, Horner et al. (2004) suggested an 80% criterion for implementing prevention practices in school settings. Based on this benchmark, the teachers receiving consultation exceeded this benchmark for four out of the six lessons, however, the teachers not receiving consultation only reached this benchmark for one out of the six lessons observed. Additionally, if one were to interpret these data as single subject multi-element design data, the three points above the 80% feasibility for the treatment group would begin to suggest experimental control. With additional data points, experimental control may be achieved. The decrease in implementation adherence for the teachers in the control group may indicate that without the performance feedback consultation, teachers are less aware of their implementation adherence and not held accountable for their performance, leading to diminished performance over time. However, one might expect all teachers implementing the curriculum to increase in their implementation adherence over time as they become more familiar with the lesson sequence, activities, and general curriculum content. Because treatment fidelity has been linked to improved student outcomes, future research should evaluate student-level data to assess whether or not differences in teacher implementation adherence impacts student outcomes.

Impact of Consultation on Teachers' Quality of Implementation of the Strong Kids Program

When referring to factors that impact the "scaling-up" of interventions in applied settings, Domitrovich and Greenberg (2005) suggested that greater attention must be given to both the measurement of intervention dosage (quantity) and the quality and fidelity of intervention delivery. The present study attempted to measure quality of delivery of the *Strong Kids* curriculum through an experimental observation tool designed by the researcher (see Appendix E). The observation measure included six items on a three point Likert type scale measuring teacher quality behaviors. The sixth item was an overall rating of instructional quality on a five-point scale. For each item, the observer was provided with specific examples to anchor and operationalize each item. A visual analysis of the quality of implementation data did not indicate significant differences between the treatment and control groups. However, analysis of the inter-observer agreement data indicated that the observational measure had less than optimal reliability across observers (ranging from 0.5-0.9). Based on these interrater reliability coefficients, one must interpret the quality of implementation data with caution, as the reliability and subsequently; the validity of the measure is questionable. This effort was an initial attempt at measuring quality of implementation of a social-emotional learning curriculum. These findings indicate that the construct of implementation quality for this type of intervention must be further defined in order to design technically adequate measurement tools. One method for improving the instrument would be include

frequency counts of teacher behavior during the *Strong Kids* lessons, such as opportunities to respond, monitoring of students, and praise and corrective statements.

Impact of Consultation on Teachers' Perceptions of Self-Efficacy

Based on previous research assessing the relation between teachers' perceptions of self-efficacy and the frequency and utility of instructional support teachers received, this study expanded upon current research by assessing teacher perceptions of self-efficacy related to addressing students' social-emotional issues. Mean scores were reported for teachers in both the treatment and control groups on the *Teacher Sense of Efficacy Scale* (Tschannen-Moran & Woolfolk Hoy, 2001). Mean scores for the control group did not change between pre and post-test; however, means scores for the treatment group decreased from 7.8 to 7. The decrease in self-efficacy for the treatment group may be a result of these teachers receiving performance feedback and coming to the realization that there are ways in which they can improve their teaching. The self-efficacy of the teachers in the control condition remained above the normative mean throughout the duration of the study. High self-efficacy coupled with the lack of performance feedback may in fact reduce the control teachers' motivation to try different, and possibly more effective, teaching techniques. If one were to continue providing performance feedback with the teachers in the treatment group, eventually those teachers' self-efficacy may increase, as they are able to implement new teaching strategies and observe positive student outcomes.

This measure was included as an attempt to assess the impact of consultation on teachers' perceptions of self-efficacy related to addressing students' social-emotional issues. However, a key limitation of this measure was its lack of construct validity related to the self-efficacy of teachers and their ability to address their students' social and emotional needs. To date, there are no self-efficacy teacher questionnaires specifically addressing the social-emotional and mental health understanding of teachers. This study incorporated this particular measure because it was the sole validated, non-experimental measure being that was identified after a comprehensive review of tools in this area. One of the implications of the present investigation is a need for the development and validation of a measure to assess teachers' self-efficacy related to addressing social and emotional issues with students.

Impact of Consultation on Student Engagement During the Strong Kids Program

Student engagement or responsiveness is an additional component of fidelity of implementation that was assessed within this study. According to Bellg and Borrelli, this area is a critical component of fidelity that intervention studies often neglect to measure or assess. The present study measured student engagement during the implementation of the *Strong Kids* curriculum by having trained data collectors observe and rate the level of student engagement for each classroom in both the treatment and control groups. A visual analysis of the data indicates that the overall percentage of student engagement during the *Strong Kids* curriculum was on average higher for the treatment group (the teacher consultation condition) than for the control group. Specifically, for the treatment group,

student engagement met or exceeded 80% for 5 out of the 6 lessons observed; whereas, for the control group, student engagement met 80% for only 2 out of the 6 lessons observed (see Figure 7). During consultation sessions, teachers in the treatment group reported modifying lessons to suit the needs of their students. For example, one teacher modified lesson activities by turning a small group activity into a role-play activity, noting that her students enjoyed the role-play activities in the curriculum. Additionally, one teacher in the treatment group presented her students with good behavior tickets to positively reinforce them for their participation during the *Strong Kids* lessons. These examples of appropriate curriculum modifications indicate that performance feedback consultation may have had an impact on student engagement during the *Strong Kids* lessons. However, there are too few data points to determine a causal relation between consultation and student engagement.

Impact of Consultation on Teachers' Perceptions of Social Validity of the Strong Kids Program

Overall, the qualitative data summarized from the social validity questionnaires did not differ greatly between the treatment and control groups. In general, teachers' perceptions in both the treatment and control groups were aligned according to the five aspects of social validity. The treatment and control groups differed on their satisfaction with the results of the curriculum. Teachers in the control group generally were not satisfied with their students' social-emotional knowledge after implementing the curriculum, nor did they observe a change in their students' behavior following the

curriculum. Conversely, teachers in the treatment group reported satisfaction with the increase in student social-emotional knowledge they observed, as well as the change in observed student behavior. Anecdotally, these are noteworthy data, particularly given the relation between perceptions of social validity and implementation adherence.

Summary of Limitations

Results from this study should be interpreted in conjunction with several limitations. The primary goals of this study were to measure the impact of performance feedback consultation on a multidimensional construct of treatment fidelity, as well as on teachers' self-efficacy related to social-emotional issues, and teachers' perceptions of social validity of the *Strong Kids* curriculum. A first major limitation is related to measurement and construct development, specifically regarding the constructs of quality of implementation of social-emotional interventions and teacher self-efficacy related to social-emotional issues. Both of these constructs need to be further refined in order to develop technically adequate assessment tools for measuring these constructs.

Second, because the social validity measure was administered only at post-test for both the treatment and control groups, we cannot determine the impact of consultation because there could have been preexisting differences between teachers' perceptions of social validity in the treatment group and teachers' perceptions of social validity in the control group. Obviously, it would have been inappropriate to ask teachers questions about their perceptions of the *Strong Kids* curriculum prior to having them actually teach the curriculum. However, in future studies, asking teachers about their perceptions related

to social-emotional learning prior to implementing an SEL curriculum and receiving consultation could allow a researcher to determine whether or not consultation impacts teachers' perceptions of the social validity of social-emotional learning in general.

Third, when conducting direct observations of study participants, researchers may encounter observer reactivity, which could limit the validity of the data being collected. The nature of having a person observe the teachers could have increased teachers' implementation fidelity or compliance with the curriculum.

Fourth, because the study took place in one school and one grade, with participants in both the treatment and control conditions intermingling throughout the study, the researcher could not necessarily control the internal validity of the treatment condition. Prior to implementing the study, teachers in both conditions were asked not to discuss the curriculum with one another, however, over the course of a twelve week curriculum, the researcher had no way of ensuring that the teachers did not communicate among one another about the curriculum. This particular limitation is in effect a "trade off," because although it would have been possible to split the participants by condition across schools, such a practice would raise additional questions about the similarity of environmental contexts in which the participants existed.

Fifth, the study took place at one middle school in Eugene, Oregon. The nature of the context and the variables present within this particular school environment make the outcomes difficult to generalize to other school contexts. For example, during the

previous academic year, this 6th grade team had been mandated to teach a social-emotional learning curriculum with no materials and no preparation time build into their schedules prior to the start of school. This year the administration was searching for a different curriculum that would be easier for the teachers to implement. Because the school was already primed to have a social-emotional learning curriculum implemented in the 6th grade, there were almost no barriers to implementation encountered at the systems level. This is not a situation that is common within every school and would most likely impact the generalizability of the results of the study and of the general study implementation in different school contexts.

Finally, this study involved the use of resources not often available within schools. The financial cost of supplying the materials for each teacher, as well as the time and personnel required to provide performance feedback consultation are rarely found within schools today. This factor may impact the effectiveness of the study in real-world conditions. Given the limited resources of schools, performance feedback consultation may not be a realistic and cost-efficient method of providing implementation support to teachers. This point is indicative of the need for schools to examine interventions using a multifaceted approach like the RE-AIM Framework. When schools consider the factors involved in the successful adoption of an intervention and maintenance of intervention outcomes over time, their initial decision-making can greatly impact the outcomes they want to see for their students. For example, a school with limited resources may not want to adopt an intervention in which teachers need additional implementation support to

obtain positive outcomes for students, despite the intervention's efficacy. Applying the RE-AIM Framework, which considers efficacy in addition to other factors impacting the effectiveness of interventions in applied settings, schools can make more informative decisions about which interventions will produce optimal outcomes in their particular environments.

Implications for Future Research

In recent years, there has been an increase in social-emotional learning curricula implemented in school settings. Due to limited personnel and resources, teachers are often selected to implement these curricula with little or no training or support. Often, schools adopt evidence-based interventions that are not implemented with adequate levels of fidelity, impacting the degree of student outcomes obtained. Subsequently, when implementing universal SEL prevention programs, researchers encounter the dilemma of measuring student outcomes, particularly the generalization of skills across time. Throughout this study, teachers anecdotally reported instances when they found students demonstrating knowledge of skills directly taught within the curriculum, outside of the designated *Strong Kids* lessons. Based on this finding, one could measure students' knowledge of skills by asking teachers to provide a weekly report on the number of times students demonstrated knowledge of social or emotional skills that were directly taught in the curriculum.

This study assessed the impact of brief consultation using performance feedback on teachers' implementation fidelity, quality of implementation, student engagement,

self-efficacy related to social-emotional issues, and social validity of the *Strong Kids* program. The study results found that consultation had impacts on implementation adherence; however, impacts on the subsequent outcome measures remain inconclusive. It is recommended that future research efforts utilize a hierarchical research designs to assess student outcomes in relation to teacher fidelity of implementation. An important research question to address is whether or not fidelity of implementation of a social-emotional learning curriculum impacts student outcomes. Because multiple dimensions of fidelity were measured in this study, additional research studies could investigate which measures of fidelity are more likely to impact student outcomes.

With the increased emphasis on incorporating evidence-based programs in school settings, there is a need for assessing barriers to implementation in order to maximize the benefits of evidence-based programs in these applied settings. Consultation is one method of providing implementation support to teachers to increase fidelity of implementation for maximizing intervention effectiveness. However, with a universal social-emotional learning curriculum—particularly a brief curriculum like *Strong Kids,* that requires minimal resources and is semi-scripted, consultation may not be necessary to obtain the effects necessary to promote social and emotional resiliency for *all* students. Therefore, future studies should assess the impact of consultation on social-emotional outcomes for students with differential needs of support (universal, secondary and tertiary).

Models such as the RE-AIM Framework may be helpful in assisting schools in deciding which interventions may work best in their environments for students with

differing needs of support. When a school is in need of an intervention to address problem behavior with a small group of high-needs individuals, that school may weigh each factor within the RE-AIM Framework differently. If the school has ample resources to implement a resource-intensive intervention that is also efficacious, that school may consider adopting that particular intervention. The RE-AIM Framework is an example of a systematic way for schools to address their needs and resources in relation to a given intervention. By considering the *reach, efficacy, adoption, implementation* and *maintenance* of an intervention, coupled with a setting's needs and available resources, schools can choose interventions that are likely to produce positive outcomes in their diverse environments.

Implications for Practice

This study has several implications for practitioners using the *Strong Kids* curriculum to address the social-emotional needs of students in school settings. Because the *Strong Kids* curriculum is semi-scripted, with a user-friendly format including all necessary materials for implementation, there is a strong possibility that ongoing consultation is not necessary for obtaining acceptable or even high levels of implementation fidelity and student outcomes. As mentioned previously, taking a public health approach to school-based interventions can be a useful way of maximizing the benefits of interventions, while taking into account the unique constraints and needs within a school system.

This public health approach combines the three-tiered model of service delivery with the RE-AIM framework for intervention selection by choosing interventions based on the needs of a system (i.e. universal, targeted, intensive) while simultaneously accounting for the resources available within a system. Taking this joint approach enables schools to maximize the effectiveness of interventions, while also maximizing the resources within their buildings (Merrell & Buchanan, 2006).

The *Strong Kids* program is a universal social-emotional learning curriculum designed to prevent internalizing problems by promoting emotional resilience and mental health for *all* students. This primary prevention approach incorporates the delivery of effective social-emotional instruction by teachers in the classroom. Based on the ideas of the RE-AIM framework, we contend that not all efficacious interventions are actually effective in applied settings, due to the multiple factors impacting intervention implementation in real-world environments such as schools. By determining which aspects of the RE-AIM framework are more likely to maximize intervention effectiveness based on the idiosyncrasies of a given context, schools can determine the best intervention match to meet the needs of their students within their particular context.

Given that *Strong Kids* is a universal curriculum, it may reach a large number of students within a school. The semi-scripted manual allows teachers to implement the curriculum with a moderate to high level of fidelity and also enables teachers to use the curriculum with little or no training. The curriculum is easily adopted within school settings, since teachers or other school personnel can implement the lessons. Based on the

nature of the program and the universal prevention purpose of the curriculum, consultation may not be necessary to obtain the prevention outcomes for which the program is designed.

From the consultation component of this study, teachers receiving consultation did devise helpful ways of tailoring the curriculum to meet their own needs and the needs of their students, such as photocopying each lesson to make it easier to manage while teaching the lesson in front of a class or incorporating additional role-play activities throughout the lessons to engage the students in the material. Making teachers more aware of these helpful implementation suggestions within the *Strong Kids* manual can be a cost-efficient way of increasing the effectiveness of the curriculum in classroom settings. Additionally, utilizing teachers who have previously implemented *Strong Kids*, as coaches to provide support to other teachers on an as-needed basis is an additional cost-effective suggestion for increasing the effectiveness of the curriculum in a variety of settings.

Conclusion

The need for mental health prevention programming in schools is rapidly increasing. Simultaneously, school and district resources are dwindling and the push toward school accountability for increased academic success is at the forefront of school administrators' priorities. In order for schools to meet the needs of all students and prepare each student to be successful, contributing members of society, schools must provide academic, social and emotional education on a continuum. This need can pose a

challenge for a school with both limited resources and populations of high needs individuals. However, taking a systematic, three-tiered approach coupled with considering the RE-AIM framework for intervention selection, schools can accommodate the needs of *all* learners within the constraints of their given budgets and resources.

This study investigated the impact of performance feedback consultation with teachers implementing a universal social-emotional learning curriculum on teachers' implementation of the curriculum as well as the teachers' self-efficacy and perceptions of social validity of the program. Given the results of the study, it is imperative that prior to adopting a curriculum, schools utilize a systematic approach to assessing their needs to be addressed, the match between the intervention and the goals of the school, and resources available within their building. Taking these elements into consideration will inevitably maximize the effectiveness of an intervention, subsequently having a greater impact on student outcomes.

APPENDIX A

PERFORMANCE FEEDBACK CONSULTATION CHECKLIST

Performance Feedback Consultation Checklist

Lesson	Date	Ask for teacher's perceptions of inst. Y/N	3 Praise Statements provided Y/N	Present graphed data Y/N	Present options/goals to improve fidelity Y/N	Resources needed/ barriers to implementation Y/N	Agreed upon Goal Y/N	Goal Is:
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

APPENDIX B

CONSULTATION GROUP PHONE/EMAIL CHECK-IN SHEET

Consultation Group Phone/Email Check-In Sheet

Date	Lesson #	Email/Phone Contact Y/N	Question/Concerns Addressed Y/N	Discussed Ways in Which Concerns Could be Addressed Y/N

APPENDIX C

FREQUENTLY ASKED QUESTIONS SHEET

Frequently Asked Questions

Has this curriculum been used before with middle school students?
Yes! And with successful outcomes.

What do I need to do to get started?
Make sure you have reviewed the lesson before you teach it, verify you have all the handouts, and if you want to make any modifications to the lesson.

Do I have to follow the scripts exactly?
No. You can modify the language as you feel your students would understand the content described in the scripts.

Can I skip sections?
No, not for the purposes of this study.

Can I divide a lesson into two parts?
No, not for the purposes of this study.

How should I group my students for in-class activities?
Group your students in a way that maintains a balance between the students learning the content and good classroom behavior management practices.

How do I work the homework assignments into the class time?
Some teachers have found it helpful for students to complete or at least start the homework assignment in class. Some teachers also use homework in the review section of a new lesson to go over previously learned concepts.

Can I use situations that are currently happening in my classroom to illustrate concepts in the lessons?
Yes. Examples are provided in the curriculum, but you can make up your own.

What do I do if a student is experiencing emotional difficulties during the course of a lesson?
If you believe a student is having a difficult time with the curriculum content, becomes upset or seems distressed, please do the following:
• Notify Verity Levitt at (541) 513-3196

**Provided by Barbara Gueldner*

APPENDIX D

IMPLEMENTATION CHECKLISTS

Implementation Checklist
Lesson 2: Understanding Your Feelings Part 1

Observation start time: _____

I. Review

- ❑ Reviewed previous lesson's main ideas (obtained 3-5 adequate ideas).

Circle One: Not Implemented Fully Implemented
Notes: _____

II. Introduction

- ❑ Introduced the concept of identifying comfortable and uncomfortable feelings

Circle One: Not Implemented Fully Implemented
Notes: _____

III. Name and Define Skills: Activity A—Definitions

- ❑ Used supplement 2.1 as overhead transparency
- ❑ Defined: emotion, comfortable, uncomfortable

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

IV. Name and Define Skills: Activity B—Discussion

- ❑ Asked class discussion questions which aid in comprehension of these vocabulary words
- ❑ In a brief discussion, conveyed 3-6 of the main ideas in Activity B

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

V. Feeling Identification

- ❑ Conveyed idea to students that identifying emotions is important so we can learn how to react positively
- ❑ Generated list of emotions
- ❑ Identified those emotions as comfortable or uncomfortable
- ❑ Distributed Supplement 2.2 as handout
- ❑ In small groups or as a class, students discussed the work they completed on their worksheets
- ❑ In a follow-up discussion, teacher asked students whether emotions were complicated to identify as comfortable or uncomfortable
- ❑ Teacher discusses that some emotions can be both comfortable and uncomfortable

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

VI. How Do You Feel?

- ❑ Teacher indicates to students that they are going to discuss when you might have comfortable and uncomfortable feelings
- ❑ Teacher gives example/s of emotion, labels it as comfortable or uncomfortable, and describes when she felt that way
- ❑ Students do the same
- ❑ Supplement 2.3 is distributed
- ❑ Follow up discussion is conducted from Supplement 2.3

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

VII. Closure

- ❑ Teacher reviewed 3 main ideas from the lesson

Circle One: Not Implemented Fully Implemented
Notes: _____

VIII. Homework Handout

- ❑ Supplement 2.4 is distributed
- ❑ Teacher explained the instructions to the class

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

Observation finish time: _____
Percentage of Components Implemented:_____

Implementation Checklist
Lesson 3: Understanding Your Feelings Part 2

Observation Start Time: _____

Lesson Adherence

I. Review: Minutes_____

- ❑ Reviewed previous lessons'/assignments' main ideas (teacher mentions (a) what emotions or feelings are and (b) identifying comfortable and uncomfortable feelings).

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

II. Introduction: Minutes _____

- ❑ Introduced the concept of expressing feelings in positive or negative ways.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

III. Identify Actions that Follow Feelings: Minutes _____

- ❑ Conveyed 3 of the 5 ideas listed in Activity A (bulleted items).
- ❑ Conveyed idea that we do appropriate and inappropriate things when experiencing. comfortable and uncomfortable feelings.
- ❑ Discussed appropriate and inappropriate ways of expressing ideas/feelings.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

IV. Positive and Negative Examples of Showing Feelings: Minutes _____

- ❑ Used Supplement 3.1 to teach appropriate ways of expressing feelings.
- ❑ Used examples from supplement to generate class participation and discussion.
- ❑ Used Supplement 3.2 to generate own examples.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

V. Practice Situations and Application: Minutes _____

- ❑ Used Supplement 3.3 or alternative examples to ask students to engage in exercise.
- ❑ Used Supplement 3.4 for students to view during activity to guide them.
- ❑ Large group discussion of activity.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

VI. Closure: Minutes _____

- ❑ Teacher reviews 2 main ideas from lesson: (a) we act in different ways when we experience emotions (b) we have appropriate and inappropriate ways of showing feelings (c) gives or asks students for an example of one appropriate and one inappropriate way of showing feelings.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

VII. Homework Handout: Minutes _____

- ❑ Supplement 3.5 is distributed.

Circle One: Not Implemented Fully Implemented
Notes: _____

Observation finish time: _____
Percentage of Components Not Implemented: _____
Percentage of Components Partially Implemented: _____
Percentage of Components Fully Implemented: _____

Implementation Checklist
Lesson 5: Understanding Other People's Emotions

Observation start time: _____

I. Review

- ❑ Reviewed previous lesson's main ideas (obtained 3-5 adequate ideas from the list provided in "Ideas Discussed in Lesson 4").

Circle One: Not Implemented Fully Implemented
Notes: _____

II. Introduction

- ❑ Introduced the concept of empathy, or how to understand and better identify other people's emotions.

Circle One: Not Implemented Fully Implemented
Notes: _____

III. Name and Define Skills: Activity A

- ❑ Used Supplement 5.1 as an overhead transparency
- ❑ Explains the 4 vocabulary words on overhead

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

IV. Name and Define Skills: Activity B

- ❑ Conveyed at least 4 of 5 main ideas under Activity B

Circle One: Not Implemented Fully Implemented
Notes: _____

V. Modeling Emotions

- ❑ Used supplement 5.2 or another list of emotions
- ❑ Explained activity to students, modeled the emotion "embarrassed" using body language and asked students to guess what emotion teacher was displaying
- ❑ Asked 1 or more students to choose an emotion without telling their classmates and had them model body language that reflected that emotion and had class guess the emotion
- ❑ Probed class for knowledge of emotions and cues that might help them discern someone else's feelings

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

VI. Integrate Key Concepts

- ❑ Discussed with students, linking emotional cues to perspective

- ❑ Obtained or provided to students the two bulleted ideas

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

**** Mark fully implemented if teacher wove this piece throughout the lesson via example situations, modeling situations, or student role-play situations.**

VII. Practice and Application: Activity A

- ❑ Teacher acted out example or his/her own example
- ❑ Teacher asked class the questions provided in Activity A and discussed questions with class

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

VIII. Practice and Application: Activity B

- ❑ Placed students in 4 small groups and explained activity
- ❑ Used Supplement 5.3 as an in-class handout and provided each group of students with one situation from the supplement
- ❑ Had groups exchange situations so they could practice with different situations

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

XIII. Closure

- ❑ Teacher reviewed 3-5 main ideas from the lesson

Circle One: Not Implemented Fully Implemented
If teacher reviews **less than 5 main ideas, please record the number of main ideas teacher reviewed below.
Notes: _____

XIV. Homework Handout

- ❑ Supplement 5.4 is distributed
- ❑ Teacher explained instructions

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

Observation finish time: _____
Percentage of Components Implemented: _____

Implementation Checklist
Lesson 7: Clear Thinking 2

Observation start time: _____

I. Review

- ❑ Reviewed previous lessons' main ideas (obtained 3-5 adequate ideas).
- ❑ Showed supplement 7.1
- ❑ Discusses supplement 7.1

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

II. Introduction

- ❑ Communicated lessons' purpose and objectives of lesson.

Circle One: Not Implemented Fully Implemented
Notes: _____

III. Looking for Evidence and Learning How to Reframe Negative Thoughts

- ❑ Explained the process of identifying a negative thought, a thinking error and replacing or reframing the negative thought if based on a thinking error.
- ❑ Provided an example to describe this process.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

IV. Activity A: Using Evidence

- ❑ Used Supplement 7.2 as overhead transparency
- ❑ Discussed Supplement 7.2, using evidence to examine our thoughts.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

V. Activity B: Reframing

- ❑ Used Supplement 7.3 as an overhead transparency to discuss how to identify thinking errors and how to use methods of reframing.
- ❑ Encouraged discussion/input from students or asked questions to students regarding their experiences with negative thoughts.
- ❑ Discussed with students the issue of having control to change some situations over other situations.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

VI. Activity C: Homework from Lesson 6

- ❑ Used Supplement 7.4 and student examples from their Lesson 6 homework to practice reframing.
- ❑ Used Supplement 7.4 and the students' homework to guide the students through the Changing Thinking Errors process using the 5-step process.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

VII. Closure

- ❑ Reviewed the steps of Changing Thinking Errors.
- ❑ Used Supplement 7.5 to explain to students how they can use the thermometer to gauge their negative thoughts and decide whether or not they need to reframe their negative thoughts.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

VIII. Homework Handout

- ❑ Handed out Supplement 7.6
- ❑ Explained how to fill out the columns
- ❑ Encouraged students to identify at least 2 events for the chart
- ❑ Reminded students not to identify who they are referring to in the homework

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

Observation finish time: _____
Percentage of Components Implemented: _____

Implementation Checklist
Lesson 8: The Power of Positive Thinking

Observation start time: _____

I. Review

- ❑ Reviewed previous lessons' main ideas (obtained 3-5 adequate ideas).

Circle One: Not Implemented Fully Implemented
Notes: _____

II. Introduction

- ❑ Communicated lessons' purpose and objectives of lesson.

Circle One: Not Implemented Fully Implemented
Notes: _____

III. Name and Define Skills: Activity A

- ❑ Used supplement 8.1 as an overhead transparency
- ❑ Discussed the relevant vocabulary words, providing examples to clarify terms.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

IV. Name and Define Skills: Activity B

- ❑ Conveyed the main ideas listed in Activity B by using own words or using script provided.
- ❑ Facilitate class discussion about negative thinking using the questions and statements provided at the bottom of Activity B.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

V. Introduce the ABCDE Model of Learned Optimism

- ❑ Used Supplement 8.2 as an overhead transparency
- ❑ Defined the steps in the model to the class.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

VI. Integrate and Illustrate the ABCDE Model: Activity A Cartoon Situation

- ❑ Used Supplement 8.3, Cartoon Situation, as an overhead transparency to narrate and discuss the ABCDE model.
- ❑ Part 1: Teacher discussed the A, B, and C parts of the model.
- ❑ Part 2: Discussed with students the *additional* thoughts and feelings that they might have.

- ❑ Part 3: Generated alternative ways to look at the situation (focusing on the D and E parts of the model)

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

VII. Activity B: Create a Situation

- ❑ Encouraged students to think of a situation that might happen that might elicit negative thoughts.
- ❑ Walked students through the situation that was created using the ABCDE model to demonstrate the use of positive thinking (can use supplement 8.2 to facilitate discussion).
- ❑ Have students identify each component of the model (Adversity, Belief, Consequence, Disputation/Deciding, Energization/Energy).

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

VIII. Closure

- ❑ Used Supplement 8.4 as an overhead transparency to conduct an informal assessment of the students' understanding of the topic.
- ❑ Called on students to respond to the questions.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

IX. Homework Handout

- ❑ Distributed Supplement 8.2 as a homework handout.
- ❑ Ask students to keep a journal of situations where they felt badly and ask them to write about those situations, their reactions to those situations, and what they learned from those situations (either using the script or their own words).

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

Observation finish time: _____
Percentage of Components Implemented: _____

Implementation Checklist
Lesson 10: Letting Go of Stress

Observation start time: _____

I. Review

- ❑ Reviewed previous lesson's main ideas (obtained 3-5 adequate ideas)

Circle One: Not Implemented Fully Implemented
Notes: _____

II. Introduction

- ❑ Communicated lesson's purpose and objectives

Circle One: Not Implemented Fully Implemented
Notes: _____

III. Name and Define Skills: Activity A

- ❑ Used Supplement 10.1 as an overhead transparency and in-class handout
- ❑ Reviewed 3 vocabulary terms

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

IV. Name and Define Skills: Activity B

- ❑ Conveyed all three main ideas in Activity B to students *(3=Fully Implemented; <3=Partially Implemented; 0=Not Implemented)*

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

V. Identifying Feelings of Stress

- ❑ Ask students to generate examples of stressful situations in their lives.
- ❑ Encourage students to describe the situation, how they felt, and how they could tell they were feeling stress.
- ❑ Read the situations provided in the manual and ask students how they would feel or react in the situations.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

VI. Dealing with Stress

- ❑ Generate additional situations or use those provided in the previous section to brainstorm both negative and positive ways to deal with stress.
- ❑ Ask students how they would know whether a solution was positive or negative.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

VII. Discussion: Activity A

- ❑ Help students generate specific ways they can relax when they are stressed or are about to encounter a stressful situation.
- ❑ List on the board or on the overhead things students have done when stressed.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

VIII. Discussion: Activity B

- ❑ Focus on each strategy and evaluate each one for its effectiveness in reducing stress.
- ❑ For each strategy, ask students to consider whether the strategy will cause them more stress in the future.

Circle One: Not Implemented Partially Implemented Fully Implemented
Notes: _____

XII. Closure

- ❑ Review 3-6 of the lesson's main points.

Circle One: Not Implemented Fully Implemented
Notes: _____

XIII. Homework Handout

- ❑ Passed out homework handout, Supplement 10.3, Letting Go of Stress

Circle One: Not Implemented Fully Implemented
Notes: _____

Observation finish time: _____
Percentage of Components Implemented: _____

APPENDIX E

TEACHER QUALITY MEASURE

Teacher Quality

Directions: After observing lesson, please report on teacher's overall instructional quality.

I. Teacher delivers lesson in a prepared manner, demonstrating fluency in delivery ***(e.g. teacher has overheads prepared, teacher expands upon script and provides multiple examples for each concept)***

	Not at all	For some of lesson	For most of lesson	For entire lesson
Circle One:	1	2	3	4

Notes: _____

II. Teacher provides opportunities for students to respond ***(e.g. either by answering teacher's questions or giving examples from their lives).***

	Not at all	For some of lesson	For most of lesson	For entire lesson
Circle One:	1	2	3	4

Notes: _____

III. During lesson delivery, teacher monitors students by walking around the room ***(e.g. teacher walks around student desks, while providing Strong Kids instruction or monitoring group activities during the lesson).***

	Not at all	For some of lesson	For most of lesson	For entire lesson
Circle One:	1	2	3	4

Notes: _____

IV. Teacher encourages student participation through praise statements/positive feedback or encouraging words ***(e.g. teacher makes comments like "Great example of ..." or "That must have been hard, thanks for sharing").***

	Not at all	For some of lesson	For most of lesson	For entire lesson
Circle One:	1	2	3	4

Notes: _____

V. Teacher provides examples of lesson content relevant to students ***(e.g. teacher provides examples to do with friend/social issues, family issues, issues related to grades, sports, etc.).***

	Not at all	For some of lesson	For most of lesson	For entire lesson
Circle One:	1	2	3	4

Notes: _____

Overall Rating of Instructional Quality

Directions: Circle the number that best describes the overall instructional quality observed.

Poor overall delivery	Struggled somewhat in delivery of lesson	Average overall delivery	Good overall delivery	Superb delivery
1	**2**	**3**	**4**	**5**
Examples: Teacher did not have materials ready and delivered the lesson in a choppy, disorganized manner, like they didn't know what was coming next in the lesson Teacher stood in front of class and never walked around Teacher did not ask students questions and skipped over discussion sections in lesson Teacher did not provide any positive feedback to students during lesson	Examples: Teacher had materials ready, but did not expand upon script or provide students with examples beyond what was presented in the lesson During small group discussion/activities, teacher did not monitor group work by walking around room and listening to student discussion Teacher presented some sections of lesson in a choppy manner and other sections of the lesson in a fluid manner, using multiple examples relevant to students and engaging students in discussion around the topic	Examples: Teacher had materials and overheads ready for when they were being used in the lesson Teacher occasionally provided their own examples of lesson content beyond what examples were provided in the lesson Teacher provided *occasional* praise to students for participating in lesson by saying things like "good example", "thanks for sharing"	Examples: Teacher had materials and overheads ready for when they were being used in the lesson Teacher provided multiple examples related to lesson content that were relevant to students Teacher provided *frequent* praise statements to students for participating in lesson by saying things like, "great example", "thanks for sharing" Teacher monitored students throughout lesson by continually walking around room during lesson delivery	Examples: Teacher had materials and overheads ready, delivered the lesson without having to use the manual continually to remind them of where they are in the lesson Teacher expanded on each script, by providing multiple examples relevant to students' lives Teacher provided students with positive feedback consistently throughout the lesson Teacher provided students with frequent opportunities to speak up during the lesson and encouraged students' input Teacher walked around the room throughout the entire lesson

APPENDIX F

STUDENT RESPONSIVENESS/ENGAGEMENT MEASURE

Student Responsiveness/Engagement

1=None or Almost None All or All (0%-19% of class) **2=Some (20%-80% of class)** **3=Almost (81%-100% of class)**

I. Students were generally attentive to instruction throughout lesson ***(e.g. their eyes were on teacher, they followed along with teacher directions).***

	None or Almost None	Some	Almost All or All
Circle One:	1	2	3

Notes: _____

II. Students were generally disruptive throughout lesson ***(e.g. talking out, whispering among themselves, not following teacher directions).***

	None or Almost None	Some	Almost All or All
Circle One:	1	2	3

Notes: _____

III. Students consistently participated throughout the lesson ***(e.g. students were actively participating by raising their hands to ask questions and contributing to class/lesson content by giving examples relevant to lesson content).***

	None or Almost None	Some	Almost All or All
Circle One:	1	2	3

Notes: _____

Overall Rating of Student Engagement During Lesson

Directions: Circle the number that best describes the overall engagement of the students during the lesson.

Poor overall engagement	Somewhat poor engagement	Average overall engagement	Good overall engagement	Superb engagement
1	**2**	**3**	**4**	**5**
Examples: No students participated in lesson During lesson students were goofing off, carrying on side conversations Teacher had to reprimand students for their misbehavior throughout lesson	Examples: Very few students participated in lesson During lesson students did not answer teacher questions or respond to teacher appropriately when called upon Students did appear to participate in small group activities and did not disrupt teacher during whole-group instruction	Examples: About half of the students participated in lesson During lesson only teacher had to call on students for them to respond to questions (no students raised their hand to participate in class discussion) Students did not disrupt teacher during instruction of lesson	Examples: About three quarters of the class participated in lesson During lesson a few students raised hands to respond to teacher questions or offer examples of lesson content Students participated in small group discussion and discussed small group topic with the whole class when asked	Examples: All students participated in lesson Students consistently raised hands with appropriate examples of lesson content Students followed along with teacher during instruction and engaged in small group discussion

APPENDIX G

TEACHER SENSE OF EFFICACY SCALE (SHORT FORM)

Teachers' Sense of Efficacy Scale[1] (short form)

Teacher Beliefs **How much can you do?**

Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.

Nothing (1) (2) Very Little (3) (4) Some (5) (6) Quite A Bit (7) (8) A Great Deal (9)

1. How much can you do to control disruptive behavior in the classroom? (1) (2) (3) (4) (5) (6) (7) (8) (9)

2. How much can you do to motivate students who show low interest in school work? (1) (2) (3) (4) (5) (6) (7) (8) (9)

3. How much can you do to get students to believe they can do well in school work? (1) (2) (3) (4) (5) (6) (7) (8) (9)

4. How much can you do to help your students value learning? (1) (2) (3) (4) (5) (6) (7) (8) (9)

5. To what extent can you craft good questions for your students? (1) (2) (3) (4) (5) (6) (7) (8) (9)

6. How much can you do to get children to follow classroom rules? (1) (2) (3) (4) (5) (6) (7) (8) (9)

7. How much can you do to calm a student who is disruptive or noisy? (1) (2) (3) (4) (5) (6) (7) (8) (9)

8. How well can you establish a classroom management system with each group of students? (1) (2) (3) (4) (5) (6) (7) (8) (9)

9. How much can you use a variety of assessment strategies? (1) (2) (3) (4) (5) (6) (7) (8) (9)

10. To what extent can you provide an alternative explanation or example when students are confused? (1) (2) (3) (4) (5) (6) (7) (8) (9)

11. How much can you assist families in helping their children do well in school? (1) (2) (3) (4) (5) (6) (7) (8) (9)

12. How well can you implement alternative strategies in your classroom? (1) (2) (3) (4) (5) (6) (7) (8) (9)

APPENDIX H

SOCIAL VALIDITY MEASURE

Strong Kids Social Validity Survey

Teacher Name: _____ Date: _____

Directions: For each question, please circle the number that best describes how you feel.

Alignment of goals between teachers and curriculum:

It is important that students have knowledge regarding coping skills they can use during difficult times in their lives.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I believe it is feasible for a teacher to instruct students on these coping skills.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I feel confident to implement a structured curriculum such as Strong Kids.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

It is important that students experience fewer social, emotional, and behavioral problems.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

It is feasible for a teacher to provide early intervention instruction in an effort to help students experience fewer emotional problems.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Acceptability of Procedures:

I found it helpful to have scripted lessons.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I found it helpful to have materials, including transparencies, in-class handouts, homework handouts, prepared and provided to me.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I thought it took an acceptable amount of time to prepare for each lesson.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I thought it took an acceptable amount of time to implement each lesson.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I thought it took an acceptable amount of time to teach *all* of the lessons.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I think there are an acceptable number of lessons in the curriculum.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I think the students were interested in the lessons.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I was satisfied with the amount of support I received from the consultant.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I needed more training to better teach this program.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I was satisfied with the email support I received.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I was satisfied with the pre-service training I received.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I needed more training to better teach this program.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I was satisfied with the face-to-face support I received.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I felt the feedback I received was useful.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Satisfaction with results:

I was satisfied with the knowledge that students' demonstrated during the course of implementing the program.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

What kind of change did you observe in students' knowledge?

Decline in knowledge	No change	Increase in knowledge	Significant increase in knowledge
1	2	3	4

I was satisfied with the problem-solving skills that students' demonstrated during the course of implementing the program?

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

What kind of change did you observe in students' problem-solving skills?

Decline in skills	No change	Increase in skills	Significant increase in skills
1	2	3	4

I was satisfied with students' overall demonstration of positive emotion during the course of implementing the program.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

What kind of change did you observe in students' demonstration of positive emotion?

Decline	No change	Increase	Significant increase
1	2	3	4

Feasibility, importance, and confidence:

I believe it is feasible to implement *Strong Kids* in my classroom.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I believe it is important to implement *Strong Kids*.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I believe it is feasible for me to spend 15 minutes of prep time prior to implementing *Strong Kids*.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I believe it is important for me to spend 15 minutes of prep time prior to implementing *Strong Kids*.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I feel confident in implementing the *Strong Kids* curriculum.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I believe I was effective at teaching the* Strong Kids *curriculum.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

APPENDIX I

SOCIAL VALIDITY INTERVIEW

Strong Kids Social Validity Interview

Name of Teacher: _____ Tx/Control: _____

In order to help improve the Strong Kids curriculum and this study, I would like to ask you some questions about your experience with the program. Please answer each question, as your honest feedback will greatly help to improve the program. Thank you in advance for completing this survey.

Acceptability of Procedures:

Q1. Based on your experience with the curriculum, what would you say you liked the *most* about the *Strong Kids* program?

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Q2. What would you say you liked the *least* about the program?

_____
_____
_____
_____
_____
_____
_____
_____
_____

[*Only answer if you received consultation*]

Q3. Based on your experience with the consultation component of the program, what did you like the *most* about the consultation process?

_____
_____
_____
_____

[*Only answer if you received consultation*]
Q4. What did you like the *least* about the consultation process?

[*Only answer if you received consultation*]
Q5. In what ways do you think the consultation process helped you?

[*Only answer if you received consultation*]
Q6. If you could change one thing about the consultation process, what would it be?

Satisfaction with Results:
Q7. What do you think is the most useful thing your students have received from participating in the *Strong Kids* program?

Q8. Since implementing the *Strong Kids* program, what behavior or behaviors have changed the most in your students?

Feasibility:

Q9. How easy or difficult was it for you to implement the curriculum?

Q10. What was the hardest or most challenging part about implementing the curriculum?

Q11. What was the easiest part about implementing the curriculum?

Q12. On a scale of 1-10 (with 1 being the least and 10 being the most), how likely would you be to use the Strong Kids program next year with kids in your classroom?

Confidence/ Self-Efficacy:

Q13. What aspects of the *Strong Kids* lessons do you feel you implemented most effectively (e.g. providing examples, keeping students engaged, making content accessible to students)

Q14. Thinking back before you implemented the *Strong Kids* program, how confident did you feel about teaching your students social and emotional skills?

Q15. Now that you've implemented *Strong Kids*, do you think you are better prepared to teach your students about social and emotional skills? If so, in what ways?

APPENDIX J

RECRUITMENT EMAIL

Recruitment Email Contact: Administrator/Principal

Dear (***insert administrator/principal's name***),

My name is Verity Levitt and I am a doctoral candidate in the University of Oregon's School Psychology program. I am seeking to recruit six 6th grade teachers to take part in my doctoral dissertation study this fall. My study will be addressing whether brief teacher consultation impacts teacher implementation of *Strong Kids*, a social-emotional learning curriculum. I am attaching an informational flyer that provides details about my study, an overview of the *Strong Kids* program, as well as information about teacher involvement. Also, if you would like to meet to discuss your school's potential participation in my study, please contact me via email at vlevitt@uoregon.edu or via phone at (541) 513-3196.

Thank you very much.

Sincerely,
Verity Levitt

Attached: *Strong Kids overview, Study Informational flyer*

APPENDIX K

STRONG KIDS INFORMATIONAL FLYER

What is it?

- Developed by the UO School Psychology Program's Oregon Resiliency Project and published by Brookes Publishing. Please visit the *Strong Kids* website at: **http://strongkids.uoregon.edu** or the Brookes Publishing website at: **http://www.brookespublishing.com/store/mentalhealth.htm#social-emotional**
- 12 lesson social and emotional learning curriculum intended to help kids cope with difficulties in life
- Intended to help build resiliency skills to prevent depression and anxiety symptoms
- Lesson's include: understanding your feelings, understanding other people's feelings (empathy) dealing with anger, learning strategies to think more clearly about situations (learned optimism), conflict resolution training, coping with stress, setting goals, and positive thinking strategies

Why am I doing this?

- This is a study for the purposes of dissertation research. Your participation will not only assist the student researcher in fulfilling the dissertation portion of the doctoral degree requirement, but also move the field of prevention and early intervention science forward by empirically validating the effectiveness of the Strong Kids' curriculum.

What is my role and what are my responsibilities?

- Six 6th grade teachers will be selected to teach the lessons in their classroom during the course of a typical class period.
- The lessons are intended to be taught once per week over the course of 12 weeks

How am I going to do that?

- Teachers will receive a 2-hour training to review materials and address questions or concerns.
- Teachers who deliver the curriculum will receive assistance from the student researcher.
- All materials will be provided to you before you begin the first lesson.

What do we expect students to get out of this?

- Prior pilot studies have indicated that students gain knowledge about ways to cope with difficulties and show a decrease in anxiety and depression symptoms.
- We also expect students to have fun!

What can I expect to get out of this?

- We hope a relatively simple, useful, and meaningful curriculum to teach your students social and emotional skills.
- A series of thank you gifts for your participation!

Contacts if I have questions:

- Verity Levitt, M.S., Student Researcher, 513-3196 or vlevitt@uoregon.edu
- Ken Merrell, Ph.D., Dissertation Committee Chair, 346-2412, kmerrell@uoregon.edu

APPENDIX L

RECRUITMENT LETTER

Verity H. Levitt
University of Oregon
School Psychology
PhD Candidate
vlevitt@uoregon.edu
(541) 513-3196

(***Insert Date***)

Dear (***insert teacher name***):

My name is Verity Levitt from the University of Oregon School Psychology program, and I am writing to invite you to participate in my graduate research study. This study will evaluate the impact of brief teacher consultation on the implementation of *Strong Kids*, a 12-lesson social-emotional learning curriculum. I am seeking to recruit six 6th grade teachers who have never implemented the *Strong Kids* program before. As a teacher participating in the study, you will be asked to implement the curriculum for 12 weeks (1 lesson per week, 45-50 minutes per lesson). You will also be asked to participate in a 2-hour in-service training on the curriculum prior to implementation. There will be two brief questionnaires to fill out and a brief (10 minute) teacher interview both before and at the end of the study. If you are assigned to the brief consultation group, you will also be asked to participate in 15-minute consultation sessions with the student researcher while you are implementing the program. As compensation for your time and effort, you will receive a copy of the published curriculum and related materials, as well as gift certificates to local shops and restaurants.

Your participation will be appreciated greatly, but is completely voluntary. If you'd like to participate or have any questions about the study, please email or contact me at (541) 513-3196 or at vlevitt@uoregon.edu.

Thank you very much.

Sincerely,

Verity Levitt

APPENDIX M

PARENT CONSENT LETTER

August 6, 2007

Dear Parent/Legal Guardian:

Your child's school, Cascade Middle School, has adopted a curriculum called *Strong Kids*, a program designed by the University of Oregon to build resiliency skills by teaching students how to handle typical stress and social situations in a positive manner. Resiliency skills are the skills that students use everyday to overcome minor problems in their environment. Since resiliency is the ability to bounce back, some of the skills covered in the resiliency program will be problem-solving, positive-thinking, goal-setting, and anger-management.[1] Attached is an overview of each of the *Strong Kids* lessons. This curriculum will begin during the first week of school.

Cascade Middle School has volunteered to be a part of a research study to evaluate the effectiveness of this curriculum. This study is being conducted by Verity Levitt, M.S., a doctoral student at the University of Oregon and supervised by Dr. Ken Merrell, the director of the School Psychology Program at the University of Oregon. Your child was selected as a possible volunteer because he/she will be receiving this curriculum as part of the general education, language arts curriculum and his or her teacher has been trained to present these lessons. The lessons will be presented in approximately 45-50-minute sessions once a week for twelve weeks during a regularly scheduled language arts class. Students will be taught social and emotional strategies to increase their resiliency and prevent social, emotional, and behavioral problems. In addition, your child's class will receive a pizza party once they have completed the *Strong Kids* curriculum. Even though prior research has demonstrated student gains in social and emotional knowledge after completing the curriculum, these same personal benefits to the student cannot be guaranteed.

To check on the effectiveness of the resiliency lessons, your child will be given three short surveys before the lessons are presented and then three more short surveys at the end of the twelve weeks. Participation in the surveys is voluntary. Each survey will take approximately 10 - 15 minutes to complete. The surveys are easy to complete and will ask questions about their feelings about themselves, their relationships, and their abilities. The students are given these questionnaires at the end of the twelve weeks to see if the lessons were effective in teaching resiliency skills. There is no grade attached to your student's performance on these surveys or for their performance throughout the twelve lessons. To maintain your student's confidentiality, he/she will be given a code name for any written information that is obtained in connection with this study. The code name will be linked to the individual's name briefly to conduct the surveys, in case your student forgets their code name at post-testing. The list of code names will be kept in a

separate safe location than the coded data. The coded data will be kept in a safe and locked location and will be destroyed upon completion of the study.

The questionnaires that your child will be asked to complete are of minimal psychological risk. Responding to questions regarding feelings could possibly be unpleasant or mildly upsetting to students. Your child's teacher is trained to monitor these situations closely and to anticipate concerns that may be unique to his or her students. The researcher will also be monitoring these procedures.

Your decision whether or not to participate will not affect your relationship with your child's district, school, teacher, or with the University of Oregon. If you decide that your child will not participate in the survey sessions, a supervised and structured activity will be provided for your child. Because each of the 2 survey sessions is expected to last only 30 - 45 minutes, the activity will most likely be in the form of a structured study session. If you decide to participate, you may still withdraw your consent and discontinue your child's participation in the surveys at any time without penalty. If you have any questions, please feel free to contact Verity Levitt at 541.513.3196 or Dr. Ken Merrell at 541.346.2414. If you have questions regarding your or your child's rights as a research participant, contact the Office for Protection of Human Subjects, University of Oregon, Eugene, OR 97403, (541) 346-2510. You will be given a copy of this form to keep.

Receipt of this letter indicates that you have read and understood the information provided above, that you willingly agree that your child may participate, that you know that you may withdraw your consent at any time and discontinue participation without penalty, that you will receive a copy of this form, and that you are not waiving any legal claims, rights or remedies.

If you decide that do not want your child to participate in the pre and post test assessments, please call 689-0641, ask for Sue Thompson and indicate that you do not want your child to participate in this study.

Sincerely,
Verity Levitt, M.S.
University of Oregon

[1] To view the materials that will be presented to your child or to learn more about the curriculum prior to making a decision to participate please log on to http://strongkids.uoregon.edu.

APPENDIX N

STUDENT ASSENT

Strong Kids Consultation Study: Student Assent

Dear Student:

My name is Verity Levitt and I am a student at the University of Oregon. I am interested in helping kids like you to stay strong even when upsetting or difficult things happen in your life. I have done a lot of work to find out what helps students to stay strong when things go wrong and have figured out some of the best things that help. Your teacher has read our materials and agrees that these are some good things to help kids to stay strong, and s/he would like to help me to find out the best way to teach these things to students in your grade.

For the next twelve weeks, your teacher is going to teach lessons once a week about some of the important things that we are interested in, like the best thing to do when you feel angry or sad. Before your teacher starts to teach these lessons, he or she is going to give you three surveys to find out how much you already know about what makes you feel strong. Then, at the very end of the twelve weeks, your teacher will give you three more easy surveys that take about 10 – 15 minutes each and find out what you have learned. Filling out these surveys should help us to understand how well the lessons help you learn skills to deal with life's problems and stay strong. There is no grade attached to your performance on these surveys and there are no "right" answers on the surveys either. From participating in the *Strong Kids* curriculum, you will be taught ways to help you problem-solve, handle stressful situations, and work successfully with your teachers and peers. In addition, your class will get a pizza party at the end of the curriculum.

We don't think that the questions you are asked to answer will bother you, but some of the questions ask you about your feelings and what you would do in possible life situations, such as what to do if you are angry or stressed. Your teacher has been trained to make sure that even these examples about things going wrong don't bring up any bad feelings for you, and your teacher will help you to remember that the situations are not real. We can help you with any bad feelings or problems that may come up after filling out these questionnaires.

Your parents have already told us that it is alright if you have these lessons. You will not receive any money for filling out the questionnaires, but we would still like you to complete them. You do not have to fill out the questionnaires and if you decide not to, you will not get into any trouble. If you decide that you will fill them out, just sign your name on the line below. Even if you sign, if you change your mind later on, just let your teacher or your parent know that you don't want to complete the questionnaires, and you won't get in any trouble for changing your mind. Remember, that completing these questionnaires will happen during the school day, not before school or after school, and the scores you get on them are not counted on your report cards. In fact all of the work

that you do in this class will be kept confidential so that no one knows whose work it is. We will use a code name instead of your name and the code name will only tell us if you are a girl or a boy, and what grade you are in, what age you are, and maybe what race you are (if you decide to say so). We will briefly keep a record of your code name that will be linked to your real name in case you forget your code name at the end of the curriculum. Once you have completed all of the surveys, no record of your real name will be kept.

If you are thinking about signing but still don't feel sure what this is asking about, ask your parents about it, or ask if you can log onto http://strongkids.uoregon.edu on the internet to learn more, or you can call me, Verity Levitt, at 541-513-3196 or Professor Ken Merrell at 541-346-2414. You will get a copy of this letter to keep and take home.

Sincerely,
Verity Levitt

I, _____, have decided to take part in this project.
Signature

APPENDIX O

TEACHER CONSENT

Strong Kids Consultation Study: Teacher Consent

Dear 6th Grade Teacher:

Your school has agreed to participate in a research study on a resiliency curriculum conducted by Verity Levitt, M.S., a doctoral student in the School Psychology Program at the University of Oregon, supervised by Ken Merrell, PhD. This study will assess if teacher support helps teachers implement the *Strong Kids* program, a twelve-week social-emotional learning curriculum. The study will also assess if teacher support impacts teachers' self-efficacy, as well as teachers' overall perception of the curriculum.

You were selected as a possible participant in this study because the principal of your school, Glen Martz, has decided to adopt the *Strong Kids* curriculum for the 6th grade this year and suggested that you would be willing be a part of this study. If you decide to participate, I will be conducting a 2.5-hour in-service teacher training. The training will involve instruction regarding the curriculum and the age and grade specific requirements for its presentation. Once you are trained, class-time will be scheduled to deliver the curriculum, and consent forms will be provided to parents to gain permission for their students to participate in an in-school research study. The impact of the curriculum will be 45 - 50 minutes a week for 12 weeks. At the discretion of the principal or other decision maker, the curriculum will be presented in lieu of a language arts or related class.

For the purposes of the research, you will be asked to assess students at the beginning of the curriculum and at the end of the twelve-week course. The assessment will consist of three easy surveys that the students fill out themselves. The surveys ask simple questions about their feelings about themselves, their relationships, and their abilities and take 10 – 15 minutes each. The scores from these assessments will be used to determine the curriculum's impact on students' knowledge of resilience, and on their resilience skills. Two of the three assessments that will be used are the *Social Emotional Resilience and Assets Scale* for children (SEARS-C) and the *Behavior and Emotion Rating Scale-2* (BERS-2). If you are not already familiar with the SEARS-C and BERS-2, you will be provided with assistance in administering these measures. These will be used as validation tools to determine how closely aligned the *Strong Kids* curriculum is to tools currently being used for the same purposes. As part of this study you will be observed by a university researcher during instruction time of the lessons and participate in brief feedback sessions. You will also be asked to participate in one brief interview lasting approximately 10 minutes each. **In order to accurately record your interview answers, audio recording will be used. You may choose not to have your interview audio recorded. However, if you do choose to have your interview audio recorded, your name will not be recorded on the tape and a code name will be used.** Finally, you will

be asked to complete three brief questionnaires, one at the beginning, one in the middle, and two at the end of the program.

Potential benefits for participating in the study include training on a social-emotional learning curriculum and knowledge about universal prevention and intervention strategies for enhancing students' resiliency skills. The results of this study will benefit the greater population of teachers and students by informing the area of school-based social and emotional learning and providing teachers and students with access to a research based social-emotional learning curriculum. In addition, teachers participating in the study will be given an honorarium of $130, which they can either redeem in gift certificates or cash. Teachers participating in the study will receive $50 at pre-testing, $50 at post-testing, and $30 during the implementation of the curriculum.

The questionnaires that you will be asked to administer to students, the observation and feedback sessions that you participate in, and the questionnaires you will be asked to complete are of minimal psychological risk. Responding to questions regarding feelings could possibly be unpleasant or mildly upsetting to students. The university investigator will monitor this procedure and will respond as appropriately. The presence of an observer in the classroom, participating in the feedback sessions, and responding to the teacher questionnaire could possibly be unpleasant. The university researcher is trained to monitor these situations closely and respond as appropriate.

Participation of districts, schools, teachers, and students is voluntary. If you choose not to participate, your decision will not affect your job, your relationship with the University of Oregon, the Department of School Psychology, your school, or the school district and you will not be evaluated for employment purposes. If you decide to participate, you are free to withdraw your consent and discontinue participation at any time without penalty. If you have any questions, please feel free to contact Verity Levitt at (541) 513-3196 or Dr. Ken Merrell at (541) 346-2414. If you have questions regarding your rights as a research participant, contact the Office for the Protection of Human Subjects, University of Oregon, Eugene OR 97403 (541) 346-2510. You will be given a copy of this form to keep.

Your signature indicates that you have read and understand the information provided above, that you willingly agree to participate, that you may withdraw your consent at any time and discontinue participation without penalty, that you will receive a copy of this form, and that you are not waiving any legal claims, rights or remedies.

_____

Print Name and Title

_____

School / Grade(s)

_____

Signature and date

APPENDIX P

PERFORMANCE FEEDBACK FIDELITY CHECKLIST

Fidelity Checklist for Performance Feedback

Teacher:_____ Lesson #:_____ Date:_____

Consultant:_____ Observer: _____

- ❑ Asked for teacher perceptions of instruction
- ❑ Provided three praise statements to teacher
- ❑ Presented graphed data
- ❑ Presented goals or options to teacher to improve his/her fidelity
- ❑ Asked if there are any barriers to implementation
- ❑ Agreed upon a goal

Percentage of Fidelity:_____

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