Improving Implementation of Self-Regulation and Coping Strategies Among Children Who

Have Experienced Trauma

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Abstract

The purpose of this study was to investigate the relationship between students who have experienced trauma and their ability to implement coping and self-regulation strategies directly taught in social skills instruction. The measurement tool was a rating scale developed by the researcher. The scale was administered pre, post, and 30 days after post. Students self-rated in four areas: goal setting, attention control, emotional monitoring and implementing strategies. Parents rated the students on the four social skills using the same instrument. Teachers rated the students with the same instrument on the four social skills. The design was a one-group pre-post-30 days after post. Sixteen students participated in the study. There were statistically significant mean gains from pre to post and from pre to 30 days after post in all four social skills. Ratings declined from post to 30 days afterwards by smaller amounts than the gains from the premeasures. Providing direct instruction to students in social skills resulted in significant gains in social skills according to self-ratings and concomitant ratings of students by parents and teachers.

CHAPTER 1

INTRODUCTION

Implementing coping and self-regulation strategies are essential to an individuals' success in various environments. An individual must have the skills necessary to regulate and cope with a wide range of emotions, in addition to feeling competent to handle stressors as they arise. Some individuals can regulate their emotions and cope with stressors with little to no direct coaching in these skills. Others may require additional interventions and supports, because those skills do not present themselves automatically.

Learning to regulate emotions and cope with stressors are skills required for success even in the elementary school setting. As students are exposed to activities or settings that trigger unwanted emotions, it is evident which students possess the skills necessary to demonstrate expected emotional behavior. Students who show behavior that may be categorized as out of the ordinary, may not have the ability to emotionally regulate strong emotions during periods of stress. These students may have not had experiences to observe positive implementation of coping and self-regulation strategies or may lack the cognitive processes required to regulate their emotional behavior.

Students who have experienced trauma may have significant deficits in social-emotional behavior and the ability to regulate and cope with certain emotions. Interventions may be implemented to help close the gap for those students whom regulation skills do not come automatic. Direct social skills instruction in identifying one's emotions accurately and then matching an appropriate taught strategy to cope with those emotions, would allow students structured opportunities for practice and implementation. This researcher wanted to see if

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students who have experienced trauma have deficits in implementing coping and self-regulation strategies, and if the effectiveness of interventions closes the social-emotional gap.

Overview

This researcher has observed an increasing number of students at the elementary level that are diagnosed with an emotional disability. This means there are more students who are unable to demonstrate expected behavior within the school setting due to many reasons. As an elementary school teacher, this researcher is required to become well versed in trauma informed education, due to the overwhelmingly high number of students who report they have experienced some form of adverse childhood experience. The increase of students who have experienced trauma and who are diagnosed with deficits in social-emotional behavior or self- management show the pervasiveness of this problem.

This researcher is a special education teacher in a self-contained behavior classroom. Many students who this researcher works closely with every day have experience some form of childhood trauma. The students in the researcher's classroom often struggle significantly to handle stressors in their daily environment. Additionally, this researcher wanted to determine if there was a connection between childhood trauma and the inability to regulate and cope with emotions. This researcher was interested in identifying and implementing research-based interventions in order to give direct instruction in self-regulation and coping strategies to students who have experienced trauma.

Statement of Problem

The purpose of this study was to examine the relationship between childhood trauma and the implementation of coping and self-regulation strategies, in addition to interventions to reduce the social-emotional gap among sixteen students in first through fifth grade.

Hypothesis

The following null hypothesis will be tested to determine the relationship between direct social skills instruction and the implementation of coping and self-regulation strategies of students. In null form, there is no statistically significant relationship for trauma-experienced elementary students who have been directly taught social skills and the implementation of coping and self-regulation strategies.

Operational Definitions

Childhood Trauma. Childhood trauma is defined as a deeply distressing or disturbing event that occurs before the age of eighteen.

Implementing a Coping Strategy. A dependent variable in this study is the implementation of a coping strategy. This can be defined as utilizing a strategy specifically taught when a student is experiencing periods of frustration. Frustration can be defined as observable changes to a student's physical demeanor such as, clenched fists, furrowed brows, or increased volume of voice.

Implementing a Self-Regulation Strategy. A dependent variable in this study is the implementation of a self-regulation strategy. This can be defined as utilizing a strategy specifically taught when a student is experiencing an emotion. Emotions can range from positive (happy or calm) to unwanted (anxious or fearful).

Social Skills Instruction. The independent variable in this study is the direct instruction of coping and self-regulation strategies. This includes direct social skills instruction, implementation of research-based instructional strategies, and frequent reminders (up to two verbal and/or visual prompts) to implement strategies.

CHAPTER TWO

A REVIEW OF THE LITERATURE

This literature review explores the effects of trauma on a child's ability to implement coping and self-regulation strategies. Section one defines self-regulation, coping strategies and the effects of appropriate implementation of strategies. Section two defines childhood trauma and the impacts within the classroom. Section three explains how trauma effects the implementation of self-regulation and coping strategies. Section four describes interventions used to assist children whom have experienced trauma. Section five describes interventions that are used to support students' implementation of self-regulation and coping strategies.

Self-Regulation Strategies and Coping Strategies

It is imperative that individuals learn how to respond appropriately to stressors within their environment. Children learn how to manage their feelings and reactions to environmental stressors by observing those around them. Coping strategies are an individual's ability to internally manage stressors in a variety of ways. As children grow and develop, they encounter various stressors. What children consider stressors varies based on an individual's temperament. Temperament is considered an individual's nature, or how they interact with their environment socially and behaviorally. Coping strategies are implemented when an individual experiences stressors within their environment and may be learned from observing behaviors of others or taught.

Post, Boyer, and Brett (2006) defined self-regulation strategies as, "To postpone acting upon a desired object or goal, and to generate socially approved behavior in the absence of external monitors" (p. 5). The term self-regulation can also be interchanged with the terms self-control and metacognitive monitoring. Self-regulation is more than an individual's ability to

comply with directives, it involves the internal processes. "Self-regulation is characterized by high levels of cognitive effort and engagement, and by adaptive and effective use of learning and problem-solving strategies such as selectively attending, planning, monitoring, and deep-level processing of information" (Boyer et al., p. 12). For some children, monitoring one's thinking, creating, and implementing a plan regarding stressors does not come naturally. "Self-regulation is an essential ability of children to cope with various developmental challenges" (Edossa, Schroeders, Weinert & Artelt, 2018, p.2). In order to navigate their academic world, children must identify and utilize self-regulation and coping strategies.

In the classroom, children are required to do more than read, write, and compute. Children must maintain age-appropriate behaviors while interacting with peers and adults across the academic setting. When a child can regulate their emotions through internal processes, they are more likely to make positive choices regarding their behaviors. When a child can implement learned strategies to manage perceived stressors, they are available for learning. According to McClelland and Cameron (2011), "Children who are able to effectively and flexibly manage their thoughts, feelings, and actions have an easier time navigating social and learning environments" (p. 30). Self-regulation is directly linked to behavioral regulation which includes: working memory, flexible thinking, and inhibitory control. As children move through school, self-regulation becomes closely connected to products greater than academic achievement such as: social competence, motivation, emotional and behavioral engagement and self-regulated learning. These outcomes can be linked to greater problem-solving skills, perseverance, and goal-setting skills. Some children have the innate skills required to implement self-regulation and coping skills; however, when children have experienced some form of trauma at an early age, their ability to cope with challenges may be impacted.

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Childhood Trauma and the Impacts in the Classroom

Trauma is a deeply distressing or disturbing experience. According to the Presidential

Task Force on Posttraumatic Stress Disorder and Trauma in Children, approximately 26% of

children experience some form of trauma by the age of four. According to recent trauma

research, three types of trauma have been identified (Ehring & Quack, 2010). Simple trauma can

be described as overwhelming and painful, involving experiences that are life threatening and/or

the potential for serious injury. Complex trauma involves personal threat, violation, or violence,

which generally occurs over multiple instances and is longer in duration. Developmental trauma

can cause splintered development due to neglect, abuse, conflict in the family, or parental

conflict such as divorce or separation. No matter the type of trauma a child experiences, all

elements of a child's development can be impacted. According to Ehring and Quack, (2010),

childhood trauma can affect one's relationships, brain, body, memory, learning, behavior, and

emotions.

As the child grows and develops, the brain does the same. From the development of the

brain stem, to the cerebellum, the limbic system, and the cortex, each part of the brain specific to

certain functions are growing as neural pathways are created and connected (Ehring & Quack,

2010). Research has shown trauma and exposure to chronic stress during this sensitive period

can prevent healthy brain development, causing the anatomic brain structures to change due to

lack of connections by neurotransmitter networks (Hubbard, 1998). As the brain's structure

changes the bridge between the left and right hemispheres can become impaired. This

impairment can cause children to have difficulty reading social cues and responding to social

conversation (Ehring & Quack, 2010). Children may also have difficulty identifying emotions in

themselves and in others, causing deficits in regulating emotions. Exposure to developmental trauma can also cause children to have limited coping strategies, demonstrate fixed or repetitive behaviors, overreact to situations, demonstrate difficulty developing relationships, and have difficulty learning and retaining new information (Ehring & Quack, 2010). Exposure to trauma and chronic stress affects the brain in many ways, which prevents children from maturing emotionally, socially and psychologically.

Children react differently to trauma and thus their behaviors will look differently, as children develop behavioral coping mechanisms in an effort to feel safe and in control. Often, these behaviors are viewed by the school systems as defiant, disrespectful, and disruptive. Behaviors can include interpersonal conflicts, aggressive responses, school refusal or avoidance, substance abuse, or antisocial behaviors. Other children may demonstrate internalizing behaviors, such as frequent daydreaming, inattention, or withdrawal. Approximately 25% of children aged 11 to 17, display externalizing behaviors (Bruskas, 2012). These externalizing behaviors are seen as a lack of ability to implement coping strategies.

How Trauma Effects Implementation of Self-Regulation/ Coping Strategies

Children who have experienced trauma have deficits in problem-solving skills. With the amount of internal processing that must occur for children to implement coping and self-regulation strategies, those with deficits in problem-solving experience difficulties implementing strategies. According to Morris, Kouros, Fox, Rao, & Garber (2014), individuals whom have experienced trauma significantly struggle to process the internal workings of implementing coping strategies. For example, a child may struggle with identifying their feelings, creating a plan to address those feelings, and maintaining appropriate behavior in response to their feelings. Children whom have experienced trauma have less adaptive coping skills, lower competence,

and increased conduct problems (Hubbard, 1998). With feelings of social and academic incompetence, children are more likely to express negative behaviors when presented with stressors. As negative behaviors arise within a classroom, that child may be reprimanded and feel social isolation from peers whom do not want to be associated with those behaviors.

"To develop into a psychologically healthy human being, a child must have a relationship with an adult who is nurturing, protective, and fosters trust and security" (Borchers, Johnsons, Kaufman & Poole, 2011 p.4). According to research conducted by John Bowlby, infants acquire mental representations of others, of the self, or of relationships that guide subsequent experiences and behavior. Children who have had positive experiences with the caregiver in their environment will develop internal workings of others as responsive and giving, and of themselves as competent and worthy of affection. Those who have painful or unsatisfying experiences develop internal workings that reflect troubled relationships. Insecure attachments are formed when abuse or neglect occurs, and children feel mistrust toward adults. Insecure attachments can occur due to trauma events that a child may face. For example, a child might be separated from loved ones due to military deployment, a divorce, a prison sentence or even removal of a child from home due to an investigation of abuse or neglect. Without secure attachments, children may not have an appropriate role-model for coping and dealing with stressors. It may be difficult for children to develop and maintain positive relationships with a trusted adult as cited in Kaufman & Poole, 2011.

Interventions Used to Support Children of Trauma

The effects of trauma, high levels of stress, and the foster care system can cause long-lasting impacts for children. There is an intervention that is designed to mediate those effects and give children and families hope for the future. Trauma-Focused Cognitive Behavior Therapy

(TF-CBT) is a research-based intervention. According to The California Evidence-Based Clearninghouse for Child Welfare, TF-CBT is considered the best-supported treatment model in the child maltreatment field. According to Anthony Mannarino, the creator of TF-CBT, "By showing them that it's okay to talk about it, it makes the experience less overwhelming". This idea is the basis for the phase-model of treatment that usually takes an average of 12 to 18 sessions. TF-CBT includes skill-based components that include gradual exposure, followed by the trauma narrative, and processing, which incorporates more intense gradual exposure interventions (Azar, 2012 p.5).

The components to TF-CBT can be described by the acronym PPRACTICE. *Psychoeducation* is designed to inform the child about trauma and possible reactions to trauma. This education helps the child understand the reactions they experience are normative and there are other individuals who are familiar with their experiences. *Parenting* skills component includes application of standard behavioral management and skills training that increases positive parent-child encounters, reinforces positive child behaviors, and teaches parents how to use consequences for misbehaviors effectively. *Relaxation Skills* are taught and practiced because relaxation can effectively reverse physiological changes that occur following a traumatic experience. *Affective* modulation skills help children learn to accurately identify, express, and manage feelings. Techniques include drawing, feeling expression games, problem-solving skills, optimism, and hope. *Cognitive* coping skills teaches children the connection between thoughts, feelings, and behaviors. The trauma narrative and processing phase consists of recounting the narrative about the trauma and correcting cognitive distortions related to the trauma. The narrative begins with life before the trauma, describes the experience, and ends with what message the child might offer others. *In vivo mastery* uses gradual exposure to help children

overcome specific trauma related fears. During conjoint parent-child sessions, the goal is to improve child-parent communication about the trauma and other issues that may not have been yet addressed. *Enhancing* safety and planning for the future includes teaching safety skills, health-promoting decisions, and learning to assess danger, which can help the child avoid re-victimization and additional trauma. The PPRACTICE intervention has been studied for over 25 years and has shown that as many as 85% of children treated get better on measures of shame, PTSD, and depression within 12 to 16 sessions (Azar, 2012). In addition to TF-CBT, interventions used to target emotional regulation can improve a child's social and behavioral well-being. According to Lincoln, Marin & Jaya (2017), direct instruction in emotional regulation strategies can minimize the effects of PTSD, because that child feels confident when they have the tools or strategies to handle difficult situations.

An additional intervention that is being implemented across multiple settings and around the world is mindfulness. Child-friendly mindfulness programs for stress management are being used in schools and community locations, as well as being developed for clinical settings (Semple & Medini, 2015). Mindfulness is thinking about the task at-hand with your mind and body completely focused. Semple and Medini (2015) state, "Mindfulness-based interventions show considerable promise in the treatment of cognitive, emotional, physiological, and behavioral posttraumatic stress symptoms in children" (p.4). Teaching a child to only focus on the present will help improve their awareness of purposefully implementing chosen coping strategies. Mindfulness is an intervention used to teach self-regulation and coping strategies for children whom have and have not experienced trauma.

Interventions Used to Support Children's Implementation of Self-Regulation/ Coping

Strategies

Viglas and Perlman conducted a mindfulness study on 127 elementary-aged students. This study measured effects on self-regulation, prosocial behavior and hyperactivity within the sample of students. The program was six weeks long with sixty-minutes of direct teaching each week. The results of this study yielded that "Children in the Mindfulness Group showed greater improvement in self-regulation, F (1, 124) = 10.70, p = .001 (=.079), were more prosocial ($z = -4.152$, $p < .001$) and less hy*p*eractive ($z = -3.377$, $p = .001$) compared to children in the Control Group" (2018, p. 23). The results of this study indicate that mindfulness interventions improve children's abilities to self-regulate their emotions, utilize positive social skills, and promote inhibition control.

Additional social skills interventions can be utilized to teach children the processes behind creating a plan and implementing a plan to make positive choices. An intervention specifically targeted for teaching coping and self-regulation strategies is called Stop and Think. This intervention is designed for elementary to middle school-aged students and it addresses four development levels: interpersonal, survival, problem-solving and conflict resolutions. Children are given scripts or metacognitive road maps to follow in order to implement chosen strategies to make positive choices. This intervention provides students with models to follow when problem-solving and faced with hypothetical situations. When students become more comfortable with the scripts and strategies, they will generalize them to make positive choices in their environment. Interventions that are implemented with fidelity provide students ample opportunities to learn coping and self-regulation strategies to aid them in managing their stressors within their environment.

CHAPTER III

METHODS

The purpose of this study was to investigate the relationship between students who have experienced trauma and their ability to implement coping and self-regulation strategies directly taught in social skills instruction.

Design

A quasi-experimental one-group pre-to-post design was used to conduct this study. The study consisted of two, intact self-contained classrooms divided by grade levels. All students within the classrooms were identified to participate in the study, with a total of sixteen students. All participants in this study received daily social skills instruction (treatment) to address coping and self-regulation strategies; therefore, there is not a comparison group who does not receive the treatment. The independent variable is the administration of direct social skills instruction using research-based curriculum. Parents, teachers, and students completed pre and post questionnaires. The dependent variables are the pre and post questionnaire results after the direct social skills instruction.

Participants

The participants of this study attend a public elementary school in Harford County, Maryland, consisting of students from a diverse ethnic and socio-economic background. Students are members of a regional behavior support classroom called the Classroom Support Program (CSP). There is a total of sixteen participants: eleven males and five females, ranging from first to fifth grade. Participant ages range from six years ten months to eleven years two months, averaging eight years four months. There are six Caucasian students and ten African American students. All participants of this study receive special education services for both academic and

social-emotional behavioral deficits. Fourteen of the sixteen participating students use a Behavior Intervention Plan (BIP) to target maladaptive behaviors.

Based on a comprehensive review of records, seven of the sixteen participants have experienced some form of childhood trauma. (All participant names and identifying information were kept confidential). The adverse experiences of these seven students include: neglect, physical or verbal abuse, drug addiction, and absentee parenting due to incarceration. All sixteen participants of this study received daily social skills instruction using research-based interventions approved by the Harford County Public School General Curriculum Committee.

Instrument

The self-regulation and coping strategy questionnaire was created by the researcher, thus no formal studies on validity or reliability were available on this instrument. The questions were derived from various self-regulation and coping strategy questionnaires such as the <u>Self-Regulation Formative Questionnaire</u> and the <u>Child Trends Self-Regulation Checklist</u>. The instrument consists of twenty-five questions that fit into the following four categories: planning or goal setting, attention control, emotional monitoring, and implementing strategies. Questions were created based on the direct skills that are taught in social skills instruction in order to measure growth for the skills. The questionnaire used a five-point scale that ranges from strongly disagree to strongly agree. The Self-Regulation and Coping Strategies Questionnaire were completed by a parent, teachers, and student (see Appendices A & B).

Procedure

Written permission for the students to complete the questionnaire was required from a parent or guardian prior to the explanation of the questionnaire to students. All questionnaires sent home were accompanied by a note that stated the person completing the document must be

over the age of eighteen and a legal guardian of the student. Prior to the competition of the questionnaire by students, a direct teaching occurred to ensure students comprehended all vocabulary and questions. Some participants in this study had deficits in reading phonics (decoding) and reading comprehension; therefore, all questions were read aloud for students to gain more accurate results. Student questionnaires were completed during the morning portion of the day because that is when students have shown the most compliance based on daily point sheet data. Questionnaires were completed by both the students' homeroom teacher and the program social worker. By having multiple team members provide input from different perspectives, the questionnaires would be a better reflection of self-regulation and coping strategies. The scores of the questionnaires completed by the homeroom teacher and the social worker were each considered.

Direct social skills instruction was implemented daily for forty-five minutes for thirty days. Social skills instruction was implemented using the research-based, county-approved curriculum Zones of Regulation. Social skills instruction was led by our program social worker, with direct assistance from the homeroom teacher and classroom paraeducators. The social skills curriculum addressed the following skills: identifying emotions, implementing strategies appropriate for emotions, goal setting, and impulse control. An attendance record was kept to track student participation and lesson objectives. At the end of each lesson, students were asked to complete an exit ticket called "what stuck with you" to determine if the lesson objective was met for each student.

After the implementation of the social skills instruction for the duration of the treatment, a post-questionnaire was completed by parents, teachers, and the student. The post-questionnaire data was compared to the pre-questionnaire data for each individual who completed the

questionnaire (for example, parent to parent and student to student.) Thirty days after the completion of treatment, questionnaires were completed to determine the duration of results. The scores from the pre-questionnaires were compared to the post-treatment questionnaires and to the questionnaires completed thirty days after the treatment was suspended.

The following will be used as a planned analysis for the action research. Pre-to-post change will be calculated for the sample of sixteen students. The sample change will be tested for statistical significance using the t-test for paired cases. The null hypothesis is that in the theoretical populations to which the sampled teachers, parents, and students belong, there is no average change from pre-to-post on the questionnaire subsections and totals. The alternative hypothesis is that in the same populations there is a mean change from pre-to-post for the teachers, parents, and students. In addition, because of the small sample, Cohen's delta effect size will be computed. Effect size measures the amount of standardized change regardless of sample size.

CHAPTER IV

RESULTS

This study examines the effects of direct social skills instruction on students' abilities to self-regulate and cope with their emotions. This study further narrowed self-regulation and coping into four sub-categories: planning and goal setting, attention control, emotional monitoring, and implementing strategies. Questionnaires were completed by students, parents, and their teacher, giving rating ranging from 1-strongly disagree to 5-strongly agree. The results of Tables 1 to 4 represent the results of student ratings prior to the implementation of direct instruction and then ratings after thirty days of direction instruction in the four subcategories. The results of Tables 5 to 8 represent the results of student ratings after thirty days of direct instruction and then thirty days after removal of the direct instruction.

Student Self-Ratings

Table 1. Students Pre v. Post Goal Setting   *Table 2. Students Pre v. Post Attention Control*

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Spregoal	16	13.8125	1.6820	0.4205
Spostgoal	16	20.1875	2.9489	0.7372

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Spreattend	16	14.2500	2.0817	0.5204
Spostattend	16	21.5000	2.2211	0.5553

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
-15.28	<0.0001

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
-23.42	<0.0001

Table 3. Students Pre v. Post Emotional Monitoring

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Spreemote	16	14.1875	2.5356	0.6339
Spostemote	16	22.2500	2.4083	0.6021

Test

Null hypothesis	H_0: $\mu_d = 0$
Alternative hypothesis	H_1: $\mu_d \neq 0$

T-Value	P-Value
-30.35	<0.0001

Table 4. Students Pre v. Post Implementing Strategies

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Sprestrat	16	14.0625	3.0215	0.7554
Spoststrat	16	22.2500	2.3805	0.5951

Test

Null hypothesis	H_0: $\mu_d = 0$
Alternative hypothesis	H_1: $\mu_d \neq 0$

T-Value	P-Value
-19.03	<0.0001

Table 5. Students Post v. 30 Days Goal Setting

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Spostgoal	16	20.1875	2.9489	0.7372
Sexgoal	16	19.9375	2.9545	0.7386

Test

Null hypothesis	H_0: $\mu_d = 0$
Alternative hypothesis	H_1: $\mu_d \neq 0$

T-Value	P-Value
1.73	0.1038

Table 6. Students Post v. 30 Days Attention Control

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Spostattend	16	21.5000	2.2211	0.5553
Sexattend	16	20.9375	1.9483	0.4871

Test

Null hypothesis	H_0: $\mu_d = 0$
Alternative hypothesis	H_1: $\mu_d \neq 0$

T-Value	P-Value
3.58	0.0028

Table 7. Students Post v. 30 Days Emotional Monitoring

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Spostemote	16	22.2500	2.4083	0.6021
Sexemote	16	21.6250	2.4461	0.6115

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
2.44	0.0276

Table 8. Students v. 30 Days Implementing Strategies

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Spoststrat	16	22.2500	2.3805	0.5951
Sexstrat	16	21.2500	2.4083	0.6021

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
7.75	<0.0001

On average, students' ratings increased by a statistically significant amount (p<.05) from pre to post on all four social skills: goal setting, attention control, emotional monitoring, and implementation strategies. Between the post ratings and 30 days after post, mean ratings declined significantly (p<.05) for three of the four skills, attention control, emotional monitoring, and implementation strategies. Ratings declined for goal setting, but the amount was not statistically significant (p>.05). Despite a decline in ratings from the 30 days after post, the declines were smaller than the gains from pre to post.

The results of Tables 9 to 12 represent the results of parent ratings prior to the implementation of direct instruction and then ratings after thirty days of direction instruction in the four subcategories. The results of Tables 13 to 16 represent the results of parent ratings after thirty days of direct instruction and then thirty days after removal of the direct instruction.

Table 9. Parents Pre v. Post Student Goal Setting

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Ppregoal	16	14.2500	1.6125	0.4031
Ppostgoal	16	20.8750	2.9637	0.7409

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
-15.52	<0.0001

Table 10. Parents Pre v. Post Student Attention Control

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Ppreattend	16	14.6875	2.4958	0.6240
Ppostattend	16	21.8750	2.2767	0.5692

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
-17.96	<0.0001

Table 11. Parents Pre v. Post Student Emotional Monitoring

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Ppreemote	16	14.7500	2.8402	0.7100
Ppostemote	16	22.6875	2.4958	0.6240

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
-23.69	<0.0001

Table 12. Parents Pre v. Post Student Implementing Strategies

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Pprestrat	16	15.0000	3.1411	0.7853
Ppoststrat	16	23.3750	2.3345	0.5836

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
-18.39	<0.0001

Table 13. Parents Post v. 30 Days Student Goal Setting

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Ppostgoal	16	20.8750	2.9637	0.7409
Pexgoal	16	20.3125	2.9826	0.7456

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
4.39	0.0005

Table 14. Parents Post v. 30 Days Student Attention

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Ppostattend	16	21.8750	2.2767	0.5692
Pexattend	16	21.1250	2.0616	0.5154

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
2.54	0.0228

Table 15. Parents Post v. 30 Days Student Emotional Monitoring

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Ppostemote	16	22.6875	2.4958	0.6240
Pexemote	16	21.7500	2.5430	0.6357

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
4.39	0.0005

Table 16. Parents Post v. 30 Days Student Implementing Strategies

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Ppoststrat	16	23.3750	2.3345	0.5836
Pexstrat	16	22.1250	2.2767	0.5692

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
6.45	<0.0001

On average, parents' ratings of students' social skills increased by statistically significant amounts from pre to post and declined by statistically significant amounts from post to 30 days afterwards, though not by as much as the pre to post gain. The changes from pre to post to 30 days after post occurred for all four social skills.

The results of Tables 17 to 20 represent the results of teacher ratings prior to the implementation of direct instruction and then ratings after thirty days of direction instruction in the four subcategories. The results of Tables 21 to 24 represent the results of teacher ratings after thirty days of direct instruction and then thirty days after removal of the direct instruction.

Table 17. Teachers Pre v. Post Student Goal Setting

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Tpregoal	16	13.8125	1.6419	0.4105
Tpostgoal	16	20.9375	2.9319	0.7330

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
-16.69	<0.0001

Table 18. Teachers Pre v. Post Student Attention Control

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Tpreattend	16	14.3750	2.3629	0.5907
Tpostattend	16	22.3125	2.0238	0.5060

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
-24.62	<0.0001

Table 19. Teachers Pre v. Post Student Emotional Monitoring

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Tpreemote	16	14.4375	2.3936	0.5984
Tpostemote	16	23.0000	2.3944	0.5986

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
-38.39	<0.0001

Table 20. Teachers Pre v. Post Student Implementing Strategies

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Tprestrat	16	14.8750	3.3441	0.8360
Tpoststrat	16	23.7500	2.5690	0.6423

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
-16.46	<0.0001

Table 21. Teachers Post v. 30 Days Student Goal Setting

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Tpostgoal	16	20.9375	2.9319	0.7330
Texgoal	16	20.1250	2.8723	0.7181

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
4.33	0.0006

Table 22. Teachers Post v. Student Attention Control

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Tpostattend	16	22.3125	2.0238	0.5060
Texattend	16	21.3125	2.0238	0.5060

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
4.47	0.0004

Table 23. Teachers Post v. 30 Days Student Emotional Monitoring

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Tpostemote	16	23.0000	2.3944	0.5986
Texemote	16	21.8125	2.3443	0.5861

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
4.84	0.0002

Table 24. Teachers Post v. 30 Days Student Implementing Strategies

Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Tpoststrat	16	23.7500	2.5690	0.6423
Texstrat	16	22.9375	2.5421	0.6355

Test

Null hypothesis	$H_0: \mu_d = 0$
Alternative hypothesis	$H_1: \mu_d \neq 0$

T-Value	P-Value
4.96	0.0002

On average, teachers' ratings of students' social skills increased by statistically significant amounts from pre to post and declined by statistically significant amounts from post to 30 days afterwards, though not by as much as the pre to post gain. The statistically significant changes from pre to post to 30 days after post occurred for all four social skills.

Summary of Gains and Losses for Student Skills

Table 25. Mean Change in Ratings of Students Social Skills

Rater	Skill	Pre to Post	Post to 30 days
Students	Goal Setting	6.38	-0.25
	Attention Control	7.25	-0.56
	Emotional Monitoring	8.06	-0.63
	Implementing Strategies	8.19	-1.00
Parents	Goal Setting	6.63	-0.56
	Attention Control	7.19	-0.75
	Emotional Monitoring	7.94	-0.94
	Implementing Strategies	8.38	-1.25
Teachers	Goal Setting	7.13	-0.81
	Attention Control	7.94	-1.00
	Emotional Monitoring	8.56	-1.19
	Implementing Strategies	8.88	-0.81

The largest rated student gains from pre to post occurred for emotional monitoring and implementing strategies for students, parents, and teachers. Likewise, the largest declines from post to 30 days after post occurred for the same social skills.

CHAPTER V

DISCUSSION

The purpose of this study was to investigate the relationship between students who have experienced trauma and their ability to implement coping and self-regulation strategies directly taught in social skills instruction. Based on the results of this study, the null hypothesis is rejected. This study found there was a statistically significant increase in student, parent, and teacher rating scales from pre to post on all four social skills subcategories: goal setting/planning, attention control, emotional monitoring, and implementing strategies.

Implications of Results

Based on the results of this study, the direct teaching of social skills improves students' abilities to set goals, control attention, monitor emotions, and implement strategies. This study shows the importance of implementing daily social skills instruction within a structured school setting for students whom have experienced trauma. In order for students to access academic content, they must possess the ability to implement strategies to focus their attention and control strong emotions. As students feel confident that they have strategies to help them be successful when encountering difficult situations, they will be able to better access rigorous curriculum in their least restrictive environment. Even after a thirty-day removal of the social skills instruction, rating scales continued to show an increase in scores prior to exposure to the curriculum.

There were declines in rating scale scores across all four subcategories from post to thirty days after post. This decline in scores suggest the importance of continued exposure of direct social skills instruction. Students whom have experienced trauma require continued exposure to material with opportunities for modeling and practice opportunities. When the instruction is

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removed, we see a decline is students' abilities to monitor their emotions, thus making it difficult to implement the strategies previously learned.

Theoretical Consequences

This research specifically analyzed students' abilities in relation to social skills. While it is evident that direct, daily social skills instruction improved students' abilities to access cross-content curriculum, academic achievement was not considered through this study. The direct socials skills instruction taught students how to monitor and regulate their emotions, which allowed them to then implement learned strategies across multiple content areas.

In order for students to access daily social skills instruction within the school setting, they did not receive academic instruction in the area of social studies or science (it was one subject or the other depending upon the rotating schedule for each grade). This study did not analyze the implications of missing academic content. Fifth graders are required to take the Maryland Integrated Science Assessment (MISA) to demonstrate their knowledge on grade-level content. It is not known if students participating in social skills instruction rather than science instruction will be negatively impacted by the results of MISA. There may be social/emotional effects for students who feel they were not included in hands-on learning opportunities embedded throughout science and social studies curriculum.

Threats to the Validity

This study was conducted on a population of sixteen students within a self-contained behavior classroom. While this was the entire population of students within the boundaries of the elementary school, the population was limited. The sixteen students ranged from grades first to fifth; however, they only represented a select number of students. There were also limited

numbers of female participants for this study, as the behavior classroom has five females accounting for 31% of the participants.

Direct social skills instruction was taught over thirty days beginning around the end of March. During this time students participated in field trips, concerts, and state testing in the areas of reading and mathematics, causing irregularities to their schedule. Schedule changes and state testing may have also caused an increase in student frustration and unwanted emotions. While these changes are inevitable during the third quarter of a school year, they may have accounted for the decrease in ratings from post to thirty-day removal. On the other hand, the decline from post to 30 days after post was smaller than the increase from pre to post.

Connections to Previous Studies/Existing Literature

According to research conducted by Morris et al., (2014), individuals who have experienced trauma struggle to implement coping strategies due to deficits in processing internal workings. This means that those who have experienced trauma require additional supports to process emotions, determine appropriate ways to cope with those emotions, and then implement an effective strategy to display appropriate social behavior. Through the direct instruction opportunities within social skills, students are given the "scripts" to work through the internal process required. Social skills instruction also provides structured opportunities for practice so students can work through scenarios without the fear of social isolation or ridicule.

A study conducted by Hubbard (1998) discusses that students who have experienced trauma have less adaptive coping skills. Just as children do not learn to read, write and speak automatically, students who have experienced trauma do not learn to cope with emotions. These students must be given direct instruction with opportunities to gradually become more independent in generalizing acceptable coping strategies across multiple environments.

Implications for Future Research

As school systems become more aware of the importance of providing trauma informed education, research-based social skills curriculum should be implemented. Within the elementary level, social skills instruction could be implemented school wide. Instruction could occur during intervention periods or as part of a health curriculum. Research should be conducted to determine the effects of social skills instruction on an entire school population to test the validity across multiple demographics. Data should be tracked to determine if there is a significant difference in academic achievement, office referrals, and/or crisis events.

This study analyzed rating scales based on thirty days of direct social skills instruction. Further research should occur to analyze results when social skills instruction is provided for a longer duration such as for a quarter or semester. Students who receive specially designed instruction for behavioral goals should have progress monitored quarterly when direct social skills instruction occurs for more than thirty days. Social skills instruction may not only lessen the gaps for students with social/emotional deficits, but also improve an entire school environment.

Conclusions/Summary

Students who have experienced trauma face many challenges when entering a school building. Many students struggle to trust adults, make friends, set rigorous goals for themselves, and achieve academic success. By providing students direct social skills instruction, a school can combat many challenges students face. Students who have experienced trauma learn best when direct, explicit instruction occurs with modeling and guided practice opportunities. Social skills instruction is an opportunity for students to learn strategies to assist them in being successful, not only in the school setting but in their world as well. Based on this study it is reasonable to

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assume that students who have experienced trauma socially and emotionally benefit from direct

social skills instruction.

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Appendix A: Student Questionnaire

Student Name: _____

Assessing Self-Regulation and Coping Strategies Questionnaire

Directions: Please rate each statement as 1)Strongly Disagree, 2)Somewhat Disagree,
3)Neutral, 4)Somewhat Agree, 5)Strongly Agree.

1. I have a difficult time controlling my temper. _____

2. I get extremely frustrated. _____

3. I get upset easily. _____

4. I fear losing control over my feelings. _____

5. I slam doors or kick things when I'm angry. _____

6. I can develop plans for my important goals. _____

7. I can identify future consequences for my actions. _____

8. I can make plans to reach my goals. _____

9. I can get distracted by little things. _____

10. I can notice things aren't working and do something about it. _____

11. I get fidgety after a few minutes of sitting still. _____

12. I have a difficult time sitting still during important tasks. _____

13. I can calm down when I feel excited or wound up. _____

14. I can usually tell when I am about to cry. _____

15. I can resist something when I know I shouldn't do it. _____

16. I can usually tell when I am getting frustrated or tired. _____

17. I have a lot of willpower. _____

18. I know strategies to use when I'm experiencing negative emotions. _____

19. I can implement strategies when I'm experiencing negative emotions. _____

20. I can identify what works well for them. _____

21. I can easily make up my mind. _____

22. I can continue working where I left off after being distracted. _____

23. I can identify how my body feels when I'm experiencing various emotions. _____

24. I can name a variety of emotion words. _____

25. I can identify actions that interfere with my work completion. _____

Appendix B: Teacher/Parent Questionnaire

Student Name: _____   Person Completing the Survey: _____

Assessing Self-Regulation and Coping Strategies Questionnaire

Directions: Please rate each statement as 1)Strongly Disagree, 2)Somewhat Disagree, 3)Neutral, 4)Somewhat Agree, 5)Strongly Agree.

1. My student has a difficult time controlling their temper. _____

2. My student gets extremely frustrated. _____

3. My student gets upset easily. _____

4. My student fears losing control over their feelings. _____

5. My student slams doors or kicks things when angry. _____

6. My student can develop plans for important goals. _____

7. My student can identify future consequences for their actions. _____

8. My student can make plans to reach goals. _____

9. My student can get distracted by little things. _____

10. When my student notices things aren't working, they do something about it. _____

11. My student gets fidgety after a few minutes of sitting still. _____

12. My student has a difficult time sitting still during important tasks. _____

13. My student can calm themselves down when excited or wound up. _____

14. My student can usually tell when they are about to cry. _____

15. My student can resist something when they know they shouldn't do it. _____

16. My student can usually tell when they are getting frustrated or tired. _____

17. My student has a lot of willpower. _____

18. My student knows strategies to use when experiencing negative emotions. _____

19. My student implements strategies when experiencing negative emotions. _____

20. My student is able to identify what works well for them. _____

21. My student can easily make up their mind. _____

22. My student can continue working where they left off after being distracted. _____

23. My student can identify how their body feels when experiencing various emotions. _

24. My student can name a variety of emotion words. _____

25. My student can identify actions that interfere with work completion. _____