Teaching Resilience in Special Education

by

Francisco Dussan

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

Approved October 2021 by the
Graduate Supervisory Committee:

Elizabeth Gee, Chair
Leigh Wolf
Jim Elsasser

ARIZONA STATE UNIVERSITY

December 2021

ABSTRACT

Our children come to school every day to learn, participate, and prepare for what the future will bring. Others come to school to find refuge and help from those who dedicate their lives to ensure they are well and safe. They come with their minds filled with hopes and dreams, while others walk around the hallways with their hearts filled with despair and uncertainty. Despite collaborative district efforts and improvements in student services, students continue to experience trauma related symptoms and other mental disorders at disconcerting rates. The school district reports that approximately 98% of students have experienced traumatic episodes and half of these students presented with significant distress from symptoms of Post-Traumatic Stress Disorder (Loudenback, 2016). At this school, approximately 25% of the student body has been referred, identified and treated for socio-emotional difficulties. These rates are often higher in students with learning disabilities participating in different academic programs. This action research study was conducted to evaluate how and to what extent does implementation of a resilience-based curriculum affect students' resilience, Posttraumatic Stress Disorder (PTSD) symptoms, attitudes toward school and efficacy for coping. This project was implemented over ten consecutive weeks in an urban middle school in East Los Angeles to a group of twenty students in special education. The intervention consists of ten modules each with activities and strategies designed to raise the students' resilience and overall well-being. Resilience Theory and Social Cognitive Theory provide the framework for understanding the problem of practice and informing the intervention. Research along with professional observations regarding the vulnerability of students in

special education coupled with the lack of evidence-based practices that assist in their emotional development inspired this project. This action research relied on an explanatory sequential design where qualitative results explained and supported the results from the quantitative data. Following the explanatory design, quantitative data was collected analyzed followed by qualitative data upon completion of the intervention. Data collected from web-based surveys and focus groups demonstrate that their participation in the resilience-based intervention increased their resilience, more specifically self-efficacy and problem solving skills while reducing PTSD symptoms. Results also showed students improved their attitudes toward school and ability to cope with stress. Quantitative and qualitative data merging, interpretation, and relation to both theory and research are discussed along with the study's limitations, implication for research and practice, and concluding thoughts.

DEDICATION

This dissertation is dedicated to my students, who day in and day out teach me about forgiveness, resilience, and hope. I also want to dedicate this to my wife Liliana Dussan for her unconditional support and for motivating me to accomplish my dreams. To my daughter Emma Dussan, whose smile give my life purpose. And to my mother, Luz Arcos, who taught me to dream and have faith in the Lord.

ACKNOWLEDGMENTS

"*Anything is possible when you have the right people there to support you*" -

Misty Copeland

There are many who helped me along the way and whose contributions made this possible. I want to take a moment to thank them.

First, I would like to thank my dissertation committee chair, Dr. Gee. Your expertise and dedication to my success are the reason why I completed this program. Dr. Gee, you gave me the confidence I did not have in myself to conduct this research and the skills to turn data into a powerful message. I also want to thank my dissertation committee members. Their guidance and wisdom elevated my work and made this project possible. Dr. Wolf and Dr. Elsasser served as expert and insightful committee members. Dr. Wolf, you taught me the value of qualitative research and the importance of social research as an advocate tool for our most vulnerable. Dr. Elsasser, your selflessness and willingness to support me throughout this program made a significant difference in my understanding of practical research. Thank you for your careful feedback and encouragement.

I also want to thank my peers for motivating and supporting me these past three years. Thank you for including me in zoom meetings and Facebook groups to learn, discuss, clarify, and ensure my work met the expectations. Thank you Brian Junkins, for your feedback, editing, and phone calls to discuss statistical analysis. Thank you Peter Hepburn for your positivism and bringing our cohort close together.

To my best friend Greg Chavez, thank you for dedicating your time to read and improve my work. Your love for the English language is truly inspiring and has made me a much better writer. Without your support, this would not have been possible. It is time to celebrate; you earned this degree right along with me.

Finally, I would like to thank my wife for her patience and unconditional support the past few years. Thank you for always supporting my dreams and pushing me to be the best I could be. We have been walking through the dark together and it is time to enjoy the sunshine!

TABLE OF CONTENTS

Page

LIST OF TABLES x

LIST OF FIGURES xi

CHAPTER

1 INTRODUCTION 1

A National Issue 2

State 3

Large Urban District 4

Setting 4

Role 6

The Intervention 8

Purpose and Research Questions 11

2 THEORETICAL PERSPECTIVES AND SUPPORTING SCHOLARSHIP ... 13

SOCIAL COGNITIVE PERSPECTIVES OF TRAUMA (PTSD) 14

The Social Context 15

Social Cognitive Processing 19

Studies Related to Social Cognitive Theory 22

RESILIENCE THEORY: A FRAMEWORK FOR INTERVENTIONS 23

Internal Assets 24

External Assets 27

Related Studies of Resilience Theory 29

CHAPTER Page

3 METHODS 32

Research Paradigm 32

Research Design 33

Setting 34

Virtual Setting.....35

Participants.....35

Intervention.....36

DATA SOURCES.....40

Quantitative Sources.....42

Qualitative Sources.....44

DATA ANALYSIS 45

Quantitative Data.....45

Qualitative Data.....45

Role of the Researcher.....49

Timeline 49

4 DATA ANALYSIS AND RESULTS 51

RESULTS FOR QUANTITATIVE DATA.....52

Survey Reliability Data 52

Internal Consistency 52

Evaluation of Treatment Group Differences 54

Resilience.....57

CHAPTER Page

PTSD 59

Student Attitudes Toward School 63

Coping 66

Posttest Evaluation 68

RESULTS FOR QUALITATIVE DATA 70

Resilience 74

Student Attitudes Toward School 75

Coping 80

Student Experience 82

Data Analysis Summary 85

5 DISCUSSION 87

Integration of Data 88

Resilience 89

Post-Traumatic Stress Disorder (PTSD) 89

Student Attitudes Toward School 90

Coping 91

INTERPRETATION OF FINDINGS 91

Research Question # 1 92

Research Question # 2 95

Limitations of the Study 98

IMPLICATIONS FOR RESEARCH AND PRACTICE 100

CHAPTER Page

Follow-Up Study 100

Family Involvement.....101

Mental Health First.....102

Special Day Class 102

Lessons Learned 104

Concluding Thoughts 106

REFERENCES 108

APPENDIX

A CMS MENTAL HEALTH REPORT 116

B WELLNESS CHECK UP PRE-POST SURVEY 118

C STUDENT SEMI-STRUCTURED INTERVIEW PROTOCOL..... 124

D ASU INSTITUTIONAL REVIEW BOARD APPROVAL 126

LIST OF TABLES

Table Page

1. Quantitative Data Sources 41

2. Qualitative Data Sources 41

3. Student Wellness Checkup Reliability 53

4. Independent T-Test for Treatment Groups 55

5. Descriptive Statistics for Pre and Post Resilience 57

6. T-Statistics for Pre and Post Resilience 58

7. Descriptive Statistics for Pre and Post PTSD 59

8. T-Statistics for Pre and Post PTSD 62

9. Descriptive Statistics for Pre and Post Students' Attitudes Toward School 64

10. T-Statistics for Pre and Post Students' Attitudes Toward School 65

11. Descriptive Statistics for Pre and Post Coping 66

12. T-Statistics for Pre and Post Coping 67

13. Post Evaluation Response Frequency Percentages: Resilience Skills 69

14. Post Evaluation Resilience Skills Descriptive Statistics 70

15. Themes, Theme-Related Components, and Assertions From Focus Groups 72

LIST OF FIGURES

Figure Page

1. Social-Cognitive Model of PTSD 15

2. Resilience and Youth Development (RYDM) framework 24

Chapter One: Introduction

"All children have within them the potential to be great kids. It's our job to create a great world where this potential can flourish"

— Stanley Greenspan

My childhood started 3,400 miles south of Los Angeles in a small but active country called Colombia. I was born and raised in a society recognized as among the most violent and dangerous in Latin America (Del Castillo et al., 2015). Child abuse, recruitment of children into armed groups, and inadequate access to healthcare intersect with social and economic factors that create a detrimental and hostile environment for heathy child development. Mental health illnesses such as depression and Post Traumatic Stress Disorder (PTSD) are high among Colombian children and are mostly associated with risk exposure (Chaskel et al., 2015). One would expect that these destructive social dynamics would determine the fate of most Colombian children to be full of despair and deprivation. Surprisingly, Colombian children have been able to thrive despite their exposure to trauma and despite their limited economic opportunities (Cortes & Buchanan, 2007). I have always been interested in finding and replicating whatever element(s) these children relied on to endure adversity. In retrospect, my own adult life and the choices I have made do not reflect my experiences as a child in Colombia. The questions I have been asking for years are "how can we teach children to be resilient" and "what exactly does it mean to be resilient?"

Unfortunately, childhood mental health illnesses and risk exposure are not exclusive to Latin America. As a psychiatric social worker living in Los Angeles, I

am in direct contact with children suffering everyday as a result of abuse, violence, and poverty among other social factors. Thus, it has become my life's purpose to not only create mental health awareness, but also to equip and develop children into resilient and emotionally healthy individuals.

A National Issue

Mental health is often ignored and unrecognized as a crucial human condition that promotes individual and collective wellbeing. The consequences of its impact, however, are sounding off the alarms across national medical, political, and educational fields. National reports and data on school shootings and recurring suicidality among students reflect the widespread epidemic of mental health issues that have pervaded the educational system and are affecting the lives of 17.1 million children across the nation (Costello et al, 2003). According to the results from the National Comorbidity Study-Adolescent Supplement (NCS-A), mental health illnesses are the most common health related issues that affect school-aged students across the United States (Merikangas et al, 2010). Reports from the National Research Council and the Institute of Medicine report that an estimated 13-20% of children living in the United States experience a mental health disorder in any given year (Griffith, 2010). This means that one in every five children experiences mental health issues that could potentially interfere with healthy emotional and cognitive development. Moreover, the NCS-A also reports that roughly half of adolescents (13-18) registered positively for *any* mental health disorder and 22% of those adolescents exhibited severe impairment (Merikangas et al, 2010). This national issue is directly affecting academic development and success for a significant number of

students. Mental health challenges make it difficult—if not impossible—for children to engage, learn, perform and become active participants in the educational process. Unfortunately, 37% of students aged 14 and older with mental health disorders will reach a point of despair and drop out of school (NAMI, 2015). Behavioral maladaptation, trauma symptoms and behaviors, performance, anger, depression, poor emotional regulation, poor academic performance, learning disabilities and truancy are only some of the problems stemming from the mental health crisis in school systems both locally and nationally.

State

In California, there is a major public health concern as the number of children with mental health illnesses is on the rise, and the lack of resources to treat them are contributors to serious consequences. Data from the Lucile Park Foundation for Children's Health reported that approximately 25% of 7th graders, 32% of 9th graders, and 33% of 11th graders in California suffer from depressive symptoms (Lucile Park Foundation, 2015). To put these figures in perspective, the percentages of all three grade levels equate to roughly 430,000 students affected by depression in California alone. Unfortunately, only one out of four students with mental health disorders in the Golden State receive the treatment they need, and most of them will receive it at their schools. In Los Angeles County, students in secondary schools—particularly 7th, 9th and 11th graders—reported moderate levels of depression. Even more critical is the slow but steady increase of Los Angeles County youth suicides (the age group from 5-14 years), comprising two incidents in 2012 to seven completed suicides in 2015 (Lucile Park

Foundation for Children's Health, 2015). These are shocking statistics that illustrate the impact of mental health issues in students, which not only affects their ability to learn but strips these students of their rights to develop into healthy, productive adults.

Large Urban School District

This school district is one of the largest in the nation, serving approximately 600,000 students across 1,000 schools. Thousands of students come to school every day despite facing a multitude of biopsychosocial factors affecting their academic and emotional development. According to district reports, approximately 98% of students have experienced traumatic episodes and half of these students presented with significant distress from symptoms of PTSD (Loudenback, 2016). These rates are congruent with national rates of mental health disorders in children. There must be a national and local shift from traditional educational policy and school interventions to a comprehensive whole-child educational approach that integrates social and emotional health practices.

Naturally, the above information on children with mental health illnesses suggests a dramatic effect on students' academic performance. It practically begs for school involvement and understanding of the benefits of trauma-informed approaches. Children struggling with mental health and learning disorders are at risk for poor outcomes in school and in life, and lack of mental health interventions are only making matters worse. Instead of putting kids further at risk, schools should be identifying and supporting at-risk children. A widely deployed, integrated system of evidence-supported, school-based mental health and preventive services is needed. If we want to help our children and our schools succeed, time is of the essence.

Setting

The setting of this study is an urban middle school located in northeast Los Angeles. For confidentiality reasons, I will refer to this school as Cypress Middle School (CMS). CMS is in the Cypress Park community, near Dodger Stadium, and serves Grades 6 through 8. In 2017, CMS celebrated its 80th anniversary. CMS is a Tile I school as approximately 92 % of students come from socioeconomically disadvantaged families. The ethnic makeup of the approximately 840 students is 72% Hispanic or Latino, 25% Asian, and 3% are categorized in other ethnic groups. Twenty-three percent (23%) of the student population is classified as English Learners and 17% are students with disabilities. CMS is both rooted in deep and long-standing traditions and simultaneously in the midst of significant change. CMS has served a disadvantaged community for over sixty years where rates of poverty and violent crimes are among the highest in the county of Los Angeles (Los Angeles Times, 2018). The long-term effects of these social factors have morphed into a mental health crisis adversely affecting the quality of life for community members by perpetuating toxic biopsychosocial dynamics.

Since 1988, CMS has reflected—through test scores, academic performance and attendance—the profound impact of socio-emotional challenges of its students and their families. For decades educational leaders failed to recognize the importance of whole-child educational approaches and have undermined the beneficial effects that welcoming, nurturing, and strengths-based schools have on student well-being and achievement. In 2016, CMS began to transform itself, however, into specialized magnet schools which offer students more rigorous academic programs as well as the opportunity to engage in

project-based learning according to areas of interest. In addition, the school principal, at the time, understood the importance of student supportive services beyond academics and assigned a psychiatric social worker to address the socio-emotional needs of students at CMS. Although enrollment increased from 700 in 2015 to 840 in 2018, there were no significant improvements in test scores and attendance.

Role

As a social worker, I understand that academic achievement is not formulated as a simple linear equation, but is, in fact, a function of multiple interconnected and interrelated biopsychosocial factors. For decades, educational leaders have focused exclusively on the improvement of cognitive enhancement through academic programs and often measure student success based on quantitative analysis that failed to examine different but integral elements of human development such as social and emotional well-being. The results? A nationwide socioemotional crisis in students from all levels resulting in deficiencies in emotional regulation, stress management, and social interactions. Year after year, I have observed slight improvements on test scores but an increase in problematic student behavior steadily growing while attendance rates continued to plunge, for everyone failed to observe how community dynamics and its influence on student mental health is the predominant contributor to poor academic performance, behavioral maladaptation and truancy. This has inspired me to set in motion a school wide plan to incorporate mental health support and interventions into the classroom. I have worked tirelessly to raise awareness of this issue in order to balance the scope of the educational system and promote whole child education which relies on data

and future action research. It's time that the educational system becomes an autonomous institution that understands the significance of whole-student approaches that foster both academic and emotional development.

This sense of professional, ethical, and moral responsibility has put me in a dual practitioner-researcher role where I have the opportunity to explore, learn, implement, and potentially improve the lives of those I serve and interact daily. Since my assignment as the psychiatric social worker at CMS in 2016, I have been studying the community and collecting data from families and students to understand why our students continue to underperform both academically and in the area of attendance. Three years of data illustrate the reciprocal relationship between community issues, mental health challenges and school success. Mental health screeners, assessments, referrals, and interviews have assisted in demonstrating the rates of trauma, depression, anxiety, and suicidal behavior that our students experience, which have helped school administration and educators understand how experiences translate into disruptions to educational attainment.

My goal has been to redesign CMS by converting our school into a whole-child school where our students' socio-emotional needs are met alongside any and all academic requirements. I partnered with local community agencies such as the Boys and Girls Club of Los Angeles, Aviva Family Services, Centro Del Pueblo, The Children's Hospital of Los Angeles, The Department of Mental Health, and the Los Angeles Mayor's Office—among others—to establish a comprehensive school-based student resource center. I also assess and treat students identified with mental health issues as well as socio-emotional challenges that hinder their development and performance. Additionally, I expanded our

mental health program by starting an undergraduate and graduate social work intern program in order to attempt to reach more students and match the growing demand for services. After conducting classroom observations, I decided to include teacher preparation and development as part of this effort. I have presented a series of mental health training to staff regarding identification of pathology, classroom management strategies, and psychological first aid. Although students are aware of all the support systems and teachers are cognizant of the mental health issues in our schools, the problem continues to pervade our classrooms.

Despite collaborative efforts and improvements in student services, students continue to experience trauma related symptoms and other mental disorders at disconcerting rates. The 2018-2019 CMS Mental Health Report shows that approximately 25% of this school's students have been referred, identified and treated for psychosocial dysfunctions (See Appendix A). This number is consistent with an epidemic of mental health issues in schools as current national data report that one in every four students is dealing with emotional and psychological dysfunctions (NRCIM, 2009). Unfortunately, this rate (20%) only accounts for students who have been identified, which means that the actual rate could be much higher. Reports from Los Angeles County suggest that depression rates, particularly at the secondary school level, are at approximately 25.7% for 7th graders, 30.2% for 9th graders and up to 32.5% for 11th graders (Lucile Packard Foundation for Children's Health, 2015). Pia Escudero, executive director of Student Health and Human Services, mentioned that child trauma and mental health issues are like a "silent" epidemic where hundreds of students with

high needs are invisible in plain sight while their pain is certainly present (Loudenback, 2016).

The Intervention: Resilience-Based Intervention (RBI)

How does reducing these issues improve academic performance and, ultimately, test scores? Can individual interventions suffice? How can we reduce the overall impact of student mental health needs? These are some of the questions brought forth by the school principal during my discussion with him in regards to discussing the need for classroom and group interventions but with the traditional concern of loss of instructional time. The answer comes from several studies that examine the relationship with and direct effect that emotional development has on cognitive development (Chinaveh et al, 2010; Moses, 2012; Barch et al, 2018). All the evidence suggests that mental health issues are often the underlying cause of deficient cognitive development and maladaptive behaviors that become barriers to educational attainment. Disorders seen in CMS students such as depression, PTSD (trauma) and Attention Deficit Disorder (ADHD) are known to impair learning, processing, integration and application of knowledge (Schulte- Körne, 2016). In addition, it is also not an uncommon phenomenon to observe students with emotional difficulties become habitual and chronic truants and engage in socially disruptive behaviors that further affect their wellbeing. Some of the common themes that arise when conducting mental health assessments with students are inability to concentrate in class and difficulties processing information due to symptoms like flashbacks, disassociation, intrusive thoughts, irritability, restlessness, and unexplained anxiety. Could anyone learn with active symptoms like these? I asked the principal this

question during our meeting to put in perspective the type of challenges we must address in order to meet the socio-emotional and educational needs of our students.

The principal then followed up with a question concerning the implementation and integration of Resilience-Based Intervention (RBI) which is a school-based prevention program designed to alleviate trauma related symptoms by teaching students stress management and resilience skills such as problem solving, self-esteem, and self-efficacy. It was a practical concern addressing the question of delivery. Mental health resources are limited and so are its effects when preventing and treating child psychopathologies. As mentioned before, roughly 25% of the student body has been identified with mental health challenges and have or are receiving services; yet the problem continues to grow and extend beyond one-to-one interventions. The objective is to continue delivering school wide interventions (e.g., anti-bullying, suicide prevention, May is mental health month) while designing and moving towards more strategic and targeted programs. Introducing RBI into a classroom and/or group setting allows the CMS mental health program to adapt to the resources available and introduce emotional development instruction directly into the classroom—at some point during a student's instructional day.

How else can we reduce the impact of mental health trauma? CMS needs to transform into a trauma-informed school, where every adult not only understands the current mental health crisis (i.e., cause & effects) but recognizes students' challenges and developmental difficulties. In addition, the complexity of the problem requires innovative designs and implementation of models. CMS students are exposed to a multitude of

social factors (e.g., poverty, violence, inequality, discrimination) that contribute to their emotional condition and it is virtually impossible to address and resolve these issues. Because mental health conditions differ from student to student—caused by different situations, experiences, circumstances, (biopsychosocial factors)—the target, in this case, is not to cause change in the environment but to build, prepare, and teach students how to negotiate the complexity (i.e., challenges) of the world in which they live.

RBI is designed to help reduce mental health illnesses and/or their impact, but more importantly, it teaches 1) resilience as a long-term protective factor against psychopathologies and 2) maladaptive coping skills (Garcia et al, 2015; Ijadi-Maghsoodi, et al 2015). Resilience refers to an individual's ability to overcome, adapt, and protect him/herself against the effects of serious adverse situations (Fergus & Zimmerman, 2005). Resilience has been shown to be an effective intrinsic mechanism of recovery and prevention among students suffering from mental health illnesses or living in environments at higher risk of trauma exposure (Fergus & Zimmerman, 2005; Luthar, Cicchetti, & Becker, 2000). And although there are other resilience-based school programs proven effective to properly deal with mental health issues in an academic environment, RBI has been designed specifically to serve disadvantaged ethnic minorities in urban cities by allowing practitioners to modify the modules according to the needs, demographics, learning abilities, and other group/classroom factors (Ijadi-Maghsoodi, et al 2015). Also, while other resilience curriculums such as Second Step (Frey, Bobbitt, Van Schoiack, & Hirschsteinb, 2005) and Social Decision Making and Social Problem Solving (SDS-SPS) (Elias, Gara, Schuyler, Branden-Muller, & Sayette, 1991) proved

effective at improving resilience and coping skills, they are not designed to reduce trauma related symptoms (Ungar, Russell, & Connelly, 2014)

Purpose and Research Questions

The mental health problem in schools is undeniably a national and local epidemic that has gotten, until now, little attention from political and educational leaders. The complexity of this issue has caused decision makers to ignore and avoid engaging in serious and meaningful attempts to address it. This study aims to implement a school-based intervention that could potentially reduce the impact of mental health issues in CMS students and serve as a model for similar applications across the district. The objective of this project is to investigate the following research questions:

RQ 1: How and to what extent does implementation of RBI affect students' (a) resiliency and (b) PTSD symptoms?

RQ 2: How and to what extent does implementation of RBI affect students' (a) attitudes toward school and (b) efficacy for coping?

Chapter Two: Theoretical Perspectives and Supporting Scholarship

"Above all we have to go beyond words and images and concepts. No imaginative vision or conceptual framework is adequate to the great reality."

—Bede Griffiths

Understanding human behavior has sparked the curiosity of many psychologists, educators and social workers across cultures and generations. From Freud to Bandura – theorists and researchers have attempted to identify and understand mechanisms that influence human development, cognition and behavior. Explaining the complexity of the human experience, however, requires more than simple observations and assumptions based on such observations. In order to conduct phenomenological analysis, researchers must rely on theoretical frameworks that provide complex and comprehensive conceptual understandings of how the world and the individual operates and interacts (Butin, 2009). A theory's explanatory power is not only for the discovery of knowledge but to utilize new knowledge to make predictions and solutions for a given problem. Thus, this project integrates two theoretical perspectives to illustrate the etiology, epidemiology, and treatment of Posttraumatic Stress Disorder in children. First, Social Cognitive Theory (SCT) is presented along with empirical studies that support and explain the current mental health problem in socially-disadvantaged middle school students. More specifically, SCT sheds light on the dyadic relationship between the social context and the individual as well as social and environmental factors that influence child development, cognition and behavior. Secondly, Resilience Theory is introduced to help

support the implementation of a school-based intervention based on core principles of individual and collective resilience and adaptation.

Social Cognitive Perspective of Trauma (PTSD)

Stanford Psychologist Albert Bandura developed the familiar Social Learning Theory (SLT), which integrates cognitive and behavioral learning theories to explain internal processes that interfere with and modulate human behavior (Bandura, 1977). SLT proposes that human learning is influenced by observing processes in the environment and mediating mechanisms that occur between stimuli and responses. Despite its popularity within the field of psychology, SLT failed to explain individual cognitive control over behavior and social influences as well as intrinsic development of cognitions and feelings. It was not until 1986, given these limitations that Bandura adapted, renamed, and presented his original theory as Social Cognitive Theory (SCT) (Bandura, 1986). SCT proposes that human learning is interconnected and interdependent with the social context and illustrates the triangular relationship between environment, individual, and behavior. It is this interdependence that provides clear and relevant information regarding the degree of influence concerning social factors on a child's mental health—particularly the development and maintenance of trauma. SCT has proven to be a much better descriptor of human learning by examining how individuals process and react to social dynamics.

Although researchers have used SCT to explain a variety of phenomena, there has not been a major emphasis in connecting social cognitive perspectives to PTSD—especially PTSD on children. Nevertheless, this investigation will rely on empirical

research that studies psychopathology and maladaptive human behavior through the lenses of SCT. Several studies have identified that social factors such as *exposure to violence, maltreatment and lack of social support* during a person's early development contributes to the onset of maladaptive behaviors and psychological issues (Bradshaw et al, 2013; Bradshaw & Garbarino, 2004; Kliewer et al, 1998; Nietlisbach & Maercker, 2009; (Ford, Racusin, Ellis, Daviss, Reiser, Fleischer, & Thomas, 2000). These social constraints, among others, seem to be directly related to impairments in social cognitive processing regarding the environment, the self, and others (Benight & Bandura, 2004; Carlson, Egeland, & Sroufe, 2009). Similarly, the literature points at individual social cognitive structures such as *attachment styles and attribution bias* as significant determinants of psychopathologies (i.e., depression, anxiety, & trauma) (Bradshaw & Garbarino, 2004; Joseph, Williams, & Yule, 1995; Sharp, Fonagy & Allen, 2012). . Below is Sharp et al. (2012) Social-Cognitive Model of PTSD:

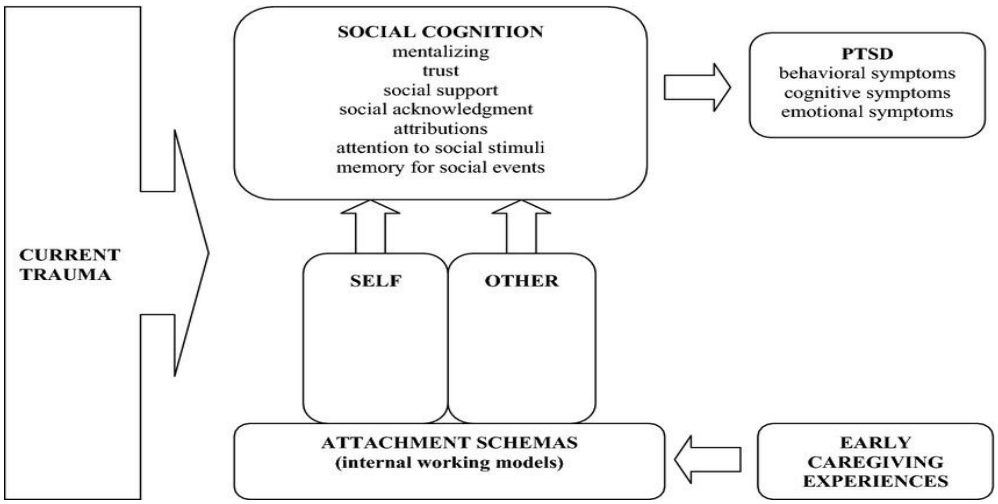


Figure 1. Social-Cognitive Model of PTSD (Sharp et al, 2012)

The Social Context (Social constraints)

Much of the theoretical analyses regarding SCT and trauma demonstrate that individuals experiencing trauma or other forms of mental health illnesses were impacted by social life events associated with violence, assaults and aggression amongst other forms of victimization (Benight & Bandura, 2004). In fact, there is empirical consensus regarding the influence of social factors in the development and maintenance of psychopathologies. Although the literature lists multiple social factors, this study will focus on the impact of exposure to violence (family and community), child maltreatment and lack of social support as they are major contributing factors of mental health issues (Bradshaw & Garbarino, 2004; Eisman, Stoddard, Heinze, Caldwell, & Zimmerman, 2015; Guay, Billette, & Marchand, 2006)

Exposure to Violence. Research has consistently demonstrated that exposure to violence contributes to negative effects on child and adolescent development and mental health (Eisman et al., 2015; Olofsson, Lindqvist, Shaw & Danielsson, 2012). Studies also show that risk exposure, particularly exposure to violence, has a significant higher impact on children than adults because it interferes directly with biopsychosocial development and internal mechanisms associated with emotional regulation and decision making (Coid, Petruckevitch, Feder, Chung, Richardson, & Moorey, 2001). Moreover, children who have been exposed to violence—regardless of the context—report higher levels of trauma and PTSD symptoms that solidify as they develop and, consequently, result in maladaptive behaviors that maintain intergenerational and communal cycles of violence. Children who are constantly exposed to violence are more likely to imitate aggressive behaviors and attitudes in their environments, which often results in normalizing

exposure and participation in violence (Fowler, Tompsett, Braciszewski, Jacques-Tiura & Baltes, 2009). In other words, children's traumatic responses could also translate into behaviors that perpetuate community violence and, later in life, intrafamilial violence. Given the context of this study it is also important to highlight the effects of exposure to violence and children's academic performance. Children's academic capacities are truncated by cognitive, emotional, and behavioral deficiencies associated with trauma responses. Research suggests that children who report experiencing direct or indirect violence tend to engage in aggressive and hyperactive behaviors that limit cognitive development (Schwartz, Hopmeyer Gorman, Harris, Karen, 2003). Thus, developing resilience-based school interventions can provide children protective mental and social structures that can help mediate the prolonged effects of violence.

Maltreatment. Similarly, child maltreatment is a well-studied social issue known to disrupt healthy childhood and adolescent development. More specifically, maltreatment has shown to contribute to PTSD as well as severe emotional problems related to anxiety, isolation, aggression, school problems, and substance abuse (Ford et al., 2000). Maltreatment mirrors the mechanisms and effects of exposure to violence whereby child victims of maltreatment develop cognitive and behavioral attitudes that support the use of isolation, withdrawal, aggression and hyperactivity as protective responses (Bradshaw & Garbarino, 2004). It is important to mention that maltreatment is not limited to acts of commission such as physical and sexual abuse but also include acts of omission related to gross negligence (such as lack of medical attention, nutrition, clothing, and affection). In general, child and adolescent victims of maltreatment are

consequently more likely to engage in interpersonal violence in adulthood mediated by anxiety, mistrust, low self-esteem, lower self-efficacy, and poor problem-solving skills (Coid et al., 2001). Unfortunately, the effects of child maltreatment are devastating across multiple domains including child academic development and performance. Research has been consistent in demonstrating the impact of maltreatment on academic performance, however, a recent study further explains this relationship and suggests that the mediating factor every time was child aggressiveness and deviant behavior (Potter, 2010). As discussed above, the sequelae of exposure to violence and maltreatment are permeating the educational system resulting in even more barriers and complexities to child development and well-being.

Lack of Social Support (Family, school, friends). The level or amount of social support in the face of adversity has shown to be one of the most important factors for child development, both cognitive and emotional. Bandura (1989), mentioned that in order for individuals to exert control over their own developmental process, they need a "great deal of social support" (p. 8). Furthermore, SCT proposes that social resources are crucial during early childhood development when the formation of character, values, morals, and standards is not yet complete (Bandura, 1977 & 1989). Children and adolescents depend on different types of social support in order to develop positive perceptions of themselves and their environment. In addition, social support assists in reinforcing positive behavior or provides resources to change behavior that does not conform within their social context. This is also true when discussing trauma in children and factors that contribute or maintain trauma symptomatology.

Research demonstrates that children experiencing PTSD symptoms benefit from social support as mediating mechanisms for trauma processing (Nietlisbach & Maercker, 2009). Individuals suffering from PTSD, regardless of age, relied on social support as a coping mechanism as well as a vehicle for trauma processing and emotional support. On the contrary, lack of social support has shown to be detrimental to overall well-being, especially to individuals who have undergone traumatic experiences. In fact, several studies indicate that lack of social support is directly related to the onset, maintenance, and predictors of PTSD (Brewin, Andrews & Valentine, 2000; Guay, Billette, & Marchand, 2006). Lack of social support is not limited to ignoring the emotional needs of a traumatized child or individual; it includes stigmatizing, ostracizing, rejecting and labeling trauma survivors. Thus, one of the most important concepts of this study is to promote and improve social support systems and to teach students to utilize social resources that facilitate emotional support and academic achievement.

Social Cognitive Processing

Bandura (1989) suggested that people are not automatically influenced and controlled by the social context nor are they solely motivated by internal mechanisms (p. 8). In fact, Social Cognitive Theory assumes that people possess intrinsic qualities that contribute to their development, behavior and cognition. Human development as seen through the social cognitive lens, requires both social and individualistic characteristics and interactions. Social Cognition has different definitions and applications and its variations come from the context in which it is being used. In general, Social Cognition refers to how individuals understand and interpret people's actions and intentions and

select appropriate responses to social situations (Bradshaw & Garbarino, 2004). Others define it as the way individuals learn behaviors and "cognitive strategies" through observation and without the need of reinforcement (Green & Peil, 2009). For this study, Social Cognition is defined as the process by which individuals understand and respond to traumatic experiences (Bradshaw & Garbarino, 2004; Sharp et al., 2012). Research has identified three common social cognitive responses that explain the development and maintenance of PTSD and which will be mentioned below.

Attachment. Attachment refers to a child's natural need for contact and dependency on a caring adult for safety, nurturance, and emotional support (Zeanah, Berlin& Boris, 2011). It is understood as the innate emotional connection that promotes healthy and stable child development—in particular self-esteem, confidence, and independence. Bowlby (1969) lists four categories of attachment: 1) Secure, 2) Ambivalent, 3) Avoidant, and 4) Disorganized (p.269-272). The level and quality of emotional attachment determines the type of attachment, which ultimately shapes children's internal processes responsible for emotional regulation and behavior. Social Cognitive Theory also presumes that individual personalities are molded by environmental factors which include the quality of parent-child relationship and the child's response to such relationships. Social risks such as exposure to violence, maltreatment, and lack of social support are direct contributors to insecure forms of attachment responsible for the construction of symptoms consistent with PTSD and other psychopathologies. In particular, research shows that children with disorganized attachment experience higher avoidance and re-traumatization symptoms associated with

PTSD (MacDonald et al., 2008). What does this mean? Evidence suggests that children with attachment issues have difficulties negotiating, processing, and coping with stressful and/or traumatic experiences. This study attempts to reverse the effects of insecure attachments through emotional support by caring and nurturing mentors capable of providing safe spaces for child exploration, learning and healing. More importantly, this project aims to promote secure attachments and teach children efficient coping mechanisms that reduce or remove PTSD symptoms. In summary, negative life experiences, coupled with disorganized attachment style are detrimental to a child's construction of the self, others, their environments, and social interaction responses.

Attribution Bias. Social Cognition includes external input as well as internal structures that formulate corresponding outputs. From early childhood onward, individuals begin to make meaning of social interactions and processes based on external input. Exposure to social risk factors influence the way children understand their experiences and assess situations. Research suggests that children who have experienced trauma (such maltreatment or exposure to violence) are more likely to develop hostile and/or catastrophic attributional biases that trigger behavioral responses associated with trauma symptoms, including aggression (Bradshaw & Garbarino, 2004). More importantly, individuals with PTSD seem to attribute negative experiences to external, stable, and uncontrollable factors (Mikulincer & Solomon, 1988). In other words, individuals who believe the traumatic experience was caused by uncontrollable environmental factors not only begin to see the world as an unstable dangerous place but develop defense mechanisms similar to PTSD symptoms such as avoidance, mistrust,

hypervigilance, and reduced social functionality (APA, 2013). Lack of perceived control plays a major role in the way people react to stressful and traumatic situations, which means that the very nature of being a vulnerable child doubles the likelihood of developing and maintaining the PTSD cycle. For this reason, this project aims to promote positive self-esteem, self-efficacy, attitude, and problem solving skills as a way to empower children to regain their sense of control and safety.

Studies Related to Social Cognitive Theory

Several research studies on children and PTSD relied on SCT to support the concept that human learning is interconnected and interdependent with the social context and that individuals' cognition derives from experiences in their environment. Kliewer et al. (1998) conducted a study with children (8-12 years old) where they examined the relationship between exposure to community violence and mental health. The results show that violence exposure was significantly associated with intrusive thoughts, anxiety and depression (p. 203-207). More importantly, their study found that children exposed to high levels of violence coupled with poor social and parental support reported higher levels of intrusive thoughts about violence (p. 207). Concisely, this study corroborated the assertions of SCT, particularly the influence of the social context in individual social cognition and behavior. In another study, Venta et al. (2017) used the social-cognitive perspective to explain how social cognitions—especially attachment insecurity—are directly related to the development of PTSD in adolescents. The researchers demonstrated that adolescents with secure attachment styles develop more positive

social-cognitive skills than those with insecure attachment styles (p.91-93). Their results also show the importance of addressing social-cognitive impairments as a potential protective factor against trauma related symptoms.

Although research utilizing SCT perspectives on childhood PTSD is limited, there is a plethora of adult studies that attribute psychosocial factors to the development of PTSD. Andrews, Brewin & Rose (2003) studied adult male and female victims of violent crimes who experienced PTSD symptomatology and then determined to what extent social support became either a protective or a contributing factor. Consistent with previous studies, poor social support and negative responses from family and friends were associated with symptoms of PTSD (p.426 - 427). Currently there is only one study that uses a social-cognitive theoretical model to explain PTSD. Sharp et al., (2012) provided an SCT model that illustrates social and individual processes that transform a negative experience into PTSD. Their model proposes that child social-cognition is influenced by early parental experiences and then examines how these experiences shape their understanding of the self, others, and the environment. Sharp et al. (2012) focused on the interactions between the child and the environment that lead to insecure attachment styles which impair social-cognitive abilities associated with emotional regulation, processing social information, and relying on social support—all important mechanisms for trauma processing and recovery.

Resilience Theory: ***A framework for developing school-based interventions***

Psychological and behavioral researchers have mainly focused their efforts on identifying risks associated with personal and social problems. And although problem

identification is important for problem solving, this project assumes a strengths-based approach that places an emphasis on the concept of resilience as a powerful protective factor against the effects of negative experiences. Resilience refers to an individual's ability to overcome, adapt, and protect him/herself against the effects of serious adverse situations (Fergus & Zimmerman, 2005). Thus, Resilience Theory highlights and explains why and how some individuals can succeed despite facing tremendous adversity. Fergus and Zimmerman (2005) presented a comprehensive resilience framework by which researchers and practitioners can formulate interventions based on protective factors inherent in resilient individuals. Research has identified several internal and external factors that appear to counteract the effects of traumatic experiences, such as self-efficacy, self-esteem, problem solving skills, social support, parental support, and religion among others (Eisman et al., 2015; Fergus and Zimmerman, 2005; Sciaraffa, Zeanah & Zeanah, 2018; Zimmerman, 2013). Here I will briefly discuss internal assets—particularly self-efficacy, self-esteem, and problem solving—as well as external resources such as parental support and adult mentoring. Below is the conceptual diagram from the Resilience and Youth Development (RYDM) framework.

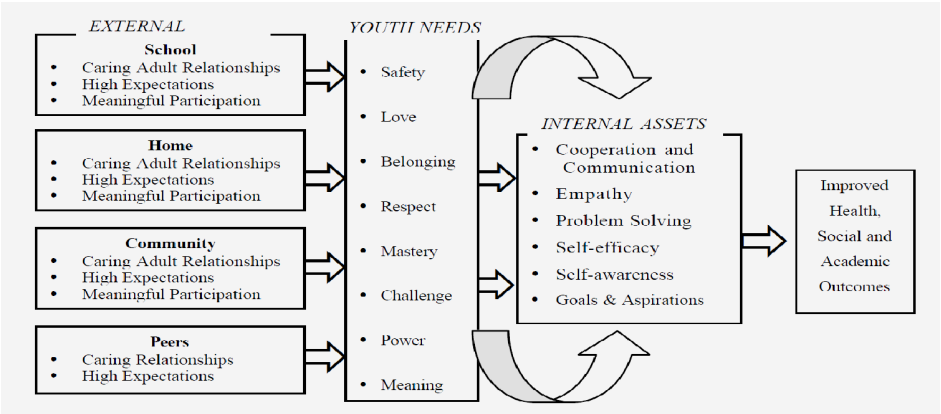


Figure 2. Resilience and Youth Development (RYDM) framework

Internal Assets. Fergus and Zimmerman (2005) define internal assets as intrinsic factors such as competence, coping skills and self-efficacy that support individual adaptation to stressful circumstances (p. 399).

Self-efficacy. Although Resilience Theory and supportive research places a heavy emphasis on self-efficacy as a major protective factor, it was in fact Albert Bandura who conceptualized self-efficacy as an "individual's belief in their capabilities to mobilize the motivation, cognitive resources, and agency to exert control over a given event" (Hamill-Skock, 2003, p.116). Research on resilience has corroborated Bandura's understanding of self-efficacy as a buffer to child adversity as well as a mechanism of behavioral modification and individual adaptation (Hamill, 2003; Sciaraffa et al., 2018). Literature on trauma and treatments of trauma has examined self-efficacy as a coping skill and suggests that self-efficacy is key in helping survivors recover from traumatic experiences including child sexual abuse and exposure to violence (Benight, Shoji, James, Waldrep, Delahanty, Cieslak, & Kendall-Tackett, 2015; Cieslak, Benight, & Lehman, 2008; Fergus, & Zimmerman, 2005; Hamill Skoch, 2003). Furthermore, available evidence from studies on resilience propose that individuals who develop self-confidence along with personal convictions that he/she can overcome adversity and succeed are protected from developing PTSD and other psychopathologies that stem from trauma (Ijadi-Maghsoodi, Marlotte, Garcia, Aralis, Lester, Escudero & Kataoka, 2017; Rutter, 1987). In summation, people who are able to exert control in stressful situations are more likely to negotiate the problem more efficiently. Based on the literature, one could purport that

individuals who are self-efficacious demonstrate higher cognitive abilities that assist in achieving desired goals even in the face of adversity. This is important information when formulating school-based interventions for children who face daily adversity. This study plans to foster child self-efficacy through activities and positive feedback that promote and reinforce competence and confidence.

Self-esteem. In mental health the term self-esteem refers to an individual's overall sense of self-worth or personal value. Similarly to self-efficacy, higher levels of self-esteem are associated with better youth outcomes despite adversity and social challenges whereas low self-esteem is a predictor of negative outcomes (Fergus & Zimmerman, 2005). Research also suggests healthy levels of self-esteem protect adolescents against substance use related to negative experiences (Byrne & Mazanov, 2001). High feelings of self-worth have been known to produce positive effects in human development, especially when managing critical circumstances that test individual character and personal views of self, others, and the environment. More significantly, a study with a sample of 6,000 youth from six ethnic groups in grades 6-12 investigated the effects of developmental assets (e.g. self-efficacy, self-esteem, responsibility, and planning and decision among others) on seven thriving indicators in adolescents (1. school success, 2. leadership, 3. valuing diversity, 4. physical health, 5. helping others, 6. delay of gratification and 7. overcoming adversity) and found that self-esteem is a meaningful predictor of school success, physical health, and resilience regardless of racial-ethnic groups (Scales, Benson, Leffert, & Blyth, 2000).

Problem Solving: Negotiating Adversity. In addition to self-efficacy and self-esteem, there is one more critical protective factor (problem solving) that integrates all other assets and gives individuals the capacity to negotiate adversity throughout their lives. Problem solving comes from the individual's ability to recruit internal assets and previous experiences to formulate a solution. The individual must first believe in not only his/her abilities but firmly believe that their approach could be successful. Problem solving seems to be a product of many protective factors as it requires and draws elements from self-efficacy and self-esteem amongst others factors not mentioned. Research on resilience has identified problem solving to be a fundamental process for individual adaptation to stress and adversity (Damon, Lerner & Eisenberg, 2006; Lee, Cheung & Kwong, 2012; Sciaraffa et al., 2018). Furthermore, studies report that children who engage in problem solving are more likely to develop resilience and produce better outcomes (Ijadi-Maghsoodi et al., 2017). Also, problem-solving skills have proven to be effective measures to prevent and protect children against substance use (Botvin & Griffin, 2002). These documented effects of teaching problem-solving skills to children have led to its integration and implementation in many school-based programs aimed at improving student well-being and which have yielded positive results in youth resilience as well as significant reductions in youth engaging in risky behaviors (Garcia, De Pedro, Astor, Lester, & Benbenishty, 2015; Ijadi-Maghoodi et al., 2017; Langley, Nadeem, Kataoka, Stein, & Jaycox, 2010). Unfortunately, trauma disrupts the development of characteristics and factors that build personal competence and problem solving skills. The

goal of this project is to rebuild developmental factors associated with individual competence and to reestablish resilience through self-efficacy and problem solving skills.

External Resources. Resilience theory provides a comprehensive framework that integrates multidimensional factors from individual structures as well as ecological factors essential for child development. This section will focus on two major external resources associated with wellbeing and resilience: 1) parental support and 2) adult mentoring. Fergus and Zimmerman (2005) referred to "resources" as external factors that contribute to individual resilience, such as parental support and adult mentoring (p. 399).

Parental Support. It is well established that parental support is a key factor, if not the most important factor, for healthy human development. From Bowlby to Bandura, parent support has demonstrated to be a biological and psychological need and one that has the power to cause or protect against serious psychopathologies. Strong and healthy connections with parents have proven to be effective measures to help children compensate for the effects of negative experiences (Fergus and Zimmerman, 2005; Zimmerman et al., 2013). Furthermore, parental support has been shown to counter youth peer pressure and participation in violent acts—which means that more of this specific type of support results in less aggressive behavior (Zimmerman, Steinman, & Rowe, 1998). Also, parent support is known to protect children from the effects of poverty, depression resulting in suicide ideation, and substance use (Fergus and Zimmerman, 2005; Tarver, Wong, Neighbors, & Zimmerman, 2004). With this in mind, students will receive education about family dynamics, communication, and the value of parent-child relationship across developmental domains.

Adult Mentoring. Fortunately for children, adult mentoring and positive relationships with non-family adults seem to compensate for not only exposure to risks but also for the effects of dysfunctional family systems. According to Zimmerman et al. (2013) relationships with other caring adults or mentors have been identified as a protective resource against the effects of risk exposure, negative influences of friends on school attitude, and stress (p. 216-217). Moreover, relationships with mentors assist children in developing positive attitudes about school and long-term educational goals. Fergus and Zimmerman (2005) also mentioned that youth who are supported by mentors are less likely to exhibit delinquent behaviors (p. 403). Hurd and Zimmerman (2010) found that positive role models or mentors protect teenage mothers from the effects of stress to their mental health (p. 802).

Research on early child development also suggests that young children exposed to adversity benefit greatly from building a safe, nurturing relationship with an adult caregiver (Sciaraffa et al., 2018). In summation, these and other studies demonstrate the crucial role that mentors have in assisting children with the development of resilience skills and overcoming adversity. This intervention is based on building resilience in children primarily through positive connections with implementers and teachers. It aims to compensate for lack of parental support and attachment to caring adults by creating an environment where children feel safe, nurtured, and supported.

Related Studies of Resilience Theory

There are plenty of empirical studies that support and incorporate the core concepts of resilience (internal assets & resources) into school-based interventions. For

instance, Ollis and Meldrum (2008) developed and tested a school-based intervention (Be Yourself and Have a Ball) consisting of physical activities such as yoga, belly dancing, and self-defense to build resilience as well as connectedness to their school and community (p. 2). According to their results, these physical activities improved students' self-efficacy, self-esteem, and feelings of control over their bodies (p. 11-12). Ollis and Meldrum (2008) mentioned the importance of the "trusted teacher" in providing safe spaces for children to develop internal assets associated with resilience (p. 10-11). Furthermore, Cicchetti and Rogosh (1997) conducted a study to examine individual characteristics in maltreated children who were able to adapt to such adversity. Their research suggests that positive self-esteem, self-efficacy, and self-confidence are associated with resilience (p. 811-813).

However, most resilience-based interventions do not target or are not designed to reduce trauma related symptoms and behaviors. For instance, Ungar et al. (2014) conducted a meta-analysis of thirty-six resilience-based interventions aimed at improving factors related to resilience. The researchers found that while other resilience curriculums such as Second Step (Frey, Bobbitt, Van Schoiack, & Hirschsteinb, 2005) and Social Decision Making and Social Problem Solving (SDS-SPS) (Elias et al., 1991) proved effective at improving resilience and coping skills, they are not designed to reduce trauma related symptoms (Ungar, Russell, & Connelly, 2014).

Fortunately, Harvard University and the University of Los Angeles (UCLA) developed the RBI program, a family resilience-model designed to enhance family mental health in U.S military families experiencing combat related trauma (Saltzman,

Lester, Beardslee, Layne, Woodward, Nash, & Saltzman, 2011). In a two-year longitudinal study with 488 military families, researchers found that RBI led to significant improvement in family emotional and behavioral well-being and adjustment as well as significant decreases in family impairment (Lester, Saltzman, Woodward, Glover, Leskin, Bursch, & Beardslee, 2012). Garcia et al. (2015) conducted a study across eight military-connected public school districts during two academic school years (2011-2012 & 2012-2013) to explore the successes and shortcomings of the implementation of RBI by graduate-level social work students (p. 106-106). The researchers also examined the social work students' perceptions of the intervention and the results reveal that the curriculum was well structured, flexible, simple, and useful in teaching resilience skills (p. 13-15). Nevertheless, the data also suggested recommendations for future implementation such as ensuring adequate space and time as well as parent engagement strategies to obtain parental consent (p. 109).

In a more recent study, Ijadi-Maghsoodi et al. (2017) adapted the RBI curriculum for military-connected students to fit the demographic, cultural, and ethnic characteristics as well as socio-emotional needs of students attending a large urban school district (p. 6-7). In this curriculum, students are taught resilience skills such as emotional regulation, communication, problem-solving, goal setting, and managing stress reminders (p.7). However, the implementers delivered the intervention using cultural and socio-economic adaptations in order to make the material more relevant and applicable to the students' unique experiences. Their results showed a clear increase in students' internal resilience

scores; an uptick in positive scores within the areas of problem solving, empathy, and social connections was also evident (p. 13).

The literature supports and explains why RBI is a widely used clinical intervention that targets the reduction of trauma symptomatology by teaching the core concepts of resilience. Moreover, RBI has been implemented in multiple settings and has proven effective in reducing traumatic experiences from combat, natural disasters, and serious health illnesses (Mogil, Paley, Doud, Havens, Moore-Tyson, Beardslee, & Lester, 2010). Its implementation in schools sets it apart from other resilience-curricula as it not only increases resilience scores, but uses resilience to mitigate the impact of trauma. Notwithstanding, there are only two studies that evaluated RBI as a school-based intervention and both were implemented with high school students in the general education program (Garcia et al., 2015; Ijadi-Maghsoodi et al., 2017). And although both studies produced positive results in terms of implementation and efficacy in improving resilience, it's important to further examine its effectiveness – particularly with middle school students in special education. Studies on resilience-building in school fail to address the uniqueness of special education students in terms of psychosocial vulnerability to life stressors and risk factors. How do we teach special education students resilience skills? How do they process trauma given their cognitive impairments? Are there context relevant resilience-building programs for special education students? These questions only begin to open possibilities for future research, perhaps for this project.

Chapter Three: Methods

"It is not enough to be compassionate, you must act."

—Dalai Lama

As a pragmatic researcher and practitioner, I believe in humanistic and inclusive approaches that prioritize the advancement of social justice and individual well-being over intellectualism and dogmatism. I believe that theories, ideologies, and methodologies are approximations of realities and are only valid when they are applicable and effective in practice. I am interested in finding effective solutions that improve the human condition – particularly the human mind. And it is the complexity of the human mind that has taught me to reject dualisms and embrace eclectic perspectives. In this project, I combined knowledge, science, awareness, experience, and practical wisdom to support the mission of education. More specifically, this study implemented an adapted version of the RBI curriculum to evaluate its efficacy in enhancing resilience skills while reducing the impact of trauma in CMS students receiving RSP services. In this chapter, I describe the study's setting, participants, role of the researcher; the purpose and structure of the intervention, data collection and analysis; and discuss strategies to ensure the study is valid and trustworthy.

Research Paradigm

Pragmatism unifies philosophical and theoretical perspectives while combining methodological approaches in order to develop a research design that can best explore and explain the world we live in (Johnson & Onwuegbuzie, 2004). In times where education is at the heart of financial crisis along with fragmented communication and expectations, pragmatism offers a prompt, practical, and value-oriented course of action that is inclusive and appreciative of cultural values and social participation in the exploration and construction of knowledge (Johnson & Gray, 2010). Most importantly,

pragmatism aligns with what I believe are the most important aspects of life itself: equality, freedom, and democracy. Thus, for this study I relied on methods that include, explore, and value the human experience during and after the research process. We cannot intend to help others without hearing what others have to say.

Research Design

Sequential Mixed Methods. This study employed a mixed methods approach in order to enhance the generalizability and validity of the results by combining quantitative and qualitative perspectives (Ivankova, 2015). A mixed methods design assisted in discovering patterns based on statistical data, while also presenting students' perspectives and experiences regarding the intervention and ultimately the problem of practice (Creswell & Guetterman, 2019). More specifically, this action research relied on an explanatory sequential design where qualitative results explain and support the results from the quantitative data. Following the explanatory design, I first collected and analyzed quantitative data followed by qualitative data upon completion of the intervention.

The quantitative component of this study used a *pretest - posttest research design* in which two groups of ten students each received the intervention. The data from both groups were treated as one for the purpose of analyses. To clarify, this design is not intended to serve as a comparative model between the two groups, but to enhance the learning experience of the participants. Although a pretest-posttest control group design would have allowed me to compare tests' values and control for a variety of internal threats to validity by endogenous changes such as maturation and regression, it would

have been unethical to test and deny *immediate* treatment to students who test positively for PTSD and other mental health challenges. Nonetheless, this design produced valuable information regarding the effectiveness of RBI in improving student resiliency, efficacy for coping, and attitudes towards school.

Setting

The setting of this study is Cypress Middle School located in northeast Los Angeles. CMS is in the Cypress Park community, near Dodger Stadium, and serves grades sixth through eighth. As mentioned before, CMS is a Title I school given that the majority (92%) of the student body is identified as economically disadvantaged. The ethnic makeup of the approximately 840 Nightingale students is 72% Hispanic or Latino and 25% Asian, while 3% are categorized in other ethnic groups. Twenty-three percent (23%) of the student population is classified as English Learners and 17% are students with disabilities (SARC, 2017). The faculty is composed of three administrators, forty-five teachers, and twenty certificated support staff (psychologist, social worker, speech therapist).

In 2016, CMS began to transform itself into specialized magnet schools which offer students higher academic programs as well as the opportunity to engage in project-based learning according to areas of interest. Currently, CMS consists of four magnet academies: The Science, Technology, Engineering, and Mathematics (STEM) Magnet with 108 students; The Business Entrepreneurship Technology (BET) with 294 students; The Medicine-Health-Kinesiology Magnet (MHK) with 121 students, and the Visual and Performing Arts (VAPA) with roughly 346 students. Overall, CMS is a school both

rooted in deep and long-standing traditions and simultaneously in the midst of significant change. CMS has served a disadvantaged community for over sixty years where rates of poverty and violent crimes are among the highest in the county of Los Angeles (Los Angeles Times, 2018).

Virtual Setting

This study adapted the delivery method of the intervention based on global health risks associated with the 2020 COVID-19 pandemic. The school district and Arizona State University Institutional Review Board implemented restrictions on in-person research in order to protect the safety and well-being of the participants and their families. Thus, the intervention was delivered entirely using Zoom virtual classrooms. Each virtual meeting followed Zoom safety protocols such as an access passcode, media, content, and participant controls so as to ensure student privacy and safety.

Participants

Data collected during the last three years shows that CMS students receiving special education services under the resource specialist program (RSP), seem to engage in behavioral disruptions and emotional outbursts more frequently than their peers. There is also a correlation between students with greater cognitive challenges and their lack of inherent characteristics and resources (i.e., age-appropriate social skills, problem-solving skills, emotional regulation, self-esteem and self-efficacy) of resilient and well-adjusted students. I chose to work with special education students (RSP) based on their vulnerabilities as well as cognitive and socio-emotional disadvantages.

This study relied on purposeful sampling to identify students from 6th and 7th grade receiving RSP services through My Integrated Student Information System (MISIS) and Individualized Educational Plan (IEP) school database. On average, there are approximately sixty-seventy total CMS students in RSP services during a school year, but based on previous cycles of research, this study developed two intervention groups; each with ten students. Second, this study assessed all 6th and 7th grade RSP students for trauma and resilience utilizing the pre web-based survey consisting of three valid and reliable scales that measure youth resilience, trauma, and emotional regulation. Students also answered questions regarding school safety and support. The next step involved selecting and assigning to the resilience-based intervention students who scored three or higher in the Primary Care PTSD Screen for DSM-V (PC-PTSD-5). Although the project examined individual scores, the focus of analysis is on special education (RSP) students as a group.

Participants and their parents received a digital consent form that described the purpose, procedures, risks, benefits, confidentiality, and their right to withdraw at any time. In addition, they also received a district approved digital telehealth services consent. Participants had to obtain parental signed consent on both forms before they could participate in the study. In an attempt to engage and incentivize the participants, CMS awarded students who completed the ten week intervention with Amazon or Starbucks gift cards.

Intervention

CMS students continue to be victims of the effects of a disenfranchised and violent community. The chronic exposure to risks and contributing factors to mental health disorders have for decades infiltrated into the classrooms, resulting in both socio-emotional and cognitive deficiencies among students. For years, CMS has focused on improving access to education as well as academic performance but has failed to recognize the importance of child well-being as an essential, if not the most important, component of learning. Fortunately, three years of irrefutable data has not only raised awareness in administrators but has activated a sense of urgency in developing a trauma-informed and whole child-centered school. This innovation is then an initial attempt to incorporate a curriculum intended to address children's social-emotional needs.

Resilience-Based Intervention began as a family-level intervention offered by the military and is supported by two decades of research that demonstrated the efficacy and effectiveness of resilience-based interventions in improving mental health, family functioning, and stress management. This intervention has shown to be useful with individuals experiencing trauma-related symptoms from serious health illnesses, natural disasters, and military combat (Mogil, Paley, Doud, Havens, Moore-Tyson, Beardslee, & Lester, 2010). RBI has also been adapted and implemented into schools wherein it incorporates activities and lessons that teach and promote resilience skills (i.e., self-efficacy, self-esteem, problem solving skills and social support). Although RBI has been shown to increase internal resilience scores such as problem solving, empathy and social connection, the literature encourages further examination of its effect on psychological health as well as academic performance and school attendance (Garcia et al, 2015; Ijadi-

Maghsoodi et al., 2017). More importantly, RBI had never been examined within a middle school situation, particularly with middle school special education students.

I have implemented RBI school-based curriculum in the classroom with CMS 6th grade students since 2016 to help them transition into middle school and also to identify and support those who are facing emotional difficulties. Based on pre and post assessments, students have increased resilience scores, particularly in problem solving and coping. Students have also reported improved perception of school connectedness and safety as well as student to student and student to staff relationships. I had also implemented RBI with a group of 8th grade students in general education referred by their teachers for issues with stress management and anxiety. After delivering the nine modules, students reported improved self-regulation, problem solving, and school connectedness.

Furthermore, previous cycles of research demonstrate that RBI is a useful mental health school-based intervention that could be delivered with minor adaptations to students receiving RSP services. I surveyed and interviewed thirty school district mental health professionals with experience in implementing RBI and approximately 87% reported moderate to high levels of perceived effectiveness of RBI for general and SPED students experiencing socio-emotional difficulties. With respect to modifications to the intervention, the data reveal that strategies such as “small groups,” “simplify concepts,” “increase session time,” and “focus on core skills” were used as accommodations for cognitive abilities and behavioral challenges prevalent in special education students.

The RBI school-based curriculum is an intervention intended for implementation in classroom or group settings with elementary, middle school, and high school students consisting of nine modules that provide training in all five RBI skills: 1) Emotional Regulation 2) Communication 3) Goal Setting 4) Problem Solving and 5) Managing Stress Reminders. Originally, the action research project planned to deliver the program in nine consecutive weeks with every session lasting approximately 45-55 minutes. However, a significant number of mental health professionals suggested extending the intervention to ten to twelve weeks and to increase each session to 60-75 minutes. Furthermore, clinicians recommended a refinement to the intervention by targeting fewer but more essential concepts such as emotional regulation, communication, problem solving, and stress management.

After considering the number of weeks per academic semester—along with the time required to implement and evaluate the intervention—best practice would dictate a delivery of the intervention over ten consecutive weeks with sessions lasting fifty-five minutes. However, unexpected circumstances associated with COVID-19 forced me to shorten the intervention by delivering two sessions per week, for a total of five consecutive weeks. In addition, each session lasted approximately 30-35 minutes given that the intervention was a completely virtual experience and it was important to maintain student engagement while reducing continuous screen time. School district leaders suggested active online learning classes to be no less than fifteen minutes and no longer than forty five minutes.

As suggested by mental health professionals, the intervention will primarily emphasize and assign additional modules to emotional regulation, communication, problem solving, and stress management. The following is the developed and adapted RBI curriculum outline for this project:

Module I: Emotional Regulation: Emotional Identification and Toolkit
Module II: Emotional Regulation: Mindfulness & Art
Module III: Emotional Regulation: Chair Yoga
Module IV: Communication
Module V: Communication: Conflict Resolution Skills
Module VI: Problem Solving: S.N.A.P
Module VII: Problem Solving: S.N.A.P & C.B.T
Module VIII: Managing Stress Reminders: Changing Feelings & Life Experiences
Module VIII: Managing Stress Reminders: Chronic Stress, Trauma & PTSD
Module X: RBI Review

Each module or lesson will replace cognitive activities (i.e. reading and writing) with interactive, manual, and visual activities. This adaptation was intended to make accommodations for the various levels of student cognitive skills and also aimed to increase student engagement. Another theme that resonated among mental health professionals was the acknowledgment that the number of students in a group had a direct effect on the implementation and overall effectiveness of the intervention.

Data Sources

This study used a mixed methods design which required quantitative and qualitative collection tools that helped answer the guiding research questions. To reiterate, I used a web-based survey consisting of three widely used scales to both select the participants and evaluate the overall effectiveness of the intervention. In addition, I conducted two focus group interviews to capture participants' perspective and experience

in regards to the intervention. The following tables provides a more detailed description of the data collection tools and data analysis methods used in this study.

Table 1

Quantitative Data Sources

Research Question	Data Tool / Constructs & Sub-constructs	Data Analysis
How and to what extent does implementation of RBI affect students' resiliency and PTSD symptoms?	Wellness Check-up Survey *Resilience (RYDM)* Self-Efficacy Problem Solving Self-Awareness *PTSD (PC-PTSD*) *Coping (ERQ-CA)* Cognitive Reappraisal Emotion Suppression	Descriptive Statistics Paired-Sample T-test (Field, 2019; Ivankova, 2015)
How and to what extent does implementation of RBI affect students' attitudes toward school and efficacy for coping?	*School Support* (RYDM) School safety Teacher Support	Descriptive Statistics Paired-Sample T-test (Field, 2019; Ivankova, 2015)

Table 2

Qualitative Data Sources

Research Question	Data Tool / Constructs & Sub-constructs	Data Analysis
How and to what extent does implementation of RBI affect students' resiliency?	Focus Group Interviews	Thematic Analysis (Charmaz, 2014)
How and to what extent does implementation of RBI affect students' attitudes toward school and efficacy for coping?	Focus Group Interviews	Thematic Analysis (Charmaz, 2014)

Quantitative Sources. The pretest was a web-based Likert scale consisting of thirty items designed to examine the following: 1) Resiliency (internal assets), 2) School Support, 3) PTSD, and 4) Emotion Regulation. All the questions were selected from valid and reliable scales, such as the Resilience Youth Development Module (RYDM) developed by the California Healthy Kids Survey (Hanson & Kim, 2007); the Primary Care PTSD Screen for *DSM-5* (PC-PTSD-5) (Cameron & Gusman, 2003; Prins et al., 2016), and the Emotion Regulation Questionnaire for Children and Adolescents (ERQ-CA).

Resilience and School Support. Resilience Youth Development Module is a widely used and reliable scale (α = .91-.93) that evaluates internal assets and external resources associated with positive student development and outcomes (Furlong, Ritchey & O'Brennan, 2009). This study used the RYDM internal assets subscale, which consists

of twelve items that examine student self-efficacy, empathy, problem solving, and self-awareness. Each item provided students with four possible responses (1 = "Not at all true," "2 = A little true," "3 = Pretty much true," and "4 = Very much true"). The RYDM is scored by adding the response values across each sub-construct where higher scores indicate greater resilience. More specifically, this scale places students into three value categories: 1) High: Average of three and above, 2) Moderate: Average of at least two, 3) Low: Average of below two. In addition, the RYDM school support subscale ($\alpha = .89$), composed of six Likert-style questions, assisted in examining students' perceptions regarding teacher and staff support. (Furlong, Ritchey & O'Brennan, 2009; Hansom & Kim, 2007). The scoring is the same across all subscales.

Post-Traumatic Stress Disorder (PTSD). Students were screened for PTSD using the PC-PTSD-5, which has been demonstrated to be a simple, yet reliable ($r = 0.83$) and accurate diagnostic instrument ($AUC=0.941$) (Prins et al., 2016). Although there are several other reliable and valid scales for PTSD, this study employed the PC-PTSD-5 due to its simplicity for students as it consists of only six questions with "yes/no" answers. The first question assesses whether or not students have been exposed to any traumatic event. If any students responded in the negative, the student skipped the PC-PTSD-5 and continued to the next portion of the pretest. Students who responded in the affirmative, answered the next five items that measured how the traumatic experience affected them in the past month. Students who answered in the affirmative to any three of the five

items, indicated a positive diagnosis for PTSD as established by psychometric results from previous studies (Cameron, & Gusman, 2003; Li et al., 2019; Prins et al., 2016).

Emotional Regulation. This study used the Emotion Regulation Questionnaire for Children and Adolescents (ERQ-CA) which is a reliable and accurate scale consisting of ten items designed as a seven-point Likert scale ranging from one to seven (1 = strongly disagree, 4 = neutral, 7 = strongly agree) that measure students' ability to cope with stressful situations (Gross & John, 2003; Gullone & Taffe, 2012). The ERQ-CA evaluates two psychological processes involved in emotion regulation: cognitive reappraisal ($\alpha = .83$) and expressive suppression ($\alpha = .75$) (Gullone & Taffe, 2012). According to Gullonre & Taffe (2012), cognitive reappraisal is an individual's ability to think differently about a situation so as to change the emotional reaction to that situation while emotional suppression involves suppressing or inhibiting the emotional response (p. 410). Cognitive reappraisal is measured by six items (1, 3, 5, 7, 8, and 10) and expressive suppression by four items (2, 4, 6, and 9).

The posttest consisted of the same first thirty items with the addition of five Likert-type questions as a means to collect feedback regarding the intervention. Each question was given a value in order to identify students with greater socio-emotional difficulties before and after the intervention. Students with high posttest scores received follow up interviews with the aim of providing more intensive mental health services (i.e., individual treatment, family therapy, mentorship programs).

Qualitative Sources. Focus groups are an effective qualitative method that allow participants and researchers to engage in open dialogues about the process and results of

the research project (Creswell & Guetterman, 2019; Rubin & Babbie, 2013). This action research study employed virtual focus groups because the interactions and dynamics among students helped to bring to light aspects of the study that were unforeseen and/or not captured through quantitative data. Also, focus groups assisted me in exploring a shared understanding of the intervention and overall collective experience. Lastly, I chose focus group interviews in order to avoid additional zoom meetings and screen time that could have resulted in less participation.

Focus Group Interviews. I conducted two thirty minute virtual focus group interviews using Zoom upon completion of the intervention. I used a semi-structured interview to allow students to elaborate on their experience during the intervention and to provide feedback regarding the modules, topics covered, activities, and delivery. It also evaluated the effective and ineffective elements of the intervention.

Data Analysis

This study followed a sequential mixed-methods design, placing emphasis on quantitative data and using qualitative data to provide more complete understanding of the effects of the intervention. The quantitative and qualitative analytical procedures are presented below.

Quantitative Data. This study used descriptive statistics including frequencies, percentages, means, and standard deviations to summarize the data in a simple and organized manner (Rubbin & Babbie, 2013). Descriptive statistics delivered graphical representation of quantitative descriptions from reports and findings. An independent T-

test was conducted to evaluate if there was a statistically significant differences between the treatment groups both before and after the intervention.

Aligned with the study's research design, a paired *t*-test was suitable to compare the same group under a pre-post design (Ivankova, 2015). The paired *t*-test compared pre and posttest mean score differences and calculated whether the difference is statistically significant (Field, 2019; Ivankova, 2015).

Qualitative Data. Data from the focus groups was recorded and transcribed using TapMedia software application and analyzed using HyperResearch (HyperRESEARCH 4.5.0, 2020). I started qualitative data analysis by first reading and developing a basic understanding of the material. Second, I began the first coding cycle using initial coding, more specifically line-by-line coding to fracture the data and identify nuances or subtleties that often convey important information about the participants as well as the research process (Charmaz, 2014). Initial coding helped create substantive meaning from large amounts of data using a more eclectic coding approach (Saldaña, 2016). Furthermore, initial coding allowed me to explore the data closely and without the application of pre-existing knowledge that could narrow or limit the possibilities for new and unforeseen knowledge. More importantly, initial coding enabled me to dissect, analyze, and understand the information thoroughly in order to identify categories that answer the guiding research questions. First coding cycle process brought to light important actions and ideas that later became the core concepts of the data.

Transition. Next, I used codes to themes as a transitional process. This approach, as its name implies, allowed me to condense similar and related codes into themes. In

conjunction with theming, I used the comparative method to filter, sort, prioritize, synthesize, and organize codes into meaningful categories. The data became more manageable and the themes began to explain with more details the what, why, how, and when of the topic under study.

Focused Coding. In this step, I reviewed all the data for a third time to determine how consistent and exhaustive the initial categories were. Also, focused coding helped me condense the data even further without neglecting or sacrificing important details. I continued to rely on the comparative methods to review the themes generated during the first cycle, paying close attention to how I was defining and relating each theme. I then assessed the themes by comparing them with the data to identify which themes were consistent and yielded more "analytic power" (Charmaz, 2014, p. 140).

From Coding to Assertions. I chose this approach in order to find relationships among categories to construct a central claim or assertions that could help explain mental health and behavioral issues in students receiving special education services as well as create a framework that could help support the core components of the intervention. The goal in using this approach was to develop a comprehensive and coherent narrative about the challenges faced by special education students as well as implement field methods that could assist in improving their resilience. This culminating phase of constant comparative methods yielded categories that are significant, clear, and interconnected enough to explain why and how trauma affects students in special education cognitive and emotional development (Ayres, 2008)

Trustworthiness

According to Lincoln & Guba (1985), trustworthiness is the equivalent of quantitative internal validity and thus researchers must carry out rigorous protocols that validate the accuracy of the findings. (p #?) For this reason, I chose to work jointly with the SEC not only for her expertise with special education students, but also for her experience with program and curriculum development based on qualitative methods such as observations, journaling, and interviewing. Furthermore, the SEC has received training in qualitative and quantitative analysis during her graduate studies as well as district professional development. The SEC and I ensured trustworthiness by implementing strategies that establish credibility, dependability, and confirmability (Lincoln & Guba, 1985).

Credibility

To establish credibility, the SEC and I used an intercoder reliability assessment to control for interpreter bias and ensure an accurate description of the data using coding framework (O'Connor & Joffe, 2020). More specifically, we first reviewed the focus interview transcripts collectively to develop the initial coding framework. Secondly, I independently started and completed the first coding cycle. I then shared with the SEC a copy of the first coding cycle that contained only data segments. The SEC used this file to apply the codes she determined appropriate for each data segment. We then compared our findings to check for inconsistencies in regards to language use, definitions, perceptions, and abstractions. Once we resolved discrepancies and agreed on consistent themes, I independently completed the remaining qualitative analysis.

Dependability

Another important concept for trustworthiness deals with dependability or reliability of the methods and findings (Creswell & Guetterman, 2019). Lincoln & Guba (1985) describe it as the ability to demonstrate that the results of the study are consistent and could be replicated using the exact same methods. We used the constant comparison method from grounded theory to correlate concepts and ensure that the meaning extracted from the data is coherent and accurate (Charmaz, 2014; Glaser & Strauss, 2009). We also discussed dependability during our triangulation debrief.

Confirmability

In addition to triangulation, I practiced reflexivity throughout the process in order to identify personal biases and preconceived notions that might influence the results (Ivankova, 2015). To do this, I maintained a research journal to reflect on emergent themes in the data and then compare them against my own understandings or biases of such themes (Tufford & Newman, 2012). I also included my reasons for pursuing this project as well as personal perceptions regarding gender, race/ethnicity, and socioeconomic status. More importantly, I reflected on any potential role conflicts with the participants and how my own value system may interfere with the results.

Role of the Researcher

In line with the values and objectives of pragmatism, I have assumed not only a professional responsibility, but also a moral obligation to bring about educational change by providing practical and efficient solutions to a very complex and often ineffective system. I do believe, however, that the complexity of our educational system should not

discourage us from doing our best to assuage or ease the problems through the continued dedication of serving our children with the current resources at hand. For this study, CMS's special education counselor (SEC) and I first collaborated to identify all 6th and 7th grade students receiving RSP services and divided the total number in half to create two assessment groups. Following up, we delivered the pretest to each group using the scales mentioned above and then identified and randomly assigned 20 students who tested positive for trauma to the two focus groups. I was solely responsible for the implementation of RBI curriculum twice per week for five consecutive weeks. Additionally, I conducted observations during the implementation process to examine behavioral responses and group dynamics, as well as individual progress. Upon completion of the program, I delivered the posttest and two focus groups using a semi-structured guide for the purpose of collecting qualitative data.

Timeline

Following approval by Arizona State's IRB and the school district's committee for External Research (CERR), I used MISIS and IEP school databases to identify 6th and 7th CMS students eligible for resource program specialist services. The selection process took place during the last week of February, more specifically, from February 18th to February 26th, 2021. Once all 6th and 7th grade RSP students were identified, the SEC and I divided the total number of students into two assessment groups where we introduced and explained the purpose and structure of the intervention via Zoom. Students also received the parent consent forms and were given until March 5th to submit them. Students and parents dropped off the consent forms to the school or emailed the

consent forms as photos and/or scanned documents. Nonetheless, the SEC and I followed up with selected students and their parents to inform them of intervention and facilitate ways in which they can provide signed consent for the intervention. Students with parental consent were given the pretest on March 10th and received a digital folder with materials and information regarding the intervention.

The pretest was delivered in the form of a web-based survey where all the data was stored and encoded to ensure information privacy. Students did not use their names, rather they used their school identification number plus two more random numbers. Students who scored three or higher for PTSD started the intervention on March 15th and ended April 19th, for a total of five consecutive weeks. Participants received the posttest on April 21st and participated in the virtual focus groups on April 28th.

Chapter Four: Data Analysis and Results

"Educating the mind without educating the heart is no education at all"

- Aristotle

This study evaluated the efficacy of a school-based resilience curriculum in raising resilience skills while reducing the impact of trauma in 6th and 7th middle school students. This action research employed a mixed methods approach, specifically an explanatory sequential design. In this chapter, I will first discuss the results from the instrument's reliability analysis followed by the quantitative data obtained using a web-based pre and posttest student survey. More specifically, I will report statistical data that evaluates mean score differences among both intervention groups followed by quantitative data for each construct and how they relate to the guiding research questions. I then present the results from qualitative data analyses along with assertions supported directly from students' voices via focus group interviews. The collection and analysis of both quantitative and qualitative data provide answers to the following two research questions:

RQ 1: How and to what extent does implementation of RBI affect students' (a) resiliency and (b) PTSD symptoms?

RQ 2: How and to what extent does implementation of RBI affect students' (a) attitudes toward school and (b) efficacy for coping?

Results for Quantitative Data

The quantitative component of this study relied on a web-based pretest and posttest delivered to two groups of ten participants. To reiterate, the web-based pre and posttest were designed to examine students': 1) Resiliency, 2) PTSD, 3) Attitudes Toward School, and 4) Coping. I conducted a reliability test to assess the internal consistency of the questionnaire with this target group. In this section, I will present results from my quantitative analyses to provide information regarding instrument reliability as well as statistical significance of any differences in pre- and post-test scores. I relied on paired-sample t-tests to compare pre and posttest mean score differences and calculate whether differences were statistically significant.

Survey Reliability Data. I administered a survey instrument to twenty 6th & 7th grade students in the Resource Specialist Program (RSP). Designed to measure students' perceptions and/or experiences related to Resilience, PTSD, Attitudes Toward School, and Coping, the instrument consists of 30 Likert-Scale items extracted from scales with established reliability and validity such as the California Healthy Kids Survey (CHKS), Resilience Youth Development Module (RYDM), and the Primary Care PTSD Screen (PC-PTSD) (Kim & McCarthy, 2006; Prins et al., 2003; Hanson & Kim, 2007). Combined, this scale is a student-focused survey that measures both risk and resilience factors through student self-reports.

Internal Consistency. Fortunately, all the participants (N=20) completed the survey in its totality. To test for reliability, I proceeded to input the collected data into SPSS and conducted a Cronbach alpha (α) analysis for the entire instrument and for the

four constructs and corresponding sub-constructs. The results reveal strong Cronbach alpha scores for "Student Attitudes Toward School": School Safety (α = .799) and "Teacher Support" (α = .910); "Resilience": Self-Efficacy (α = .841) and "Problem Solving" (α = .721); "Coping": Reappraisal (α = .960) & Suppression (α = .631)" and "PTSD" (α = .626) (Plano Clark & Creswell, 2010). More significantly, the aggregate alpha score (α = .855) suggests that this scale served as a reliable pretest and posttest instrument. Results are presented in Table 3.

Table 3

Student Wellness Checkup Reliability

Construct	Associated Items	Coefficient Alpha
Student Attitudes Toward School	Items Q 2-8	.907
- School Safety	Items Q 2-3	.799
- Teacher Support	Items Q 4-8	.910
Resilience	Items Q 9-14	.815
- Self-Efficacy	Items Q 9-12	.841
- Problem Solving	Items Q 13-14	.721
Coping	Items Q15-24	.515
- Reappraisal	Items Q15,17,19,21,22 & 24	.960
- Suppression	Items Q 16,18,20 & 23	.631
PTSD	Items Q 25-30	.626

Overall Alpha	Items Q2-Q30	.855

Evaluation of Treatment Group Differences. This study consisted of twenty students who were selected based on comparable PTSD scores and similar demographical characteristics (e.g. age, grade, and academic program). These students were then randomly assigned to two equal treatment groups. Both groups were treated as one and were exposed to the same school-based intervention, including activities and discussion prompts. I carefully followed the program model to ensure implementation fidelity so as to cause the least amount of outcome variation among the treatment groups as possible. Nevertheless, each group came to the intervention with unique experiences and other natural factors that might have contributed to differences in outcomes. During the intervention, each group also developed different characteristics based on peer dynamics, participation, experiences, and learning styles. For this reason, I conducted an independent sample t-test to determine if there was a statistically significant difference between pre and posttest construct mean scores for intervention groups. The table below provides the results of the independent t-test.

Table 4

Independent T-Test Statistics for Treatment Groups

Constructs		Pre Score					Post Score				
	Group	M	SD	t	df	*p*	M	SD	t	df	*p*
Resilience	A	2.20	0.52	.451	18	.657	2.93	0.34	.126	18	.901
	B	2.30	0.46		18		2.95	0.23		18	
PTSD	A	1.30	0.23	1.40	18	.179	1.71	0.13	.293	18	.773
	B	1.18	0.12		18		1.73	0.11		18	
Student Attitudes Toward School	A	2.48	0.76	.409	18	.687	2.81	0.55	1.14	18	.266
	B	2.60	0.44		18		3.02	0.19		18	
Coping	A	3.13	0.36	.583	18	.567	3.42	.042	1.11	18	.279
	B	3.04	0.32		18		3.39	.073		18	

The results revealed no substantial differences between the construct means scores of Group A and Group B prior and after the intervention. The "Resilience" pretest scores for Group A (M=2.20, SD=0.52) and pretest scores for Group B (M=2.30, SD=0.46) conditions; t(18).451, p=.657 do not provide enough evidence to assume that there is a statistically significant difference between Group A and Group B pretest scores. Similarly, The "Resilience' posttest scores for Group A (M=2.93, SD=0.34) and Group B (M=2.95, SD= 0.23) conditions; t(18)=.126, p=.901 suggest there is no statistically significant difference between the posttest mean scores for this construct. With a *p* value larger than the alpha cutoff score of 0.05, I can conclude that students' placement in different treatment groups did not influence their outcomes as it relates to resilience.

The “PTSD” ” pretest scores for Group A (M=1.30, SD=0.23) and pretest scores for Group B (M=1.18, SD=0.12) conditions; t(18)1.40, p=.179 do not provide enough evidence to assume that there is a statistically significant difference between Group A and Group B pretest scores. Further, the “PTSD” posttest mean scores for Group A (M=1.71, SD=0.13) and Group B (M=1.73, SD=0.11) conditions; t(18)=.293, p=.773 also do not provide enough evidence to assume the posttest mean score difference for this construct is statistically significant. In other words, there is not a statistically significant difference in the variances between groups regarding PTSD symptoms.

The “Student Attitudes Toward School ” pretest scores for Group A (M=2.48, SD=0.76) and pretest scores for Group B (M=2.50, SD=0.44) conditions; t(18).409, p=.687 do not provide enough evidence to suggest that there is a statistically significant difference between Group A and Group B pretest scores. Similarly, the “Student Attitudes Toward School” posttest mean scores for Group A (M=2.81, SD=0.55) and Group B (M=3.02, SD=0.19) conditions; t(18)=1.14, p=.266 also do not provide enough evidence to assume the posttest mean score difference for this construct is statistically significant. With a *p* value larger than the alpha cutoff score of 0.05, I can conclude that students’ placement in different treatment groups did not influence their outcomes as it relates to their attitudes toward school.

Lastly, the “Coping” pretest scores for Group A (M=3.13, SD=0.36) and pretest scores for Group B (M=3.04, SD=0.43) conditions; t(18).583, p=.567 do not provide enough evidence to suggest that there is a statistically significant difference between Group A and Group B pretest scores. Similarly, the “Coping” posttest mean scores for

Group A (M=3.42, SD=0.42) and Group B (M=3.49, SD=0.73) conditions; t(18)=1.11, p=.279 also do not provide enough evidence to assume the posttest mean score difference for this construct is statistically significant. With a *p* value larger than the alpha cutoff score of 0.05, I can conclude that students' placement in different treatment groups did not influence their outcomes as it relates to their abilities to cope.

Resilience. The first guiding research question explores the efficacy of this school-based intervention in increasing student resilience. To answer this question, I used descriptive statistics as well as the paired-sample t-test to compare the pre and posttest mean of each sub-construct score difference. The construct of resilience in this study consists of two sub-constructs: 1) Self-efficacy and 2) Problem Solving. Descriptive statistics for both sub-constructs are presented in table 5.

Table 5.

Descriptive Statistics for Pre and Post Students' Attitudes Toward School

Sub-Constructs	Pre Score		Post Score	
	M	SD	M	SD
School Safety	2.45	0.57	3.02	0.29
Teacher Support	1.85	0.54	2.77	0.41

Descriptive statistics show "Self-efficacy and "Problem-Solving" mean scores and mean variation for pre and posttest. The "Self-Efficacy" sub-construct show an increase with pretest mean score of 2.45(SD=0.57) and a posttest mean score of 3.02(SD=0.29). The higher standard deviation in the pretest score (SD=0.57) indicates that the responses were more spread out while the lower standard deviation in the posttest

score (SD=0.29) shows a more concentrated aggregation of scores around the mean. The difference of mean scores of 0.57 points suggest that the intervention may have contributed to an increase in students' perception of self-efficacy.

Similarly, the "Problem-Solving" sub-construct increased from a pretest mean score of 1.85(SD=0.54) to a posttest mean score of 2.77(SD=0.41). The pretest score standard deviation (SD= 0.54) indicates higher variance between response selections, while the standard deviation of the posttest (SD=0.41*)* shows a more concentrated aggregation of scores around the mean. The difference of mean scores of 0.92 points suggest that the intervention may have contributed to an increase in students' perception of their ability to problem-solve. Below, I present the results from the paired sample t-test analysis to conclude whether the mean scores for both sub-constructs are statistically different.

Table 6

T-Test Statistics for Pre and Post Resilience Survey

Sub-Constructs	Pre Score		Post Score				
	M	SD	M	SD	t	df	p
Self-Efficacy	2.45	0.57	3.02	0.29	4.19	19	.001
Problem Solving	1.85	0.54	2.77	0.41	5.96	19	.001

As illustrated above, the mean score for "Self-Efficacy" pretest scores (M = 2.45, SD= 0.57*)* and posttest scores (M= 3.025, SD= 0.29*)* conditions; t(19)= 4.19, p=.001 indicates that students developed a higher sense of self-efficacy at the conclusion of the

intervention. With a p value of less than 0.05, I conclude there is a 95% chance the intervention had a direct effect on reducing improving students' perception of their self-efficacy.

Similarly, the "Problem Solving" t- test results demonstrate that there is a statistically significant difference between the pretest scores (M=1.85, SD= 0.54) and posttest scores (M= 2.77, SD= 0.41) suggesting that students developed problem solving skills, $t(19)= 5.96$, $p=.001$. Furthermore, the paired-samples t-test produced a low two-tailed probability ($p= .001, \alpha=0.05$ *)*, indicating that there is less than 0.1% chance of obtaining such t-test values by chance.

PTSD. The first guiding research question also explores to what extent this school-based intervention affects student's PTSD symptoms. The construct of PTSD in this study consists of five sub-constructs: 1) Nightmares, 2) Avoidance, 3) Hypervigilance, 4) Numbness, and 5) Guilt. The scale consists of six "yes/no" questions that examine the five elements of PTSD domains – particularly, nightmares, avoidance of thinking about the situation, feeling on guard, numbness and guilt in response to a frightening event. In order to produce descriptive statistics using the PC-PTSD, I had to convert nominal responses (yes-no) to numerical values (yes =1 & no = 2). I then used SPSS to calculate the mean as well as the standard deviation of each response with the purpose of analyzing variation and dispersion. I also used descriptive statistics and paired sample t-test to calculate mean differences between the pre and posttest. Table 7 illustrate the results.

Table 7.

Descriptive Statistics for Pre and Post PTSD Survey

Sub-constructs	Pre Score		Post Score	
	M	SD	M	SD
Nightmares	1.85	0.36	2.00	0.00
Avoidance	1.10	0.31	1.95	0.22
Hypervigilance	1.15	0.36	1.85	0.36
Numbness	1.10	0.31	1.55	0.51
Guilt	1.25	.44	2.00	0.00

The "Nightmare" sub-construct yielded only a slight increase with a pretest mean score of 1.85 (SD=0.36) and a posttest mean score of 2.00(SD=0.00). The pretest score standard deviation (SD= 0.36) indicates higher variance between response selections. In contrast, the standard deviation of the posttest (SD=0 .00*)* shows no variance of scores around the mean. In other words, every student answered in the negative for this sub-construct during the posttest. The pretest mean score indicates that the majority of students answered in the negative regarding experiencing nightmares before participating in the intervention, thus the posttest scores only show a marginal effect on students' reduction of nightmares.

The "Avoidance" sub-construct increased from a pretest mean score of 1.10(SD=0.31) to a posttest mean score of 1.95(SD=0.22). The pretest score standard deviation (SD= 0.31) indicates higher variance between response selections. In contrast, the standard deviation of the posttest (SD=0 .22*)* shows a more concentrated aggregation of scores around the mean. However, the posttest mean score indicates that the majority

of students' answered in the negative for avoidance related symptoms after completion of the intervention.

The "Hypervigilance" sub-construct show an increase with a pretest mean score of 1.10 (SD=0.36) and posttest mean score of 1.55(SD=0.36). The standard deviations of both sets of data are identical, indicating that the responses from both the pretest and posttest scores were similar. Nonetheless, the posttest mean score provides evidence that students reduced hypervigilance symptoms after completion of the intervention.

The "Numbness" sub-construct show an increase with a pretest mean score of 1.10 (SD=0.31) and a mean post score 1.55(SD=0.51). The lower standard deviation in the pretest score (SD=0.31) show a more concentrated aggregation of scores around the mean while the larger standard deviation in the post score (SD=0.51) indicates that the responses were more spread out. The difference of mean scores of .20 points suggest that the intervention may have contributed to a decrease in students' numbness related symptoms.

The "Guilt" sub-construct show an increase with pretest mean score of 1.25(SD=0.44) and a posttest mean score of 2.00(SD=0.00). The higher standard deviation in the pretest score (SD=0.44) indicates that the responses were more spread out while the smaller standard deviation in the posttest score (SD=0.00) show no variance of scores around the mean. This score also suggests that very student answered in the negative for this sub-construct during the posttest. The difference of mean scores of 0.44 points suggest that the intervention may have contributed to a decrease in students' guilt

related symptoms. Below, I present the results from the paired sample t-test analysis to conclude whether the mean scores for both sub-constructs are statistically different

Table 8.

T-Test Statistics for Pre and Post PTSD Survey

Sub-Constructs	Pre Score		Post Score				
	M	SD	M	SD	t	df	p
Nightmares	1.85	0.36	2.00	0.00	1.83	19	.083
Avoidance	1.10	0.31	1.95	0.22	10.3	19	.001
Hypervigilance	1.15	0.36	1.85	0.36	5.48	19	.001
Numbness	1.10	0.31	1.55	0.51	3.32	19	.004
Guilt	1.25	.44	2.00	0.00	7.55	19	.001

The paired sample t-tests illustrated above provide statistical evidence to answer the intervention's efficacy in affecting students' PTSD symptoms. The "Nightmare" t-test pretest mean score (M=1.85, SD= 0.36) shows that most students answered in the negative before starting the intervention, thus explaining the small effect in posttest score

conditions t(19)=1.83, p=.083). In other words, these results are not statistically significant to suggest the intervention had an impact in affecting pre and posttest scores for this sub-construct.

However, the "Avoidance" t-test results of pretest scores (M=1.10, SD=0.31) and posttest scores (M=1.95, SD=0.22) conditions; t(19)=10.3, p=.001, provide enough evidence to suggest that there is a statistically significant difference between the mean scores. With a *p* value of less than 0.05, I conclude there is a 95% chance the intervention had a direct effect on reducing students' avoidance related symptoms.

Similarly, The "Hypervigilance t-test results from the pretest scores (M=1.15, SD=.036) and posttest scores (M=1.85, SD=0.36) conditions; t(19)=5.48, p=.001, provide enough evidence to suggest that there is a statistically significant difference between the mean scores. With a *p* value of less than 0.05, I conclude there is a 95% chance the intervention had a direct effect on reducing students' hypervigilance related symptoms.

The "Numbness" t-test results from pretest scores (M=1.10, SD=0.31) and posttest scores (M=1.55, SD=0.51) conditions, t(19)=3.32, p=.004, provide enough evidence to suggest that there is a statistically significant difference between the mean scores. With a *p* value of less than 0.05, I conclude there is a 95% chance the intervention had a direct effect on reducing students' emotional numbness related symptoms.

The "Guilt" t-test results of pre scores (M=1.25, SD=0.44) and post scores (M=2.00, SD=0.00) conditions; t(3)=7.55, p=.001 provides enough evidence to suggest that there is a statistically significant difference between the mean scores. With a *p* value

of less than 0.05, I conclude there is a 95% chance the intervention had a direct effect on reducing students' guilt related symptoms.

Students' Attitudes Toward School. The second research question asks whether the intervention had any influence on students' attitudes toward their school. This construct is defined by two sub-constructs: 1) School Safety and 2) Teacher Support. I used descriptive statistics and paired sample t-test to calculate mean differences between the pre and posttest.

Table 9

Descriptive Statistics for Pre and Post Students' Attitudes Toward School

Sub-Constructs	Pre Score		Post Score	
	M	SD	M	SD
School Safety	3.07	0.83	3.62	0.53
Teacher Support	2.33	0.59	2.64	0.45

Descriptive statistics show a positive increase in students' attitudes towards school. These results reveal that "School Safety" posttest mean score (M= 3.62, SD=0.53) was higher that the pretest mean score (M= 3.07, SD=0.83). The higher standard deviation in the pretest score (SD=0.83) indicates that the responses were more spread out, while the smaller standard deviation in the posttest score (SD=0.53) indicates

that the responses were closely centered on the mean. The difference of mean scores of 0.55 points suggest that the intervention may have contributed to an increase in students' perception of school safety.

Also, the "Teacher Support" posttest mean score (M=2.64, SD=0.45) was slightly higher than the pretest mean score (M= 2.33, SD= 0.59). The higher standard deviation in the pretest score (SD=0.59) indicates higher response variance, while the lower standard deviation in the posttest score (SD=0.45) show a more concentrated aggregation of scores around the mean. The difference of mean scores of 0.31 points suggest that the intervention may have contributed to an increase in students' perception of teacher support. Table 10 provides the results of the paired sample t-test, which calculates if the difference, however slight, is statistically significant.

Table 10

T-Test Statistics for Pre and Post Students' Attitudes Toward School

Sub-Constructs	Pre Score		Post Score				
	M	SD	M	SD	t	df	p
School Safety	3.07	0.83	3.62	0.53	2.82	19	.011
Teacher Support	2.33	0.59	2.64	0.45	2.39	19	.027

The "School Safety" t-test results for pretest scores (M= 3.07, SD=0.83) and posttest score (M=3.62, SD=.053) conditions; t(19)= 2.82, p=.011 provide enough evidence to suggest that there is a statistically significant difference between the mean

scores. With a *p* value of less than 0.05, I conclude there is a 95% chance the intervention had a direct effect on improving students' perceptions of school safety.

The "Teacher Support" t-test results of pretest scores (M=2.33, SD=0.59) and posttest scores (M=2.64, SD=0.45) conditions; t(19)=2.39, p=.027 indicate that there is a statistically significant difference between the pretest and posttest scores. With a *p* value of less than 0.05, I conclude there is a 95% chance the intervention had a direct effect on improving students' perception of teacher support. Although this is statistically significant, students' demonstrated a relatively small difference of .31(SD=.45) between pre and posttest mean scores regarding their perception of how supported they feel by their teachers. I attribute this small impact on students' pre-existing perceptions to how they feel in school and the connections they have made with their teachers prior to the intervention.

Coping. The second research question also asks how and to what extent the intervention affects a student's ability to cope. Coping is defined by two sub-constructs: 1) Reappraisal and 2) Suppression. Descriptive statistics and a paired sample t-test was conducted to determine whether there were differences in the mean scores when comparing the pre and posttest results on students' ability to cope. Table 11 presents descriptive statistics of sub-constructs "Reappraisal" and "Suppression."

Table 11

Descriptive Statistics for Pre and Post Coping

Sub-Constructs	Pre Score		Post Score	
	M	SD	M	SD

Reappraisal	2.80	0.71	3.98	0.51
Suppression	3.52	0.54	2.53	0.14

The results above show differences between the pre and posttest mean scores for students' ability to reappraise situations as well as their use of mental suppression as a psychological defense mechanism. The "Reappraisal" posttest mean score (M= 3.98, SD=0.51) than the pretest mean score (M= 2.80, SD=0.71).The higher standard deviation in the pretest score (SD=0.71) indicates that the responses were more spread out, while the smaller standard deviation in the posttest score (SD=0.51) indicates less variance in the responses. The difference of mean scores of 1.18 points suggest that the intervention may have contributed to an increase in students' ability to reappraise socioemotional challenges.

On the other hand, the "Suppression" pretest mean score (M= 3.52, SD=0.54) is higher than the posttest mean score (M=2.53, SD=0.14). The lower posttest mean score represents an improvement in students' ability to engage in more positive coping mechanisms such as reappraisal and less in negative coping mechanisms such as suppression. The higher standard deviation in the pretest score (SD=0.54) indicates that the responses were more spread out, while the smaller standard deviation in the posttest score (SD=0.14) show a more concentrated aggregation of scores around the mean. The difference of mean scores of 0.99 points suggest that the intervention may have contributed to a decrease in students' suppression of socioemotional challenges. The

table below provides the results of the paired sample t-test, which calculates if the mean differences are statistically significant.

Table 12

T-Test Statistics for Pre and Post Coping

Sub-Constructs	Pre Score		Post Score				
	M	SD	M	SD	t	df	p
Reappraisal	2.80	0.71	3.98	0.51	7.42	19	.001
Suppression	3.52	0.54	2.53	0.14	7.68	19	.001

The results above show differences between the pre and posttest mean scores for students' ability to reappraise situations as well as their use of mental suppression as a psychological defense mechanism. The "Reappraisal" t-test results for the pretest scores (M= 2.8, SD=0.72) and posttest scores (M= 3.98, SD=0.51) conditions; t(19)=7.42, p=001, indicate there is a statistically significant difference between the pre and post mean scores. With a *p* value of less than 0.05, I conclude there is a 95% chance the intervention had a direct effect on improving students' ability to reappraise socioemotional challenges.

The "Suppression" t-test results for the pretest scores (M= 3.52, SD=0.54) and posttest scores (M= .53, SD=0.14) conditions; t(19)=7.68, p=001, indicate there is a statistically significant difference between the pre and post mean scores. With a *p* value of less than 0.05, I conclude there is a 95% chance the intervention had a direct effect on reducing students' suppression of socio-emotional challenges. This is important because

students seem to have replaced suppression as a maladaptive coping mechanism for higher levels of self-regulation, such as reappraisal.

Posttest Evaluation. The posttest included four Likert-scale questions of agreement (strongly agree = 1, agree = 2, half and half = 3, disagree = 4, strongly disagree = 5) that assessed student's learning of resilience skills such as stress management, communication, goal setting, and problem solving. I also included an additional question that asked students whether they would recommend the intervention to other students. The data shows that the majority of students learned resilience skills and nineteen out of twenty students recommended the program to their peers. The table below show the results.

Table 13

Post Evaluation Response Frequency Percentages: Resilience Skills

Item	Strongly Agree	Agree	Half & Half	Disagree	Strongly Disagree
Stress Management Score	25% (n=5)	50% (n=10)	20% (n=4)	5% (n=1)	0% (n=0)
Communication	5% (n=1)	80% (n=16)	15% (n=3)	0% (n=0)	0% (n=0)

Goal Setting	15% (n=3)	45% (n=9)	40% (n=8)	0% (n=0)	0% (n=0)
Problem Solving	40% (n=8)	55% (n=11)	5% (n=1)	0% (n=0)	0% (n=0)
Recommend Program	45% (n=9)	50% (n=10)	5% (n=1)	0% (n=0)	0% (n=0)

As depicted in table 13, the survey data indicate consistent positive scores for stress management. Although the total number of the sample population (n = 20) cannot produce generalizable results, it is important to highlight that over 75% of participants (n = 15) reported learning stress management skills. Moreover, students also scored high for communication skills with 85% reporting they learned more efficient ways to communicate. Nineteen out of twenty (95%) students also indicated they learned problem solving strategies during the nine-week intervention. In contrast, the data revealed that only 60% of participants felt they learned goal setting strategies. When students were asked as to whether they would recommend the intervention to peers, nineteen students or 95% indicated they would recommend.

Next, I computed the mean score and standard deviations of each of the four resilience skills to explore students' level of agreement. Table 17 illustrates such calculations.

Table 14

Descriptive Statistics for Post Evaluation Resilience Skills

N = 20	Mean	Std. Deviation
Problem Solving	1.65	0.58
Communication	2.10	0.44

Stress Management	2.05	0.82
Goal Setting	2.25	0.71

These results reveal that "Problem-Solving received a mean score of 1.65 (SD=0.58) indicating that, in fact, students learned or improved their problem-solving skills. This is important given that in previous cycles of research, students generally shared having little to no problem- solving skills. Also, the mean score for "Communication (M=2.10, SD=0.44) indicates that participants learned ways to communicate better with others. Consistent with the data above, "Stress Management" obtained a mean score of 2.05 (SD=0.82), which demonstrates that students "agreed" learning skills that helped them manage their stress levels. Lastly, all four resilience skills obtained generally low standard deviation scores, indicating low variance between response selections.

Results for Qualitative Data

I conducted two thirty minute virtual (Zoom) focus group interviews using the same semi-structured interview to allow students to elaborate on their experience during the intervention and to provide feedback regarding the modules, topics covered, activities, and delivery. Students' feedback also addressed both effective and ineffective elements of the program. Data from the focus groups were recorded and transcribed using TapMedia software application and analyzed using HyperResearch (HyperRESEARCH 4.5.0, 2020). The focus group interviews were an opportunity for students to express their thoughts about the intervention as well as feedback that could help answer the guiding research questions. To reiterate, this study's objective is to answer how and to what

extent the school-based intervention affect students' resilience, PTSD symptoms, attitude towards school, and coping.

The SEC and I first reviewed the focus interview transcripts together to develop the initial coding framework. We analyzed two sets of transcripts to document and understand students' experiences during the intervention. The preliminary data analysis yielded over 30 codes related to each research question and constructs under study. In this section, I present the results of my qualitative analysis organized first by presenting assertions regarding (a) Resilience, (b) Students' Attitudes Toward School, and (c) Coping followed by students' experience of the intervention. The construct "PTSD" was excluded given the potential risks associated with re-traumatization. Table 15 presents each construct along with theme-related components and assertions made based on the focus groups interviews.

Table 15.

Themes, Theme-Related Components, and Assertions from Focus Group Interviews

Construct	Theme	Theme-related Components	Assertions
Resilience	Positive Attitude	1. Resilience skills allowed students to identify different perspectives in any given situation 2. Resilience skills taught students to reframe negative circumstances. 3. Resilience skills allowed students to identify potential solutions using a problem solving model (SNAP). 4. Resilience skills taught students how to utilize assertive, cordial, and positive communication.	1. Teaching resilience skills provided students a strengths-based perspective and improved their ability to negotiate adversity using more effective problem solving, thinking, and communication skills.
Student Attitudes Toward School	High Expectations	1. The intervention had a small effect on students' attitudes toward school. However, students expressed positive perceptions of teachers who have high expectations and challenge them to improve their work.	2. Students' participation in the intervention had a small impact on their attitudes toward school, but identified high expectations as source of stress, but also encouragement.
	Supportive	1. The intervention provided students and researcher the opportunity to interact and engage in socio-emotional exercises that created a supportive, trustful, and empathic environment.	3. Participating in the intervention helped students develop trustful and caring relationships among each other and presenter.
	Trauma-Informed Development	1. The intervention allowed students to discuss importance of socio-emotional development and trauma-informed practices in the classroom.	4. Participation in the intervention educated students about benefits of trauma-informed practices and role of school in their socio-emotional development

Coping	Self-Care	1. Coping skills encouraged students to engage in soothing activities that contribute to more stable moods. 2. Coping skills helped students reduce negative feelings, anxiety, and stress levels. 3. Coping skills helped students refocus their energy, improve attention and engagement.	5. Teaching coping skills allowed students to learn self-management strategies that improve their mental health and participation in school
Student Experience	Helpful	1. The intervention taught students problem-solving skills they deemed helpful when addressing personal and school challenges. 2. The intervention provided students useful communication skills they deemed useful in resolving interpersonal conflict	6. The intervention helped students develop skills essential for overcoming adversity
	Caring	1. The intervention helped students developed deeper connections based on shared experiences and disclosed feeling good about caring for peers who were in distress.	7. The intervention helped students develop empathy and supportive relationships among themselves.
	In-Person & Longer Session Time	1. Students shared they would have enjoyed the intervention more if it was delivered in-person 2. Students shared that the activities would have been more engaging and fun if they were together in the classroom. 3. students shared sessions were short and more time was needed to participate in activities and engage in discussions	8. Delivering the intervention in person and increasing session time would have improved participation and fostered a stronger sense of community.

Resilience. Students provided valuable feedback regarding the intervention's efficacy in raising their resilience skills. I asked students three questions in order to evaluate their overall understanding and application of resilience skills for stress management and problem solving.

***Positive Attitude*:** Assertion 1: *Teaching resilience skills provided students a strengths-based perspective and improved their ability to negotiate adversity using more effective problem solving, thinking, and communication strategies.* The first question asked students to share strategies that helped them feel less stressed. Overall, students shared that reframing negative situations and engaging in problem solving were the two most important and effective skills. One student mentioned, "Instead of dwelling about the problem, it's just better to think positively and then do something about it." A peer in his group added, "You know, it's really all about attitude and how you think about things." Effective communication was also an important skill to learn and to use whenever they are confronted with challenges both at home and in school. Students reported that communicating their emotions appropriately contributed to more positive moods, but also in their day to day relations with family and friends. One student shared,

> For me talking about what is wrong inside, like emotionally is very important because I tend to keep it inside, which makes things worse. Keeping inside made me angry and that made me explode at home with my sister for no reason, but also with my friends. I also feel that communication helps us fix conflict with our family and friends, because the majority of the times, no one is listening or communicating what they really mean correctly.

I asked students during both focus groups if they believed they learned how to be more resilient and to explain why. Students shared that the program helped them understand the simplicity but also the importance of strategies such as reframing situations, identifying problems, and brainstorming solutions. Students also expressed that the intervention boosted their self-efficacy involving problem solving and stress management. A student shared, "I liked the fact that you made me realize that I am already resilient, but that I should practice it more." Another student mentioned, "I think dealing with family and school stuff will be easier now, especially using the S.N.A.P thing." Codes including "hopeful," "positive," "facing," "dealing with," and "prepared" shed light to students' feelings of confidence and self-efficacy. In general, the majority of students expressed they learned and improved resilience skills, in particular problem solving.

Student Attitudes Toward School. Students provided insight that helped answered how and to what extent the intervention influenced their attitudes toward school. Students had the opportunity to express their opinions and feelings about school safety as well as teacher support and connectedness. Students were very open and engaged in an honest and insightful discussion about their perception of teachers. Three main themes emerged during our discussion: 1) High Expectations, 2) Supportive, and 3) Trauma-Informed Education.

High Expectations. Assertion 2: *Students' participation in the intervention had a small impact on their attitudes toward school, but identified high expectations as source of stress and encouragement.* I began this conversation by reviewing our rules of

confidentiality and ensuring their anonymity. I then provided a safe space and asked students to openly share their thoughts and feelings about their teachers in relation to academic and emotional support. Students collectively and consistently expressed they are "pushed" by their teachers to be productive, organized, and efficient in every academic task. Students also shared that their teachers hold them to high standards and while that could sometimes produce anxiety and stress, most of them appreciated being "thought of as smarter and better." Students also mentioned that their teachers' expectations contribute not only to their learning but also their ability to reflect, correct, accept constructive criticism, and improve. One student shared, "It's weird. I get mad sometimes when they want more or better, but deep inside I know they are right and that makes me do better." Another student in the same group added, "Honestly, if teachers did not care, I would do very little or probably nothing."

As the discussion went on, students elaborated on the importance of external motivation and how necessary it is for academic and emotional development. For instance, one student expressed, "I think teachers also help us be better people. They expect us to behave well and treat others with respect." Her comment led to a small discussion about the role of teachers in their socio-emotional development and the impact I had made with them. The students closed this discussion with two insightful takeaways: high expectations could be stressful, but are important for student performance.

Supportive. Assertion 3: *Participating in the intervention helped students develop trustful and caring relationships among each other and presenter.* This theme generated from codes such as "helpful," "understanding," "one-to-one time," "patience," "tutoring,"

and “flexibility,” among others. Students expressed feeling supported by most of their teachers and shared that they have built close connections with some of them. I asked students to describe how they are supported and to provide recommendations to better understand their needs and how they want to be supported. In general, students described that the majority of their teachers often offer additional help with assignments and projects and that others provide test prep workshops and tutoring during lunch and after school. One student shared, “I can say that most of my teachers offer extra help for those who don’t understand or need more guidance.” A student from a different group added, “I came from a different school and the teachers here are way better at supporting you and helping you do well in class.” Students in both focus groups expressed feeling satisfied with the level of support that teachers provide – particularly, one-to-one instruction and flexibility in terms of creativity and innovation. I asked students if the intervention had influenced their attitudes toward school in regards to teacher support. A few students mentioned they felt more connected with the school given that a staff member was paying attention and “cared” about their personal issues. Others shared that they had already built positive relationships with their teachers and came into the intervention with a positive perception of school staff.

However, a few students from Group A discussed they would like teachers to be more supportive of their emotional development. They explained that teachers are very concerned with their academics and often ignore or are indifferent about how their personal lives affect their overall performance. One student shared, “I think every teacher

should be taught this intervention as well. I think it would show them that we have problems too." Another student followed up with,

> I agree. They should support our emotional development just as much as they support us with school work. I think that most of us got really close to you. At least I feel that I can come to you with personal issues and you won't make me feel dumb. This class, I think made us or at least me, feel that I can trust at least one adult at school.

Group B shared that the intervention not only helped them connect with a staff member, but also with each other. The students reported they built trustful and meaningful friendships with one another. One student mentioned, "I am glad I got to participate in this class, because I usually don't make friends that easy. Most of us still hangout and talk about things and know how to help each other out." The discussion around teacher support was very interactive as most students in both groups contributed to the discussion. Their feedback confirms the findings from my quantitative analysis and also confirms the importance of school-based interventions as relationship bridges between students and staff as well as highlights preventive strategies that contribute to positive school climate and overall student well-being.

Trauma-Informed Education. Assertion 4: *Participation in the intervention educated students about benefits of trauma-informed practices and role of school in their socio-emotional development.*

After our conversation about teacher support, students naturally began identifying and discussing among themselves barriers that impede student-teacher connections and

what practices are detrimental to student socio-emotional support. Approximately 90% of the participants shared that teachers fail to understand how emotional difficulties are externalized as behavioral disruptions, lack of motivation and energy, attention, truancy, and anger...among others. According to the students, teachers often misconstrue emotional difficulties with "disrespect" or deliberate and targeted offensive behaviors in order to antagonize or cause "problems." One student explained, "Most teachers are nice, but they do not really understand we have real problems and do not have perfect lives. They expect us to come happy and ready for school every day but never really ask us what's up with us." Others shared the same sentiment and voiced that some teachers "just think they are bad kids" when in reality they are going through "bad stuff." Codes that formed this theme include: "quick to judge," "confused," "criticized without knowing," "unaware of problems," "punished without knowing," "judges me," and "thinks negatively of me without knowing me."

I allowed students to continue the conversation without any interruptions, and I took notes as to what I considered would be important for me and other educators to learn. For example, students shared that teachers and administrators should learn about this intervention and understand the same way they did as to how and to what extent emotional difficulties affect student performance and behavior. Students also shared that participating in this intervention made them aware of the need for trauma-informed practices in the classroom. A student added,

> For me, the course we took with you made me glad that at least someone cares about our personal problems and knows how to help us deal with them. I guess, I

am more comfortable at school knowing I can talk to someone who understands emotional problems. But, honestly we see our teachers all day and they should know some of this stuff too. I really like all my teachers, but if they get into mental health that could help a lot of students at our school.

A student also shared a powerful statement, "A teacher once told me that we never stop learning and she challenged me to participate in a science competition. I think she is right, but I now challenge her and all the teachers to learn more about us and our needs." I believe that this closing statement is a reflection of our students' ability to reflect and willingness to work together towards a more comprehensive and trauma informed educational system.

From these results, students concluded that the ten-week intervention significantly improved their cognitive abilities to negotiate problems and regulate their emotions by practicing useful, easy, and effective skills associated with resilience. The qualitative data above strongly support and validate the quantitative results from the pre and posttests. Nonetheless, the data also informed potential adaptations as it relates to the setting and length of the intervention. Students' feedback also exposed how both setting and length influenced student engagement, participation, and interactions with me and fellow peers.

Coping. The second research questions asks how and to what extent the school-based intervention influenced student's ability to cope. To answer this question, I asked students to share self-regulation strategies or practices they learned in the program and to describe situations in which they might use them.

Self-Care: Assertion 5: *Teaching coping skills allowed students to learn self-management strategies that improve their mental health and participation in school.* The theme "self-care" is composed of two main strategies that emerged after reviewing the data: 1) Arts and 2) Physical Activity).

*Arts***.** Students expressed they enjoyed and felt artistic activities were effective in reducing negative feelings. The intervention exposed students to artistic activities involving coloring mandalas and free drawing as a method to manage daily stress but also as a tool to reduce symptoms associated with trauma and depression. Most students shared that coloring helped them "relax," "forget," "focus," "feel good," "feel happy," and "feel less worried." One student reported, "The mandalas were fun, but also made me feel less anxious." Interestingly, another student shared, "There is something about colors and shapes that is relaxing." Two students from one group elaborated that the mandalas provide a "perfect" combination of colors and shapes that helped them relax. It is also important to highlight that students chose coloring as their preferred coping strategy as they can use both at home and in school. In fact, three students suggested that their school should provide a safe space and time where any student experiencing negative emotions could go color mandalas or engage in artistic activities. They explained that often students experiencing anxiety or other negative emotions are sent to the school nurse where their mental health needs are not properly addressed. In other words, these students recommended the use of holistic practices as part of their student support services in their school.

*Physical Activity***.** The data showed students also benefited and had positive perceptions about the use of physical activities as a self-regulation tool. More specifically, students identified the use of chair yoga and ordinary stretching as the second most effective coping strategy. Initial codes that show students' perceptions include "fun," "engaging," "energizing," "relaxing," and "calming." One student described the effectiveness of chair yoga by sharing, "Stretching in my chair has really helped me focus and feel less jittery, especially now that I sit in front of the computer all day long." Other student comments were representative of other peers. He shared, "The stretching helped me concentrate better and not be so down." Another student from the same group added, "Instead of wanting to punch the desk….or someone else, I now take a walk or stretch."

Similarly to the use of arts, students suggested their school should implement chair yoga during homeroom to "start the day" and at the beginning of seventh period as most of them are "tired" and "grumpy." I followed up with both groups about this idea and most of them shared they have or have seen friends come to school experiencing negative feelings associated with family issues. Students expressed that introducing emotional check-ins as well as self-regulatory practices such as yoga before the start of the school day would significantly improve their mood as well as their willingness to participate in academic activities. In sum, students strongly benefitted from physical activities that promote emotional wellness and advocated for their integration in their daily school experience.

Student Experience. Overall, students expressed positive feelings about the intervention. After reviewing all the codes, the data produced two general themes: Helpful and Caring. Students also had the opportunity to express their opinion about the material and dynamics. Their feedback was constructive and generated key themes such as "simple," "engaging," and "interactive." In fact, a great majority (95%) of students shared they would recommend the intervention to their friends. Nevertheless, the data also highlighted limitations related to the virtual experience. Below, I discuss the themes associated with student experience.

Helpful. Assertion 6: *The intervention helped students develop skills essential for overcoming adversity.* During the focus interviews, students shared their thoughts concerning what they enjoyed or found interesting about the program and whether it was helpful. The semi-structured interview produced consistent responses across both focus groups. Students shared that it was helpful to learn stress management and problem solving skills. As one student mentioned, "I think learning how to keep your cool during difficult times, you are more likely to make better decisions." Another student shared, "At first I was skeptical, but I feel that learning how to problem solve helps dealing with home and school stuff." Both focus groups shared similar perceptions about the intervention and described the material as "useful," "productive," and "full of helpful tools." Additional codes including "handy," "it works," and "usable" contributed to this overarching theme. Collectively, students voiced that the intervention is helpful in not only addressing emotional challenges, but it also assisted with daily life stressors.

Caring. Assertion 7: *The intervention helped students develop empathy and supportive relationships among themselves.* The data revealed that students felt compelled to care for one another during and after the intervention. Students also shared they developed deeper connections based on shared experiences and disclosed feeling good about caring for peers who were in distress. For instance, one student mentioned, "I looked forward to our meetings because I wanted to be there for the group." Another student expressed the same sentiment, "It felt good that the group cared to hear about my day." Collectively, students demonstrated a higher level of empathy towards one another than before the intervention. A students' words support this assertion:

> I often felt that I was the only one going through problems and that made me angry. I walked around thinking why me? And that made me not care about other peoples' problems. I either thought they did not have problems or they couldn't compare with mine, so I just didn't care. After hearing everyone's stories here, I realized we all have things bothering us and we have to be more careful how we treat each other. And since I know how much it sucks to be sad or angry, then I now try to help instead.

Other codes like "concerned," "reaching out," "paying attention," and "supportive" were consistent among both focus groups.

In-Person and Longer Session Time. Assertion 8: *Delivering the intervention in person and increasing session time would have improved participation and fostered a stronger sense of community.* A great majority of students shared they would have enjoyed the intervention more if it was delivered in-person. Some students expressed that

they would have liked to be next to their peers to provide support and to participate in the activities. One student shared, “I know we are in a pandemic, but a hug would go a long way.” Others echoed this sentiment and expressed, “Being together with your friends helps you to feel less lonely and sad.” Students in both focus groups shared that the virtual setting allowed them to “hide” their faces whenever they were not feeling well. They explained that being physically present in a group would have encouraged them to share their feelings and “get stuff off their chest.” Others shared that the activities would have been more engaging and fun if they were together in the classroom. Additionally, students consistently mentioned that sessions were short and added they would have liked to have more time for the activities and to engage in discussions. Initial codes included “too short,” “fast,” “not enough time,” “more time for activities,” “ended fast,” “should be an hour,” and “should be a whole class period” were consistent in both focus groups.

Data Analysis Summary

This study evaluated the efficacy of a school-based intervention in improving students’ well-being and socio-emotional development. Quantitative data demonstrated that the intervention, did in fact, improved students’ resilience skills and attitudes toward school as measured by the RYDM scale. Furthermore, the pre and posttest results show that students acquired or improved their ability to regulate their emotions and behaviors. Lastly, the PC-PTSD pre and posttest scores demonstrate a significant reduction of PTSD related symptoms in students after their participation in the intervention.

In addition, the focus group interviews generated themes and assertions that support the findings from the quantitative analysis. Students expressed they learned strengths-based perspectives and improved their ability to negotiate adversity using more effective problem solving, thinking, and communication strategies. Also, students shared that their participation in the intervention had a small impact on their attitudes toward school and identified high expectations as source of stress, but also encouragement. Furthermore, students shared that participating in the intervention helped them develop trustful and caring relationships among each other and presenter. More importantly, students provided feedback as to the importance of mental health in schools and reported that participation in the intervention educated students about benefits of trauma-informed practices and role of school in their socio-emotional development. In terms of coping, students reported they learned self-management strategies that improve their mental health and participation in school.

Regarding their experience during the intervention, students expressed that the intervention helped them develop skills essential for overcoming adversity as well as empathy and supportive relationships among themselves. Lastly, students reported that the intervention in person and increasing session time would have improved participation and fostered a stronger sense of community. The next chapter will include a detailed discussion and interpretations of findings along with the study's limitations, implications for research, and concluding thoughts.

Chapter Five: Discussion

"Children have the resilience to outlive their suffering, if given a chance."

- *Ishmael Beah*

The purpose of this action research study was to implement and evaluate a school-based intervention that could reduce the impact of mental health issues in students who experience symptoms associated with traumatic stress. As a psychiatric social worker, I recognized the impact that mental health has in my students, in particular those in special education. For this reason, I adapted an existing school-based program consisting of ten modules, each developed to teach 6th and 7th grade students skills that build students' self-efficacy, problem solving, and self-regulation – all concepts associated with resilience (Eisman et al., 2015; Fergus and Zimmerman, 2005). As discussed in Chapter Four, the results demonstrate that the resilience-based intervention improved students' problem solving skills, communication skills, and overall resilience. More importantly, there was a significant reduction in PTSD symptoms as indicated by the pre and posttest scores.

Raising awareness of the importance of emotional intelligence is one of the most fulfilling aspects of my work. For many years, the educational system has focused solely on educating the mind while neglecting our students' socio-emotional development. Our children's future will be a house of cards, in constant danger of collapse, if we do not first build, in each of them, a strong and solid emotional foundation. This research study has allowed me the opportunity to be actively involved in my students' emotional development while learning and becoming a better social worker and a better educator. This experience has not only inspired me to continue the work, but has also confirmed the

value of prevention and early intervention mental health programs in schools. I am optimistic that this action research study could serve as a model for similar applications across the school district. In order to structure and ensure this study addressed my students' emotional challenges, I developed the following two research questions:

RQ 1: How and to what extent does implementation of RBI affect students' (a) resiliency and (b) PTSD symptoms?

RQ 2: How and to what extent does implementation of RBI affect students' (a) attitudes toward school and (b) efficacy for coping?

In this chapter, I first present the integration of quantitative and qualitative results for the purpose of examining how each complement and support one another. Next, I interpret the study's findings as it concerns each research question. Following, I discuss the limitations as it relates to the methods and structure of the intervention. Lastly, I examine the implications for research and practice followed by concluding thoughts.

Integration of Data

According to Greene (2007), mixed methods have five specific purposes: triangulation, complementarity, development, initiation, and expansion. The purpose of using and integrating quantitative and qualitative data in this study was to employ a practical approach that explores and analyzes multiple ways of understanding the socio-emotional development of my students. The objective was to combine the benefits of both methods in order to strengthen the validity and generalizability of the results (Greene, 2007). In other words, I was interested in data complimentary as it "seeks elaboration, enhancement, illustration, and clarification of the results from one method

with the results of the other method" (Greene, 1989, p. 259). Mixed methods allowed me to not only combine different types of data but also include my appreciation for pragmatic action research.

Resilience. The results from both quantitative and qualitative demonstrate complimentary as it relates to students' increase of resilience skills such as problem solving, communication, stress management, and self-efficacy during the ten-week intervention. As illustrated in Chapter Four, the quantitative results for the resilience sub-constructs self-efficacy and problem solving mean scores improved from 2.45 to 3.02 and 1.85 to 2.77 indicating a significant increase of students' ability to negotiate adversity by employing the skills taught in the program. Qualitative data from the focus groups corroborate the quantitative results. For instance, students shared they learned and understood when and how to use resilience skills to manage life stressors including traumatic experiences by reframing circumstances, maintaining a positive attitude, communicating their emotions and needs effectively, and engaging in problem solving. During the course of the intervention, students demonstrated various skills through participation in hands-on activities as well as practical scenarios that evaluated their thinking and application of communication and problem solving skills. In Chapter Four, I presented direct student feedback regarding their perception of the intervention that compliments the quantitative results associated with resilience – particularly, self-efficacy, problem solving, and effective communication skills. In the students' own words, "Personally, I learned to be resilient because I learned I can't change the past, but I can control how I feel now."

PTSD. This construct was evaluated using only quantitative data given the possible risks associated with open group discussion regarding traumatic experiences such as reliving trauma and associated psychological and physical responses. Nonetheless, results from the pre and posttest clearly demonstrates a significant reduction in PTSD symptomatology. This was also supported by students' self-reports of increased mood, energy, and improved stress management skills. During the focus groups, students briefly discussed feeling more positive, encouraged, and hopeful about their future. Although we did not discuss PTSD symptoms during the focus interviews, students' behavior and feedback throughout the intervention demonstrated improvements in self-perception, self-efficacy, self-forgiveness, positivism, and hopefulness. A 7th grade student in Group B, in particular, expressed, "I was just mad all the time. Mad at myself because I really thought I had fucked everything up. But realized that was not even my fault, I was only six years old." This is evidence of students' improved ability to self-reflect and reconstruct cognitive distortions commonly associated with mental health symptoms such as guilt, anger, and trauma.

Students' Attitude Toward School. Quantitative and qualitative results reveal complementarity for this construct. The quantitative results of the posttest show mean score increases in both the school safety (+.55) and teacher support (+.31) sub-constructs. Although the mean score increase is not as large as other constructs, it is still a considerable and important improvement as to how students perceive their school environment. To illustrate, students reported during the focus group interviews having a more positive perception and appreciation for their teachers and their efforts to help them

succeed in and outside the classroom. Students' described their teachers as supportive and interested in their academic success. They elaborated, specifically, on teachers holding them to high expectations and how such expectations contribute to better academic performance. Qualitative data also explains why the mean score differences were not as substantial. For instance, students expressed discontent regarding teacher socio-emotional support, in particular, their lack of awareness about mental health symptoms and how they are associated with student performance and behavior. Their feedback highlights the importance of educating teachers about student mental health and integrating trauma-informed practices in the classroom.

Coping. The quantitative and qualitative results regarding students' efficacy for coping demonstrate data complementary and substantiate students' improved ability to cope after the ten-week intervention. In my quantitative analysis, the posttest score for reappraisal was 1.2 points higher than the pretest score which is indicative of an increase in higher level of thinking necessary for more effective self-regulation. Students' responses from the focus groups support these results but also provide more details regarding coping practices. In fact, students displayed understanding and use of self-regulation tools through the use of yoga, mindfulness, and artistic expression. Both intervention groups favored the use of coloring and chair yoga as their preferred coping strategies as they can use both at home and in school. Several students attributed improved mood and energy to coping strategies taught during the intervention.

Interpretation of Findings

In this section, I interpret, integrate, and ground the study's findings with theoretical and empirical research. Below, the results are discussed by order of research question.

Research question #1: *How and to what extent does implementation of RBI affect students' (a) resiliency and (b) PTSD symptoms?* The results show data complementary and reveal that students are able to increase their resilience while reducing symptoms associated with PTSD by participating in a school-based resilience curriculum. First, we need to review what resilience is and the mechanisms by which children develop resilience. Then, I will review Social Cognitive Theory and its application in this study.

Resilience refers to an individuals' ability to overcome, adapt, and protect themselves against the effects of serious adverse situations (Fergus & Zimmerman, 2005). Resilience Theory (RT) proposes there are certain protective factors inherent in resilient individuals that explain why and how they can overcome the effects of trauma and succeed despite facing tremendous adversity. The research supports this notion by identifying several internal and external actors that appear to counteract the effects of traumatic experiences, such as self-efficacy, optimism, problem solving skills, coping responses, creativity, effective communication, and social support among others (Eisman et al., 2015; Fergus and Zimmerman, 2005; Sciaraffa, Zeanah & Zeanah, 2018; Zimmerman, 2013). My intervention, thus, was developed and grounded on theoretical and empirical evidence regarding human resilience in order to equip my students with the

tools they need to succeed emotionally and academically. Consequently, I chose to teach my students how to build resilience through a combination of activities that required them to engage in decision making, critical thinking, problem solving, communication, self-control, and situational reframing. For example, students participated in case scenarios involving school, family, and internal conflict where they first identified their emotional condition (sad, angry, excited, etc…) and reflected as to how their current emotional state could affect their decisions. Second, students engaged in logical and systematic problem solving to come up with the best possible solution. Third, students had to defend their decision by describing their thought process. These exercises helped students integrate and strengthen their problem solving and communication skills while simultaneously increasing their self-efficacy or confidence in their own abilities.

This is important because according to Schwarzer & Warner (2013), individuals with high self-efficacy believe in their abilities to negotiate adversity and tend to reframe problems as challenges rather than as threats, tend to maintain control during demanding tasks, motivate themselves, and persevere through difficult situations. Higher levels of self-efficacy, along with improved problem solving skills, act as buffers against stress, anxiety, and other mental health challenges posed by traumatic events and difficult life situations. Similarly, an individual's ability to problem solve is fundamental to their overall ability to manage, adapt, and overcome stress and adversity (Damon, Lerner & Eisenberg, 2006; Lee, Cheung & Kwong, 2012; Sciaraffa et al., 2018). For instance, problem solving skills have shown to protect youth against the effects of peer substance use and other risky behaviors that are often byproducts of psychological and emotional

disturbances (Botvin & Griffin, 2002; Ungar, Russell, & Connelly, 2014). As mentioned before, this study aligns with the tenets of resilience theory, particularly the mechanisms by which children develop mental and emotional fortitude. Based on this study's results, my students significantly increased their problem solving skills through exercises that promote critical thinking and cognitive flexibility, both of which are highly associated with positive outcomes and protective traits against the effects of trauma (Botvin & Griffin, 2002; Ijadi-Maghsoodi et al., 2017).

Additionally, students significantly reduced trauma related symptoms after the ten week intervention and such effect could be explained by the connection between social cognitive perspectives and PTSD. The research has identified several contributing factors such as exposure to violence, maltreatment, and lack of social support, during a person's early development can contribute to the onset of maladaptive behaviors (Bradshaw et al, 2013; Bradshaw & Garbarino, 2004; Kliewer et al, 1998; Nietlisbach & Maercker, 2009). Social Cognitive Theory supported with empirical evidence suggests that individuals experiencing trauma and other mental health disorders were caused by adverse life events often related to violence and aggression (Benight & Bandura, 2004). However, research studies grounded on SCT also identify and prioritize the importance of social support as a defense and coping mechanism against the onset and development of deeper traumatic symptoms (Nietlisbach & Maercker, 2009). Thus, one of the most important concepts of this intervention was to promote and improve social support systems and to teach my students to utilize social resources that facilitate emotional support. During the intervention, students developed deeper connections with one another

based on shared experiences, and their interactions became a vehicle for trauma processing and emotional support.

Social Cognitive Theory also proposes that a child's attachment style (e.g. Secure, Ambivalent, Avoidant, and Disorganized) ultimately shapes children's internal processes responsible for emotional regulation and behavior (Bolwby, 1969). This intervention attempted to reverse the effects of insecure attachments, if any, through emotional support by a caring nurturing mentor who provided safe spaces for processing, learning, and healing. Adult mentoring and positive relationships with nonfamily adults compensate for not only exposure to risks but also for the effects of dysfunctional family systems. In fact, children who develop healthy relationships with non-parent adults or mentors are more protected against the effects of risk exposure and traumatic events (Zimmerman et al, 2013). More importantly, this project promoted secure attachments by teaching my students social skills that promote healthy self-esteem, confidence, and independence. Students developed healthier attachments with me as their mentor as I proved to be caring, trustful, and empathic. Students voiced through the intervention how important it was for them to be able to trust adults and have closer relationships with their parents and teachers without fear of rejection and judgement. Social support assists in reinforcing positive behavior and attitudes that help combat factors that contribute or maintain trauma symptoms.

Research question # 2: *How and to what extent does implementation of RBI affect students' (a) efficacy for coping and (b) attitudes toward school?* The results from quantitative and qualitative data are consistent and indicate that students' efficacy for

coping and attitudes toward school improved during the intervention. To better understand these changes, I will review how theoretical concepts and empirical evidence relate to both constructs.

Michael Rutter, a Resilience Theorist and researcher, proposed that professionals working with at-risk youth should implement interventions that promote protective psychological features such as self-regulation and self-efficacy (Rutter, 2007). Rutter suggests that teaching positive coping to children could help reduce the effects of risk while producing better outcomes. Similarly, Masten (2011) suggests that interventions should include and implement activities that develop the "most powerful moderators" (e.g. self-efficacy, self-regulation, problem-solving skills) to have the greatest impact on child resilience. With this in mind, this intervention dedicated three modules to emotional regulation in order to help students increase control over their emotional responses as well as their self-efficacy regarding self-control. Students learned coping skills through a variety of physical and artistic strategies designed to target different personalities and interests that facilitated engagement and participation. The hands-on portion of these activities seemed to have been an important element to the emotional regulation modules.

More importantly, as students developed or increased their sense of self-efficacy, they also developed more positive perceptions about coping skills in terms of practice and effectiveness. In other words, self-efficacy seemed to have a direct positive relationship with my students' ability to learn how to adapt through coping strategies. Research and Bandura's SCT corroborate this relationship by explaining that self-

efficacy facilitates behavioral modification and psychological adaptations (Bandura, 1989; Hamill, 2003; Sciaraffa et al., 2018). In effect, empirical evidence identifies self-efficacy as a coping skill in itself that is strongly associated with trauma recovery (Benight et al, 2015; Cieslak et al, 2008; Fergus, & Zimmerman, 2005). However, this relationship is not linear but reciprocal. When students are presented with different types of coping skills they increase their ability to deploy coping skills according to the situation, which in turn increase their overall self-efficacy (Freire et al, 2020). In sum, this intervention helped my students develop coping self-efficacy and action self-efficacy as demonstrated by their perceived ability to negotiate life stressors through the use of not only coping, but also problem solving and communication.

Students also changed their perceptions toward school. The results showed a statistically significant change; however, this construct obtained the lowest mean score difference. Overall, both quantitative and qualitative data show that students had more positive perceptions about school safety and teacher support. Mentor-student connection during the intervention seems to be a contributing factor to this change. But what exactly are the mediating factors? Resilience Theory highlights the importance and relationship between adult mentoring and students' sense of trust and safety (Fergus and Zimmerman, 2005; Hurd & Zimmerman, 2010). Moreover, relationships with mentors assist children in developing positive attitudes about school and long-term educational goals by increasing their sense of belonging, trust, and use of social resources (Fergus & Zimmerman, 2005).

Qualitative data points out the effect of teacher-student connections and its influence on how my students felt empowered to advocate for themselves and others. Also, students shared that building closer relationships with teachers is crucial for their social emotional learning and well-being. Norman Garmezy (1987), theorist and researcher, explained that the quality of a child's social connection in school is directly related to "social comprehension" which encompasses factors such as interpersonal understanding and appreciation. I also attribute my students' new perception of their learning environment to their increase in resilience. When students are resilient, they are more likely to perceive criticism as constructive and accept shortfalls rather than blame them on their teachers. In my experience, students who are resilient tend to seek and accept assistance whether it is academic or emotional because they can communicate their needs and can distinguish stressors from personal flaws. In other words, they seek support from teachers and mentors because their feedback is not perceived as an attack on their sense of self but as a resource. Social Cognitive Theory also states that individual personalities are molded by environmental factors which include the quality of adult-child relationship and the child's response to such relationships. The quality of these relationships is a direct contributor to the different types of attachments, which in turn activate different types of responses. In this case, students with secure attachments with their mentors lead to more positive behaviors including seeking assistance and building networks of academic and emotional support (Bergin & Bergin, 2009).

Limitations of the Study

Although this study demonstrated the efficacy of this resilience based curriculum, there are several limitations associated with both endogenous and exogenous factors.

Experimenter Effect. Experimenter effects may include differences in the ways researchers deliver the experiment based on personal characteristics, training, and biases (Creswell & Guetterman, 2019). For example, the experimenter's personality or charm may motivate/influence participants, which could lead to psychological/behavioral changes in favor of the researcher. My inherent optimism for this intervention combined with my mental health training limit the extent to which the results are generalizable in different schools. For this study it was virtually impossible to control for this limitation; however, the objective of this project was primarily concerned with increasing my students' resilience and overall well-being and less with its application in different schools.

Virtual Setting. This study was delivered during the 2020 COVID-19 pandemic and was adapted to protect my students against health risks associated with the virus. The school district along with the Institutional Review Board implemented restrictions on in-person research in order to protect the safety and well-being of the participants and their families. The intervention was then delivered virtually for all ten weeks. Although the virtual experience was in itself an opportunity for exploring telehealth-like services, it negatively influenced the students' learning and interaction. To illustrate, qualitative data showed that the virtual experience reduced students' engagement and impaired therapeutic elements of in-person social interactions. Furthermore, students, on occasions, turned their cameras off and retreated from insightful peer to peer

conversations. From the students' own accounts, it was difficult to manage distractions related to media use and family. For me, the virtual experience made it difficult to observe behavioral and psychological cues triggered by conversations, activities, and instructional material. There was a sense of disconnect amongst students at the beginning of the intervention that prevented group cohesion, empathy, and support. I suspect that in-person delivery would contribute to more positive outcomes as they relate to social skills, collaboration, communication, and student-mentor relationships.

Session Length. The circumstances surrounding the pandemic also forced me to adjust the length of sessions in order to maximize student engagement. The virtual experience, naturally, required students to be in front of their devices for the duration of each session. With this in mind, I reduced sessions from 55 minutes to approximately 30-35 minutes to maintain student engagement while reducing continuous screen time. The material had to be condensed down to fewer concepts and activities that could have significantly improved students' resilience skills. Students also mentioned that sessions were "too short" and described that longer meetings would have helped them understand more of the material. In addition, students expressed that the length of the sessions were not enough to complete and review some of the activities as a group. I agreed with the students' feedback and added that the 30-35 minute sessions posed difficulties when preparing lesson plans, synthetizing, and delivering the material. The intervention would have been much more productive and effective with the original session time length of 50-55 minutes.

Implications for Action Research and Practice

The cyclical, participative, and reflective process of this action research project contributed to a more clear and refined understanding of not only the problem of practice, but also factors that mitigate or alleviate the effects of such problem. More specifically, this study has advanced our understanding of how children build resilience through different socio-emotional strategies in a school-based setting. The results of this project contribute and support the importance of school mental health interventions in the development and overall well-being of our students. However, there are unexplored possibilities to consider in future studies regarding resilience curriculums in schools as well as trauma-informed practices. This study identifies four implications that warrant further investigation in both action research and practice.

Follow-Up Study. Despite of whether significant results on child mental health are identified after posttest analysis, follow-up studies are often necessary to discover the intervention's true long-term effects (Larson & Biggs, 2020). Follow-up studies contribute to a strong empirical foundation for mental health and school evidence-based practices that could have sustained benefits in students across different developmental stages. This study warrants further consideration as it relates to how participation in this intervention affect students' use of resilience skills, PTSD symptoms, and coping skills over time. Moreover, following up with students' in-person learning and academic performance could help educators associate and understand the long-term effects of school-based mental health in students' cognitive development. Following this group of students and measuring their ability to negotiate adversity as they enter different school

and life circumstances would provide a more accurate estimate of the benefits of this intervention.

Family Involvement. Throughout the intervention, students had the opportunity to share about personal life challenges and stressors that have contributed to emotional difficulties. During several weekly sessions, students in both Group A and Group B reported that family stressors and dynamics were the main source of mental health issues and stress in my students. Further research should examine how and to what extent family involvement in this school-based intervention affects student resilience. Future studies could implement parent sessions to evaluate how family communication styles and coping mechanisms influence student socio-emotional development. Also, researchers should investigate how parent involvement in school-related activities influence students' attitudes toward school.

Mental health providers interested in delivering this intervention should consider incorporating parents/guardians to provide parent education regarding healthy communication styles, emotional regulation, stress management, mental health de-stigmatization, and positive discipline. Practitioners should also consider providing parents with information about community resources that could alleviate family stressors stemming from economic hardships. I believe educating and supporting the family could improve and sustain their overall quality of life.

Mental Health First. Students suggested that implementing grounding exercises at the beginning of the school day would help them reduce the mental health symptoms that often interfere with academic performance. It would be interesting and beneficial to

explore how and to what extent grounding exercises during homeroom (first 15 minutes of classroom activity) affect student resilience, emotional development, academic performance, attitudes towards school, and overall well-being. Future studies should also evaluate how teacher involvement in mental health practices influence students' school connectedness as well as classroom dynamics.

In the future, I will develop and deliver mental health education to teachers – particularly homeroom teachers so that they can facilitate grounding exercises or at least provide a safe space where students can practice mindful activities or chair yoga. I will discuss with school administration the potential benefits of incorporating "mental health first" in every classroom to allow students to do emotional self-check-ins as well as grounding strategies to refocus their attention and energy.

Special Day Class. Special Day Class (SDC) is a self-contained class which provides services to special education students with higher needs. Students in SDC receive 50% of their instructional day in the same classroom and are provided additional assistance that other academic programs (general, RSP, DIS) do not offer. These students face a variety of challenges that hinder not only their academic development but also their socio-emotional growth. Mental health issues within the SDC at my school are prevalent and there seems to be a vicious cycle between mental health and cognitive performance. In other words, SDC students come to school with serious mental health difficulties which interfere with their academic development. In turn, their learning disabilities often exacerbate and/or produce symptoms of stress, anxiety, and hopelessness. Future research on school-based interventions should consider examining

how and to what extent resilience-based interventions affect SDC students' resilience, in particular their self-efficacy. Research as it pertains to school mental health should devote more effort in supporting our most vulnerable by providing them with opportunities to succeed in every aspect of their lives.

I encourage mental health practitioners and special education teachers to implement social emotional learning lessons in their SDC classrooms that include self-regulation, communication, and activities that build their self-efficacy such as conflict resolution and problem solving scenarios. Students in SDC should learn to identify emotions and mental health symptoms that affect their daily life as well as strategies to manage their stress, including seeking help. Lastly, school administrators, teachers, and mental health professionals should collaborate to destigmatize not only mental health but special education as a whole through school-wide campaigns and student led advocacy.

Lessons Learned

This action research is the culmination of working with CMS students with socio-emotional needs for the past several years. Their challenges and their will to overcome them inspired me to embark on a journey in search for ways to restore hope in their

hearts. I set out to teach students to believe in themselves, but in the end it was me who learned invaluable life lessons about love, compassion, and resilience. In this section, I will share lessons learned regarding the study's implementation, but also personal lessons that came from my interactions with the students.

Challenges. There were several difficult challenges that could have put a stop to this action research from the very beginning. First, the effects of COVID-19 completely changed important aspects of the original methodology including recruitment, setting, and the conventional way to obtain parental consent. To overcome these barriers, I ensured that both school administrators and parents understood the importance and potential benefits of this study. With their support, I was able to secure district approval as well as school resources that facilitated recruitment and selection of participants. Parent engagement was also crucial, therefore I ensured to provide an informed consent that was clear, honest, and accessible in Spanish and Mandarin.

The school district also posed strict requirements and safeguards that delayed the implementation of the intervention. Due to state and federal regulations regarding COVID-19, the school district toughen up their approval process and limited the number of research projects taking place this year. As I mentioned above, thanks to both school and parent support, the district considered this study to "contribute to the well-being of our students and families." Nevertheless, their approval required strict adherence to Federal Educational Rights and Privacy Act (FERPA) and Health Insurance Portability and Accountability Act (HIPPA) as well as district policies regarding student interaction and conflict of interests. Doctoral candidates interested in delivering school-based

interventions should invest time to educate and gain the support of their stakeholders prior to engaging in recruitment and selection. This study would have not been possible without it. Also, doctoral candidates should consult with their districts during their second year to avoid delays and possible denials.

Personal Lessons. As a first year graduate student, I was skeptical and often times resistant to philosophical and empirical concepts that challenged my own understanding of the world. This exposure, although difficult, opened my eyes to new and interesting possibilities, realities, and truths that represent the human experience. I adopted an inclusive perspective that changed me not only as a researcher, but as mental health professional. Frequently, I assumed a hierarchical position with my students that limited their participation in the co-construction of knowledge and practices that could have improved their lives. Through this action research, I returned to a place of humbleness and appreciation for differences in thought, experiences, and ideas. Believing I "know what is best for them" no longer applies, rather, I now see my students as empowered individuals capable of advocacy, innovation, and self-reliance.

Prior to this action research project, I believed I knew what it meant to be resilient and I intended to develop it in my students. Ironically, it was me who learned a different or a more practical definition of perseverance and determination. My students' will to meet the demands placed on them by the system while confronted with the effects of an inadequate system encouraged me to do the same. Their voices filled this project with a purpose that goes beyond their classroom and which inspired me to advocate for investment and implementation of district wide school-based mental health services. I

hope to be as determined as my students in negotiating adversity and obstacles, particularly, as it pertains to challenging the status quo.

Concluding Thoughts

Political and economic policies and exclusive focus on academic attainment ignores the importance of social emotional development and the individual and social ramifications of poor mental health. Not only is our children's mental health being ignored, but they are also exposed to a multitude of negative social factors that hinder their ability to grow up to be healthy and successful adults. The quantitative and qualitative data in this study highlights and calls attention to the level of mental health challenges that disturbs our student's ability to thrive in many areas of their lives.

The rise of mental health disorders, especially during/after the COVID-19 pandemic has revealed not only its detrimental effects, but also the importance of destigmatizing, funding, and providing mental health services. These effects permeate into our classrooms aggravating the already fragile emotional condition of our students. We demand so much from our children, but we do not provide them with the tools, care, and attention they need to excel not only as students, but as people. The education system is aware of the difficulties that our students in special education face and thus have established comprehensive academic programs that support and facilitate learning. Educational leaders should also be aware, understand, and activate efforts with the same or greater level of concern that support student socio-emotional development and wellness. And while we work to create a better society, we must understand that our youth, particularly students with learning disabilities, continue to experience social

stressors that disturb both cognitive and emotional development. Thus, we need to equip them with the necessary skills to overcome and succeed despite adversity. We should also know that our children are resilient and that despite everything they face, they are extraordinary at managing expectations and adversity. Our children are resilient and have the capacity to learn how to be more resilient if given the proper support.

Addressing the mental health needs of our children is a complex problem, and this complexity intimidates and paralyzes action from top to bottom. While we do need a robust and integrated system of evidence-based school mental health services, it is often small steps that begin to challenge the status quo. This study is evidence that children develop mental and emotional fortitude through school-based interventions that strengthen communication, coping, and problem solving skills. Students' emotional health practically begs for school involvement and understanding of the benefits of trauma-informed approaches. If we want to help our children and our schools succeed, we must act now.

REFERENCES

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, D.C.

Andrews, B., Brewin, C., & Rose, R. (2003). Gender, social support, and PTSD in victims of violent crime. *Journal of Traumatic Stress, 16*(4), 421-427.

Ayres, L. (2008). Thematic coding and analysis. In L. M. Given (Ed.), *The SAGE encyclopedia of qualitative research methods* (pp. 868-868). Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781412963909.n451

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall,

Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of child development. Vol.6*. Six theories of child development (pp. 1-60). Greenwich, CT: JAI Press

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.

Barch, D. M., Albaugh, M. D., Avenevoli, S., Chang, L., Clark, D. B., Glantz, M. D., & Sher, K. J. (2018). Demographic, physical and mental health assessments in the adolescent brain and cognitive development study: Rationale and description. *Developmental cognitive neuroscience*, *32*, 55-66.

Benight, C. C., & Bandura, A. (2004). Social cognitive theory of posttraumatic recovery: The role of perceived self-efficacy. *Behavior Research and Therapy, 42,* 1129–1148.

Benight, C., Shoji, K., James, L., Waldrep, E., Delahanty, D., Cieslak, R., & Kendall-Tackett, K. (2015). Trauma coping self-efficacy: A context-specific self-efficacy measure for traumatic stress. *Psychological Trauma: Theory, Research, Practice, and Policy, 7*(6), 591-599.

Botvin, G. J., & Griffin, K. W. (2002). Life skills training as a primary prevention approach for adolescent drug abuse and other problem behaviors. *International Journal of Emergency Mental Health*.

Bowlby, J. (1969). *Attachment and loss*. New York: Basic Books.

Butin, D. W. (2009). *The education dissertation: A guide for practitioner scholars.* Corwin Press.

Bradshaw, C., & Garbarino, J. (2004). Social cognition as a mediator of the influence of family and community violence on adolescent development: Implications for intervention. *Annals of the New York Academy of Sciences, 1036*(1), 85-105.

Bradshaw, C.P., Goldweber, A., & Garbarino, J. (2013). Linking social--environmental risk factors with aggression in suburban adolescents: The role of social--cognitive mediators. *Psychology in the Schools, 50*(5), 433-450.

Brewin, C. R., Andrews, B., & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology, 68(5),* 748–766.

Byrne, D., & Mazanov, J. (2001). Self-esteem, stress and cigarette smoking in adolescents. *Stress and Health, 17*(2), 105-110.

Cameron, R.P., & Gusman D. (2003). The primary care PTSD screen (PC-PTSD): development and operating characteristics. *Primary Care Psychiatry. 2003; 9(1):*9–14.

Carlson, E. A., Egeland, B., & Sroufe, L. A. (2009). A prospective investigation of the development of borderline personality symptoms. *Development and Psychopathology, 21, 1*311–1334. http://dx.doi.org/10 .1017/S0954579409990174

Cieslak, B., & Caden L. (2008). Coping self-efficacy mediates the effects of negative cognitions on posttraumatic distress. *Behaviour Research and Therapy, 46*(7), 788-798.

Cicchetti, D., & Rogosch, F. (1997). The role of self-organization in the promotion of resilience in maltreated children. *Development and Psychopathology, 9*(04), 797-815.

Coid, J., Petruckevitch, A., Feder, G., Chung, W. S., Richardson, J., & Moorey, S. (2001). Relation between childhood sexual and physical abuse and risk of revictimisation in women: a cross-sectional survey. *The Lancet*, *358*(9280), 450-454.

Cortes, L., & Buchanan, M. J. (2007). The experience of Columbian child soldiers from a resilience perspective. *International Journal for the Advancement of Counselling*, *29*(1), 43-55.

Costello E., Mustillo S., Erkanli A., Keeler G., & Angold A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence. *Archives of General Psychiatry. 60(8*):837-844.

Charmaz, K. (2014). *Constructing grounded theory*. (2nd ed.). Thousand Oaks, CA: Sage Publication

Chaskel, R., Gaviria, S. L., Espinel, Z., Taborda, E., Vanegas, R., & Shultz, J. M. (2015). Mental health in Colombia. *BJPsych international*, *12*(4), 95-97.

Chinaveh, M., Ishak, N. M., & Salleh, A. M. (2010). Improving mental health and academic performance through multiple stress management intervention: Implication for diverse learners. *Procedia-Social and Behavioral Sciences*, *7*, 311-316.

Creswell, J. W. & Guetterman, T.C. (2019). *Educational research: Planning, conducting, and evaluating quantitative*. Saddle River, NJ: Pearson

Damon, W., Lerner, R. M., & Eisenberg, N. (Eds.). (2006). *Handbook of child psychology, social, emotional, and personality development* (Vol. 3). John Wiley & Sons.

Eisman, A., Stoddard, S., Heinze, J., Caldwell, C., & Zimmerman, M. (2015). Depressive symptoms, social support, and violence exposure among urban youth: A longitudinal study of resilience. *Developmental Psychology, 51(9),* 1307-1316

Elias, M., Gara, M., Schuyler, T., Branden-Muller, L., & Sayette, M. (1991). The promotion of social competence: Longitudinal study of a preventive school-based program. *American Journal of Orthopsychiatry*, *61*(3), 409-417. http://dx.doi.org/10.1037/h0079277

Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annu. Rev. Public Health, 26,* 399-419.

Ford, J., Racusin, R., Ellis, C., Daviss, W., Reiser, J., Fleischer, A., & Thomas, J. (2000). Child maltreatment, other trauma exposure, and posttraumatic symptomatology among children with oppositional defiant and attention deficit hyperactivity disorders. *Child Maltreatment, 5*(3), 205-217.

Fowler, P., Tompsett, C., Braciszewski, J., Jacques-Tiura, A., & Baltes, B. (2009). Community violence: A meta-analysis on the effect of exposure and mental health outcomes of children and adolescents. *Development and Psychopathology, 21*(1), 227-259.

Furlong, M. J., Ritchey, K. M., & O'Brennan, L. M. (2009). Developing norms for the California resilience youth development module: Internal assets and school resources subscales. *The California School Psychologist, 14(1)*, 35-46.

Frey, K., Bobbitt, N. S., Van Schoiack, E. L., & Hirschsteinb, M. (2005). Effects of a school-based social–emotional competence program: Linking children's goals, attributions, and behavior. *Applied Developmental Psychology*, *26*(2), 171-200. http://dx.doi.org/10.1016/j.appdev.2004.12.002

Garcia, E., De Pedro, K. T., Astor, R. A., Lester, P., & Benbenishty, R. (2015). FOCUS school-based skill-building groups: Training and implementation. *Journal of Social Work Education, 51(sup1),* S102-S116.

Guay, S., Billette, V., & Marchand, A. (2006). Exploring the links between posttraumatic stress disorder and social support: Processes and potential research avenues. *Journal of Traumatic Stress, 19(3),* 327–338

Gullone, E., & Taffe, J. (2012). The emotion regulation questionnaire for children and adolescents (ERQ–CA): A psychometric evaluation. *Psychological Assessment, 24*(2), 409-417. doi:http://dx.doi.org.ezproxy1.lib.asu.edu/10.1037/a0025777

Glaser, B.G., & Strauss, A.L. (2009) *The discovery of grounded theory: Strategies for qualitative research.* Transaction publishers.

Green, M., & Piel, J. A. (2009). *Theories of human development: A comparative approach* (second ed.): Prentice-Hall, Inc.

Griffith, A. (2010). Committee on the prevention of mental disorders and substance abuse among children, youth, and young adults, National Research Council and the Institute of Medicine: preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities. *Journal of Child and Family Studies, 19(5)*, 675-676.

Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and wellbeing. *Journal of Personality and Social Psychology*, 85, 348–362. doi:10.1037/0022-3514.85.2.348

Hanson, T. L., & Kim, J. O. (2007). Measuring resilience and youth development: the psychometric properties of the Healthy Kids Survey. *Issues & Answers Report*, REL, 34.

Hamill Skoch, S. (2003). Resilience and self-efficacy: The importance of efficacy beliefs and coping mechanisms in resilient adolescents. *Colgate University Journal of the Sciences. 35.*

Hurd, N. M., & Zimmerman, M. A. (2010). Natural mentoring relationships among adolescent mothers: A study of resilience. *Journal of Research on Adolescence, 20(3),* 789-809.

Ijadi-Maghsoodi, R., Marlotte, L., Garcia, E., Aralis, H., Lester, P., Escudero, P., & Kataoka, S. (2017). Adapting and implementing a school-based resilience-building curriculum among low-income racial and ethnic minority students. *Contemporary School Psychology, 21(3), 223-239.*

Ivankova, N.V. (2015). *Mixed methods applications in action research: From methods to community action.* Thousand Oaks, CA: Sage.

Joseph, Williams, & Yule. (1995). Psychosocial perspectives on post-traumatic stress. *Clinical Psychology Review, 15*(6), 515-544.

Kliewer, W., Lepore, S., Oskin, D., Johnson, P., & Kendall, Philip C. (1998). The role of social and cognitive processes in children's adjustment to community violence. *Journal of Consulting and Clinical Psychology, 66*(1), 199-209.

Langley, A. K., Nadeem, E., Kataoka, S. H., Stein, B. D., & Jaycox, L. H. (2010). Evidence-based mental health programs in schools: Barriers and facilitators of successful implementation. *School Mental Health, 2(3),* 105-113.

Larson, L. M., & Biggs, B. A. (2020). Importance of follow-up studies to examine sustained effects of early nutrition interventions. *Pediatrics*, 145(3).

Lee, T., Cheung, C., & Kwong, W. (2012). Resilience as a positive youth development construct: A conceptual review. *The Scientific World Journal, 2012,* 390450.

Lester, P., Saltzman, W. R., Woodward, K., Glover, D., Leskin, G. A., Bursch, B., & Beardslee, W. (2012). Evaluation of a family-centered prevention intervention for military children and families facing wartime deployments. *American Journal of Public Health,* 102(S1), S48-S54.

Li, Jina, Zhang, Weijun, Chen, Wenrui, Yuan, Hui, Zhang, Shengfa, Tian, Meng, & Qu, Zhiyong. (2019). Applications of the Chinese version of the primary care PTSD screen for DSM-5 (PC-PTSD-5) for children. *Journal of Affective Disorders, 254*, 109-114.

Lincoln, YS. & Guba, EG. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications.

Los Angeles Times. (2018). Mapping L.A. *Los Angeles Times*. Retrieved from: http://maps.latimes.com/neighborhoods/

Lucile Park Foundation for Children's Health. (2015). Number of youth suicides, by age. Retrieved from: https://www.kidsdata.org/topic/211/suicides-age/table#fmt=123&loc=364&tf=64,67,73,79,84&ch=1309,446,1308,787&sortColumnId=0&sortType=asc

Loudenback, J. (2016). *LAUSD's* mental health director describes child trauma as a silent epidemic. *LA School Report.* Retrieved from: http://laschoolreport.com/child-trauma-as-a-silent-epidemic

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child development, 71(3*), 543-562.

Macdonald, H., Beeghly, M., Grant-Knight, W., Augustyn, M., Woods, R., Cabral, H., Frank, D. (2008). Longitudinal association between infant disorganized attachment and childhood posttraumatic stress symptoms. *Development and Psychopathology, 20*(4), 1351.

Merikangas, K.R., He, J., Burstein, M., Swanson, S.A., Avenevoli, S., Cui, L., Benjet, C., Georgiades, K., Swendsen, J., (2010). Lifetime prevalence of mental disorders in US adolescents: Results from the national comorbidity study-adolescent supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry. 49(10):* 980-989.

Mikulincer, M., & Solomon, Z. (1988). Attributional style and combat-related posttraumatic stress disorder. *Journal of Abnormal Psychology, 97* (Aug 88), 308-313.

Mogil, C., Paley, B., Doud, T., Havens, L., Moore-Tyson, J., Beardslee, W. R., & Lester, P. (2010). Families OverComing Under Stress (FOCUS) for early childhood: Building resilience for young children in high stress families. *Zero to Three Journal*, 31(1), 10-16.

Moses, K. S. (2012). *The effect of stress on self-reported academic performance measures among Hispanic undergraduate students at Arizona State University*. Arizona State University

National Alliance of Mental Illnesses (NAMI). (2015). Mental health by the numbers. Retrieved from: https://www.nami.org/Learn-More/Mental-Health-By-the-Numbers

Nietlisbach, G., & Maercker, A. (2009). Social cognition and interpersonal impairments in trauma survivors with PTSD. *Journal of Aggression, Maltreatment & Trauma, 18*(4), 382-402.

O'Connor, C., & Joffe, H. (2020). Intercoder reliability in qualitative research: debates and practical guidelines. *International Journal of Qualitative Methods*, *19*, 1609406919899220.

Olofsson, N., Lindqvist, K., Shaw, B. A., & Danielsson, I. (2012). Longterm health consequences of violence exposure in adolescence: A 26- year prospective study. *BMC Public Health,* 12, 411–422.

Ollis, D., & Meldrum, K. (2008). 'Be yourself and have a ball': using a school and community based health education model to build young women's resilience and connectedness. In *AARE 2008: International Education Research Conference.*

Changing Climates: Education for Sustainable Futures (pp. 1-16). The Association.

Potter, D. J. (2010). How maltreatment matters: effects of child maltreatment on academic performance. *Children and Youth Speak for Themselves*, 13, 167-202.

Prins, A., Bovin, M. J., Smolenski, D. J., Marx, B. P., Kimerling, R., Jenkins-Guarnieri, M. A., & Tiet, Q. Q. (2016). The primary care PTSD screen for DSM-5 (PC-PTSD-5): development and evaluation within a veteran primary care sample. *Journal of General Internal Medicine, 31(10),* 1206-1211.

Rubin, A., & Babbie, E. (2013). *Research methods for social work*. Cengage Learning.

Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *The American Journal of Orthopsychiatry*, 57, 316.

Saltzman, L,, Beardslee, L., Woodward, N., & Saltzman, W.R. (2011). Mechanisms of risk and resilience in military families: Theoretical and empirical basis of a family-focused resilience enhancement program. *Clinical Child and Family Psychology Review, 14*(3), 213-230

Scales, P., Benson, P., Leffert, N., & Blyth, D. (2000). Contribution of developmental assets to the prediction of thriving among adolescents. *Applied Developmental Science, 4*(1), 27-46.

Sciaraffa, M.A., Zeanah, P.D., & Zeanah, C.H. (2018). Understanding and promoting resilience in the context of adverse childhood experiences. *Early Childhood Education Journal, 46*(3), 343-353.

Sharp, C., Fonagy, P., & Allen, J. G. (2012). Posttraumatic stress disorder: A social-cognitive perspective. *Clinical Psychology: Science and Practice*, 19, 229–240. http://dx.doi.org/10.1111/cpsp.12002

School Mental Health. (2015). An integral part of the educational team. Large Urban School District. Retrieved from: https://achieve.lausd.net/cms/lib/CA01000043/Centricity/Domain/260/SMH_Strategic%20Plan_FINAL_5.27.16.pdf

Schulte-Körne, G. (2016). Mental health problems in a school setting in children and adolescents. *Deutsches Arzteblatt International, 113(11*), 183-90.

Schwartz, D., & Gorman, A. H. (2003). Community violence exposure and children's academic functioning. *Journal of educational psychology*, *95*(1), 163.

Tarver, D. B., Wong, N. T., Neighbors, H. W., & Zimmerman, M. A. (2004). The role of father support in the prediction of suicidal ideation among Black adolescent males. *Adolescent boys: Exploring diverse cultures of boyhood,* 144-166.

Tufford, L., & Newman, P. (2012). Bracketing in qualitative research. *Qualitative social work*, *11*(1), 80-96.

Venta, A., Hatkevich, C., Mellick, W., Vanwoerden, S., Sharp, C., & Kendall-Tackett, Kathleen. (2017). Social cognition mediates the relation between attachment schemas and posttraumatic stress disorder. *Psychological Trauma: Theory, Research, Practice, and Policy,9*(1), 88-95.

Zimmerman, M. (2013). Resiliency theory: A strengths-based approach to research and practice for adolescent health. *Health Education & Behavior*, 40(4), 381-383

Zimmerman, M., Steinman, K., & Rowe, K. (1998). Violence among urban African American adolescents: The protective effects of parental support. *Psychological research and interventions* (pp. 78-103). Thousand Oaks, CA, US: Sage Publications, Inc.

Zimmerman, M., Stoddard, S., Eisman, A., Caldwell, C., Aiyer, S., & Miller, A. (2013). Adolescent resilience: promotive factors that inform prevention. *Child Development Perspectives*, 7(4), 215-220.

Zeanah, C., Berlin, L., & Boris, N. (2011). Practitioner review: Clinical applications of attachment theory and research for infants and young children. *Journal of Child Psychology and Psychiatry, and Allied Disciplines, 52*(8), 819-833.

APPENDIX A

CMS MENTAL HEALTH REPORT

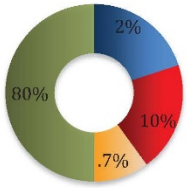
CMS Middle School End-of-Year Report 2018-19

Goal: 100% Graduation

School Safety	PSW supported school climate and safety through school wide, year round preventative campaigns, crisis interventions, risk assessments, re-entry and safety plans. PSW facilitated FOCUS as well as socio emotional support groups.
Parent, Community & Student Engagement	Implemented school wide positive behaviors and interventions, supporting a safer and more nurturing environment for students to learn. PSW facilitated parent workshops, community events, community outreach, and family services during the 2018-2019 school year. PSW provided community referrals for students as needed.
100% Attendance	PSW collaborated with multi-disciplinary team to address barriers preventing student daily attendance. PSW supported student's attendance through individual counseling, home visitations, parent education, student incentives and family resources.

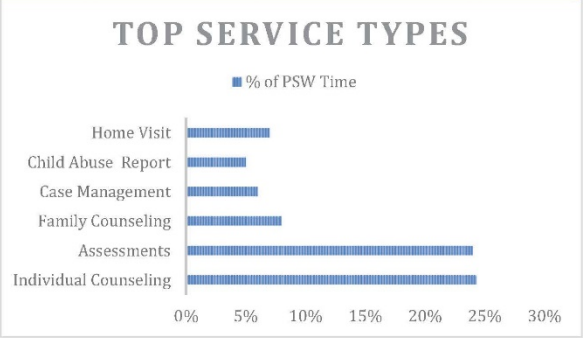
Program Impact

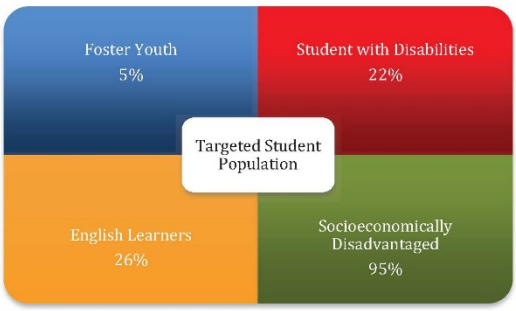
Number of Individual Students Served

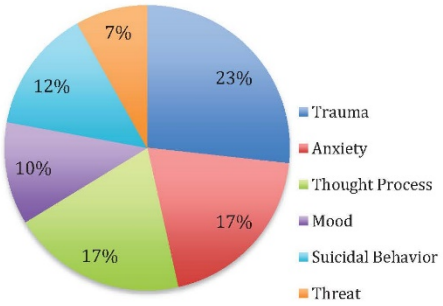


African American ■ Asian ■ White ■ Latino

148 Indiv.
20 Group







APPENDIX B

WELLNESS CHECK-UP PRE/POST SURVEY

Wellness Check-Up

Hello!

This Survey will ask you some questions about CMS and how you are doing. It is important to us to know how you are doing so that we can help you and other students be successful at school. The answers to your questions will not be given to anyone other than Mr. Dussan unless it is necessary for student safety

This survey should take 10 to 15 minutes to complete.

Thank you again,
Mr. Dussan

School Safety & Teacher Support

The following eight questions on this page will ask you about your experience at your school. Make sure to read each question carefully and select the answer that you think is true.

1.General Health: Have you seen a doctor or nurse in the past year?

◯ Yes ◯ No

2. How safe do you feel at your school?

◯ Very Unsafe ◯ Unsafe ◯ Neither Safe or Unsafe ◯ Safe ◯ Very Safe
Disagree

3. How safe do you feel on your way to and from school?

◯ Very Unsafe ◯ Unsafe ◯ Neither Safe or Unsafe ◯ Safe ◯ Very Safe

4. Do the teachers and other staff members care about you?

◯ No, Never ◯ Yes, Some of the Time ◯ Yes, Most of the Time ◯ Yes, All the Time

5. Do the teachers and other staff members tell you when you do a good job?

◯ No, Never ◯ Yes, Some of the Time ◯ Yes, Most of the Time ◯ Yes, All the Time

6. Do the teachers and other staff members want you to do your best?

◯ No, Never ◯ Yes, Some of the Time ◯ Yes, Most of the Time ◯ Yes, All the Time

School Safety & Teacher Support

7. Do the teachers and other staff members listen when you have something to say?

- ◯ No, Never
- ◯ Yes, Some of the Time
- ◯ Yes, Most of the Time
- ◯ Yes, All the Time

8. Do the teachers and other staff members believe that you can do a good job?

- ◯ No, Never
- ◯ Yes, Some of the Time
- ◯ Yes, Most of the Time
- ◯ Yes, All the Time

Self-Efficacy

Read each question carefully. Then choose the option that best describes you.

9. I can work with someone who has different opinions than mine.

- ◯ Not at all True
- ◯ A Little True
- ◯ Pretty Much True
- ◯ Very Much True

10. I can do most things if I try

- ◯ Not at all True
- ◯ A Little True
- ◯ Pretty Much True
- ◯ Very Much True

11. There are many things that I do well

- ◯ Not at all True
- ◯ A Little True
- ◯ Pretty Much True
- ◯ Very Much True

Problem Solving

Read each question carefully. Then choose the option that best describes you.

12. When I need help, I find someone to talk with

- ◯ Not at all True
- ◯ A Little True
- ◯ Pretty Much True
- ◯ Very Much True

13. I try to work out problems by talking or writing about them

- ◯ Not at all True
- ◯ A Little True
- ◯ Pretty Much True
- ◯ Very Much True

Coping

In this next section we would like to ask you some questions about your emotions, in particular, how you control your emotions. The following questions involve two different aspects of your emotions. One is what you feel like inside. The other is how you show your emotions in the way you talk, gesture, or behave.

Choose the answer that best describes you

14. When I want to feel happier, I think about something different

◯ Strongly Disagree ◯ Disagree ◯ Half and Half ◯ Agree ◯ Strongly Agree

15. I keep my emotions to myself

◯ Strongly Disagree ◯ Disagree ◯ Half and Half ◯ Agree ◯ Strongly Agree

16.When I want to feel less bad, I think about something different

◯ Strongly Disagree ◯ Disagree ◯ Half and Half ◯ Agree ◯ Strongly Agree

17. When I am feeling happy, I am careful not to show it

◯ Strongly Disagree ◯ Disagree ◯ Half and Half ◯ Agree ◯ Strongly Agree

18. When I am worried about something, I think about it in a way that helps me feel better

◯ Strongly Disagree ◯ Disagree ◯ Half and Half ◯ Agree ◯ Strongly Agree

19. I control my feelings by not showing them

◯ Strongly Disagree ◯ Disagree ◯ Half and Half ◯ Agree ◯ Strongly Agree

20. When I want to feel happier about something, I change the way I am thinking about it

◯ Strongly Disagree ◯ Disagree ◯ Half and Half ◯ Agree ◯ Strongly Agree

21. I control my feelings about things by changing the way I think about them

◯ Strongly Disagree ◯ Disagree ◯ Half and Half ◯ Agree ◯ Strongly Agree

22. When I am feeling bad(e.g, sad, angry, or worried), I am careful not to show it

◯ Strongly Disagree ◯ Disagree ◯ Half and Half ◯ Agree ◯ Strongly Agree

23. When I want to feel less bad (e.g, ad, angry, or worried) about something, I change the way I am thinking about it

◯ Strongly Disagree ◯ Disagree ◯ Half and Half ◯ Agree ◯ Strongly Agree

PTSD

24. Sometimes things happen to people that are unusually or specially frightening, horrible, or traumatic. For example:

* a serious accident or fire
* a physical or sexual assault or abuse
* an earthquake or flood
* a war
* seeing someone be killed or seriously injured
* having a loved one die through homicide or suicide

Have you ever experienced this kind of event?

25. In the past month, have you had nightmares about the event(s) or thought about the event(s) when you did not want to?

◯ Strongly Disagree ◯ Disagree

26. In the past month, have you tried hard not to think about the event(s) or went out of your way to avoid situations that reminded you of the event(s)

◯ Strongly Disagree ◯ Disagree

27. In the past month, have you been constantly on guard, watchful, or easily startled?

◯ Strongly Disagree ◯ Disagree

28. In the past month, have you felt numb or detached from people, activities, or your surroundings?

◯ Strongly Disagree ◯ Disagree

29. I control my feelings by not showing them

◯ Strongly Disagree ◯ Disagree

WellnessCheck-Up / Posttest

Hello!

This survey will ask you some questions about the program that you attended this semester. I want to learn from you what you learned, what you thought about the program, and how the program could improve. The answers to your questions will not be given to anyone unless it is necessary for student safety. Thank you for completing the survey.

Mr. Dussan

1. I learned ways I can feel less stressed?

◯ Strongly Agree ◯ Somewhat Agree ◯ Neither Agree nor Disagree ◯ Somewhat Disagree ◯ Strongly Disagree

2. I learned ways to communicate better with others

◯ Strongly Agree ◯ Somewhat Agree ◯ Neither Agree nor Disagree ◯ Somewhat Disagree ◯ Strongly Disagree

3. I learned how to set goals for myself?

◯ Strongly Agree ◯ Somewhat Agree ◯ Neither Agree nor Disagree ◯ Somewhat Disagree ◯ Strongly Disagree

4. I learned how to solve problems that come up in my life?

◯ Strongly Agree ◯ Somewhat Agree ◯ Neither Agree nor Disagree ◯ Somewhat Disagree ◯ Strongly Disagree

5. I think that other students should get this program?

◯ Strongly Agree ◯ Somewhat Agree ◯ Neither Agree nor Disagree ◯ Somewhat Disagree ◯ Strongly Disagree

APPENDIX C

STUDENT SEMI-STRUCTURED INTERVIEW PROTOCOL

Semi Structured – Focus Group Interview

Overall Experience

1. Could you share something you enjoyed or found interesting during the program?

2. Could you share something you think was not helpful?

3. Is there something you would change about the program, if so, what?

4. Would you recommend it to your friends?

5. How do you feel about your school after the program?

Resilience

1. What are some ways that you can feel less stressed?

2. What are your thoughts about (SNAP)?

3. What is effective communication?

Emotional Regulation

1. Could you share ways you can control your emotions?

2. What strategy do you think you will use the most whenever you become upset, frustrated, or sad?

Attitudes Toward School

1. Could you share your thoughts/feelings about your school?

2. Do you feel safe in your school?

3. Feel free to express your opinion/feelings about teacher support?

4. Do you feel supported and appreciated by teachers and staff?

APPENDIX D

ASU INSTITUTIONAL REVIEW BOARD APPROVAL

ASU Knowledge Enterprise Development

APPROVAL: EXPEDITED REVIEW

Elisabeth Gee
Division of Educational Leadership and Innovation - Tempe
480/965-4284
Elisabeth.Gee@asu.edu

Dear Elisabeth Gee:

On 9/23/2020 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Families Overcoming Under Stress (FOCUS): Teaching Resilience in Special Education
Investigator:	Elisabeth Gee
IRB ID:	STUDY00012518
Category of review:	
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Child Assent Form.pdf, Category: Consent Form; • FOCUS RCC - School Age Curriculum.pdf, Category: Other; • IRB - Memo.pdf, Category: Other; • IRB - Point by Point Letter.pdf, Category: Other; • IRB Social Behavioral - FOCUS.docx, Category: IRB Protocol; • Parent Consent Forms.pdf, Category: Consent Form; • Supporting Documents 16-09-2020.pdf, Category: Other;

The IRB approved the protocol from 9/23/2020 to 9/22/2021 inclusive. Three weeks before 9/22/2021 you are to submit a completed Continuing Review application and required attachments to request continuing approval or closure.

If continuing review approval is not granted before the expiration date of 9/22/2021 approval of this protocol expires on that date. When consent is appropriate, you must use final, watermarked versions available under the "Documents" tab in ERA-IRB.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc: Francisco Dussan
Francisco Dussan