

Fall 2022

Exploring Mindfulness as a Social and Emotional Learning [SEL] Intervention: An Action Research Case Study

Matthew T. Griffith

Follow this and additional works at: <https://scholarcommons.sc.edu/etd>



Part of the [Curriculum and Instruction Commons](#)

Recommended Citation

Griffith, M. T.(2022). *Exploring Mindfulness as a Social and Emotional Learning [SEL] Intervention: An Action Research Case Study*. (Doctoral dissertation). Retrieved from <https://scholarcommons.sc.edu/etd/7072>

This Open Access Dissertation is brought to you by Scholar Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Scholar Commons. For more information, please contact digres@mailbox.sc.edu.

EXPLORING MINDFULNESS AS A SOCIAL AND EMOTIONAL LEARNING [SEL]
INTERVENTION: AN ACTION RESEARCH CASE STUDY

by

Matthew T. Griffith

Bachelor of Science
University of Georgia, 2010

Master of Science
Florida State University, 2013

Education Specialist
Florida State University, 2013

Submitted in Partial Fulfillment of the Requirements

For the Degree of Doctor of Education in

Curriculum and Instruction

College of Education

University of South Carolina

2022

Accepted by:

Leigh D'Amico, Major Professor

Rhonda Jeffries, Committee Member

Rebecca Morgan, Committee Member

Ellen Hampshire, Committee Member

Cheryl L. Addy, Interim Vice Provost and Dean of the Graduate School

© Copyright by Matthew T. Griffith, 2022
All Rights Reserved.

Dedication

This dissertation in practice is first dedicated to my wife, Jenni, whose unwavering support and encouragement carried me through to the end. It is also dedicated to our son Hank, who was born smack dab in the middle of this doctoral program. (And I thought *this dissertation* would be my loftiest venture yet...).

Finally, I dedicate this project to my family, and especially my parents, who have always made me feel I have the talent, capability, and responsibility to make a difference in people's lives. This study is one humble attempt.

Acknowledgements

I would like to offer my genuine appreciation to the administration, staff, families, and students of the elementary school where I conducted this study. Not only did they make this study possible, but they made a young school psychologist feel he was right where he was supposed to be for nine great years.

I would also like to thank my committee chair, Dr. Leigh D'Amico. Your steady guidance made a seemingly insurmountable task a much more attainable (and fulfilling) endeavor.

Abstract

Children appear to be faced with more stressors today than ever before, and schools are tasked with providing social and emotional support and instruction to help their students navigate life's ups and downs. The purpose of this mixed methods action research case study was to explore the effectiveness of mindfulness-based practices as a social and emotional learning (SEL) intervention for a small group of three second grade students at a rural elementary school. These students were identified by their teacher as having weaknesses in the areas of self-control, emotional regulation, and sustained attention that required more targeted intervention than the class-wide lessons already implemented. This exploration of an SEL intervention within a multi-tiered system of supports (MTSS) framework is grounded in a theoretical framework comprising Lev Vygotsky's sociocultural theory, Abraham Maslow's hierarchy of needs and concept of self-actualization, and Carl Rogers' humanist perspective. Data collected via pre- and post-intervention surveys, teacher and participant interviews, and observations suggest that all three students improved in the areas of self-awareness and self-management after participating in the mindfulness-based intervention. The three students also seemed to enjoy the intervention, and they reported practicing or using mindfulness strategies outside of the sessions. Important implications regarding the lesson delivery were also discovered and can be used to improve the use of this intervention as an SEL support in the future. The results of this action research study suggest that small-group,

mindfulness-based practices boast the potential to serve as an engaging, effective, and practical SEL intervention for schools in a time of heightened social and emotional needs.

Keywords: mindfulness, social and emotional learning (SEL), multi-tiered system of supports (MTSS), elementary students

Table of Contents

Dedication	iii
Acknowledgements.....	iv
Abstract.....	v
List of Tables	x
List of Abbreviations	xi
Chapter One: Introduction	1
Problem of Practice	5
Theoretical Framework	7
Research Question and Purpose of the Study	10
Researcher Positionality	12
Research Design.....	14
Data Collection.....	18
Data Analysis	20
Quality Control.....	21
Ethical Considerations.....	23
Significance and Limitations of Study	24
List of Definitions	25
Chapter Two: Literature Review	27
Statement of Problem of Practice.....	27
Purpose Statement and Research Questions.....	28

Chapter Organization	29
Literature Review Methodology	29
Theoretical Framework	29
Multi-Tiered System of Supports (MTSS).....	35
Social and Emotional Learning (SEL)	39
Mindfulness	43
Effectiveness of Mindfulness Interventions with Children	48
Summary	55
Chapter Three: Research Design	57
Overview of Study	57
Research Design	59
Participants	63
Data Collection Methods.....	64
Data Analysis Methods	67
Considerations for Validity and Reliability	68
Chapter Four: Data Analysis.....	71
Intervention	72
General Findings and Analysis	73
Summary	109
Chapter Five: Discussion	112
Discussion of Findings	112
Implications of the Findings.....	118
Action Plan	120

Future Research.....	122
Conclusions	124
References.....	126
Appendix A: Pre- and Post-Intervention Teacher Survey	138
Appendix B: Individual, Semi-Structured Student Interview.....	141
Appendix C: Self-Reflective Journal	142
Appendix D: Informed Consent.....	143

List of Tables

Table 4.1 <i>Schedule of Mindfulness Lessons</i>	73
Table 4.2 <i>Results of Pre- and Post-Intervention Teacher Ratings for Bobby</i>	84
Table 4.3 <i>Results of Pre- and Post-Intervention Teacher Ratings for Chip</i>	92
Table 4.4 <i>Results of Pre- and Post-Intervention Teacher Ratings for Leo</i>	102

List of Abbreviations

DES.....	Davis Elementary School (pseudonym)
MTSS.....	Multi-Tiered System of Supports
RTI.....	Response to Intervention
SEL.....	Social and Emotional Learning

Chapter One: Introduction

Alex sat slumped in his chair with that I-just-reluctantly-rolled-out-of-bed look that teenagers seem to master during their high school years. It was almost noon. He politely responded to conversational questions, yet offered little elaboration beyond a word or two or a head nod. As we began the cognitive assessments as a part of his reevaluation (since Alex had previously been identified as a student with a learning disability in first grade), the subtle dread was decipherable in his slumped shoulders and sad eyes. Again, he was polite and seemed to give his best effort on all tasks presented, but many of his answers were punctuated with a questioning tone, further slumping shoulders, or even excuses to save face: “It’s too early; my brain isn’t working yet.” Reviewing his records, I learned he had faced all kinds of adversity in his young life: foster care, boys’ homes, abuse, neglect, finally adoption, but then run-ins with the law, psychiatric diagnoses, medications, and persistent academic failure. That seemingly invisible force weighing on his shoulders became much more palpable.

As a school psychologist, I often interact with students in a one-on-one setting like the one described above, as I conduct interviews and assessments to try to understand how students learn and what the school can do to help them realize their potential. As a part of these evaluations, I delve deeply into the students’ records, gathering background information about everything from how much they weighed at birth to what they like to do on weekends to family mental health histories and trauma. For much of my career, this is how it has worked: I learn a lot about relatively few students, one at a time, usually

only after they have experienced significant and persistent learning and/or emotional and behavioral difficulties that may warrant special education support. I often wonder if the trajectories of these slump-shouldered teens could be boosted with the proper early intervention at the elementary level.

After a shift in my role a few years ago, I had the opportunity to more meaningfully and proactively intervene in students' lives through my school district's adoption of a multi-tiered system of supports (MTSS) framework in all of our schools, including the two elementary schools and high school I served. According to the William County (pseudonym) School District Strategic Plan, MTSS is a framework that provides additional interventions and supports based on individual student needs. MTSS programs have been associated with improved achievement, as evidenced by reading and math standardized test scores (Menendez et al., 2008) and better school-wide behavior, as indicated by less office discipline referrals (Sherrod & Ziomek-Daigle, 2009). In a nutshell, in my school district, this framework consists of school-based teams that meet regularly to identify and support students who are at risk in the areas of attendance, academic performance, and behavioral and emotional concerns. I have been especially involved at my elementary schools, where the teams convene weekly to discuss these students, opening my eyes to the vast number of youth (even in early grade levels) who are already at risk for not graduating high school.

Each of the struggling students reviewed at my elementary schools and high school had their own story, some resembling the path of Alex, but nearly all requiring an "all hands on deck" approach to intervene early and nudge them back on track. I often left these meetings discouraged, sometimes inspired, and nearly always overwhelmed.

The adversity our young scholars face, often on a day-to-day basis, has only fortified my long-held belief that schools need to do more to prepare them for life's ups and downs. My district, like most districts around the country, has grown aware of the increasing importance of the social and emotional health of children and has the resources in place to identify student needs. Now is the time to shift our focus to providing the types of social and emotional instruction and interventions needed to enable students to navigate life's adversity, which extends well beyond academics.

Children and adolescents seem to be faced with more stressors today than ever before. As Rempel (2012) proposed, schools play an integral role in the social and emotional growth of children. Thus, schools need more than just academic syllabi to guide their instruction; they require practices and supports that will equip their students with the tools to manage their responses to the inevitable adversity they will meet throughout their lives. Social and emotional skills allow one to “understand, manage, and express the social and emotional aspects of one's life in ways that enable the successful management of life tasks” (Elias et al., 1997, p. 2). As defined by the Collaborative for Academic, Social, and Emotional Learning (CASEL), social and emotional learning (SEL) is an active process that emphasizes skill-building in the areas of self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, n.d., “What is the CASEL SEL framework?” section). Opportunities for explicit and differentiated SEL instruction are integral to the success of MTSS and addressing the needs of the whole child.

One of my elementary schools, Davis Elementary School (DES; pseudonym), recently introduced school-wide efforts to meet the social and emotional needs of its

students. Through MTSS meetings, analysis of discipline data, teacher input, and other anecdotal information, the administration at DES recognized the necessity to address this area and has explored social and emotional curricula and other skill-building and reinforcement strategies. Among the programs in which DES invested the most time and money is the “K-12 Mindful Schools Curriculum,” an empirically supported program developed by the organization Mindful Schools that integrates mindfulness practices in the classroom environment (Mindful Schools, 2019). This widely used program has been shown to improve students’ capacity to pay attention and participate in class activities (Smith et al., 2012). Literature has also supported its effectiveness as an emotional intervention for elementary-age minority children, significantly reducing depressive symptoms (Liehr & Diaz, 2010). The “K-12 Mindful Schools Curriculum” has been used at DES to teach mindfulness concepts and practices to whole classes with hopes of reducing stress and improving students’ focus and emotional regulation.

While anecdotal feedback from classroom teachers and administrators regarding early outcomes of these efforts has been generally positive, it seems that many of the same students who are flagged as being at risk in our MTSS meetings due to learning and/or behavioral and emotional difficulties also struggle with the whole-group format of these lessons. I have observed that, while the Mindful Schools program and other mindfulness-based practices may benefit the classes as a whole, the same students identified as at risk for falling through the cracks of Tier 1 instructional practices similarly need a more targeted social and emotional skills intervention to help them build and practice the competencies they need to be successful. In other words, I must match the intervention to the need, not only in terms of skill deficits, but also with respect to

intervention delivery and format. Specifically, students at DES identified by their teacher as having weaknesses in the areas of self-control, emotional regulation, and sustained attention appear to require additional, Tier 2 mindfulness instruction. This mindfulness intervention would allow participants more opportunity to practice, ask questions, and share experiences without the influence of a full classroom of peers.

Problem of Practice

My problem of practice concerned students at DES identified by their teacher as having weaknesses in the areas of self-control, emotional regulation, and sustained attention who have difficulty accessing the benefits of whole-group mindfulness instruction. As introduced above, the need for SEL supports in schools has been well-established, and small-group delivery of social and emotional skills instruction would allow students a safe space with more opportunities to practice, ask questions, and share experiences. The targeted group could also allow for more differentiation of the lessons to more effectively meet the individual needs of these students.

With the implementation of MTSS, the basic goal in my district has been to expand the scope of Response to Intervention (RTI) across all grade levels, tracking and providing supports in academic and non-academic areas, such as home life stressors, emotional and behavioral difficulties, and attendance, among others. Our MTSS teams have developed their collective skills at identifying at-risk or struggling students, asking the right questions to find the root cause of their difficulties, and doing their best to match interventions to need. However, a dearth of social and emotional interventions is often frustrating for schools as they try to meet the diverse needs of their learners who may need more help managing their emotions and interacting with others. When a second-

grade student does not respond to core instruction and is determined to fall in the high-risk category for literacy skills, they are assigned to a small-group reading intervention with a highly trained interventionist. When a second-grade student does not respond to class-wide social and emotional instruction and is determined to fall in the high-risk category for these skills, what additional supports can the school provide for that student?

As highlighted by Durlak et al. (2011), there is general agreement that schools have a responsibility to foster students' cognitive *and* social and emotional development, and with increasing stress surrounding academic performance and standardized testing, schools need empirically supported SEL instruction to meet their students' needs. The evidence of the benefits of SEL programs is mounting. A meta-analysis of 213 school-based SEL programs spanning kindergarten through twelfth grade conducted by Durlak et al. (2011) found favorable outcomes regarding attitudes about self, others, and school; more appropriate social behaviors; fewer conduct and internalizing problems; and better academic achievement.

Burgeoning research on mindfulness-based programs suggests mindful practices represent an opportunity to develop emotional regulation and prosocial coping skills in children (Biegel et al., 2009). Kabat-Zinn (1994) defines mindfulness as “paying attention in a particular way: on purpose, and in the present moment, and nonjudgmentally” (p. 4). As noted by Siegel and Bryson (2016), a simple awareness of feelings in itself can foster emotional regulation. Interventions using meditation techniques are already integrated into social and academic instruction in school settings (Black et al., 2009). The literature has identified positive outcomes specifically associated with the practice of mindfulness in the areas of self-confidence, self-esteem,

relationships, attention, and cognitive and academic performance, providing more evidence to support the scholastic appropriateness of mindfulness (Rempel, 2012). While anecdotal outcomes of class-wide mindfulness instruction have similarly been positive at DES so far, small-group mindfulness instruction is needed to meet the needs of students with self-control, emotional regulation, and sustained attention deficits that warrant more targeted mindfulness practice and discussion, and fewer distractions.

Theoretical Framework

The theoretical framework of an action research study, as outlined by Grant and Osanloo (2014), serves as the foundation from which all knowledge is formed, underlying and connecting all aspects of the study, including the problem of practice, purpose statement, significance, research questions, methodology, and data analysis. In addition to the aforementioned research on mindfulness and social and emotional competencies and learning, this action research study's theoretical framework was based upon the work of Lev Vygotsky, Abraham Maslow, and Carl Rogers.

The rationale for my small-group delivery of the Mindful Schools curriculum, in addition to the curriculum itself, reflected Vygotsky's sociocultural theory. Specifically, both required the concept of the zone of proximal development (ZPD), the emphasis on the importance of language and dialogue in learning, and the belief that children acquire skills through opportunities to learn from peers and teachers who are more skilled (McLeod, 2018). Another Vygotskian instructional concept that benefited my intervention was scaffolding, in which a teacher or more skilled peer provides support to a novice to help them find success on a task (McLeod, 2018).

Vygotsky's sociocultural theory accentuates the importance of social interaction in children's ability to learn and make meaning of knowledge (McLeod, 2018). The ZPD illustrates the difference in what a student can learn independently and what they can learn with the guidance of a more skilled peer or teacher (McLeod, 2018). The small-group delivery of my mindfulness intervention capitalized on this concept, as students who might have been unable to understand or master principles or techniques in the whole-group setting had more opportunities for interaction with and guidance from peers and a teacher. Vygotsky's focus on the importance of language and dialogue in learning (McLeod, 2018) also merged organically with my action research study, as the Mindful Schools curriculum relies heavily upon verbal explanations of concepts and dialogue between the teacher and the students during lessons. Additionally, outcomes of the intervention were measured in part through dialogue via interviews with students and their teacher.

While Vygotsky's theory provided perspective on the curriculum content and lesson delivery, the work of Maslow complemented the spirit of the mindfulness practice and equipped this study with Maslow's hierarchy of needs, the concept of self-actualization, and the belief that childhood experiences heavily influence children's abilities to reach their potential as adults (McLeod, 2020). Rogers' humanist perspective (and other Rogerian principles) embraces Maslow's hierarchy while also emphasizing the necessary attributes of an environment that facilitates the growth of an individual (McLeod, 2014).

The works of Maslow and Rogers more explicitly address social and emotional needs of children and blend well with concepts of mindfulness. Maslow's hierarchy of

needs is a motivational theory that identifies the needs that must be met for individuals to grow and develop (McLeod, 2020). These categories of needs include physiological, safety, love and belongingness, esteem, and self-actualization (McLeod, 2020). Self-actualization is believed by both Maslow and Rogers to represent the fulfillment of one's potential, and this level can only be achieved once the needs in all other areas have been met (McLeod, 2020). The mindfulness intervention specifically addressed love and belongingness, as our small group emphasized trust, acceptance, affiliation, and esteem. The skills taught also intended to create feelings of mastery and control over emotions, with the overarching goal of providing skills that garnered personal growth and self-fulfillment.

Rogers' criteria for an environment that supports growth was also used to inform the parameters of the small-group intervention. Specifically, Rogers theorized that the environment must possess and encourage openness and ease of self-disclosure, unconditional acceptance, and empathy to ensure children feel understood (McLeod, 2014). During data collection, student input provided self-reflective insight regarding their self-sufficiency with the skills taught, mirroring the subjectivity of the idea of self-actualization. Data collected for analysis also sought to learn about the students' levels of interest and motivation with regard to the mindfulness intervention, which further matched the motivational aspect of the hierarchy of needs.

The theoretical framework put forth by Vygotsky, Maslow, and Rogers naturally fit my problem of practice concerning elementary students who required SEL support beyond the whole-group mindfulness instruction in place. Not only do humanist principles echo many mindfulness concepts, but the small-group delivery of mindfulness

instruction aligned with the work of all three selected theorists, as it allowed more opportunity for the students to practice, ask questions, feel heard, and share experiences and dialogue in building social and emotional skills in a safe space with an empathetic, encouraging, and skilled teacher. As with the idea of self-actualization, the ultimate goal of this intervention was for students to master the social and emotional skills needed to realize their potential as students and, eventually, adults. This action research study explored a possible positive intervention that could better equip children to meet their potential as students, but also as human beings.

Research Question and Purpose of the Study

The purpose of this action research study was to provide an effective SEL intervention for DES students who have difficulty accessing the benefits of whole-group mindfulness instruction. This study investigated the benefits of using a small-group mindfulness intervention to facilitate SEL among these students at DES. Specifically, the following research question was addressed in this study: What are the benefits of a small-group mindfulness intervention for students identified by their teacher as having weaknesses in the areas of self-control, emotional regulation, and sustained attention?

This research question was identified in order to “cut across and introduce the possibilities for change on multiple levels” (Herr & Anderson, 2015, p. 91). It also matched the intended research approach for this study (Efron & Ravid, 2013), namely an action research mixed methods case study that relied upon qualitative data to shed light on student experiences and feelings, and both qualitative and quantitative data to provide insights from teachers into the effectiveness of this SEL intervention. This mixed methods case study also allowed a descriptive study of the effects of an intervention on

this bounded system of three students (Merriam & Tisdell, 2016). The research question prompted the analysis of the themes that emerged among the three students when mindfulness instruction was presented in a small-group format. Data collected to answer this question included semi-structured interviews with the students and my own reflective journals.

The research question also sought to learn about the student outcomes after implementing the mindfulness program as an SEL intervention, specifically their displays of self-awareness and self-management skills in the classroom setting. CASEL defines self-awareness as, “The abilities to understand one’s own emotions, thoughts, and values and how they influence behavior across contexts... [including] capacities to recognize one’s strengths and limitations with a well-grounded sense of confidence and purpose” (CASEL, n.d., “What is the CASEL SEL framework?” section). According to CASEL (n.d.), self-management refers to “the abilities to manage one’s emotions, thoughts, and behaviors effectively in different situations and to achieve goals and aspirations... [including] the capacities to delay gratification, manage stress, and feel motivation and agency to accomplish personal and collective goals” (CASEL, n.d., “What is the CASEL SEL framework?” section). These constructs were chosen due to their relevance to school performance, their link to established benefits of mindfulness in the literature, and their congruence with the theoretical framework of this study. Teacher surveys and semi-structured interviews were the primary data sources to investigate these constructs, but information and insights gleaned from my own observations and semi-structured interviews with the students also proved valuable. As answers to the research question

were pursued, it was first important to understand my relationship to the students, the teachers, the school, and the action research study.

Researcher Positionality

Herr and Anderson (2015) describe positionality as a self-reflective analysis of the “myriad forms of border crossing” by researchers during their studies (p. 37). They further explain that positionality is the researcher’s relationship to their research participants and setting, and that an understanding of their multiple positionalities is necessary so the researcher is cognizant of their limitations and possible implications for methodology (Herr & Anderson, 2015). Positionality can refer to ‘insider versus outsider’ in every sense of the terms, such as relating to the physical setting, gender, race, religion, and position of authority, to name a few, and it can change throughout the study (Herr & Anderson, 2015).

My role as a school psychologist further blurred the lines of this already murky topic. I served as the school psychologist at three different schools, and I defined my relationship to each of my schools very differently. For my action research, I conducted my study at an elementary school that I had served for eight years. There was little staff turnover there, so I knew many of the teachers and administrators well. I was also familiar with many of the students and their families. In this way, my positionality had attributes of an insider. In more general terms, I was also an insider in the sense that I worked in the education field and for this school district in particular. However, as a school psychologist and not a teacher on staff, I often felt like somewhat of an outsider.

From a cultural standpoint, I felt like an outsider as I grew up in suburban Georgia, and my school served a somewhat rural community in South Carolina where

many students received free and reduced-price lunch. As I worked with students from different backgrounds in my mindfulness interventions, an understanding of stereotypes was important, especially as I engaged in individual and small-group discussions with students in the context of learning, practicing, and applying mindfulness principles and exercises to their everyday lives. An effective instructor of any material must understand the false stereotypes attributing poverty to deficiencies among the poor or cultural weaknesses (Gorski, 2012). Understanding the plight of impoverished families provided me with a more accurate picture of the day-to-day stressors faced by children—stressors that I hoped my mindfulness lessons would equip my students to navigate.

Rogarian principles also significantly impacted my positionality as a school psychologist and as a researcher. Specifically, I subscribe to Rogers' belief that children are innately good, and that they do their best given their situation (McLeod, 2014). This theoretical perspective influenced my instruction and interactions with the students, my interviews with the teacher, and my perception and interpretation of the data collected. My Rogerian positioning enriched my study, as it helped me to emphasize and describe the growth and skill-building that occurred among my students.

For this study, I conducted small intervention groups by pulling three students from their classroom each week, so I was an outsider to their classroom, as well. I believe I was able to optimize the advantages of my dual insider/outsider role, and it was helpful that I had an established working relationship with the teacher-participant selected. This rapport allowed for honest ratings and discussions of the impact of the intervention on her students, and her pre-existing buy-in to the application of mindfulness concepts in her classroom likely augmented my intervention's efficacy and transfer. Overall, my insider

knowledge of the school and staff helped me select the classroom and individual students that met the needs of my study. As an outsider, I felt the students perceived this project as something special and fun that they would not typically be able to do, increasing their level of enthusiasm to participate. And while my Rogerian background influenced my perception of the data, my outside position allowed me to maintain more objectivity regarding findings.

Research Design

I conducted action research through a mixed methods case study design as I investigated the identified research question: What are the benefits of a mindfulness intervention for students identified by their teacher as having weaknesses with self-control, emotional regulation, and sustained attention? This mixed method design relied upon qualitative data to shed light on student experiences and feelings, and both qualitative and quantitative data to provide impressions from the teacher into the effectiveness of this SEL intervention based on observations of the students in the classroom. This design was a case study, as it was a descriptive study of the effects of an intervention on a bounded system of three students (Merriam & Tisdell, 2016). As Merriam and Tisdell (2016) explain, case studies using qualitative data reflect the attributes of basic qualitative research, such as aiming to acquire meaning and understanding, using the researcher as the human data collection and analysis instrument, and utilizing descriptive data. Additional context was provided by analysis of patterns and themes detected in my own journal entries. While qualitative data was vital for this study, a mixed methods stance was required, as it allowed a more objective data source to aid in evaluating the intervention's effectiveness (Herr & Anderson, 2015). A mixed

methods design is common in case studies (Merriam & Tisdell, 2016).

According to the criteria described by Dana (2015), my study was an appropriate fit for action research, as this project allowed me to collect data as a part of my current duties, easily meshed the roles of researcher and practitioner, and represented an effort to provide “more equitable learning conditions for all” (p. 167). Efron and Ravid (2013) provide a more comprehensive definition of action research in education, explaining it as a practitioner’s investigation in their own classroom or school setting that aims to develop an aspect of their professional practice while also improving student outcomes. The mixed methods design allowed qualitative data collection conducive to the exploration and reflection of my own practice, while a combination of qualitative and quantitative data sources informed intervention effects on student outcomes.

This mixed methods action research ambition contrasts with traditional research, which serves the primary purpose of adding to a field’s knowledge base (Herr & Anderson, 2015). Efron and Ravid (2013) also explain that action research findings are more directly applicable to the researcher’s specific setting and population, but traditional research yields results that are more transferable across settings. While I hope to share my experiences and findings with my other schools and colleagues in my school district, my study focused on and was most directly applicable to my school and its students. Additionally, while outside experts conduct traditional research studies, allowing them to maintain objectivity, action researchers like me are more involved and personally and professionally invested in the study (Efron & Ravid, 2013). Moreover, while traditional quantitative research aims to widen a knowledge base with numerical data that can be generalized across settings, the qualitative researcher provides a depth of understanding

and insights into the experiences of specific samples and contexts (Merriam & Tisdell, 2016). One of the greatest strengths of action research, as outlined by Herr and Anderson (2015), is its inherent reflectiveness, encouraging educators to actively investigate their own practices, share their findings and collaborate with colleagues, and resist falling into the malaise of operating under the status quo.

The present study met each of the criteria outlined above. An emphasis was also placed on the experiences of the student-participants. The depth and breadth of these goals could not have been met through traditional research methodology, nor through a purely quantitative or wholly qualitative design. An action research, mixed methods case study design enabled me to obtain answers to each of my research questions by allowing me to “highlight different aspects of the same question” and to “assume an objective or subjective stance, or attitude, depending on the question under investigation” (Efron & Ravid, 2013, p. 46).

Context and Setting of Study

I served as the school psychologist at Davis Elementary School (DES; pseudonym) for nine years. DES was a rural school where, according to their School Renewal Plan developed before the 2017-18 school year, the student body of 780 students consisted of 76% white, 13% African American, 7% Hispanic, and 5% other. The plan also outlined that the socioeconomic status of these students varied, but 37% of students qualified for free or reduced-price lunch. There was generally little staff turnover at DES and it was situated in a large and well-resourced school district in the southern United States where Christianity was the predominant religion. My school district, and DES in particular, had invested substantial time and money in recent years exploring

more SEL supports for its students. I felt that this momentum merged organically with my established relationship with the staff and families of DES. The scene for this action research study was also set by the proven staff and administrator buy-in regarding students' social and emotional health, in addition to my personal interest and professional training in mindfulness practice.

Description of Intervention and Research Procedure

The nonprofit organization Mindful Schools created the “K-12 Mindful Schools Curriculum,” an empirically supported program that integrates mindfulness practice in the classroom environment (Mindful Schools, 2019). This program has been used at DES the past several school years by me and the school counselors to teach mindfulness concepts and practices to whole classes with hopes of reducing stress and improving students' focus and emotional regulation. The curriculum consists of 16 lessons and 14 “extras,” or other scripted enrichment activities that can also be used as lessons (Mindful Schools, 2019). Lesson titles include “Body Awareness,” “Thoughts,” and “Mindful Test Taking,” to name a few (Mindful Schools, 2019). Activities may consist of the instructor's modeling and practicing mindful breathing, mindful listening, or other techniques, in addition to allowing students to practice on their own and share about their experiences. Each lesson lasts approximately 15-20 minutes when implemented in a whole-class setting. For the purposes of this action research study, two lessons were combined in each 30-minute session and administered to a small group of three students one time per week for eight weeks.

Participants

The primary participants in my study were three elementary students at DES

identified by their teacher as having deficits in the areas of self-control, emotional regulation, and sustained attention. These elementary students represented a typical case sample, as they were purposely selected as being typical of the group being studied (Efron & Ravid, 2013). The selected students' teacher also served as a participant, as she provided additional insights in helping me answer my research question (Efron & Ravid, 2013). More specifically, the teacher associated with the students was best suited to provide information about the intervention's impact in the classroom. Finally, I was an active participant in this study, as well, with my journals providing valuable observations and reflections.

Data Collection

Characteristic of a mixed methods design, the data for this study were collected from qualitative and quantitative sources. There are many advantages of using different types of data, one of which is the enhanced validity of a study when the researcher can triangulate data from varied sources and multiple perspectives (Herr & Anderson, 2015). Multiple data sources were used with the participants in this study: I, as the researcher and implementer of the intervention, completed reflective journals; the students participated in semi-structured interviews; and the students' classroom teacher completed surveys and participated in follow-up semi-structured interviews. The data sources aligned with the theoretical framework of this study, as they each focused on personal growth throughout the intervention and relied largely upon language and dialogue to co-construct a narrative of the collective experience.

Data collection first consisted of the reflective journal entries I made after each of the eight intervention sessions to help answer the research question. Based on guidance

from Efron and Ravid (2013), I used unstructured entries that record anything that seemed important at the time, and emergent themes were coded (Merriam & Tisdell, 2016). I also used audit trails in my entries to augment reliability by justifying my thought processes that guided any adjustments to my intervention delivery and data collection (Merriam & Tisdell, 2016). Additionally, these journal entries were “helpful in documenting your behaviors and the behaviors of others in the setting that you investigate and in increasing your insight into daily classroom interactions” (Efron & Ravid, 2013, p. 125). Journals also provide qualitative data to guide and adapt an investigation throughout the process (Efron & Ravid, 2013). Structured or semi-structured observations of students during the sessions would seem ideal, but it would have proved difficult if not impossible to implement the lessons and observe reliably.

Additionally, semi-structured student interviews were conducted twice: once at the midpoint of the intervention phase (i.e., after four sessions) and then again after the entire intervention period (i.e., after all eight sessions) to gather self-report data from the students regarding their experiences with the mindfulness intervention. Data collected from the initial student interviews at the intervention phase midpoint were also used to make adjustments to the intervention based on student feedback. To investigate data relevant to the research question, emergent themes from the interviews were coded (Merriam & Tisdell, 2016). Semi-structured interviews were used, as they provided pre-prepared, open-ended questions while also allowing participants to “co-construct the narrative and raise and pursue issues that are related to the study but were not included when the interview questions were planned” (Efron & Ravid, 2013, p. 98). Additionally,

according to Efron and Ravid (2013), interviews encouraged and enabled interviewees to speak more openly about the study, adding depth to the conversation.

In order to incite information from the teacher about her impressions of the effects of the intervention on the students' functioning in the classroom, pre- and post-intervention teacher surveys using Likert-scale questions were administered. As Efron and Ravid (2013) posit, surveys are a quick and efficient way to evaluate programs' effectiveness. The teacher survey provided data particularly pertaining to the SEL competencies self-awareness and self-management. Finally, based on teacher responses on the post-intervention survey, I designed a semi-structured interview to follow-up with the teacher about patterns or trends that either aligned with other data collected or seemed at odds with my perceptions or those of the student-participants. This "member checking" helped ensure internal validity of my study (Merriam & Tisdell, 2016).

Data Analysis

The goal of data analysis in action research is to convert the information collected into trustworthy and reliable findings (Efron & Ravid, 2013). For my journal entries, I reflected upon my unstructured entries after each session, allowing me to tweak my mindfulness instruction along the way. Journals also provided qualitative data and quotations to add more context to other data sources. Regarding data yielded from semi-structured student and teacher interviews, I analyzed this information qualitatively to help build meaning and begin to see patterns (Efron & Ravid, 2013). Specifically, to investigate data relevant to the research question, emergent themes from the interviews were coded (Merriam & Tisdell, 2016). Finally, for the pre- and post-intervention teacher surveys, I quantitatively analyzed this data by tallying teacher responses on Likert

scale (*strongly agree, agree, disagree, and strongly disagree*) pre- and post-test surveys for each student-participant. The survey questions specifically targeted student-participants' displays of self-awareness and self-management in the classroom, but survey items also pertained to academic performance, engagement at school, and mindfulness skills. I used cross-tabulation tables to record, tally, and display teacher responses as raw scores, facilitating the comparison of the pre- and post-survey results and the identification of trends (Efron & Ravid, 2013).

Quality Control

With the knowledge generated through action research often disparaged for being “practice driven rather than theory driven” (Herr & Anderson, 2015), ensuring and defending the quality of action research dissertations is paramount. I believe my study inherently had strong process validity, or “to what extent problems are framed and solved in a manner that permits ongoing learning of the individual or system” (Herr & Anderson, 2015, p. 68). My study was designed to examine another possible way to provide SEL for students who do not respond to the one-size-fits-all whole-group mindfulness. This aspiration fit with my school district's focus on identifying and implementing SEL supports. Self-reflective journals also helped me remain aware of my own subjectivity (Efron & Ravid, 2013).

In working with my student-participants, I developed appropriate interview questions and read questions aloud to students to ensure they understood. While focus group interviews have benefits, such as making children more comfortable (Efron & Ravid, 2013), I opted for individual interviews due to the strong rapport I developed with each student and the additional information that I was able to procure in a one-on-one

setting. The students also distracted each other often during the mindfulness sessions together, so individual interviews helped the students stay on task and answer questions to the best of their ability. However, I did have one concern regarding the delivery of my mindfulness intervention with my chosen population. I was selecting students with teacher-identified deficits in the areas of self-control, emotional regulation, and sustained attention who struggled to benefit from mindfulness in the whole-group setting; therefore, I worried about behavior management in my sessions. Careful student selection, attending to group dynamics, and agreeing on group norms and parameters with students in the first session were all proactive measures taken. A small group size of three also likely helped with behavior management, while still maintaining the benefits of small-group instruction.

With my teacher-participant, I carefully designed appropriate behavior surveys and interview questions. I used teacher input to augment the trustworthiness of my study, as I was able to use data collected from them to triangulate student reports and my own reflections. Trustworthiness refers to how credible the researcher's interpretation of the findings seem to those who provided it (Herr & Anderson, 2015). Teacher data also indicated how the students transferred their learned skills to other environments. Regarding recruitment of the teacher for the study, it was difficult to be selective with the teacher, as student selection took precedence. However, due to my established rapport with many of the teachers at DES, I was able to secure willing and enthusiastic participation from the teacher of the three students selected. This teacher was a suitable reporter regarding the students, and she was eager for them to receive additional support. This teacher also integrated mindfulness practices in her classroom.

Ethical Considerations

As stated by Herr and Anderson (2015), “Ethical decisions are infused in every move we make as researchers” (p. 148). With my study, I believe I met the high ethical standards in place with action research. Permission for my study was obtained from the University’s Institutional Review Board (IRB) and from my school district and school principal. Informed consent was provided to the parents, the students, and the teacher. Informed consent ensures all participants’ agreement to participate is informed, competent, and voluntary (Pritchard, 2002). I also provided parents with much information about the practice of mindfulness, emphasizing that it is a secular practice that benefits adults and children in the area of self-regulation, and that its practice has no religious implications. Pseudonyms were used for all participants and the school and school district name, and all efforts were made to ensure anonymity during the study and in the presentation of the findings, especially since this study explicitly targeted students identified by their teacher as needing Tier 2 SEL support. I also provided honest and transparent information to the parents of the student-participants about why they were chosen for the study. Specifically, it was explained that their teacher identified them as students who struggle with skills like self-regulation, sustained attention, self-awareness, and/or self-management, and that this additional support was believed to be an intervention that would help them build skills in these areas. The other side of this issue is the consideration that I provided an SEL intervention in a school that would like to have much more of this type of support; unfortunately, I was only able to provide it for three students, possibly neglecting others who need it or could benefit.

Although I was not these students’ classroom teacher, I was still an adult and

district employee in a school setting and, therefore, could be at risk of coercion. I had to maintain an awareness of these power dynamics and monitor possible exploitation of my participants (Pritchard, 2002). Ensuring students and parents understood that the study was voluntary and not a required academic task was a crucial first step. Additionally, when I planned the study I was at risk of what Pritchard (2002) calls “educational misconception” (p. 6), which refers to instructional practices that are advertised as beneficial, but in actuality yield little or no benefit. Through careful planning with the teacher, however, I was able to minimize this factor by scheduling the intervention sessions for non-instructional time in between lunch and recess. This measure prevented the students from missing out on valuable academic instruction time. While the possible limitations may have posed a threat to this study during the planning phase, I was able to minimize ethical concerns and optimize the intervention’s potential to improve student outcomes.

Significance and Limitations of Study

The present study fits the definition of action research offered by Efron and Ravid (2013) as a practitioner’s investigation in their own school setting that aimed to develop an aspect of their professional practice while also improving student outcomes. The problem statement was generated from my own observations and understanding that more SEL supports were needed in my school, and from my own practice of mindfulness in the whole-group setting that did not seem to be successfully reaching all students. I took it upon myself to do more to support students like Alex, the slump-shouldered teen described in the introduction, at a young age to help them realize their potential. The data collected and lessons learned from this study benefited my elementary school, but I also

intend to replicate this intervention at my other current and future schools, in addition to sharing my results and experiences with colleagues. I would consider other school psychologists, administrators, school counselors, teachers, and district leadership as possible stakeholders, as well.

While I did see myself as a blend of an insider and an outsider in this study, my preexisting knowledge and relationships at my school allowed me to design and implement a study that intended to improve student outcomes, incite further action in the procurement of SEL supports within my school and throughout my district, develop a skill within myself as a practitioner, and continue to self-reflect on my experiences and make modifications as new problems arose. An emphasis was also placed on the experiences of the student-participants and possible emergent trends, such as aspects of the intervention that attracted their interest, kept them engaged, and benefited their social and emotional competency. The depth and breadth of these goals and perspectives required a mixed methods, action research case study approach; my aspirations for this study could not have been achieved through traditional research methodology.

List of Definitions

Action research: A practitioner's investigation in their own classroom or school setting that aims to develop an aspect of their professional practice while also improving student outcomes (Efron & Ravid, 2013).

Mindful Schools K-12 Curriculum: An empirically supported program that integrates mindfulness practice in the classroom environment (Mindful Schools, 2019).

Mindfulness: "Paying attention in a particular way: on purpose, and in the present moment, and nonjudgmentally" (Kabat-Zinn, 1994, p. 4).

Multi-tiered system of supports (MTSS): Student support framework that uses data from universal screening, continuous progress monitoring, and implementation fidelity in order to implement research-supported practices based on student needs (Freeman et al., 2017).

Social and emotional learning (SEL): an active process that emphasizes skill-building in the areas of self-awareness, self-management, social awareness, relationship skills, and responsible decision making (CASEL, n.d.).

Social and emotional learning (SEL) competencies: Five broad areas of social and emotional competence (CASEL, n.d., “What is the CASEL SEL framework?” section).

Relationship skills: “The abilities to establish and maintain healthy and supportive relationships and to effectively navigate settings with diverse individuals and groups” (CASEL, n.d.).

Responsible decision-making: “The abilities to make caring and constructive choices about personal behavior and social interactions across diverse situations” (CASEL, n.d.).

Self-awareness: “The abilities to understand one’s own emotions, thoughts, and values and how they influence behavior across contexts” (CASEL, n.d.).

Self-management: “The abilities to manage one’s emotions, thoughts, and behaviors effectively in different situations and to achieve goals and aspirations” (CASEL, n.d.).

Social awareness: “The abilities to understand the perspectives of and empathize with others, including those from diverse backgrounds, cultures, and contexts” (CASEL, n.d.).

Chapter Two: Literature Review

This chapter begins with a review of the problem of practice identified in the first chapter. It then provides the purpose for the research, establishing the context of the study and the problem of practice by explaining the underlying theoretical framework and related research in the field.

Statement of Problem of Practice

The problem of practice concerned students at DES identified by their teacher as having weaknesses in the areas of self-control, emotional regulation, and sustained attention who had difficulty accessing the benefits of whole-group mindfulness instruction and required Tier 2 intervention (more specialized instruction). As introduced previously, the need for social and emotional learning (SEL) supports in schools has been well established, and small-group delivery of social and emotional skills instruction allowed students a safe space with more opportunities to practice, ask questions, and share experiences. The targeted group also permitted differentiation of the lessons to more effectively meet the individual needs of these students.

With the implementation of MTSS, the basic goal in my school district has been to expand the scope of Response to Intervention (RTI) across all grade levels, tracking and providing supports in academic and non-academic areas, such as home life stressors, emotional and behavioral difficulties, and attendance, among others. The school-based MTSS teams have developed their collective skills at identifying at-risk or struggling

students, asking the right questions to find the root cause of their difficulties, and doing their best to match interventions to need. However, schools require more evidence-based social and emotional interventions in order to help students manage their emotions and behaviors and interact successfully with others.

As highlighted by Durlak et al. (2011), there is general agreement that schools have a responsibility to foster students' cognitive and social and emotional development, and with increasing stress surrounding academic performance and standardized testing, schools need empirically supported SEL instruction to meet their students' needs. Burgeoning research (Black et al., 2009; Kallapiran et al., 2015; Lee et al., 2008; Liehr & Diaz, 2010) on mindfulness-based programs suggests mindfulness practices represent an opportunity to meet needs related to the mental health and SEL of students. Kabat-Zinn (1994) defines mindfulness as "paying attention in a particular way: on purpose, and in the present moment, and nonjudgmentally" (p. 4). As noted by Siegel and Bryson (2016), a simple awareness of feelings in itself can foster emotional regulation. While anecdotal outcomes of class-wide mindfulness instruction already in place at DES were initially positive, small-group mindfulness instruction was needed to support students with weaknesses in the areas of self-control, emotional regulation, and sustained attention who required more targeted practice and discussion, and fewer distractions.

Purpose Statement and Research Questions

The purpose of this action research, mixed methods case study was to provide an effective SEL intervention for students at DES identified by their teacher as having weaknesses in the areas of self-control, emotional regulation, and sustained attention requiring Tier 2 intervention. This study investigated the benefits of using a small-group

mindfulness intervention to facilitate SEL among these students at DES. Specifically, the following research question was addressed in this study: What are the benefits of a small-group mindfulness intervention for students identified by their teacher as having weaknesses in the areas of self-control, emotional regulation, and sustained attention?

Chapter Organization

This chapter first explains the strategies employed in the literature review process. That section is followed by a synthesis of the literature pertaining to this study's theoretical framework, focusing on sociocultural theory and the humanist perspective. Thorough explorations of constructs relevant to this study then highlight the concepts of multi-tiered system of support (MTSS), social and emotional learning (SEL), and mindfulness, emphasizing the historical perspectives and transformative potential of each. Current research surrounding school-based mindfulness interventions is also highlighted, noting participant outcomes and study limitations.

Literature Review Methodology

In order to gain the necessary knowledge and understanding of the present inquiry, the University of South Carolina online library was used to search databases such as EBSCO Host, ProQuest, and JSTOR for peer-reviewed journals. Websites, books, and textbooks were also used for this comprehensive literature review.

Theoretical Framework

This action research, mixed methods case study relied on the sociocultural theory of learning, as put forth by Lev Vygotsky (1978), as this theory emphasizes the importance of language and dialogue in learning and the belief that students acquire skills through opportunities to learn from more skilled peers and teachers (McLeod, 2018). The

works of Abraham Maslow and Carl Rogers from the humanist perspective then explicitly addressed social and emotional needs of children, complementing concepts of mindfulness. Maslow provided his hierarchy of needs, a motivational theory that identifies the needs that must be met for individuals to grow and develop (McLeod, 2020), and the concept of self-actualization is believed by both Maslow and Rogers to represent the fulfillment of one's potential once all prerequisite needs have been met (McLeod, 2020). Finally, Rogers provided his belief that children are innately good and his criteria for an environment that supports growth (McLeod, 2014), and his principles informed the small-group delivery of this study's intervention.

Vygotsky and the Sociocultural Theory of Learning

Davydov and Kerr (1995) summarize the foundational ideas about education put forth by Lev Vygotsky and his disciples: The education system is responsible for providing environments and stimuli that develop children's personalities and potentials in unique ways based upon individual factors like differing developmental levels and proclivities (Davydov & Kerr, 1995). These authors also explain that the student is the actual subject in the process of teaching, and that this process should consist of a guiding teacher that collaborates with the student rather than trying to impress knowledge or skills upon them (Davydov & Kerr, 1995).

These ideals reflect the spirit of Vygotsky's sociocultural theory, which underpinned my rationale for the small-group delivery of the Mindful Schools curriculum, in addition to the curriculum itself. Vygotsky's sociocultural theory of learning emphasizes the importance of a more skilled teacher helping to hone skills and understanding in their student, while also co-constructing meaning and knowledge

through social interaction and dialogue (Applefield et al., 2000). Modeling the skills and providing immediate feedback are key components (Applefield et al., 2000). Davydov and Kerr (1995) explain that Vygotsky believed true learning required the adult teacher to work with the child or student, and that instructional practices had to be based on the developmental and individual differences of the learners. The student is the main subject of the learning experience, and the adult or teacher is responsible for meeting the student on their level, guiding them through the activity, and encouraging their development (Davydov & Kerr, 1995).

Vygotsky's (1978) belief that students can master skills that would be beyond their independent capability when they are guided and supported by a more skilled teacher is referred to as the zone of proximal development (ZPD). Vygotsky (1978) believed that children acquire skills through opportunities to learn from peers and teachers who are more skilled, and he emphasized the importance of language, dialogue, and social interaction (Vygotsky, 1978). Another related Vygotskian instructional concept that benefited the present study's intervention is scaffolding, in which "a teacher or more advanced peer helps to structure or arrange a task so that a novice can work on it successfully" (McLeod, 2018).

In summary, Vygotsky's sociocultural theory accentuates the importance of social interaction in children's ability to learn and make meaning of knowledge (Vygotsky, 1978), and the ZPD illustrates the difference in what a student can learn independently and what they can learn with the guidance of a more skilled peer or teacher (Derry, 2013; Vygotsky, 1978). The small-group delivery of the mindfulness intervention capitalized on these concepts, as students who might be unable to understand or master

principles or techniques in the whole-group setting had more opportunities for interaction with and guidance from peers and a teacher. Vygotsky's focus on the importance of language and dialogue in learning (McLeod, 2018) also merged organically with the present action research study, as the Mindful Schools curriculum relies heavily upon verbal explanations of concepts and dialogue between the teacher and the students during lessons. Additionally, outcomes of the intervention were measured in part through dialogue via interviews with students and teachers. While Vygotskian principles provided much of the study's framework from an instructional perspective, guidance regarding the social and emotional needs of students was also be a key component.

Abraham Maslow, Carl Rogers, and Humanism

While Vygotsky's theory provided perspective on the curriculum content and lesson delivery, the work of Abraham Maslow complemented the spirit of mindfulness practice and equipped this study with Maslow's hierarchy of needs, the concept of self-actualization, and the belief that childhood experiences heavily influence one's ability to reach their potential as an adult (McLeod, 2020). Carl Rogers' humanist perspective embraces Maslow's hierarchy while also emphasizing the necessary attributes of an environment that facilitates the growth of an individual (McLeod, 2014).

The works of Maslow and Rogers more explicitly address social and emotional needs of children and blend well with concepts of mindfulness. Maslow believed that behaviorist principles, which dominated psychological theory in the early to mid-20th century, did not satisfactorily explain what it means to be human (Ellis et al., 2009). He also eschewed popular Freudian tendencies of that time that attributed human behavior to innate, and often unconscious drives, as Maslow alternatively saw "humankind as

motivated to satisfy complex social and even spiritual needs” (Ellis et al., 2009, p. 292). He devised categories of these needs to include physiological (e.g., biological needs like food, water, and air), safety (i.e., physical security), love and belongingness (i.e., social approval), esteem (i.e., achievement), and self-actualization (i.e., fulfillment of one’s potential; Maslow, 1943). Maslow’s hierarchy of needs is a motivational theory that encompasses these categories and identifies the needs that must be met for individuals to grow and develop (Maslow, 1943).

Elias et al. (2009) note, however, that Maslow did not consider meeting these needs to be “the driving force of the psyche” (p. 290); rather, meeting needs merely represents prerequisites for moving to higher levels in the hierarchy. Self-actualization is believed by Maslow (and Rogers) to represent the fulfillment of one’s potential, and this ultimate level can only be achieved once the needs in the other areas have been met (Maslow, 1943). Maslow’s work fit the study’s mindfulness intervention that aimed to explicitly address love and belongingness through a small group that emphasized trust, acceptance, affiliation, and esteem. The skills taught intended to create feelings of mastery and control over emotions, with the overarching goal of providing skills that garner personal growth and self-fulfillment.

Carl Rogers was an American psychologist in the mid- to late-20th century who wrote extensively about the humanist perspective in therapy, emphasizing the importance of empathy and his optimistic views on human nature (Ellis et al., 2009). Rogers viewed man as a work in progress and, like Maslow, he espoused the view that humans are engaged in an ongoing process of self-actualization, graduating to more challenging and more fulfilling experiences along the way (Ellis et al., 2009). He also felt that humans are

innately positive creatures who are capable of being emotionally adjusted and happy (Rogers, 1961). Like Maslow, Rogers believed in the process of self-actualization, as he believed, “Intrinsic to the primarily unconscious aspects of experience is an innate capacity to value positively whatever we perceive as actualizing and to value negatively that which we perceive as non-actualizing” (Elias et al., 2009, p. 319). An important distinction between Maslow and Roger’s views of self-actualization, however, is that Rogers believed in *actualizing tendencies*. As explained by Elias et al. (2009):

[Rogers] considered the motive of self-actualizing to be a subset of the actualizing tendency. Self-actualizing for Rogers is the portion of the actualizing tendency of which the person is consciously aware. If the person is not burdened by psychological conflicts, psychological defenses, or distortions of self-perception, self-actualization and the actualizing tendency will tend to be the same. (p. 320)

The mindfulness intervention in the present study aimed to relieve some of the psychological burdens alluded to by Rogers. Furthermore, during the data collection phase of this study, student input provided self-reflective insight regarding their self-sufficiency with the skills taught, mirroring the subjective and consciously aware components of self-actualization.

In addition, Rogers developed criteria necessary for an environment that supports growth, and his insights were used to inform the parameters of the present study’s small-group intervention. Specifically, Rogers theorized that the environment must possess and encourage openness and ease of self-disclosure, unconditional acceptance, and empathy to ensure children feel understood (McLeod, 2014). Rogers (1969) also described the necessary attributes of a teacher, indicating that they must be genuine, caring, and

empathic, in addition to truly valuing the thoughts and feelings of the learner. In short, the learner must be able to trust the teacher (Rogers, 1969).

Multi-Tiered System of Supports (MTSS)

The discussion of the literature surrounding the history and development of MTSS, in addition to its hallmark features and elements, provides important context for this study's problem of practice, including MTSS's roots in equitable education. As the predecessor to MTSS, Response to Intervention (RTI) was a component of the Individuals with Disabilities Education Improvement Act (IDEIA) of 2004 as a way to identify specific learning disabilities in students based on their response (or lack thereof) to tiered academic interventions (Panorama Education, n.d.). While RTI's focus was on academics (mainly reading), Positive Behavioral Interventions and Supports (PBIS) had also emerged as a part of the 1997 reauthorization of the Individuals with Disabilities Education Act (IDEA; Panorama Education, n.d.). PBIS initially aimed to provide interventions for students believed to have behavioral disorders, but it was soon adapted to serve as a vehicle for school-wide, positive behavioral supports and strategies (Panorama Education, n.d.). Believed to have its roots as a medical model of tiered interventions, MTSS encompasses aspects of RTI and PBIS in order to address whole-child needs to prepare students for graduation and beyond (Panorama Education, n.d.).

Each of these initiatives were in some ways built upon the growing awareness that a disproportionate number of minorities, namely Black, Latinx, and Native American, were being identified as having an educational disability and being placed in special education programs (Thorius & Maxcy, 2015). As asserted by Sullivan et al. (2020), "Equity focused MTSS provides a critical mechanism for educational equity." These

authors also highlight the current political and sociocultural climate, opining that these factors make it even more important for schools to meet the whole-child needs of students, especially considering the many mental health challenges faced by the Black community and other students of color (Sullivan et al., 2020).

The MTSS framework is used for both the identification of at-risk students and the provision of targeted interventions to meet student needs, whether academic, behavioral, or social and emotional (Braun et al., 2020). The multiple tiers refer to Tier 1, which generally refers to instructional practices used with all students; Tier 2, which usually refers to small-group instruction to help students who did not make appropriate growth in Tier 1 work on a targeted skill; and Tier 3, which comprises the most intensive supports available at a school (Braun et al., 2020). In the William County (pseudonym) School District, Tier 3 supports are generally provided through special education. In William County, as in most districts, MTSS is an intervention-based framework that was the product of the merger between two previous models, RTI and PBIS, which were both used in schools to match interventions to student needs (*What is MTSS?* 2019).

As academic needs have been the primary concern of RTI and MTSS efforts, schools do not have as many empirically based interventions at their disposal for students with social and emotional and behavioral needs (August et al., 2018). Concerns regarding students' social skills are ever-present in schools, but academic-minded curricula do not explicitly focus on this area, and schools do not yet consistently identify and implement empirically based interventions for social and emotional and behavioral skills (Sugai et al., 2000). Lack of systems to help school personnel identify and treat these deficits make it difficult to take a proactive approach. Schools have the responsibility and the ability to

serve as a vehicle of prevention, capitalizing upon the recent momentum with regards to MTSS legislation and mental health awareness (August et al., 2018).

The goal of MTSS is to provide students with the supports they need in order to find success (August et al., 2018). Freeman et al. (2017) summarize the main components of MTSS:

MTSS frameworks have a number of core features. First, decisions are made based on *data*, including universal screening, continuous progress monitoring, and implementation fidelity. Second, priority is given to evidence-based *practices* that are empirically supported (replicated demonstrations of functional relation, adequate effect sizes), aligned with student need, and contextually relevant. Third, support *systems* are in place to maximize implementation fidelity, for example, team-based coordination and action planning, professional development, and data-driven decision-making. (p. 30)

MTSS programs have correlated with improved achievement, as evidenced by reading and math standardized test scores (Menendez et al., 2008) and better school-wide behavior, as indicated by less office discipline referrals (Sherrod & Ziomek-Daigle, 2009). MTSS frameworks have also been correlated with less exclusionary practices, such as suspensions and expulsions, and reduced instances of resulting poor attendance and high school dropout rates (Childs et al., 2016; Freeman et al., 2016). Even when the number of discipline referrals remains the same or similar, schools implementing MTSS to address behavior and discipline have reduced their use of student suspensions (Gage et al., 2018; Scott et al., 2019).

However, there are many barriers to the successful implementation of MTSS, such as financial constraints, a lack of resources, and a misunderstanding among school staff about what MTSS is and how it works. For example, Braun et al. (2020) surveyed teachers at an urban elementary school and found that many teachers were confused about the process. These authors also learned that these teachers felt their available Tier 2 interventions seemed effective, but there were not enough interventions for students who did not respond to Tier 2 and required additional assistance or skill-building beyond this level (Braun et al., 2020). These limitations, and others like them in schools across the country, may explain why the Every Student Succeeds Act (ESSA) in 2015 recommended the expansion of MTSS in public schools (Every Student Succeeds Act, 2015).

According to the William County School District Strategic Plan, MTSS is a framework that provides a spectrum of extra supports and interventions based on individual student needs. All schools in the William County School District now utilize an adapted MTSS model. This process uses a sophisticated software system that monitors all students in the district and “flags,” or provides alerts, when students are having difficulties in the areas of attendance, behavior, and/or course grades. Most schools assemble their MTSS team, which consists of a facilitator, administrators, teachers, school counselor(s), and a school psychologist, once per week or once every two weeks to review students who flagged. Background information is compiled and other data from teachers are collected with the aim of putting evidence-based interventions in place that match the need of the student. The intervention(s) are then implemented with fidelity, progress-monitoring data are collected, and the student’s progress is reviewed at a

subsequent MTSS meeting, typically four to six weeks later. Thus, the effectiveness of this MTSS framework hinges upon having available evidence-based interventions that match the need area and can be implemented with fidelity.

Social and Emotional Learning (SEL)

As mentioned above, the evolution of MTSS has significant implications for a renewed focus on the whole-child needs of students, especially in the area of mental health and social and emotional functioning. Social and emotional skills allow one to “understand, manage, and express the social and emotional aspects of one’s life in ways that enable the successful management of life tasks” (Elias et al., 1997, p. 2). As defined by the Collaborative for Academic, Social, and Emotional Learning (CASEL), social and emotional learning (SEL) is an active process that emphasizes skill-building in the areas of self-awareness, self-management, social awareness, relationship skills, and responsible decision making.

Research on the benefits of SEL is mounting. A meta-analysis of 213 school-based SEL programs spanning kindergarten through 12th grade conducted by Durlak et al. (2011) found favorable outcomes regarding attitudes about self, others, and school; more appropriate social behaviors; fewer conduct and internalizing problems; and better academic achievement. McClelland et al. (2017) also found that children with higher SEL competencies tend to have higher achievement skills. CASEL provides the following descriptions of the five SEL competencies (CASEL, n.d., “What is the CASEL SEL framework?” section):

Relationship Skills: “The abilities to establish and maintain healthy and supportive relationships and to effectively navigate settings with diverse individuals and groups.”

Responsible Decision-Making: “The abilities to make caring and constructive choices about personal behavior and social interactions across diverse situations.”

Self-Awareness: “The abilities to understand one’s own emotions, thoughts, and values and how they influence behavior across contexts.”

Self-Management: “The abilities to manage one’s emotions, thoughts, and behaviors effectively in different situations and to achieve goals and aspirations.”

Social Awareness: “The abilities to understand the perspectives of and empathize with others, including those from diverse backgrounds, cultures, and contexts.”

SEL has gained momentum on a global scale, as countries around the world are putting these programs into practice (Schonert-Reichl, 2019). A review of recent literature indicates that SEL competencies can be both taught and measured, and they predict success in school and beyond (Schonert-Reichl, 2019). Schonert-Reichl (2019) posits that SEL interventions “should occur in an environment that is safe, caring, supportive, participatory, and well managed... that supports students’ development and provides opportunities for practicing the skills” (p. 226). Domitrovich et al. (2017) further argue that SEL should be implemented in pre-K through 12th grade schools as a public health service, as children spend much of their time in this setting and schools have high prevention potential for at-risk youth. McClelland et al. (2017) also provide guidance regarding implementation of SEL, suggesting that SEL interventions be tailored based on student needs, empirically based, implemented with fidelity, and designed to

provide children with many chances to practice the skills in different settings and with different people.

A report by Dusenbury et al. (2019) found that 14 states have adopted social and emotional standards in their kindergarten through 12th grade schools, with 10 of them basing their standards on the five CASEL competencies outlined above. Moreover, several of them also specifically use culturally responsive curriculum to provide equitable social and emotional skills instruction to their diverse student bodies (Dusenbury et al., 2019). Osher et al. (2016) suggest that factors like race, ethnicity, culture, and socioeconomic status all need to be considered when schools are planning for SEL instruction.

The transformative power of SEL also has great potential. Jagers et al. (2019) posit that transformative SEL can help schools “effectively address issues such as power, privilege, prejudice, discrimination, social justice, empowerment, and self-determination” (p. 163). SEL instruction needs to develop within students the ability to analyze the causes of oppression and inequity and to take action (Jagers et al., 2019). The social and emotional implications of oppressed populations can include internalizing and externalizing distress and behaviors that are harmful to themselves and others (Jagers et al., 2019). It is crucial that SEL efforts recognize the responsibility to develop citizens that critically examine our society and government, and initiate action to further social justice (Jagers et al., 2019). Regarding suggestions for educational applications, Immordino-Yang et al. (2018) provide guidelines for supporting the SEL needs of diverse learners:

1. SEL that includes explicit instruction of social and emotional competencies as well as the infusion of learning and use of such competencies throughout all aspects of schooling enterprise, including educative and restorative discipline approaches;
2. A caring, supportive learning environment that includes relational trust and respect among students and adults (school personnel, caregivers, and community members); a sense of being known, valued, and safe; developmentally appropriate tasks; and culturally responsive learning opportunities;
3. Productive instructional strategies that include collaborative inquiry-based activities that build on a student's prior knowledge and experiences and employ explicit instruction, scaffolding, and application to make the work meaningful and to facilitate conceptual understanding, elaboration, co-construction, and transferable knowledge and skills; and
4. Individualized supports that include multitiered systems of support, extended learning opportunities, and access to integrated services. (p. 172)

As Donahue-Kegan et al. (2019) highlight, many of the hallmarks of classrooms that cultivate SEL are also characteristic of culturally responsive learning environments, such as focusing on student strengths, maintaining high expectations for all students, and modeling strong communication skills, listening skills, and empathy. Further, these authors note that, "Although SEL and CRT (critical race theory) are interconnected, this connection has not been made explicit in the field frequently enough" (Donahue-Kegan et al., 2019).

Educational policy must strive to meet the needs of the whole child, as research highlights the link between SEL, brain development, academic achievement, and physical health (Immordino-Yang et al., 2019). Put simply, “Attending to SEL capacities and the contexts that support them, therefore, supports social and emotional and physical wellness, as well as scholarly achievement and cognition” (Immordino-Yang, 2019, p. 196). SEL also has the potential to create citizens who critically examine our society and government, and take it upon themselves to take action to further social justice (Jagers et al., 2019).

Mindfulness

As defined previously, Kabat-Zinn (1994) describes mindfulness as “paying attention in a particular way: on purpose, and in the present moment, and nonjudgmentally” (p. 4). Mindfulness originated in Eastern religions such as Buddhism, and mindfulness practices are often associated with Buddhist meditation (Shapiro et al., 2006). However, mindfulness has been studied and implemented extensively in the psychology field in recent decades to teach people skills to help regulate emotions and responses to stress (Bishop et al., 2004). Shapiro et al. (2006) explain that mindfulness-based practices go far beyond meditative techniques; rather, mindfulness refers more broadly to the persistent and intentional attending to the human experience, moment-by-moment. Brown et al. (2007) further describe how mindfulness exceeds mere self-control, as it is “not a controlled state of mind that manipulates thoughts... Rather, mindfulness is... simply abiding awareness of what is taking place, whether that be intrusive thought, worry, or whatever else may be occurring each moment” (p. 275). Bishop et al. (2004) propose an operational definition of mindfulness that includes two

primary components: the ability to self-regulate one's attention, which allows presence in the moment, and a nonjudgmental and curious disposition towards all thoughts, sensations, and feelings that arise. Each of these descriptions emphasize how mindfulness garners the intentional yet objective acknowledgement of thoughts, feelings, and other experiences.

Rempel (2012) suggests mindfulness-based practices can be effective in addressing problems like stress, anxiety, depression, and trauma, and positive outcomes have also been specifically associated with the practice of mindfulness in the areas of self-confidence, self-esteem, relationships, attention, and cognitive and academic performance. These findings seem to support the scholastic appropriateness of mindfulness, but there is a need for more research specifically regarding the use of mindfulness in the school setting (Rempel, 2012). The use of mindfulness in schools should not be too much of a stretch, though, as interventions using meditation techniques are already integrated into social and academic instruction in school settings (Black et al., 2009).

There is robust research indicating the effectiveness of mindfulness as an intervention for emotional needs (Ames et al., 2014; Biegel et al., 2009; Cheang et al., 2019; Semple et al., 2005). Specifically, mindfulness-based interventions are useful for reducing stress, anxiety, and depressive symptoms, and improving quality of life in children and adolescents in both clinical and nonclinical settings (Kallapiran et al., 2015). Mindfulness-based interventions have also been related to reduced symptoms of anxiety, depression, and somatic distress, in addition to being linked to improved self-esteem and quality of sleep (Biegel et al., 2009).

Mindfulness-based intervention has shown promise specifically in the school setting. Semple et al. (2005) found mindfulness to be an effective school-based intervention with small groups of seven- and eight-year-old children presenting with symptoms of anxiety (Semple et al., 2005). Moreover, it has been effective as an emotional intervention for elementary-age minority children, significantly reducing depressive symptoms in this specific population (Liehr & Diaz, 2010). Additionally, mindfulness-based cognitive therapy (MBCT) with adolescents has been linked to a decrease in depressive symptoms and an improvement in perceived quality of life, in addition to being described by the adolescents as an enjoyable experience (Ames et al., 2014). Cheang et al. (2019) also found support for the notion that mindfulness-based interventions increase empathy in children and adolescents, in addition to a correlation between self-compassion and mindfulness. After conducting a meta-analysis of studies on the effectiveness of mindfulness interventions with youth, Niemien and Sajaniemi (2016) concluded that mindfulness-based practices appear to represent an effective way to teach children even at a young age how to cope with stress and maintain focus.

Zelazo and Lyons (2011) highlight that research indicates mindfulness training is appropriate for children as young as preschool, and that these exercises develop self-regulation skills. Self-regulation skills are important to teach at an early age, as they can have an impact on early reading and math achievement (Blair & Razza, 2007). These skills can also enhance social and emotional skills like understanding emotions, solving problems in social interactions, and other prosocial behaviors (Bierman et al., 2008). Additionally, Lee et al. (2008) found evidence that not only can mindfulness-based interventions be related to parent-reported decreases in internalizing and externalizing

behaviors in children, they also have the potential to be a feasible and acceptable treatment in the eyes of parents.

Relevant to children's school performance, research has linked mindfulness-based interventions to improved attention skills (Felver et al., 2017; Jha et al., 2007; Napoli et al., 2005), in addition to lower teacher ratings of student test anxiety (Napoli et al., 2005). Budding research by Wheeler et al. (2017) in the neuroscience of mindfulness has shown that mindfulness leads to brain network activation indicative of improved attention, in addition to emotional regulation and psychological well-being. Regarding cognitive abilities, a meta-analysis by Chiesa et al. (2011) suggests that mindfulness could improve aspects of attention, memory, executive functioning, and cognition in adults. School-based mindfulness programs have also been linked to improved cognitive functioning and resilience to stress in children (Zenner et al., 2014).

Mindfulness has the added potential to serve as an effective emotional intervention for oppressed racial and ethnic groups. This is an important implication, as populations that are discriminated against are at an increased risk for lasting physical and psychological effects, including depressive symptoms (Brown-Iannuzzi et al., 2014). Mindfulness has been shown to lessen the effects of discrimination in terms of reported depressive symptoms, thus suggesting mindfulness may serve as a protective factor for individuals who suffer discrimination (Brown-Iannuzzi et al., 2014). Sibinga et al. (2013) found that a school-based mindfulness meditation intervention implemented with urban middle school males was related to improved overall psychological functioning, including reduced anxiety and enhanced coping abilities. Mindfulness-based interventions have also been found to increase self-compassion and decrease perceived

stressed and depression in Latino middle school students (Edwards et al., 2014).

Furthermore, Womack and Sloan (2017) found that mindfulness practice may mitigate race-related stress in African American college students.

The present study's mindfulness intervention was delivered in a small-group format (i.e., three students) with the intention of providing as effectively as possible the many benefits of mindfulness-based practices. Wasik (2008) suggests that small-group instruction of students (defined by the author as five or fewer students) has many advantages for the cognitive and social and emotional development of children, even in comparison to one-on-one instruction. Specifically, it provides students with more attention and opportunities than are possible in large group settings, it allows teachers to observe how well students understand and master skills, and it gives teachers an opportunity to observe how students interact with peers and provide feedback (Wasik, 2008).

Scott et al. (2007) provide further behavior management considerations for my small group to enhance instruction and learning. These guidelines can be applied to the whole-group learning environment, but they also have important implications for small-group instruction. The authors outline positive behavior supports (PBS) that aid in predicting and preventing problem behaviors. Specifically, teachers must first identify behavioral patterns, and then develop rules, routines, and physical arrangements that decrease the likelihood of such challenges. For example, the students must understand the rules and behavioral norms of the group, and there needs to be consistency with routines so they know what to expect, and what is expected of them. Strategic modifications to the

physical setting also keep students safe, reduce distractions, and facilitate supervision and feedback, thus improving the quality of instruction.

Effectiveness of Mindfulness Interventions with Children

Several studies conducted to examine the effectiveness of mindfulness-based interventions with children are summarized to provide differing perspectives and outcomes related to the present problem of practice. These studies were selected due to their similarities with the present study, as they all meet the criteria of measuring the effectiveness of mindfulness-based interventions with children. Some also specifically take place in a school setting. Studies that utilize qualitative data collection and analysis are highlighted, as well, due to similarities in study design.

Schonert-Reichl et al. (2015) investigated the effectiveness of a class-wide SEL program that focused on mindfulness and caring for others. The participants consisted of four classrooms of combined fourth and fifth graders (n=99) who were randomly assigned to receive either the mindfulness intervention or a standard program teaching social responsibility. Relative to the control group, the students who received the SEL program with mindfulness reported more empathy, perspective-taking, emotional control, optimism, school self-concept, and mindfulness. Additionally, they improved more in their cognitive control, showed fewer physical signs of stress, displayed greater decreases in self-reported symptoms of depression, and were rated by peers as more prosocial. A possible limitation of this study is the small sample size. Additionally, while the authors analyzed the differences in the individuals, the students were randomly assigned to their intervention at the classroom level. These factors can limit insights into causal relationships. Nevertheless, these authors had a similar purpose and population as the

current study: investigating the impact of a mindfulness-based SEL intervention with elementary students.

Liehr and Diaz (2010) also used an experimental design to investigate the effectiveness of a mindfulness intervention with children. This intervention was based on the same Mindful Schools curriculum that was used in the present action research study. Using a pre- and post-intervention design, the authors compared the effectiveness of the mindfulness intervention to a health education intervention. The participants were 17 minority children at a summer camp. The children who received the mindfulness intervention reported significantly fewer depressive symptoms over time compared to students who received the health education intervention. A limitation to this study was the small sample size. Additionally, this study took place in a summer camp setting rather than a school setting. Nevertheless, the mindfulness intervention showed promise as an intervention for emotional regulation in children.

Crescenti et al. (2016) investigated the effects of a mindfulness-oriented meditation intervention on the psychological well-being of 16 seven- and eight-year-old primary school students in Italy. The authors compared the mindfulness group to an active control group receiving an emotional awareness program. Pre- and post-intervention measures of behavioral, social, emotional, and attentional skills in the children were reported by their teacher (all students had the same teacher). The children also reported on a measure of mood and depressive symptoms. While the mindfulness-oriented meditation group was not associated with less depressive symptoms, teacher report data indicated less difficulties with inattention and reduced internalizing problems, such as anxiety, in the children who received the mindfulness intervention. Limitations of

this study included the small sample size, in addition to its sole reliance on teacher report of internalizing problems in children. The authors recommended parent input, as well, in future research endeavors, and to compare parent reports and ratings to what is reported by the children and observed by the classroom teacher. This study has implications for the present study, as it explores a school-based mindfulness intervention with seven- and eight-year-olds, examining social and emotional and attention skills. Additionally, insights can be gleaned from this study due to its use of qualitative data in learning about student outcomes and experiences with the intervention.

An experimental study using a randomized clinical trial design by Biegel et al. (2009) examined the effectiveness of a mindfulness-based stress reduction (MBSR) program on 74 adolescents aged 14 to 18 years in an outpatient psychiatric facility. The MBSR was compared to the control condition (described as “treatment as usual”). The study found that the mindfulness-based intervention was related to self-reported reduced symptoms of anxiety, depression, and somatic distress, in addition to being linked to improved self-esteem and quality of sleep. Regarding possible limitations, this study took place in an outpatient clinical setting and consisted of mostly females with pre-existing psychiatric needs. These factors could impact this study’s generalizability. However, the results of this study provide further support for mindfulness-based interventions’ potential for positive social and emotional outcomes with youth who may have a history of psychological distress.

Van Vliet et al. (2017) investigated the effects of MBSR on adolescents with serious mental illness at an inpatient facility. The authors found that the adolescents who completed the program reported better mood, self-concept, self-control, problem-solving,

interpersonal relationships, and awareness of the here-and-now. The participants were 28 adolescents (14 male and 14 female) between the ages of 12 and 17. Most participants met criteria for at least two psychological disorders, including mood, anxiety, attachment, behavioral, and attention deficit or hyperactivity disorders. The MBSR program lasted eight weeks, with one two-hour session each week to include mindfulness instruction, skills practice, and group discussions. Breathing exercises, mindful eating, mindful walking, and body scans were some of the skills taught and practiced during this intervention. The topics and strategies used in this program mirror those employed by the Mindful Schools curriculum in the present action research study. Regarding possible limitations, this study had a small sample size. Additionally, the study took place in a residential setting with participants with significant mental health needs.

While the related research studies discussed to this point have primarily relied upon quantitative data to examine outcomes, McGeechan et al. (2019) conducted a qualitative study about a mindfulness intervention implemented with 38 students and three teachers at four secondary schools in England. Similar to the current study, semi-structured interviews were an important data collection tool to learn more about these students' experiences with a mindfulness intervention. The students in the sample were selected due to behavioral and academic difficulties. The mindfulness intervention spanned 10 weeks, with each session lasting one hour. The following are the titles of the weekly lessons: Introduction Lesson, Attention, Anchoring Attention, Recognizing Worry, Being Here Now, Moving Mindfully, Stepping Back, Befriending the Difficult, Taking in the Good, and Putting It All Together. Semi-structured interviews and focus groups were used to collect qualitative data regarding the intervention and its impact.

Interview data suggested that, while some of the participants felt they had no choice but to participate, they ended up enjoying the mindfulness sessions and reported feeling better equipped to cope with stress after receiving the intervention. Teacher participants also perceived benefits of the program, but they had concerns about how it could be implemented long-term. Potential limitations include the small number (16) of student participants who participated in an interview about the intervention. Additionally, no data was collected regarding long-term effects or benefits of the intervention.

Dariotis et al. (2017) also conducted a qualitative investigation of a school-based mindfulness intervention. These authors chose an intervention that specifically used a mindfulness and yoga program with fifth and sixth grade students in three public schools in low-income urban areas. The purpose of the study was to obtain insights regarding how to successfully implement, adapt, and further develop school-based mindfulness and yoga interventions in similar schools. Twenty-two fifth and sixth grade students were selected by their teachers from the sample of 122 student-participants in the study to participate in six focus groups across the three schools about their experiences with the mindfulness and yoga intervention. Students ranged from age 10 to 13 years, and 72% of the focus group participants were Black. Nine classroom teachers out of a possible 11 also participated in focus groups. The intervention was implemented by an outside agency, and it used mindful yoga practices to enhance emotional and cognitive regulation skills in the students. The sessions were 45 minutes in length and occurred twice a week for 16 weeks, emphasizing present moment awareness, yoga practice, breathing techniques, mindful reflection, and brief discussions of health-related topics like nutrition. Through qualitative data collection in the focus groups, the researchers

identified four emergent themes that need to be considered in planning and implementing similar interventions: intervention delivery to ensure student participation and engagement, communication with teachers and administrators about the program and its logistics, promoting buy-in from all stakeholders, and instructor qualities that promote rapport and behavior management with the students. These implications and lessons learned are informative for the present action research study's design.

As noted above, research has linked mindfulness-based interventions to improved attentional skills in children. Felver et al. (2017) conducted a randomized clinical trial to investigate the effects of a mindfulness intervention for children and parents on the children's attention skills. Forty-one parent-child pairs were randomly assigned to either the mindfulness group or a control group. The mindfulness program is called Mindful Family Stress Reduction (MFSR), and it consisted of one 90-minute session each week for eight weeks. These sessions consisted of instruction on mindfulness concepts and strategies, and opportunities for the participants to practice these skills together. At times, children and parents were separated into different groups for activities that were more child-friendly (i.e., shorter breathing or listening activities). All participants were also instructed to practice mindfulness on their own at home for 15 to 20 minutes each day, and to document how much time they spent practicing. Results of the study indicate that children who received the mindfulness intervention exhibited improved attentional self-regulation skills compared to the children in the control group. Regarding limitations, the authors point out that this intervention was delivered in a group format rather than individual, and that nesting effects could have had a significant impact on observed results. Additionally, the participants were exposed to the researchers weekly for eight

weeks, so they might have been more motivated to perform well on the post-tests. Motivation and effort of participants could especially impact performance on tasks of attention. Nevertheless, the purpose, methodology, and findings of this study have implications for the present action research study, as the mindfulness-based intervention used a similar curriculum and these authors investigated impacts of the intervention on the children's attentional self-regulation skills. This variable coincides with the SEL competencies targeted in the present study.

Finally, Cheang et al. (2019) conducted a meta-analysis of 16 published studies in order to investigate the effectiveness of mindfulness-based interventions in fostering empathy and compassion in children and adolescents aged five to 18 years old. This meta-analysis relates to the present study as there exists much overlap between empathy and compassion and the SEL competencies targeted in the present study. To be eligible for the meta-analysis, the studies had to measure either empathy or compassion in children and have a mindfulness intervention component. The authors found support for the notion that mindfulness-based interventions increase empathy in children and adolescents, in addition to a correlation between self-compassion and mindfulness. Possible limitations of this meta-analysis include the small sample size and poor methodologies in many of the selected studies.

The studies discussed in this chapter investigate the effectiveness of mindfulness-based interventions for children and adolescents, specifically measuring various areas of psychological well-being and social and emotional skills. While small differences exist between these studies and the present action research project, such as different age groups, settings, and specific intervention types, these studies demonstrate the undeniable

promise and scholastic appropriateness of mindfulness. Additionally, while these studies vary in design, important insights can be gleaned from many of them due to their use of qualitative data in learning about student outcomes and experiences with mindfulness-based interventions.

Summary

The mental health needs of students have been brought to the collective awareness now more than ever before. It is imperative that schools optimize their MTSS frameworks that purport to identify student needs and provide evidence-based interventions, whether the concerns are academic or social and emotional. Vygotsky's sociocultural theory of learning, coupled with humanistic principles, provides a theoretical framework for the current investigation of an SEL intervention. The mindfulness instruction is built upon social interaction and dialogue in learning, and an emphasis on the empathy required by teachers to help meet the needs of diverse learners and allow them to reach their potential. Research and policy surrounding SEL has proliferated in recent years, providing a promising opportunity for school-based prevention. These programs have also been shown to prime students for success both inside and outside of school.

Much research has targeted mindfulness interventions in recent years, and early indicators regarding the utility of these programs with diverse populations in the schools are promising. The small-group delivery of mindfulness interventions provides customized SEL support for the many students who struggle to reap the benefits of the universal programs and lessons. The following chapter will present the methodology and

research design of this study, with descriptions of the setting, participant sample, data collection, and data analysis methods

Chapter Three: Research Design

Overview of Study

As a school psychologist at a rural elementary school, my job responsibilities, in addition to my own personal and professional interests, have placed me on the front lines of my school's search for feasible, effective, and engaging SEL interventions. While my school district as a whole has sanctioned several initiatives to identify and implement SEL instruction and intervention, I have commenced my own grassroots attempts at attending to a critical yet oft-neglected aspect of our students' education. With the support of my supervisor and the school principal, and with the collaboration from my school counselors and participating teachers, whole-group mindfulness instruction had been implemented in select classrooms at one of my elementary schools for several years with generally positive feedback. However, much like academic instruction, a one-size-fits-all approach for SEL is not sufficient. Therefore, my problem of practice concerned students at my elementary school, Davis Elementary School (DES), who were identified by their teacher as having weaknesses in the areas of self-control, emotional regulation, and sustained attention, and who had difficulty accessing the benefits of whole-group mindfulness instruction. Small-group delivery of social and emotional skills instruction in this study allowed differentiation of instruction, in addition to a safe space with more opportunities for students to practice, ask questions, and share experiences.

The theoretical framework for this action research study was based upon the work of Lev Vygotsky, Abraham Maslow, and Carl Rogers. The rationale for my small-group delivery of the Mindful Schools curriculum, in addition to the curriculum itself, reflected Vygotsky's sociocultural theory. The work of Maslow complements the spirit of mindfulness practice and equipped this study with Maslow's hierarchy of needs, the concept of self-actualization, and the belief that childhood experiences heavily influence children's abilities to reach their potential as adults (McLeod, 2020). Rogers' humanist perspective embraces Maslow's hierarchy and emphasizes the necessary attributes of an environment that facilitates the growth of an individual (McLeod, 2014).

Several major areas of research support the need and provide the rationale for this study. First, it is important to understand the multi-tiered system of supports (MTSS) framework recently adopted by my school district. This framework purports to provide additional supports and interventions to students based on individual needs. Through MTSS, a significant area of need is consistently being identified: social and emotional learning (SEL).

SEL is defined as, "The process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions" (CASEL, n.d., "What is the CASEL SEL framework?" section). Two specific SEL competencies were explored more extensively in this study: self-awareness and self-management. Self-awareness refers to one's "abilities to understand one's own emotions, thoughts, and values and how they influence behavior across contexts" (CASEL, n.d.,

“What is the CASEL SEL framework?” section). Self-management refers to one’s “abilities to manage one’s emotions, thoughts, and behaviors effectively in different situations and to achieve goals and aspirations” (CASEL, n.d., “What is the CASEL SEL framework?” section). Mindfulness-based practices represent a promising avenue for supporting the social and emotional needs of students and building social and emotional skills (Mindful Schools, 2019). Issues in the literature related to small-group instructional delivery for elementary students were also explored and shaped the implementation of the small-group instruction for three students.

Research Design

I conducted action research through a mixed methods case study design as I investigated the following research question: What are the benefits of a small-group mindfulness intervention for students identified by their teacher as having weaknesses in the areas of self-control, emotional regulation, and sustained attention? This mixed methods design used qualitative data to explore student experiences and feelings. Additionally, both qualitative and quantitative data provided impressions from the teacher into the effectiveness of this SEL intervention based on her observations of the students in the classroom. This design was a case study, as it was a descriptive study of the effects of an intervention on a bounded system of three students (Merriam & Tisdell, 2016). Further, Yin (2014) defines a case study as “an empirical inquiry that investigates a contemporary phenomenon (the ‘case’) in-depth and within its real-world context” (p. 16). Yin (2014) also argues that proper attention to the rigor and methodology of case studies makes this research design a high-quality way to explore problems in the social sciences, but case studies can also be used for descriptive, explanatory, and generalizing

purposes. Merriam and Tisdell (2016) add that qualitative case studies reflect the tenets of basic qualitative research, as they utilize the researcher as a human data collection instrument to gather and analyze descriptive data. Additional context was provided by analysis of patterns and themes from my journal entries. While qualitative data provided a rich description of the experiences of this study, a mixed methods approach allowed a more objective data source to evaluate the intervention's effectiveness (Herr & Anderson, 2015). Case studies commonly employ a mixed methods design (Merriam & Tisdell, 2016).

According to the criteria described by Dana (2015), my study was an appropriate fit for action research, as this project allowed me to collect data as a part of my current job, easily meshed the roles of researcher and practitioner, and used my investigation to provide "more equitable learning conditions for all" (p. 167). Efron and Ravid (2013) provide a more comprehensive definition of action research in education, explaining it as a practitioner's investigation in their own classroom or school setting that aims to develop an aspect of their professional practice while also improving student outcomes. The mixed methods design facilitated qualitative data collection conducive to the exploration and reflection of my own practice, while a combination of qualitative and quantitative data sources informed intervention effects on student outcomes.

This mixed methods action research contrasts with traditional research, which serves the primary purpose of adding to a field's knowledge base (Herr & Anderson, 2015). Efron and Ravid (2013) also explain that action research findings are more directly applicable to the researcher's specific setting and population, but traditional research yields results that are more transferable across settings. While I hope to share

my experiences and findings with my other schools and colleagues in my school district, my study focused on and is most directly applicable to my school and its students. Additionally, while outside experts conduct traditional research studies, allowing them to maintain objectivity, action researchers like me are more involved and personally and professionally invested in the study (Efron & Ravid, 2013). Moreover, while traditional quantitative research aims to widen a knowledge base with numerical data that can be generalized across settings, the qualitative researcher provides a depth of understanding and insights into the experiences of specific samples and contexts (Merriam & Tisdell, 2016). Further, one of the greatest strengths of action research, as outlined by Herr and Anderson (2015), appears to be its inherent reflectiveness, encouraging educators to actively investigate their own practices, share their findings and collaborate with colleagues, and resist falling into the malaise of operating under the status quo.

This study met each of the criteria outlined above. An emphasis was also placed on the experiences of the student-participants. The depth and breadth of these goals could not have been met through traditional research methodology, nor a purely quantitative or wholly qualitative design. A mixed methods, action research case study design enabled me to obtain answers to my research questions by allowing me to “highlight different aspects of the same question” and to “assume an objective or subject stance, or attitude, depending on the question under investigation” (Efron & Ravid, 2013, p. 46).

The specific intervention used in this study was developed by the nonprofit organization Mindful Schools and is called the “K-12 Mindful Schools Curriculum” (Mindful Schools, 2019). This curriculum is an empirically supported program that integrates mindfulness practice in the classroom environment (Mindful Schools, 2019).

This widely used program has been shown to improve students' capacity to pay attention and participate in class activities, attributes related to self-awareness and self-management (Smith et. al, 2012). Research has also supported its effectiveness as an emotional intervention for elementary-age minority children, significantly reducing depressive symptoms (Liehr & Diaz, 2010). This program had been used at DES for several years by me and the school counselors to teach mindfulness concepts and practices to whole classes with hopes of reducing stress and improving students' focus and emotional regulation. The curriculum consists of 16 lessons and 14 "extras," or other scripted enrichment activities that can also be used as lessons (Mindful Schools, 2019). Lesson titles include "Body Awareness," "Thoughts," and "Mindful Test Taking," to name a few (Mindful Schools, 2019). Activities may consist of the instructor modeling and practicing with the students mindful breathing, mindful listening, or other techniques, in addition to allowing students to practice on their own and share about their experiences. Each lesson lasts approximately 15-20 minutes when implemented in a whole-class setting.

For the purposes of this action research study, two lessons were combined in each 30-minute session and administered to a small group of three students one time per week for eight weeks. The lessons took place between their lunchtime and recess to ensure they did not miss any academic instruction. Finding a consistent room where we could hold our sessions was a challenge, as limited availability at the school caused us to use four different rooms across the eight sessions. The sessions began with a mindful "sit," where students got into their "mindful bodies" (i.e., sitting still, eyes closed, and hands in their lap) and either focused on their breath or listened to a chime. The goal of this activity was

to increase the amount of time the students could maintain mindful bodies and focus on their breath or the sounds. I would then ask the students about their experiences using mindfulness techniques or concepts the past week and let them share and reflect. After a quick review of the previous week's lesson, I would then introduce that day's lessons and activities, which varied week-to-week, but generally included a combination of guided sits, visualization of scenarios, skills practice, and discussion. We would close sessions by allowing one of the three students to sound the chime, asking the other two students to get into their mindful bodies, listen to the chime, and take mindful breaths. I would then give them fist bumps and words of encouragement as I dismissed them back to their classroom.

Participants

I served as the school psychologist at DES for nine years. DES is a rural school where, according to their most recent School Renewal Plan developed before the 2017-18 school year, the student body of 780 students consisted of 76% white, 13% African American, 7% Hispanic, and 5% other. The plan also outlined that the socioeconomic status of these students varied, but 37% of students qualified for free or reduced-price lunch. There was generally little staff turnover at DES and it was situated in a large and well-resourced school district in the southern United States with Christianity as the predominant religion. My school district, and DES in particular, has invested substantial time and money in recent years exploring more SEL supports for its students. This momentum merged with my established relationship with the staff and families of DES, the proven staff and administrator buy-in, and my personal interest and professional training in mindfulness practice in order to spark needed change through action research.

The primary participants in my study were three white male, second grade students at DES identified by their teacher as having weaknesses in the areas of self-control, emotional regulation, and sustained attention that warrant Tier 2 mindfulness instruction. These second grade students represented a typical case sample, as they were purposely selected as being typical of the group being studied (Efron & Ravid, 2013). The selected students' teacher also represented a complementary participant, as she provided additional insights in helping answer the research question (Efron & Ravid, 2013). More specifically, the teacher was associated with the students and was best suited to provide information about the intervention's impact in the classroom. Finally, I was an active participant in this study, as well, with my journals providing valuable observations and reflections.

Data Collection Methods

Characteristic of a mixed methods design, the data for this study was collected from qualitative and quantitative sources. There are many advantages of using different types of data, one of which is the enhanced validity of a study when the researcher can triangulate data from varied sources and multiple perspectives (Herr & Anderson, 2015). Multiple data sources were used with the participants in this study: I, as the researcher and implementer of the intervention, completed reflective journals; the students participated in semi-structured interviews; and the students' classroom teacher completed surveys and participated in a follow-up semi-structured interview. The data sources aligned with the theoretical framework of this study, as they each focused on personal growth throughout the intervention and relied largely upon language and dialogue to co-construct a narrative of the collective experience.

Researcher's Reflective Journals

Data collection first consisted of the reflective journals that I wrote after each of the eight intervention sessions to help answer the research question. Based on guidance from Efron and Ravid (2013), I used unstructured entries that recorded anything that seemed important at the time, and emergent themes were coded (Merriam & Tisdell, 2016). I also used audit trails in my entries to augment reliability by justifying my thought processes that guided any adjustments to my intervention delivery and data collection (Merriam & Tisdell, 2016). Additionally, these journal entries were utilized as they are “helpful in documenting your behaviors and the behaviors of others in the setting that you investigate and in increasing your insight into daily classroom interactions” (Efron & Ravid, 2013, p. 125). Journals also provided qualitative data to guide and adapt the investigation throughout the process (Efron & Ravid, 2013). Journal entries varied in length from one to two handwritten pages, separated into two columns on each page: “descriptive field notes” and “reflective field notes.” Structured or semi-structured observations of students during the sessions would have had many benefits, but it would have proved difficult if not impossible to implement the lessons and observe reliably.

Semi-Structured Student Interviews

Student interviews were conducted twice: once at the midpoint of the intervention phase (i.e., after four sessions) and then again after the entire intervention period (i.e., after all eight sessions) to gather self-report data from the students regarding their experiences with the mindfulness intervention. These interviews were conducted individually with students as part of their time with me, which occurred in the afternoons between lunch and recess. Semi-structured interview protocols were used, as they

provided pre-prepared, open-ended questions while also allowing participants to “co-construct the narrative and raise and pursue issues that are related to the study but were not included when the interview questions were planned” (Efron & Ravid, 2013, p. 98). Additionally, according to Efron and Ravid (2013), interviews encourage and enable interviewees to speak more openly about the study, adding depth to the conversation.

Data collected from the first student interviews at the intervention phase midpoint were used to make adjustments to the intervention based on student feedback. To investigate data relevant to the research question, emergent themes from the interviews were also coded (Merriam & Tisdell, 2016)

Teacher Surveys and Follow-Up Interviews

In order to incite information from the teacher associated with the students about her impressions of possible effects of the intervention, including any changes in students’ displays of SEL competencies like self-awareness and self-management, demeanor, engagement, or academic performance in the classroom, pre- and post-intervention teacher surveys using Likert-scale questions were administered. As Efron and Ravid (2013) posit, surveys are a quick and efficient way to evaluate programs’ effectiveness. The teacher survey gathered data particularly pertaining to the SEL competencies of self-awareness and self-management, but it also included questions regarding other teacher observations of the student-participants, such as change in demeanor, impact on relationships with peers, and overall academic engagement and/or performance. Finally, based on teacher responses on the post-intervention survey, I created and conducted a semi-structured interview to follow-up with the teacher one week after the intervention concluded to inquire about patterns or trends that either aligned with other data collected

or seemed at odds with my perceptions or those of the student-participants. This member checking also helped ensure the internal validity of my study (Merriam & Tisdell, 2016).

Data Analysis Methods

The goal of data analysis in action research is to convert the information collected into trustworthy and reliable findings (Efron & Ravid, 2013). I analyzed data collected from all of the sources (i.e., my journal entries, semi-structured interviews with student-participants, surveys from teachers, and semi-structured interview with teachers) and coded emergent themes. For my journal entries, I reflected upon my unstructured entries after each session, allowing me to tweak my study question or mindfulness instruction along the way. Journals also provided qualitative data and quotations to add more context to other data sources. Regarding data yielded from semi-structured student and teacher interviews, I analyzed this information qualitatively to help build meaning and begin to see patterns (Efron & Ravid, 2013). Specifically, to investigate data relevant to the research question, emergent themes from the interviews were coded (Merriam & Tisdell, 2016). I used axial coding by grouping pieces of data (such as comments, notes, observations, etc.) into emerging constructs (Corbin & Strauss, 2015).

For the pre- and post-intervention teacher surveys, I quantitatively analyzed this data by tallying teacher responses on Likert scale (*strongly agree*, *agree*, *disagree*, and *strongly disagree*) pre- and post-test surveys regarding each student-participant. The surveys' questions specifically targeted student-participants' displays of self-awareness and self-management in the classroom, but the survey also included questions regarding other teacher observations of the student-participants, such as change in demeanor, impact on relationships with peers, and overall academic engagement and/or

performance. I then used cross-tabulation tables to record, tally, and display teacher responses as raw scores, facilitating the comparison of the pre- and post-survey results and the identification of trends (Efron & Ravid, 2013). I created surveys that were long and detailed enough to incite the data needed without causing an undue burden of time on the teacher.

Considerations for Validity and Reliability

With the knowledge generated through action research often disparaged for being “practice driven rather than theory driven” (Herr & Anderson, 2015), ensuring and defending the quality of action research dissertations is paramount. I believe my study inherently had strong process validity, or “to what extent problems are framed and solved in a manner that permits ongoing learning of the individual or system” (Herr & Anderson, 2015, p. 68). My study was designed to examine another possible way to provide SEL instruction for students with deficits in the areas of self-control, emotional regulation, and sustained attention who did not respond to the one-size-fits-all whole-group mindfulness. This aspiration fit with my school district’s current focus on identifying and implementing SEL supports. Self-reflective journals also helped me to remain aware of my own subjectivity (Efron & Ravid, 2013).

In working with my student-participants, I developed appropriate interview questions and read questions aloud to students to ensure understanding. While focus group interviews have benefits, such as making children more comfortable and more likely to speak up than in an individual format (Efron & Ravid, 2013), I chose individual interviews due to the rapport I had established with each of the students and my desire to conduct in-depth interviews with each student that could best be done in a one-on-one

format. However, I had one concern regarding the delivery of my mindfulness intervention with my chosen population. I selected students identified by their teacher who had weaknesses regarding self-control, emotional regulation, and sustained attention and, therefore, struggled to benefit from mindfulness in the whole-group setting; therefore, I worried about behavior management in my sessions. Careful student selection, attending to group dynamics, and agreeing on group norms and parameters with students in the first session were all helpful measures. A small group size of three also helped with behavior management, while still maintaining the benefits of small-group instruction.

With my teacher-participant, I carefully designed an appropriate rating scale and interview questions. Additionally, teacher input augmented the validity or trustworthiness of my study, as I used data collected from the teacher to triangulate student reports and my own reflections. This member checking strategy helped ensure my study's trustworthiness (Merriam & Tisdell, 2016), which refers to how credible the researcher's interpretation of the findings seem to those who provided it (Herr & Anderson, 2015). Teacher data also indicated how the students were transferring their learned skills to other environments. Regarding recruitment of teachers for the study, it was difficult to be selective with the teacher chosen for the study, as student selection took precedence. However, due to my established rapport with many of the teachers at DES, I was able to secure willing and enthusiastic participation from the teacher of the three students I selected. This teacher was a suitable reporter regarding the students, and she was eager for them to receive additional support. This teacher also integrated mindfulness practices in her classroom as part of her core instruction.

Merriam and Tisdell (2016) define reliability as, “Whether the results are consistent with the data collected... a researcher wishes outsiders to concur that, given the data collected, the results make sense- they are consistent and dependable” (p. 251). As Creswell and Miller (2000) explain, many aspects of ensuring both validity and reliability are built in to the action research process, such as triangulation, prolonged observations in the field, rich and thick description, and external audit, and each of these strategies were used in my study. I also used audit trails, as these detailed notes illustrated my thought processes throughout the study and provided explanations for why certain conclusions were drawn (Merriam & Tisdell, 2016). Finally, I actively sought alternative explanations for the data to further ensure that I drew defensible conclusions.

Chapter Four: Data Analysis

For several years, whole-group mindfulness instruction was implemented to augment social and emotional learning (SEL) in select classrooms at one of my elementary schools with generally positive feedback. However, much like academic instruction, a one-size-fits-all approach for SEL was not sufficient. Therefore, my problem of practice concerned students at my elementary school, Davis Elementary School (DES), identified by their teacher as having weaknesses in the areas of self-control, emotional regulation, and sustained attention who had difficulty accessing the benefits of whole-group mindfulness instruction. Small-group delivery of social and emotional skills instruction allowed differentiation of instruction, in addition to a safe space with more opportunities for these students to practice, ask questions, and share experiences.

The theoretical framework for this action research study was based upon Lev Vygotsky's sociocultural theory; Abraham Maslow's hierarchy of needs, concept of self-actualization, and belief that childhood experiences heavily influence their abilities to reach their potential as adults (McLeod, 2020); and Carl Rogers' humanist perspective, including the belief that children are innately good (McLeod, 2014), which greatly influenced my interactions with the participants and my perception of the data collected. It is also important to understand the multi-tiered system of supports (MTSS) framework recently adopted by my school district, which provides individualized supports for

students. Through MTSS, a significant area of need is consistently being identified: social and emotional learning (SEL). Two specific SEL competencies that were explored more extensively in the context of small-group, mindfulness practices in this study were self-awareness and self-management. Self-awareness refers to one's "abilities to understand one's own emotions, thoughts, and values and how they influence behavior across contexts" (CASEL, n.d., "What is the CASEL SEL framework?" section). Self-management refers to one's "abilities to manage one's emotions, thoughts, and behaviors effectively in different situations and to achieve goals and aspirations" (CASEL, n.d., "What is the CASEL SEL framework?" section).

Intervention

The "K-12 Mindful Schools Curriculum" is an empirically supported program that integrates mindfulness practice in the classroom environment (Mindful Schools, 2019). This program had been used at DES for several years to teach whole-group mindfulness lessons to reduce stress and improve students' focus and emotional regulation. DES was a mid-sized elementary school in a rural part of a well-resourced school district. Seventy-six percent of students were white, and 37% received free and reduced price lunch. For the purposes of this action research study, two 15-20 minute lessons were combined in each 30-minute session and administered to the small group of three white male, second-grade students once a week for eight weeks. These students were selected as a purposive sample, as they had received Tier 1 SEL and mindfulness instruction, but they were still identified by their teacher as requiring additional, Tier 2 support in the areas of self-control, emotional regulation, and sustained attention.

Table 4.1

Schedule of Mindfulness Lessons

Session	Topic(s)
Week One	Introduction Mindful bodies Mindful of sound Mindful breathing
Week Two	Heartfulness More mindful bodies practice
Week Three	Body awareness Mindful breathing
Week Four	Generosity More mindful breathing practice More mindful listening practice
Week Five	Mindful seeing Kindness on the playground
Week Six	Emotions Motion
Week Seven	Mindful of every activity Listening challenge
Week Eight	Mindful eating Ending review

General Findings and Analysis

“You picked us because we always play in class,” asserted Chip.

“My parents said I’m doing this because I can’t focus,” added Leo.

Bobby refrained from commenting but bounded excitedly up the stairs to the second floor after I had retrieved him and his two peers from their classroom for the first time.

I heard comments such as these as I walked with my three new second-grade acquaintances to the large room upstairs where we would practice mindfulness together for our inaugural session. Three stools sitting side-by-side at the front of the well-lit room

awaited the trio as they entered, and the banter bordering on giddy continued as they took their places several feet in front of my chair, fidgeting and arguing over who got to sit where. As a school psychologist accustomed to interacting with active and, at times unruly, elementary students in a generally one-on-one setting, I admit I also felt some of the nervous energy that was likely fueling my seven-year-old friends that afternoon. Noticing in myself the physical sensations that often accompany uncertainty and anticipation, I spoke aloud to myself as much as to my students when I began our first session together, introducing the chime with instructions soft and simple, “Let your eyes close, and breathe.”

Over the eight weekly sessions, a similar scene would transpire on Monday afternoons sandwiched between the students’ lunchtime and recess. The enthusiasm of Bobby, Chip, and Leo rarely waned as the sessions progressed, but I was certainly kept on my toes by these young students who on several occasions self-reported difficulty sitting still and maintaining focus. While all three met my criteria for sample selection designed to hand-pick second grade students who might benefit from more intensive mindfulness practice, over the coming weeks I would learn just how different these students were in terms of personality, self-regulation, academics, home life, and even future goals. I also could not help but learn about myself as I did my best to understand, encourage, and teach them.

Bobby

In addition to using pseudonyms, several details about all three students’ demographics and background were changed slightly in order to protect confidentiality.

Student's Background and Demographics

Bobby was an excitable, white seven-year-old male who lived at home with his mother, a middle school teacher, his father, a firefighter, and his younger brother. Outside of school, he enjoyed playing sports like soccer. His teacher described him as “bright,” but she qualified that he had stronger skills and independence in math compared to subjects and tasks requiring reading. However, his overall academic skills were described as grade-appropriate. Bobby self-reported that reading was sometimes “hard,” as he did not always know all of the words he was asked to read. Bobby did not have a significant disciplinary history, but his teacher noted that “he loses self-control” and displayed “meltdowns” when frustrated with an academic task.

Quantitative Results of Teacher Pre-Intervention Survey

On the pre-intervention survey, Bobby’s teacher identified several areas of strength. Namely, she expressed strong agreement with the statement, *the student is happy*, and she rated that she agreed with the following: *the student has a positive attitude overall at school, the student generally has good attendance, the student gets along well with his peers, the student is an active participant in class, the student typically demonstrates mastery of course material, the student makes mostly A’s and B’s, the student is confident, the student is motivated, and the student willingly works to accomplish goals.*

However, Bobby’s teacher also endorsed several areas of weakness pre-intervention. Specifically, she endorsed agreement with the following statements: *the student acts without thinking, the student has difficulty sitting still, and the student requires instant gratification (i.e., immediate acknowledgement of their actions or successes).* Additionally, she rated that she disagreed with the following statements: *the*

student effectively manages stress and the student consistently completes his school work to the best of his ability. Finally, Bobby's teacher responded "neutral" to each of the following statements: *the student effectively calms himself (i.e., breathing) when he is upset or anxious, the student has a hard time maintaining focus, the student is a self-starter, the student seems to understand how his emotions influence his behavior, and the student can identify his own strengths and weaknesses.* Overall, these pre-intervention ratings suggest that Bobby presented as an academically capable student who was engaged and happy at school, but the teacher indicated he struggled most with impulsivity, hyperactivity, work completion that reflected his potential, effective stress management, and a need for instant gratification.

Qualitative Data from Journals in Chronological Order

I recorded detailed descriptive and reflective journal entries immediately after each of the eight mindfulness sessions. My entries focused on observed behaviors and verbalizations of each individual student, but they also provided space for me to reflect on my own lesson delivery to help me make modifications to the environment and the nature of the activities as we progressed through the eight sessions.

As observed on the day of our inaugural mindfulness session, Bobby sometimes spoke out of turn, but he was generally the least likely to blurt out during our lessons. As the sessions progressed, he also seemed to stay focused during mindful sits, practice strategies in between sessions, and try the various mindfulness activities, such as the body scan and sending kind thoughts to others. During the first session, I observed that Bobby appeared to sustain attention during the mindful breathing and listening activities. He also seemed to enjoy the stillness of the minute-long sit, afterwards using the word "calm" to describe how he felt. He was the only participant that used the word "calm" to

describe his feeling. During the mindful listening activity, Bobby was able to volunteer several new sounds that he noticed, both inside and outside the room. However, despite my modeling, Bobby, like the other two participants, was unable to provide a sound that he heard within his own body, such as his heartbeat. Overall, Bobby engaged in the mindfulness activities, but he was observed to blurt out off-topic comments often, along with his two peers, prompting me to set the expectation that they raise their hands to speak. At the end of the session, Bobby smiled when I gave fist bumps to him and the other two participants before walking them back to their classroom.

Over the next three sessions, Bobby seemed excited to join me for the sessions, and he eagerly engaged in the opening “sits” that began each mindfulness session. During these sits, the participants were asked to get into their mindful bodies, close their eyes, and focus on their breath for a minute. This interval would then increase as they showed they could maintain their efforts for the entire time allotted. For the second session, due to limited space availability at the school, we had to use a smaller room containing chairs for the participants that were much closer together. Although this new environment seemed to cause more off-task behaviors from all of the participants (such as whispering and touching), Bobby showed less blurting out behaviors compared to the first session, appropriately shared that he had practiced mindful breathing that week when he was angry, demonstrated that he remembered how to get into a mindful body, and smiled when he shared that he sent kind thoughts to his dog. He also shared that, after sending kind thoughts, he noticed feeling “calmer” and “happier.” Bobby displayed some off-task and silly behaviors with his peers (such as laughing, making noises, and making off-topic comments), but his behaviors were less frequent compared to his peers.

During the third and fourth sessions, Bobby was described in my entries as “excited,” “focused,” and “motivated.” All three participants seemed intent on focusing on their breath for the initial sit in the third session, lasting close to 90 seconds with the aid of some scaffolding via verbal guidance from me (i.e., “Continue to focus on your breath,” “You may feel your breath in your belly or in your chest,” “If your attention wanders, simply notice that and bring your focus back to your breath”) throughout the sit. Bobby displayed some inconsistency during the 90 seconds, at times seeming to focus on his breath, but then giggling or making a noise. When I asked the group if they have trouble maintaining focus on their breath during sits, however, Bobby said he did not. He also spontaneously reported during this session, “I’m always moving.” This statement suggested a level of self-awareness, but possibly a weakness regarding self-management. The third session also included the body scan activity, which was a more physical lesson where they were asked to notice different feelings and sensations from the bottoms of their feet up to the tops of their heads. Bobby reported that he felt most feeling in his feet, but when I asked him to describe that feeling and gave examples for scaffolding (i.e., warm, cold, heavy, tired), he said, “Nothing.” While he displayed an awareness of the feeling in his feet, he was not yet able to use words to describe a specific sensation. Bobby also giggled when he was guided to put his hands at his eyelashes and notice how that felt. To finish the body scan, I attempted to establish relevance of the lesson to their lives, asking if they had trouble sleeping at night. Bobby affirmed that he did, so I encouraged him to practice the body scan at night when he could not sleep.

The fourth session consisted of a lesson about generosity that required a lot of verbal explanations from me and much visualization from the participants. Bobby was his

most focused during this session, but his peers had much difficulty remaining in their mindful bodies and following along quietly. Despite the off-task and disruptive behaviors displayed by his peers that almost required me to shorten the lesson and dismiss them early, Bobby remained engaged. During this session, he provided an example of a time that week that he used mindful breathing to calm himself when he was experiencing stress at school, followed instructions to maintain his mindful body during the visualization activity, and appeared motivated to try throughout the session. I thanked Bobby for his good effort at the end of the session. As a side note, my Rogerian background helped me to maintain the perspective and patience needed to continue this lesson where two of my students had difficulty self-regulating.

The fifth session marked the beginning of the second half of our time together, and I decided to allow for more flexible seating and more physical activity when possible due to all of the students' need to move and talk. All three students were again described in my notes as "excited" and "bouncy" in this session. Bobby reported that he did not practice or try any mindful strategies during the previous week. However, he was also observed to maintain attention and stay in his same seat throughout the entire session, and I noted he "has improved with focus over sessions and still listens best." A talking stick was introduced to help manage all of the students' desire to share their thoughts and off-task stories. All three students seemed to enjoy this strategy, even though they needed frequent reminders that they had to have the stick in order to talk. More visualization was required for this lesson, as I walked the students through a playground scenario and asked them to describe how they would feel. Bobby (and his peers) used words like "angry" and "good" that were appropriate to the context, but all three students also shared off-topic

stories. When I asked them how they could have used mindfulness in the stories they told, it was hard to tell if they understood the application. Bobby was chosen to close out the session by hitting the chime.

The sixth session began poorly, as the students talked loudly and excitedly as we entered the same large room from the first session, had difficulty settling down, and all reported they had not practiced any mindfulness strategies that week. I specifically noted, “Bobby seemed silly and unfocused today.” Drawing from Rogerian principles, I needed to adapt the session to help my students do their best with this lesson. For the initial sit, I chose to have them listen for the chime rather than focus on their breath, as they seemed to enjoy and have more success with the listening. However, I felt the need to have them listen to the chime three times in an attempt to get them in the right mindset to begin the day’s activities. I was able to adapt that day’s lesson about emotions to a more physically active one, where I allowed the students to stand up and act out various emotions that I would assign them for their peers to guess. Bobby effectively acted out what “angry” looks like, and he was also engaged when it was his turn to guess. However, Bobby was not able to answer questions like, “Where do you feel anger in your body?” This question aimed to make them notice physical sensations associated with emotions, such as increased heart rate for anger. Overall, Bobby seemed to benefit from the adaptations made to this lesson.

The seventh session required another room change due to limited availability of space, prompting a move to the sensory room. This small room contained no chairs or desks; rather, it had one bench with a table, and various tools to be used when students needed a sensory break. There was a small trampoline, an exercise ball, a sensory tent, a

soft mat, and buckets of other materials for sensory activities. All three students were understandably ecstatic to be allowed in this room that they did not know existed in their school. Therefore, I set a timer for five minutes and allowed them to explore the novel room before we began our mindfulness lesson. It was (unsurprisingly) difficult to then transition to mindfulness, but as a review all three students were able to tell me examples of ways we can use mindfulness. Bobby again was able to provide a specific example of when he had used mindfulness that week, when his father made him angry so he took a mindful breath to calm down. However, Bobby made noises and laughed during the listening activity when they were supposed to quietly notice new sounds. At the end of this session, none of the students wanted to leave, even though their class was about to go to recess. However, their desire was attributed to the novel, fun room rather than the mindfulness activities.

The eighth and final session again required the use of the sensory room due to limited space availability. However, the students were eager to go back to the sensory room, as they (unprompted) greeted me when I went to retrieve them from their classroom with a serious tone and promised they would listen and follow instructions if they were again allowed to visit that room. I felt that this indicated they were aware that their behavior the previous week did not meet expectations. We walked to the sensory room and began with a sit. Each of the students got into their mindful bodies and focused on their breath for over a minute, prompting me to note in my journal entry that it was their “best yet,” a welcome accolade for the last session. Bobby knocked his feet against the bench during the sit, but he did not seem aware of this behavior as he kept his eyes closed and seemed focused on his breath.

This final meeting was highlighted by a lesson on mindful eating. I told the students to close their eyes because I had brought them a special snack. They each complied and then were excited to see the fruit snacks. While Bobby seemed somewhat restless, he followed directions and showed self-control to wait until I prompted him to open the packet and try a fruit snack, and he described what he noticed about the appearance, texture, and taste of the fruit snacks. He joined his peers in expressing disappointment that this was the last session, but he was able to tell me a new way that he could use mindfulness in the future: when he is reading. He also spontaneously shared that his birthday was the next week, and he told me about his plans for his party.

Student Semi-Structured Interview at Midpoint

During the semi-structured interview conducted with Bobby at the midpoint of the intervention phase, he reported that he liked coming to school because “we get lunch and recess.” He also indicated that he enjoyed related arts, especially P.E. However, he reported that school work was “hard,” particularly in reading when he did not know all the words. Regarding behavior at school, he reported that he was “good” overall, but he also indicated that he got in trouble sometimes “because of Leo and Chip. They make me laugh and I get in trouble.” When asked what he had learned about mindfulness to that point, Bobby reported, “That it keeps you calm when you’re mad.” He added that mindfulness allows him to “hear everything because when you’re not loud you can hear stuff around you.” He indicated that he feels “good” about mindfulness and that it makes him “happy” and “calm.” Bobby was unable to name anything he disliked about it.

Quantitative Results of Teacher Post-Intervention Survey

Findings from the post-intervention survey indicated that Bobby showed improvement in ratings on each of the teacher’s concern items from the pre-intervention

survey (i.e., his tendency to act without thinking, have difficulty sitting still, not completing schoolwork to the best of his ability, need instant gratification, and not effectively managing stress). Teacher ratings suggested that Bobby improved most on the item, *the student consistently completes his schoolwork to the best of his ability*. Survey results also showed improvement as rated by his teacher on each of the items pertaining to the SEL competencies of self-awareness and self-management. See Table 4.2 for specific items and responses.

Qualitative Results of Semi-Structured Teacher Interview

After the intervention phase, Bobby's teacher reported in a semi-structured interview that in the classroom he "sometimes does it (mindfulness strategies) himself, but he will always do it when prompted." However, his teacher reported that, overall, Bobby's "meltdowns" had reduced in frequency by about 50 percent from pre- to post-intervention. She indicated that these meltdowns consisted of crying and shutting down when "academic perseverance" was required. His teacher added that even when he just needed to re-read directions or correct a simple mistake, Bobby would become upset and cry. She also indicated that Bobby generally liked to be the leader in a group, but he was oddly susceptible to being influenced negatively by certain peers. She added that he knew which classmates got him in trouble, but "he just can't stay away." This observation was consistent with observations during the sessions and in the first semi-structured student interview suggesting he possessed a certain level of self-awareness, but he had difficulty controlling his behavior.

Table 4.2*Results of Pre- and Post-Intervention Teacher Ratings for Bobby*

Survey Item	Pre- Intervention Rating	Post- Intervention Rating	Δ
Mindfulness-Related			
1. The student effectively uses strategies to calm themselves (i.e., breathing) when he is upset or anxious.	3	4	+1
2. The student acts without thinking.	4	3	+1*
3. The student has difficulty sitting still.	4	3	+1*
4. The student has a hard time maintaining focus.	3	3	0*
Demeanor/Engagement			
5. The student has a positive attitude overall at school.	4	4	0
6. The student generally has good attendance.	4	5	+1
7. The student is happy.	5	5	0
8. The student gets along well with their peers.	4	4	0
9. The student is an active participant in class.	4	5	+1
10. The student is a self-starter.	3	4	+1
Academic Performance			
11. The student consistently completes his/her schoolwork to the best of his/her ability.	2	4	+2
12. The student typically demonstrates mastery of course material.	4	5	+1
13. The student makes mostly As and Bs.	4	5	+1
Self-Awareness			
14. The student seems to understand how their emotions influence his/her behavior.	3	4	+1
15. The student can identify their own strengths and weaknesses.	3	4	+1
16. The student is confident.	4	5	+1
Self-Management			
17. The student is motivated.	4	5	+1
18. The student requires instant gratification (i.e., immediate acknowledgement of their actions or successes).	4	3	+1*
19. The student effectively manages stress.	2	3	+1
20. The student willingly works to accomplish goals.	4	5	+1

Note: Teacher ratings were made based on a 5-item Likert scale where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

*Lower ratings indicate improvement on items 2, 3, 4, and 18.

Qualitative Results of Final Semi-Structured Student Interview

In the final semi-structured interview with Bobby, similar to the previous interview, he expressed that he liked mindfulness, and that it made him feel happy and calm. He also added descriptors like “comfortable” and “situated,” indicating possible increased self-awareness of how these strategies made him feel. Consistent with teacher reports of his “meltdowns” when experiencing academic frustration, in both interviews with Bobby he shared times when he had used mindfulness, and both instances were due to having a lot of school work to do and feeling overwhelmed. He shared in the final interview that he recently had “started freaking out” in that situation, so he “took a mindful breath.” This breath helped him reset: “I then thought I could just do one thing at a time, and I did.” This example of Bobby’s application of the mindfulness principles and strategies suggested growth in the area of self-management, as he was able to calm himself and complete his school work to the best of his ability.

Quantitative Results of Teacher Pre-Intervention Survey

On the pre-intervention survey, Chip’s teacher identified two areas of strength, as she agreed with the following statements: *the student is confident* and *the student is an active participant in class*. Chip’s teacher identified many areas of concern, however. Specifically, she endorsed strong agreement with the following statements: *the student acts without thinking*, *the student has difficulty sitting still*, and *the student has a hard time maintaining focus*. She also agreed that *Chip requires instant gratification (i.e., immediate acknowledgment of actions his actions and successes)*. His teacher disagreed with the following statements: *the student effectively uses strategies to calm himself (i.e., breathing) when he is upset or anxious*, *the student has a positive attitude overall at*

school, the student gets along well with his peers, the student consistently completes his school work to the best of his ability, the student makes mostly A's and B's, the student seems to understand how his emotions influence his behavior, the student effectively manages stress, and the student willingly works to accomplish goals.

Qualitative Data from Journal in Chronological Order

Chip excitedly joined me and his peers on the day of the first mindfulness session, spontaneously expressing, “You picked us because we always play in class.” While this statement suggested a level of self-awareness about his behavior and that of his peers, Chip would seemingly lack self-awareness in a lot of ways over the course of our sessions and interviews. On the initial mindful sit, Chip displayed the most off-task and silly behaviors, such as making noises, laughing, and fidgeting on his stool, but he did also try to focus on his breath at times during the minute-long sit and appeared to experience calm immediately after. However, after the sit, when asked about the experience he reported, “My head hurts. I need to bring headache medicine next time.” Chip also raised his hand and blurted out off-topic stories and comments, and he spontaneously shared a comment about “my mom’s boyfriend.” I had to ask all three students to raise their hands before speaking due to Chip’s frequent blurting out. None of them consistently followed this rule, however.

On the day of the second session, Chip came excitedly to the new, smaller room and expressed that he preferred the current chairs over last week’s stools. Chip reported that he had practiced mindful listening during class last week, but he did not provide many details. He presented as impulsive and attention-seeking, but he seemed very excited to see me. During the initial sit, he was talkative and fidgety, and he made noises.

The students were not able to complete the full minute-long sit. He also needed several reminders to stay in his mindful body while the other two students did not. Chip followed directions for the heartfulness activity where they were asked to send kind thoughts to a loved one. He reported that he sent kind thoughts to Leo, and he got silly when explaining why. He also made fun of Leo for sending thoughts to his mother, saying, “You kiss her?” and, “I kiss my mom on the cheek.” Before we closed out with another mindful sit, I told them that the student who focused best on their breath would get to hit the chime to close out our session. All three students expressed excitement at this potential reward, but Chip’s behavior during the subsequent sit did not reflect this interest, as he immediately began making noises.

The third session was an interesting one for Chip, as it highlighted how much he influenced his two peers. Chip initially argued with them over which seat he would take in the small room with chairs close together, and then again complained that closing his eyes made his head hurt (he added that he gets migraines, but it was unclear if this was true). Chip also shared that he had used mindfulness that week at home; his sister was annoying him so he went outside and took mindful breaths to calm down. However, before we began the body scan activity, Chip closed his eyes and sat very still and quiet in his chair for most of the session. He did not seem upset; rather he was oddly subdued. His influence on the others was highlighted by how well they were able to focus and participate when Chip was quiet and focused. It was also noted that this activity was more physical than the past lessons, which may have been more preferred for them. Chip was asked to close out the session with the chime, and he smiled and seemed to enjoy this privilege that he had earned.

During the fourth session, Chip displayed more off-task and disruptive behaviors, and I nearly had to end the session early. At one point, Chip even asked if he could go back to class, but by the end of the session he said he did not want to return to class. Chip shared at the beginning that he had used mindfulness that week when he had been “frustrated,” but during the initial sit he made noises and tried to get his peers to laugh. Chip and Leo especially talked and did not follow directions consistently during this session. Chip was able to tell about a time when he had acted generously, but he told a long and detailed story and seemed to enjoy the attention he was getting from his peers. Chip also shared with me that their teacher had asked what they do in the mindfulness sessions, and he told her “mindful bodies and breathing.” At the end, Chip asked who would get to close out the session with the chime. This question indicated to me that he liked the idea of being chosen, but he may not be aware of how poorly he followed directions and behaved. This question may have also been his way of seeking acceptance or positive attention from an adult.

I began the fifth session by asking the students about their spring break. Chip shared that he spent the whole week with his father helping him build a hog pen. He indicated that he did not practice any mindfulness over the break. Chip engaged in a lot of attention-seeking behaviors, like making noises and jokes. However, he also spontaneously shared that his grandfather had passed away recently, and he expressed this in a serious tone that was very uncharacteristic of him. Chip also told off-topic stories about being bullied and how his father told him he needed to fight back. I tried to talk all three students through ways mindfulness could be used in those situations to help them make good decisions, but Chip did not seem to understand the application. At the end of

the session, Chip pointed out that Bobby got to close out with the chime again. I brought all of their attention to why Bobby was chosen. It seemed that Chip had the awareness that his behavior was not meeting expectations, but he did not have the self-control to make better choices.

All of the students again excitedly joined me for the sixth session, which was adapted to allow for more movement since each of the students had such a high energy level. I told them I had activities planned where they would not have to sit still, and they all expressed excitement. I also allowed them to do a preferred listening activity rather than a breathing activity to start off the session. All three of the students seemed to try their best on the three rounds of listening for sounds. Chip was very engaged in the activity where the students were given an emotion and had to act it out. He also spontaneously mentioned his father during the session, and he asked if he could show me his loose tooth. I chose Chip to close us out with the chime, and I asked him to stay back after the session as an attempt at building rapport. He calmly told me about his weekend, and he seemed more subdued without his audience of peers.

The seventh session posed the challenges of the many distractions in the small sensory room, but after getting them to transition to the mindfulness activities, I was able to again adapt the lessons to allow for more movement. Chip shared that he had used mindfulness that week when his sister made him mad, prompting him to take a mindful breath. He asked if he could get water from the fountain, and I used this as an opportunity for him to practice mindfulness. I asked Chip what he noticed, and he said, "Feel it down in your stomach." Chip was able to tell ways that we have learned we can use mindfulness, but like his peers, he was unable to share new ways he may be able to use it.

Chip was generally very fidgety and impulsive during this session, prompting me to ask if they needed to go back to class early. However, at the end of the session, they all actually wanted to stay longer. This was likely due to the fun they had in the novel sensory room, though.

The eighth and final session again saw all three students very excited to join me, but they asked with a serious tone if we could use the sensory room again if they “listened” and were “good.” Consistent with my Rogerian perspective, the students wanted to do “good.” After agreeing on what the expectations were, I shook hands with all three students and we proceeded to the sensory room. Chip was generally quiet and still as he focused on his breathing for over a minute during the initial sit. He also followed instructions during the mindful eating activity, showing self-control to not open his fruit snacks or eat any until he was instructed. Chip was able to provide descriptors of how the snacks looked, felt, and tasted, but he was unable to tell how eating the food made him feel. He also displayed some silliness and off-task behaviors after this activity. All three students were disappointed when I reminded them this would be our last formal session together. Anecdotally, the principal shared with me that afternoon that she had overheard Chip spontaneously saying something kind to a female peer while in the hallway.

Student Semi-Structured Interview at Midway Point

During the semi-structured interview conducted with Chip at the midpoint of the intervention phase, Chip preferred to stand rather than sit in the chair at my desk. He also drew on my notepad while he answered questions. He reported that he liked coming to school because, “It’s fun... I’m the smartest kid in class.” When asked if school was

hard, he said, “Easy! Sometimes hard. Like social studies when we have to write 76 thousand million things.” He added that math is easiest for him. Regarding behavior, Chip said, “Bad and good. Sometimes I get mad and I scream.” I followed up to see if he could tell me more about what behaviors get him in trouble, but he was unable to provide any other examples except “screaming.” Regarding mindfulness, Chip said he felt “good” about it, and that it had taught him, “To be mindful of people and nicer to other people.” However, he also again reported that closing his eyes gave him a headache. When asked what specific things he liked about mindfulness, he said, “Sitting by my friends, making jokes.” I probed, but he was unable to provide any other examples of things he liked. However, Chip also reported that mindfulness made him feel “calm,” and he added that he used it “everyday,” usually because his sisters made him mad and he needed to take a breath. When he returned to class from mindfulness sessions, he reported that he felt several emotions: “happy, calm, sometimes mad.” I followed up about “mad,” and he said, “I’m mad all the time.” At the end of the interview, Chip also spontaneously mentioned his father, sharing that he missed him because he only saw him on weekends. His father gave him things to remember him during the weeks when he did not get to visit with him. He also told me about his grandfather who went to the hospital for pneumonia and died “like seven weeks ago.” He seemed sad as he shared this, but he quickly changed the subject, asking what was in the closet in my office. He then burped loudly and laughed.

Table 4.3*Results of Pre- and Post-Intervention Teacher Ratings for Chip*

Survey Item	Pre- Intervention Rating	Post- Intervention Rating	Δ
Mindfulness-Related			
1. The student effectively uses strategies to calm themselves (i.e., breathing) when he is upset or anxious.	2	2	0
2. The student acts without thinking.	5	5	0*
3. The student has difficulty sitting still.	5	4	+1*
4. The student has a hard time maintaining focus	5	4	+1*
Demeanor/Engagement			
5. The student has a positive attitude overall at school.	2	3	+1
6. The student generally has good attendance.	3	5	+2
7. The student is happy.	3	4	+1
8. The student gets along well with their peers.	2	2	0
9. The student is an active participant in class.	4	4	0
10. The student is a self-starter.	3	4	+1
Academic Performance			
11. The student consistently completes his/her schoolwork to the best of his/her ability.	2	3	+1
12. The student typically demonstrates mastery of course material.	3	3	0
13. The student makes mostly As and Bs.	2	3	+1
Self-Awareness			
14. The student seems to understand how their emotions influence his/her behavior.	2	2	0
15. The student can identify their own strengths and weaknesses.	3	3	0
16. The student is confident.	4	5	+1
Self-Management			
17. The student is motivated.	3	2	-1
18. The student requires instant gratification (i.e., immediate acknowledgement of their actions or successes).	4	4	0*
19. The student effectively manages stress.	2	2	0
20. The student willingly works to accomplish goals.	2	4	+2

Note: Teacher ratings were made based on a 5-item Likert scale where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

*Lower ratings indicate improvement on items 2, 3, 4, and 18.

Quantitative Results of Teacher Post-Intervention Survey

Findings from the post-intervention teacher survey indicated that Chip improved on 50 percent of the items, remained the same on 45 percent, and worsened on 5 percent or one item (*the student is motivated* was rated with *disagree* after initially being rated pre-intervention as *neutral*). Teacher ratings indicated most improvement on the following items: *the student willingly works to accomplish goals* (from *disagree* to *agree*) and *the student generally has good attendance* (from *neutral* to *strongly agree*). Chip also improved on the following items: *the student has difficulty sitting still*, *the student has a hard time focusing*, *the student has a positive attitude overall at school*, *the student is happy*, *the student is a self-starter*, *the student is confident*, and *the student completes his school work to the best of his ability*. It was noted that he improved on one item under self-management (*the student willingly works to accomplish goals*) and one item under self-awareness (*the student is confident*).

Qualitative Results of Semi-Structured Teacher Interview

After the intervention phase, in a semi-structured interview Chip's teacher reported that he was "hit or miss with everything." He was the least likely of the three students to independently use his mindfulness strategies in class, but he liked sharing his knowledge about mindfulness. He noticed his teacher had a chime in her classroom, and he asked if he could hit the chime when the class needed to reset after a transition. His teacher also shared that when she asked Chip to share some of his mindfulness strategies he had learned with a classmate who was struggling with self-control, he eagerly did so. She also indicated that, in general, Chip did not seem to get much attention at home, so he was always trying to get attention at school. He did not appear to care if it was positive

or negative attention. Sometimes the teacher asked him to sit in the hallway right outside the door during instruction because he listened much better when he did not feel he had an audience around him. She noticed that he willingly sat in the hallway, and she let him decide when he was ready to re-enter the classroom. She indicated that he seemed to be aware that he focused and listened better from outside the door, sometimes shouting answers to teacher's questions from the hallway.

When asked about the impact of the mindfulness intervention on Chip and his behavior, his teacher said, "Negligible." However, contrary to this response, she also reported that his outbursts in the classroom had decreased, even though these behaviors during related arts classes had remained the same. Her evaluation of the intervention's effects also conflict with her pre- and post-intervention survey responses which suggested Chip showed at least some improvement on half of the items administered. Nevertheless, the teacher reiterated that most days managing Chip's behavior in the classroom was a "battle." It was noted that the teacher's responses to interview questions could have been impacted by the kind of day or week Chip was having at the time.

Qualitative Results of Final Semi-Structured Student Interview

In the final semi-structured interview with Chip, he again stood at my desk as he reported that he liked "everything" about school, and that in general school work was "easy." When asked about his behavior, he said, "Pretty good. Good sometimes. Today I was good," but he then quickly changed the subject to say, "I'm really good at baseball." Regarding mindfulness, he reported that it made him feel "good," and that he learned about, "Sitting still, hitting a chime, and kinda crazy stuff." He reported that he disliked the fart noises that his peers would make in sessions, even though he was usually the perpetrator of these disruptive behaviors. Chip further reported that he found it easy to sit

still for a long time, which is at odds with observational data and teacher report. When asked if he used mindfulness outside of the lessons, he again shared an example of his sisters making him mad, and him using mindful breathing to calm down.

Leo

Student's Background and Demographics

Leo was an energetic and intelligent, white second-grade male described by his teacher as being the highest academically achieving among the group of three students. Leo also lived on a farm with his mother, father, and younger sibling. His father was in the military and when he would get deployed, Leo prided himself on helping his mother with tasks around the farm. Leo also enjoyed playing sports like football. His teacher further described him as “all boy,” meaning he had stereotypical interests for his age and gender, and that he was “all over the place” in terms of distractibility and hyperactivity. She also reported that, of the three students sampled, he most effectively monitored his behavior and self-regulated at school, but he consistently allowed Chip to get him in trouble. Despite having common leadership qualities, Leo did not generally try to be the leader when he was in a group of peers, according to his teacher.

Quantitative Results of Teacher Pre-Intervention Survey

On the pre-intervention survey, Leo's teacher identified many areas of strength. Namely, she endorsed items suggesting strong agreement with the following statements: *the student generally has good attendance, the student is happy, the student gets along well with his peers, and the student is an active participant in class.* She also rated that she agreed with the following: *the student has a positive attitude overall at school, the student is a self-starter, the student typically demonstrates mastery of course material,*

the student makes mostly A's and B's, the student is confident, and the student willingly works to accomplish goals.

Regarding weaknesses, Leo's teacher endorsed relatively few areas pre-intervention. However, she rated that she strongly agreed that he has difficulty sitting still. She also rated that she agreed with the following statements: *the student acts without thinking, the student has a hard time maintaining focus, and the student requires instant gratification (i.e., immediate acknowledgement of their actions or successes)*. Finally, Leo's teacher responded "neutral" to each of the following statements: *the student effectively calms himself (i.e., breathing) when he is upset or anxious, the student consistently completes his school work to the best of his ability, the student seems to understand how his emotions influence his behavior, the student can identify his own strengths and weaknesses, the student is motivated, and the student effectively manages stress*. Overall, these pre-intervention ratings suggest that Leo presented as an academically capable student who is engaged and happy at school, but the teacher indicated he struggled most with impulsivity, sustained attention, and a need for instant gratification.

Qualitative Journal Data in Chronological Order

On the day of our inaugural mindfulness session, Leo immediately said to me, "My parents said I'm doing this because I can't focus." I asked him if that was true, and he confirmed he struggled with sustained attention in the classroom. Off-topic comments and blurting out were common from all three students during the first session, but Leo tried to stay focused on his breathing for the entire minute-long sit at the beginning of the session. He was then able to say the breathing made him feel "quiet, still." Leo added,

however, that closing his eyes made his head hurt. Bobby interjected, “You just don’t want to do it (anymore).” Leo responded with, “Yes, I do! My head just hurts sometimes when I close my eyes.” Chip made a similar comment that closing his eyes made his head hurt, so it is possible that the two students’ responses influenced each other. During the mindful listening activity, however, Leo was able to volunteer several sounds that he could hear that he had not noticed before, both inside and outside the room. Despite my modeling, Leo, like the other two participants, was unable to provide a sound that he heard within his own body, such as his heartbeat. Overall, Leo engaged in the mindfulness activities, but he was observed to blurt out off-topic comments often, along with his two peers, prompting me to set the expectation that they raise their hands to speak. At the end of the session, Leo made a disappointed face when I asked them to practice mindfulness before the next time we meet, as if I had given him a homework assignment. However, he smiled when I gave fist bumps to him and the other two participants before walking them back to their classroom.

For the second session, the environment (i.e., a smaller room containing chairs for the participants that were much closer together) seemed to contribute to more off-task behaviors from all of the participants (such as whispering and touching). However, Leo appeared excited to return for the second lesson, and he seemed motivated to try the sits and the activity where they were asked to send kind thoughts to a loved one. Leo shared that sending kind thoughts to his mother made him feel “happier” and “calmer.” Despite some off-task and silly behaviors with his peers (such as laughing, making noises, and making off-topic comments) during the mindful sits, Leo seemed to try hard overall and he was chosen to close out the session by hitting the chime.

During the third session, all three participants seemed intent on focusing on their breath for the initial sit, lasting close to 90 seconds with the aid of some verbal guidance from me (i.e., “Continue to focus on your breath,” “You may feel your breath in your belly or in your chest,” “If your attention wanders, notice that and bring your focus back to your breath”) throughout the sit. From my journal entry: “Leo (was) again most engaged in sits. Said he didn’t practice last week so I encouraged him to try.” I also noted that, while Leo visibly had difficulty sitting still, and he admitted this tendency, he seemed to have self-control during sits so far. This might have been an indication of strong self-management skills.

The third session also included the body scan activity. Leo reported that he felt most feeling in his “arms” and “all over the place,” but when I asked him to describe that feeling and gave examples for scaffolding (i.e., warm, cold, heavy, tired), he said, “Nothing.” While he displayed an awareness of the feeling in his arms, he was not yet able to use words to describe a specific sensation. To finish the body scan, I attempted to establish relevance of the lesson to their lives, asking if they had trouble sleeping at night. Leo affirmed that he did, so I encouraged him to practice the body scan at night when he had trouble falling asleep.

The fourth session consisted of a lesson about generosity that required a lot of verbal explanations from me and much visualization from the participants. All three students seemed excited to join me for the session. However, once in the room, Leo and Chip had much difficulty remaining in their mindful bodies and following along quietly, and I almost had to end the session prematurely. The perspective and patience of my Rogerian roots helped me to continue the lesson. During this session, Leo seemed to have

particular difficulty focusing. However, he provided an example of a time that week that he used mindful breathing when he was frustrated. He and Chip also made spontaneous comments suggesting they think and talk about mindfulness in between sessions.

For the fifth session, where I decided to allow for more flexible seating and more physical activity when possible, all three students were again described in my notes as “excited” and “bouncy.” A talking stick was introduced to help manage all of the students’ desire to share their thoughts and off-task stories. All of the students seemed to enjoy this strategy, even though they needed frequent reminders that they had to have the stick in order to talk. More visualization was required for this lesson, as I talked the students through a playground scenario and asked them to describe how they would feel. Leo (and his peers) used words like “angry” and “good” that were appropriate to the context, but all three students also shared off-topic stories. When I asked them how they could have used mindfulness in the stories they told, it was hard to tell if they understood the application.

The sixth session began poorly, as the students talked loudly and excitedly as we entered the room, had difficulty settling down, and all reported they had not tried any mindfulness strategies that week. Leo sheepishly reported, “I forgot.” He also complained that his peers were touching him or sitting too close in this setting. Drawing from Rogerian principles, I needed to adapt the session to help my students do their best with this lesson. For the initial sit, I chose to have them listen for the chime rather than focus on their breath, as they seemed to enjoy and have more success with the listening. However, I had to have them listen to the chime three times in an attempt to get them in the right mindset to begin the day’s activities. I was able to adapt that day’s lesson about

emotions to a more physically active one, where I allowed the students to stand up and act out various emotions that I would assign them for their peers to guess. Leo effectively made an angry face, but he was not able to answer questions like, “Where do you feel anger in your body?” This question aimed to help them notice physical sensations associated with emotions, such as increased heart rate for anger. Overall, Leo, like his peers, seemed to benefit from the adaptations made to this lesson.

The seventh session required another room change due to limited availability of space, prompting a move to the small sensory room with various tools to be used when students needed a sensory break. I set a timer for five minutes and allowed them to explore the novel room before we began our mindfulness lesson. It was difficult to then transition to mindfulness, but as a review all three students were able to tell me examples of ways we can use mindfulness. When Chip and Leo asked to get water from the fountain, I asked how what they noticed about how the water felt. Leo reported, “It feels good on my mouth,” and he added, “It’s cold.” Leo again reported that he did not practice mindfulness that week, and he appeared somewhat ashamed as he made this confession. In general, Leo seemed to have good insights in sessions, but he did not report consistent practice in between sessions. At the end of this session, none of the students wanted to leave, even though their class was about to go to recess. However, their desire to stay was attributed to the novel, fun room rather than the mindfulness activities. It was also noted that, during one of the sits of this session, Leo complained, “It’s hard to be mindful when there’s so many noises!” Both of his peers were making noises when they were supposed to be focusing on their breath. I tried to bring each of the students’ attention to this observation by Leo.

The eighth and final session again required the use of the sensory room due to limited space availability. However, the students were eager to go back to the sensory room, as they (unprompted) greeted me when I went to retrieve them from their classroom with a serious tone and promised they would listen and follow instructions if they were again allowed to visit that room. I felt that this indicated they were aware that their behavior the previous session did not meet expectations. We walked to the sensory room and began with a sit. Each of the students got into their mindful bodies and focused on their breath for over a minute, prompting me to note in my journal entry that it was their “best yet,” a welcome accolade for the last session. After this sit, Leo was observed to police the other two, reminding them that they were not allowed to sit on the exercise balls.

This final session was highlighted by a lesson on mindful eating. I told the students to close their eyes because I had brought them a special snack. They each complied and then were excited to see the fruit snacks. Leo and his peers followed directions and showed self-control to wait until I prompted him to open the packet and try a fruit snack, and he described what he noticed about the appearance, texture, and taste of the fruit snacks. He joined his peers in expressing disappointment that this was the last session, but he was able to tell me new ways that he could use mindfulness in the future: eating and brushing his teeth. He also spontaneously shared during this session that his father “left last night.” I asked him if we could talk about that after the session, at which time he told me that his father was being deployed overseas for 10 months. He seemed proud to share this fact, however, and he reported that he gets to FaceTime with him regularly.

Table 4.4*Results of Pre- and Post-Intervention Teacher Ratings for Leo*

Survey Item	Pre- Intervention Rating	Post- Intervention Rating	Δ
Mindfulness-Related			
1. The student effectively uses strategies to calm themselves (i.e., breathing) when he is upset or anxious.	3	4	+1
2. The student acts without thinking.	4	3	+1*
3. The student has difficulty sitting still.	5	4	+1*
4. The student has a hard time maintaining focus.	4	3	+1*
Demeanor/Engagement			
5. The student has a positive attitude overall at school.	4	5	+1
6. The student generally has good attendance.	5	5	0
7. The student is happy.	5	5	0
8. The student gets along well with their peers.	5	5	0
9. The student is an active participant in class.	5	5	0
10. The student is a self-starter.	4	5	+1
Academic Performance			
11. The student consistently completes his/her schoolwork to the best of his/her ability.	3	4	+1
12. The student typically demonstrates mastery of course material.	4	5	+1
13. The student makes mostly As and Bs.	4	5	+1
Self-Awareness			
14. The student seems to understand how their emotions influence his/her behavior.	3	4	+1
15. The student can identify their own strengths and weaknesses.	3	4	+1
16. The student is confident.	4	4	0
Self-Management			
17. The student is motivated.	3	4	+1
18. The student requires instant gratification (i.e., immediate acknowledgement of their actions or successes).	4	3	+1*
19. The student effectively manages stress.	3	4	+1
20. The student willingly works to accomplish goals.	4	5	+1

Note: Teacher ratings were made based on a 5-item Likert scale where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

*Lower ratings indicate improvement on items 2, 3, 4, and 18.

Student Semi-Structured Interview at Midway Point

At the midway point, during a semi-structured interview, Leo reported that he found school to generally be “fun, but sometimes real boring when it’s raining because we have to do indoor recess.” He described his school work’s level of difficulty as being, “medium,” adding that he found math and social studies easier than reading. When asked about his behavior at school, Leo said, “Sometimes good, sometimes bad. It just depends on the day.” I asked what “good” behavior looked like, and he said, “Sitting in my chair quietly.” He said “bad” behavior consisted of “playing around, talking to Bobby and Chip.” Regarding mindfulness, Leo indicated that it made him feel “good,” and that he learned, “you can do deep breaths and mindful bodies.” These mindful practices made him feel “happy” and “calm.” When asked about an experience using mindfulness outside of the lessons, he reported: “A little bit. When I got frustrated, I was laughing at Chip because he was saying funny things during class. I sat down and took deep breaths.”

Quantitative Results of Teacher Post-Intervention Survey

Findings from the post-intervention teacher survey indicated that, while Leo’s teacher had identified relatively few areas of weakness on the pre-test survey, his teacher reported improvement on 75 percent of the items. Furthermore, he either improved or maintained the same rating in each area. More specifically, his teacher’s post-intervention ratings indicated that he improved on four out of four items measuring self-management skills, two out of three items measuring self-awareness, and three out of three measuring academic performance.

Qualitative Results of Final Teacher Semi-Structured Interviews

Data collected from the post-intervention, semi-structured interview with Leo’s teacher was consistent with the post-intervention teacher ratings. Leo’s teacher reported

that he was the most likely to use mindfulness strategies independently, and that he improved in his ability to control his behavior and work independently. She added, “Leo does the best job of reflecting on his behavior and self-regulating. Even if he is not explicitly told, he will check in with the teacher at the end of the day (about his behavior).” Leo continued to make poor choices around Chip in the classroom, but he improved overall in his ability to monitor and control his behaviors.

Qualitative Results of Final Semi-Structured Student Interview

In the post-intervention interview with Leo, he preferred to stand at the desk and draw a picture of an army tank throughout the interview. He indicated that he thought school was “good,” but he disliked “getting in trouble and boring stuff like reading for 30 minutes.” Leo also reported that school work was “sometimes easy if I know it, but it gets tricky if I don’t.” Regarding his behavior at school, Leo indicated it was good overall, but he qualified that it is “sometimes a little off.” When asked what “off” meant, he responded, “Not doing the right thing and not listening.” Regarding mindfulness, Leo reported, “I like how you can use deep breaths and listen to noises around you.” He added that mindfulness made him feel “calm, sensitive, and happy,” and that after the sessions he felt calmer when he went back to class. When asked about his use of mindfulness outside the sessions, he reported, “Maybe about four months ago, before my dad left. In class, when it was noisy and people were shouting I sat quietly, closed my eyes, and took deep breaths.” His difficulty providing a recent example was consistent with his tendency during sessions to admit that he had not practiced mindfulness during the week. However, his teacher reported that he was most likely of the three students to use mindfulness independently in class as needed.

Overall Group Trends

During data collection and analysis, several themes were identified across cases and with regards to the instructional delivery and environment of the mindfulness intervention.

Self-Awareness

As detailed in the case analyses, each of the three student-participants began with different strengths and weaknesses. However, data from teacher ratings, teacher interviews, student interviews, and my observations suggested each of the students improved in the area of self-awareness. Self-awareness refers to one's "abilities to understand one's own emotions, thoughts, and values and how they influence behavior across contexts" (CASEL, n.d., "What is the CASEL SEL framework?" section). Teacher ratings suggested that Bobby and Leo improved on multiple items measuring self-awareness, and Chip improved on one out of three items (*the student is confident*). Data from teacher and student interviews also suggested that Bobby and Leo seem to have improved in their self-awareness, as they were able to provide insights regarding their academic and behavioral strengths and weaknesses at school. Chip was able to answer questions about academic subjects that are difficult for him, but he also made unfounded claims that he was the "smartest" student in his class. Behaviorally, Chip was unable to provide any reasons except "for screaming" as to why he got in trouble at school. Their teacher reported that Bobby and Leo were aware that Chip got them in trouble, but they continued to have difficulty with self-control around him. In the sessions, all three students were able to demonstrate awareness of things they noticed in their environment, but they also often lacked insights about how emotions made them feel.

Self-Management

Data from teacher ratings, teacher interviews, and student interviews suggested each of the students improved their self-management skills. Self-management refers to one's "abilities to manage one's emotions, thoughts, and behaviors effectively in different situations and to achieve goals and aspirations" (CASEL, n.d., "What is the CASEL SEL framework?" section). Specifically, according to teacher ratings, Bobby and Leo showed growth on all four items measuring self-management skills (i.e., *the student is motivated*, *the student requires instant gratification*, *the student effectively manages stress*, and *the student willingly works to accomplish goals*). Chip also showed improvement, but just on one item (*the student willingly works to accomplish goals*). However, he displayed his most significant growth with this skill. Additionally, Bobby improved in his ability to sit still, and Chip and Leo improved on items measuring their abilities to both sit still and maintain focus. Data from the teacher interview suggested that Leo was always the most likely to regulate his behaviors and emotions in class, but his teacher still reported growth in this area. She also indicated in an interview that Bobby had improved markedly, reducing "meltdowns" due to academic frustration by 50 percent. Observations from the sessions indicated variable self-management skills from week to week for all students. Each of them had at least one session where they performed particularly well, but their observed self-management was largely inconsistent overall.

Engagement and Interest

Evidence of each of the students' engagement and interest in the mindfulness lessons was gleaned from my observations, in addition to teacher and student interviews.

Regarding the sessions, students were noted to excitedly join me for the mindfulness lessons each week, and on several occasions expressed disappointment that the session was over. The students were also observed to smile when I closed out sessions with fist bumps. While their sustained attention and ability to follow instructions varied across sessions, all of the students were able to tell me multiple times they used mindfulness strategies outside of our sessions. The students and teacher also indicated that they discussed and practiced mindfulness during the week in class. Student interviews indicated that all of the students enjoyed mindfulness, as they used words like “good” to describe the experience, and at times added that it made them feel “calm” and “happy.” Additionally, the students were unable to provide examples of things they disliked about mindfulness. It is possible that the students’ responses to these interview questions were influenced by wanting my approval, but the triangulation of all the data suggests they enjoyed the lessons and their applications.

Lesson Delivery and Environment

Reviewing my observational journals that illustrate the variability in the students’ abilities to maintain focus and follow directions during the sessions, I also sought to explore factors related to the lessons that may have impacted the success of the students. One common theme throughout the intervention phase was the inconsistency in where we were able to practice mindfulness together. Despite my efforts to reserve a large room in a part of the school away from hallway traffic and undue distractions, this room often had to be used by other teachers. Therefore, over the course of the eight sessions, we had to use four different rooms: the aforementioned large, well-lit room containing chairs and stools and much extra space; the small, outer office space of the assistant principal that

shared a wall with a restroom and had four chairs and a large table; the school counselors' classroom, which had enough space but also had many distractions, such as bean bag chairs, a couch, and shelves of books and board games; and the sensory room, which was somewhat small and contained many distractions, such as a small trampoline, an exercise ball, a tent, a mat, and shelves of materials for other sensory activities. My journal entries suggested that small rooms may have contributed to more off-task behaviors, as the students would whisper and touch each other, especially during our mindful sits. Alternatively, larger rooms could present with more distractions, especially before I began adapting lessons to allow for more movement. The students had most difficulty focusing and following instructions in the sensory room due to the many distractions there, but access to those distractions (i.e., the trampoline, exercise ball, etc.) also served as an effective motivator in the last session. The types of seats (e.g., chair, stool, floor, etc.) impacted behavior, too, and the students sometimes argued over who got to sit where. In all of the sessions, I found it helpful to dim the lights at times to help create a feeling of calm.

In addition to these inconsistent environments, I also noted in my journals that I should have taken more time (possibly the first full session) to establish norms and agree with them on behavioral expectations. I implemented strategies like requiring them to raise their hands or hold a talk stick as the sessions progressed, but I could have avoided some behavioral challenges if I had been more intentional from the start. Another significant modification I made over the course of the intervention phase was adapting lessons to allow for more movement and less sitting still. As I noted in a reflective journal entry from the fifth session: "I need to adapt- why must they be so still for

everything? Mindfulness is more than stillness.” I began to focus less on how well they stayed seated, and I adjusted lessons to emphasize more movement instead of verbal discussion and visualization activities. I also tried to implement more preferred tasks, as I let them listen to the chime rather than focus on their breath for the opening sit. They seemed more engaged and more likely to put forth sustained effort with the listening.

Finally, throughout the intervention phase, I drew upon my Rogerian background and tried to practice my own self-awareness and self-management by monitoring how I approached the sessions and interacted with the students. My journal entries helped me to find themes and trends that arose. Specifically, I certainly noticed apprehension before that initial session, and frustration emerged at times when students did not seem to be focused or understanding the point of a lesson. I noted in my entries that I almost ended a session prematurely due to behavioral challenges, and I once had to threaten to let them miss some of their recess if they did not listen and try to participate. I experienced some impatience with regards to off-task behavior, as well, but I was also impatient regarding their progress and mastery of the skills. I wanted to make a difference that was noticeable after just a few weeks, but this was an unrealistic and unconstructive expectation. Overall, I found I had to “practice what I preached” with the mindfulness lessons, and I had to focus on the many positive interactions I had with these three students.

Summary

As detailed above, each of the students began this mindfulness journey in very different places in terms of SEL competencies and academic skills, but also regarding their family backgrounds and home life. The research question investigated in this action research study was: What are the benefits of a small-group mindfulness intervention for

students identified by their teacher as requiring additional, Tier 2 support in the areas of self-control, emotional regulation, and sustained attention? All three students showed varying degrees of improvement related to self-awareness and self-management at school. Bobby showed most improvement overall, according to teacher ratings and teacher interview data. However, even though the teacher indicated in an interview that Chip did not seem to respond to the intervention, her ratings suggested that he also improved on half of the survey items administered. Chip was also observed to spontaneously share with me things that seemed to bother him at home, such as how little he sees his father and the passing of his grandfather. This student who sought any type of attention seemed to enjoy the interaction with an adult who cared enough to ask about his week. While Leo's teacher had fewest concerns about him pre-intervention, he also managed to make incremental yet important improvement in areas like self-awareness and self-management, but also academic performance, all in the midst of his father's military deployment.

More broadly, the findings of this study suggested that the benefits of the mindfulness intervention would extend beyond just this bounded case of three students. Important lessons were learned about environmental considerations and lesson delivery format that need to be heeded during future efforts in order to facilitate optimal skill-building and personal growth. These sessions were also an exercise in patience and persistence for me, as I learned that progress takes time. Additionally, I learned that I should not underestimate the significance of these students having a consistent adult that asked them about their week, shared strategies to help them at school, and gave them fist bumps regardless of how well they listened that day. As I reminded myself in my journal

entry after the sixth session, “They won’t remember what you said, but they’ll remember that you cared.”

Chapter Five: Discussion

My problem of practice concerned students at my elementary school, Davis Elementary School (DES), identified by their teacher as having weaknesses in the areas of self-control, emotional regulation, and sustained attention who had difficulty accessing the benefits of Tier 1 mindfulness instruction. The intervention included small-group delivery of social and emotional skills instruction to promote differentiation of instruction, in addition to a safe space with more opportunities to practice, ask questions, and share experiences. With a theoretical framework based upon the works of Lev Vygotsky, Abraham Maslow, and Carl Rogers, this mixed methods, action research case study worked within the multi-tiered system of supports (MTSS) framework to explore the following research question among a small group of three second grade students: What are the benefits of a small-group mindfulness intervention for students identified by their teacher as requiring additional, Tier 2 support in the areas of self-control, emotional regulation, and sustained attention?

Discussion of Findings

Self-Awareness

All three of the students in the present study improved in the area of self-awareness. Self-awareness refers to one's "abilities to understand one's own emotions, thoughts, and values and how they influence behavior across contexts" (CASEL, n.d., "What is the CASEL SEL framework?" section). Teacher ratings suggested that Bobby

and Leo improved on multiple items measuring self-awareness, and Chip improved on one out of three items (*the student is confident*). Further, teacher and student interview data provided evidence that Bobby and Leo enhanced their self-awareness, as they were able to provide insights regarding their academic and behavioral strengths and weaknesses at school. These findings are consistent with previous research suggesting mindfulness-based programs can improve students' school self-concept (Schonert-Reichl et al., 2015) and awareness of the here-and-now (Van Vliet et al., 2017). Chip was similarly able to answer questions about academic subjects that were difficult for him, but he also made contradictory claims that he was the “smartest” student in his class and he lacked insight regarding his behavior at school. In the sessions, all three students were able to demonstrate awareness of things they noticed in their environment. However, while Bierman et al. (2008) found that mindfulness training enhanced children's ability to understand emotions, throughout the sessions all three of the student-participants often lacked insights about emotions and related physical sensations. This lack of understanding could be due to their young age, as an awareness of the external environment is an easier concept to comprehend than awareness of their internal world.

Self-Management

Despite inconsistency among all three students in their displays of self-management skills during sessions, teacher report data indicated that each of the students improved their self-management skills at school over the course of this intervention. Self-management refers to one's “abilities to manage one's emotions, thoughts, and behaviors effectively in different situations and to achieve goals and aspirations” (CASEL, n.d., “What is the CASEL SEL framework?” section). This improvement is consistent with

previous research suggesting that mindfulness-based practices correlate with enhanced self-management skills, such as regulating emotions and handling stress (Bishop et al., 2004), and improving attention skills (Felter et al., 2017; Jha et al., 2007; Napoli et al., 2005; Niemien & Sajaniemi, 2016; Wheeler et al., 2017).

Further, it is notable that many self-management subskills, such as self-discipline, self-motivation, goal-setting, and personal agency, are important for academic achievement, even with young elementary students. Blair and Razza (2007) highlighted the relationship between self-regulation skills and early reading and math achievement. Additionally, Zenner et al. (2014) linked school-based mindfulness programs to improved cognitive functioning, and SEL competencies predict success in school and post-graduation (Schonert-Reichl, 2019).

Academic performance was not identified in the present study as being an area of notable growth for the group, but this was largely due to the high achievement ratings for Bobby and Leo on the pre-intervention teacher survey. Their teacher identified all three students as having difficulties related to self-control, emotional regulation, and sustained attention, but Chip was the only one of the three with significant academic concerns. Teacher post-intervention ratings showed that Chip improved his work completion and grades, but additional quantitative data, such as number grades or district testing scores, may have provided more insights regarding incremental academic improvement for higher achieving students like Bobby and Leo. However, the post-intervention teacher interview provided an important insight illustrating the link between improved self-management skills and academics. Specifically, she reported that Bobby had reduced “meltdowns” due to academic frustration by 50 percent over the course of the

intervention. While the quantitative ratings did not highlight this important improvement for Bobby, qualitative data shed light on one of the more impactful improvements resulting from this intervention.

Engagement and Interest in Mindfulness

In addition to the identified social-emotional and academic benefits of mindfulness-based interventions, research suggests that mindfulness practices are perceived as enjoyable by children and adolescents (Ames et al., 2014; McGeechan, et al., 2019). Present findings are consistent with previous research, as data consistently showed all three students enjoyed the mindfulness sessions. While their sustained attention and ability to follow instructions varied across sessions, students were noted to excitedly join me for the mindfulness lessons each week, and on several occasions expressed disappointment that the session was over. They also provided multiple examples of using or talking about mindfulness outside of our sessions at home and at school. Student interviews further indicated that all of the students enjoyed mindfulness, as they used words like “good” to describe the experience, and several times added that it made them feel “calm” and “happy.” It would be difficult to completely discern if their enjoyment was due to the actual mindfulness lessons and activities or the special time they got to leave class with an adult for non-academic activities. However, it was promising that the students and their teacher were able to provide several examples of using or referencing mindfulness outside of our sessions. Moreover, their improvements in the previously referenced areas of self-awareness, self-management, and academic performance also suggested some level of engagement in the intervention.

Lesson Delivery and Environment

After conducting a qualitative investigation of a school-based mindfulness intervention, Dariotis et al. (2017) identified four emergent themes for consideration in the planning and implementing of similar interventions: intervention delivery to ensure student participation and engagement, communication with teachers and administrators about the program and its logistics, promoting buy-in from all stakeholders, and instructor qualities that promote rapport and behavior management with the students. From a Rogerian perspective, my careful planning and implementation of this intervention were vital to my students' abilities to develop their skills and meet their potential. Evaluating my intervention using the four factors proposed by Dariotis et al. (2017), there are several areas where I effectively planned and implemented my study, and also areas that I could improve. First, I conducted the intervention using a widely-used mindfulness curriculum designed to be engaging for children. I also used a small-group format which, according to Wasik (2008), has many advantages for the cognitive and social-emotional development of children, even in comparison to one-on-one instruction. Additionally, I communicated with parents, teachers, and administrators about this program, and I had pre-existing buy-in due to my long-standing professional relationship with the school and their recent history of focusing on SEL, and exploring mindfulness in particular.

However, one of the largest barriers to the implementation of this study was my failure to secure a consistent space each week that was conducive to our small-group activities with young students who benefit from consistency and structure. This challenge may have been avoided by more formally reserving with administration a room for the

entirety of the intervention phase. As explained by Scott et al. (2007), physical arrangements and consistency are important factors for behavior management and effective instruction. The uncertainty regarding our location made it difficult to maintain a physical setting that was optimal for the students' learning. This lack of a consistent space also caused a distraction for the students, as evidenced by their behavior upon entering spaces like the sensory room and the school counselors' classroom where they were presented with novel distractions.

Finally, while I put much thought and effort into rapport-building and behavior management, more attention to establishing and agreeing upon behavioral norms during sessions may have decreased the prevalence of off-task behaviors. Efforts to build rapport with students, such as giving fist bumps, greeting them in the hallways outside of our sessions, allowing them to ring the chime at the end of sessions, and keeping them after sessions to ask about their day seemed effective, but my energies to create a positive, supportive, and stress-free environment sometimes created one lacking the structure necessary to facilitate instruction with a group of young students who struggle with focus and self-regulation. The emphasis by Scott et al. (2007) on consistency with rules and routines in an instructional setting certainly applies to this challenge, as it seemed our group expectations were either not effectively established, or proved too difficult for the students to meet. However, modifications to the curriculum's lessons, such as allowing more movement and reducing the emphasis on discussion- and visualization-based activities, did help with engagement and behavior management.

Implications of the Findings

As the purpose of my action research project was to conduct an investigation at my school that would advance my professional development while also improving student outcomes (Efron & Ravid, 2013), the findings of this study suggest several important implications for my practice and for the SEL support provided to the students in my school district.

Principally, mindfulness-based interventions have the potential to be an effective Tier 2 SEL support. Consistent with existing research on mindfulness-based practices, each of the students in the present study experienced improvements in the SEL competencies of self-awareness and self-management. Each of the students also experienced academic improvement, according to teacher report. While it seems more and more demands are being placed on schools and teachers to ensure academic rigor, carving out precious time and resources during the school day to focus on SEL often is of secondary importance to district and school leadership. However, the results of this study support that SEL can actually promote academic achievement. Behavioral improvement among students in this study, such as Bobby's reduced frustration-fueled meltdowns and Chip's curtailed behavioral outbursts in class, also benefits teachers and enhances the instruction in their classrooms.

Within my school district's MTSS framework, and its recent emphasis on SEL at the Tier 1 level, this mindfulness intervention could provide support for students identified by their teachers (or through other data sources and referral systems) as needing more specialized instruction with social and emotional skills. This process would mirror the framework already in place for skills like reading, where students identified as

needing further support are matched with an appropriate Tier 2 intervention. Tier 2 interventions typically consist of more specialized, small-group instruction, like the intervention group in the present study.

Mindfulness-based practices also represent an option for Tier 2 SEL support that is practical within this MTSS framework. All three students in the present study experienced benefits from just 30-minute sessions once per week over an eight-week intervention period. Eight weeks is a typical intervention duration within an MTSS framework during which progress monitoring data are collected to evaluate growth and inform next steps. Additionally, planning with the students' teacher ensured they missed no academic instruction, and the teacher survey was brief out of respect for their time but still provided useful data showing the effects of the intervention. Mindfulness-based practices also represent a relatively inexpensive initiative when implemented by school or district staff. Finally, and possibly most important, the students seemed to enjoy the mindfulness practices in this study, and they reported using it in between sessions. The students also appeared to like the individualized attention each week from another caring adult at school.

At the district level, this intervention is very feasible for other school psychologists in my department to take action to provide SEL support to their schools. Our district has added school psychologist positions in recent years, largely with the purpose of helping to address the increasing social-emotional and behavioral needs of students. This increase in staff has resulted in school psychologists being assigned to less schools and, subsequently, more manageable testing caseloads. However, I find that school psychologists lack either the direction or confidence to conduct SEL interventions

like the one in this study, whether whole-group, small-group, or individual. In some cases, I believe that many of my colleagues are long-removed from their graduate training where they likely learned counseling and intervention skills, and are now constrained by their busy assessor and consultant roles. While these duties are important and time-consuming parts of our job, active involvement in SEL efforts at our schools requires little training, inexpensive materials, and minimal planning, and social-emotional interventions may reduce the number of referrals for special education evaluations. I cannot imagine an administrator declining an offer from a school psychologist for additional help with the social-emotional functioning of their students.

Action Plan

Action research boasts an inherent reflectiveness, encouraging educators to actively investigate their own practices, share their findings, and collaborate with colleagues to take action (Herr and Anderson, 2015). Below, I more explicitly outline my action plan:

First, I will arrange with my supervisor a time during a monthly staff meeting to share the findings of my study with our department of more than 40 school psychologists. This presentation will focus on the logistics of organizing and implementing the intervention, in addition to the promising outcomes and anecdotal experiences of the study. I will also make myself available to all staff members to provide ways to have discussions with administration about initiating their own SEL intervention at their assigned schools, and I will share materials such as my informed consent form, teacher survey, and journal protocols. My hope is that my colleagues will understand the effectiveness, ease, and enjoyment of such efforts. I will also emphasize that mindfulness

is just one type of SEL support, and I will share other resources for different interventions that may better align with their interests, training, and/or experience. Additionally, with our increased role in MTSS in recent years, I intend to show them they can help bridge a significant gap by remedying the dearth of evidence-based SEL interventions at our disposal in schools (August et al., 2018).

The second part of my action plan will focus on my current school assignments. I am no longer serving DES, as I have been reassigned to two other sites: a large urban elementary school receiving Title I funding and a secondary alternative school for students with significant emotional and behavioral disabilities. As I become acclimated with the staff, students, and resources available at my new schools, I look forward to meeting with school administration and/or MTSS teams to share my experiences with mindfulness and to strategize how I can help meet the social and emotional needs of their students. With an understanding that SEL interventions need to be tailored to student needs (McClelland et al., 2017), I will also keep an open mind regarding the delivery format and even the type of intervention I utilize next, whether that be mindfulness or another empirically-based program. I am hopeful that my new school assignments will allow me to work with more diverse student populations, in terms of age, race, ethnicity, gender, and psychiatric history.

Finally, I will share my study and its findings with our district's MTSS coordinator in an effort to add to our growing collective bank of SEL supports for our large school district of diverse learners. School psychologists have worked closely with the MTSS coordinator in recent years during the launch of our school-based MTSS teams, and I hope this action research study will spark further collaboration as we

continue to refine our process to meet the individual needs of all students. This collaboration could include future trainings for all stakeholders about the importance of SEL, the resources we have available in our district, and how intervention efforts can complement the MTSS framework that has been firmly established in all of our schools.

Future Research

While my study yielded findings and insights that I will apply to my professional practice, there is still more to be learned about my topic and problem. First, although my study with a sample of white, second-grade males showed significant benefits for these participants, this study needs to be replicated using more diverse populations. Specifically, there is much research supporting the effectiveness of mindfulness-based practices as a social-emotional support for minority populations (Brown-Iannuzzi et al., 2014; Edwards et al., 2014; Sibinga et al., 2013; Womack & Sloan, 2017), but I was unable to explore the benefits with such populations because they were not available at my school. However, my study still inherently espouses the emancipatory spirit of action research due to its focus on SEL. As Jagers et al. (2019) explain, SEL has great transformative potential for all students, as it develops in them the ability to understand the roots of inequity in our society and take action.

Further research is also needed to investigate the benefits of mindfulness-based practices with students of different ages and genders. These differences may significantly impact the lesson delivery and the modifications I had to implement due to my students' proclivity for movement and physical activities as opposed to some of the discussion- and visualization-based activities as outlined in the curriculum. These different populations

also may face distinct age- and gender-related challenges, and it would be interesting to learn how mindfulness-based practices can address other areas of need.

From an ecological standpoint, further investigation of the students' classroom environment would facilitate the exploration of other school-based or teacher-influenced factors impacting their mindfulness experience and their SEL development. For example, this investigation might include information about their classroom routines, more specifics regarding class-wide academic and SEL instruction, data regarding the behavior and self-regulation skills of the "typical" student in their class, and any mindfulness instruction and/or reinforcement occurring in their classroom on a daily basis.

Additionally, data sources from outside the school environment could also prove insightful. Specifically, input from the students' parents through interviews and/or rating scales would show the transfer of skills to home, and any other observed effects of the intervention outside the school environment. Parents' involvement in the study would also promote family engagement in the students' SEL instruction and make more connections between their home and school lives. Moreover, this data source would align with SEL's overall goal of improving student outcomes and helping them to reach their potential at school and beyond. Similarly, collecting data six months or a year after the intervention may also provide information about retention of skills well beyond the intervention period.

Parent input through interviews and rating scales would also provide more insights into some of the other differences in the students' lives that were clearly impacting each of the students' performances at school and in the mindfulness small group. Bobby's academic frustration in the context of having a mother who is a teacher,

Chip's home and family life that lacked structure, and Leo's father's deployment all impacted their experience with the mindfulness intervention and with me. Additional information about their homes and families would allow richer insights and possibly more appropriate and effective instruction.

Conclusions

From the day of the first intervention session, as I tried to keep up with Bobby, Chip, and Leo hopping up the stairs at Davis Elementary, all the way to the last post-intervention interview, where their teacher shared the improvements she witnessed while also reiterating continued concern about Chip, I was afforded the opportunity to step out of my typical assessor-consultant duties and into the role of teacher. In Vygotskian terms, I was to be "the more knowledgeable other" in our zone of mindfulness development. With years of personal and professional mindfulness study and practice under my belt, I was eager to share this knowledge and these habits with my students. I was equally eager to watch them immediately internalize our lessons and make great, noticeable strides when we met again the next week.

I became disparaged at times during our sessions when concepts did not seem to click or the students were in an especially silly mood and would not cooperate. Looking back, I worried a lot between sessions. I worried that I was wasting the students' time. I worried that I was not an effective teacher. I even worried some days that I had totally lost control of the group. And while I experienced relief when post-intervention teacher ratings suggested the intervention did yield important benefits for the students, it was not until I was writing up the results section of this paper that I was reminded of the purpose of this whole endeavor.

I concluded the results section with part of my journal entry from the sixth intervention session: “They won’t remember what you said, but they’ll remember that you cared.” Similarly, *I* will not remember specific areas of growth identified in these students during this study. But I will never forget learning that Bobby significantly reduced his meltdowns resulting from academic frustration in class, or being told by Leo that his father was going to be deployed for nearly a year, but that was okay because he was excited to help around the house and FaceTime often while he was gone. And I will most certainly not forget my first one-on-one interview with Chip, after four weeks of his attention-seeking and disruptive behaviors that threatened the fidelity of my intervention efforts, when in an uncharacteristically solemn tone he told me that he missed his father during the week. He also confided that his grandfather had died recently, and he missed him, too. No, I will not forget that interaction and how it made me feel about my grassroots efforts to connect with students like Chip and nudge them back on track.

I also cannot help but wonder about Alex, the high school student with the slumped shoulders, sad eyes, and adversity-filled childhood. If his social-emotional needs had been identified and met with appropriate intervention when he was Chip’s age, would that have been the “boost” he needed? Will Chip, and other students like him, get their boost?

References

- Ames, C. S., Richardson, J., Payne, S., Smith, P., & Leigh, E. (2014). Mindfulness-based cognitive therapy for depression in adolescents. *Child & Adolescent Mental Health, 19*(1), 74–78. <https://doi-org.pallas2.tcl.sc.edu/10.1111/camh.12034>
- Applefield, J., Huber, R., & Moallem, M. (2000). Constructivism in theory and practice: Toward a better understanding. *The High School Journal, 84*(2), 35–53.
- August, G. J., Piehler, T. F., & Miller, F. G. (2018). Getting “SMART” about implementing multi-tiered systems of support to promote school mental health. *Journal of School Psychology, 66*, 85–96, <https://doi.org/10.1016/j.jsp.2017.10.001>
- Biegel, G. M., Brown, K. W., Shapiro, S. L., & Schubert, C. M. (2009). Mindfulness-based stress reduction for the treatment of adolescent psychiatric outpatients: A randomized clinical trial. *Journal of Consulting and Clinical Psychology, 77*(5), 855–866, <https://doi.org/10.1037/a0016241>
- Bierman, K. L., Domitrovich, C. E., Nix, R. L., Gest, S. D., Welsh, J. A., Greenberg, M. T., Blair, C., Nelson, K., & Gill, S. (2008). Promoting academic and social and emotional school readiness: The Head Start REDI program. *Child Development, 79*(6), 1802–1817. <https://doi.org/10.1111/j.1467-8624.2008.01227.x>
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abbey, S., Speca, M., Velting, D., & Devins, G. (2004). Mindfulness: A

- proposed operational definition. *Clinical Psychology: Science and Practice*, 11(3), 230–241. <https://doi-org.pallas2.tcl.sc.edu/10.1093/clipsy.bph077>
- Black, D. S., Milam, J., & Sussman, S. (2009). Sitting-meditation interventions among youth: A review of treatment efficacy. *Pediatrics*, 124(3), e532–e541. <https://doi.org/10.1542/peds.2008-3434>
- Blair, C., & Razza, R. P. (2007). Relating effortful control, executive function, and false belief understanding to emerging math and literacy ability in kindergarten. *Child Development*, 78(2), 647–663. <https://doi.org/10.1111/j.1467-8624.2007.01019.x>
- Braun, G., Kumm, S., Brown, C., Walte, S., Tejero Hughes, M., & Maggin, D. M. (2020) Living in Tier 2: Educators’ perceptions of MTSS in urban schools. *International Journal of Inclusive Education*, (24)10, 1114–1128. <https://doiorg.pallas2.tcl.sc.edu/10.1080/13603116.2018.1511758>
- Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Addressing fundamental questions about mindfulness. *Psychological Inquiry*, 18(4), 272–281. <https://doi.org/10.1080/10478400701703344>
- Cheang, R., Gillions, A., & Sparkes, E. (2019). Do mindfulness-based interventions increase empathy and compassion in children and adolescents: A systematic review. *Journal of Child and Family Studies*, 28, 1765–1779. <https://doi.org/10.1007/s10826-019-01413-9>
- Chiesa, A., Calati, R., & Serretti, A. (2011). Does mindfulness training improve cognitive abilities? A systematic review of neuropsychological findings. *Clinical Psychology Review*, 31, 449–464. <https://doi.org/10.1016/j.cpr.2010.11.003>

- Childs, K., Kincaid, D., George, H., & Gage, N. (2016). The relationship between school-wide implementation of positive behavior intervention and supports and student discipline outcomes. *Journal of Positive Behavior Interventions*, 18(2), 89–99.
<https://doi.org/10.1177/1098300715590398>
- Collaborative for Academic, Social, and Emotional Learning. (n.d.). *Fundamentals of SEL*. <https://casel.org/fundamentals-of-sel/>
- Crescentini, C., Capurso, V., Furlan, S., & Fabbro, F. (2016). Mindfulness-oriented meditation for primary school children: Effects on attention and psychological well-being. *Frontiers in Psychology*, 7, 805.
<https://doi.org/10.3389/fpsyg.2016.00805>
- Dana, N. F. (2015). Understanding inquiry as stance: Illustration and analysis of one teacher researcher's work. *LEARNing Landscapes*, 8(2), 161–171.
<https://doi.org/10.36510/learnland.v8i2.702>
- Dariotis, J., Mirabal-Beltran, R., Cluxton-Keller, F., Feagans Gould, L., Greenberg, M., & Mendelson, T. (2017). A qualitative exploration of implementation factors in a school-based mindfulness and yoga program: Lessons learned from students and teachers. *Psychology in the Schools*, 54(1), 53–69.
<https://doi.org/10.1002/pits.21979>
- Davydov, V., & Kerr, S. (1995). The influence of L. S. Vygotsky on education theory, research, and practice. *Educational Researcher*, 24(3), 12–21.
<https://doi.org/10.2307/1176020>
- Derry, J. (2013). *Vygotsky: Philosophy and education*. ProQuest Ebook Central.
<https://ebookcentral.proquest.com>

- Domitrovich, C. E., Durlak, J., Staley, K. C., & Weissberg, R. P. (2017). Social and emotional competence: An essential factor for promoting positive adjustment and reducing risk and school children. *Child Development*, 88(2), 408–416.
<https://doi.org/10.1111/cdev.12739>
- Donahue-Keegan, D., Villegas-Reimers, E., & Cressey, J. M. (2019). Integrating social and emotional learning and culturally responsive teaching in teacher education preparation programs: The Massachusetts experience so far. *Teacher Education Quarterly*, 46(4), 150–168.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405–432.
- Dusenbury, L., Yoder, N., Dermody, C., & Weissberg, R. (2019). *An examination of frameworks for social and emotional learning (SEL) reflected in state K–12 standards. Measuring SEL using data to inspire practice frameworks briefs* (Comparative Series 3 of 3). <https://measuringsel.casel.org/wp-content/uploads/2019/02/Framework-C.3.pdf>
- Edwards, M., Adams, E. M., Waldo, M., Hadfield, O. D., & Biegel, G. M. (2014). Effects of a mindfulness group on Latino adolescent students: Examining levels of perceived stress, mindfulness, self-compassion, and psychological symptoms. *Journal for Specialists in Group Work*, 39(2), 145–163.
<https://doi.org/10.1080/01933922.2014.891683>

- Efron, S. E., & Ravid, R. (2013). *Action research in education: A practical guide*. Guilford Press.
- Elias, M. J., Zins, J. E., Weissberg, R. P., Frey, K. S., Greenberg, M. T., Haynes, N. M., Kessler, R., Schwab-Stone, M. E., & Shriver, T. P. (1997). *Promoting social and emotional learning: Guidelines for educators*. Association for Supervision and Curriculum Development.
- Ellis, A., Abrams, M., & Abrams, L. (2009). *Personality theories critical perspectives*. SAGE.
- Every Student Succeeds Act, 20 U.S.C. § 6301 (2015).
<https://www.congress.gov/114/plaws/publ95/PLAW-114publ95.pdf>
- Felver, J., Tipsord, J., Morris, M., Racer, K., & Dishion, T. (2017). The effects of mindfulness-based intervention on children's attention regulation. *Journal of Attention Disorders*, 21(10), 872–881.
<https://doi.org/10.1177/1087054714548032>
- Freeman, J., Simonsen, B., McCoach, D., Sugai, G., Lombardi, A., & Horner, R. (2016). Relationship between school-wide positive behavior interventions and supports and academic, attendance, and behavior outcomes in high schools. *Journal of Positive Behavior Interventions*, 18(1), 41–51.
<https://doi.org/10.1177/1098300715580992>
- Freeman, J., Sugai, G., Simonsen, B., & Everett, S. (2017). MTSS coaching: Bridging knowing to doing. *Theory Into Practice*, 56(1), 29–37.
<https://doi-org.pallas2.tcl.sc.edu/10.1080/00405841.2016.1241946>

- Gage, N. A., Whitford, D. K., & Katsiyannis, A. (2018). A review of schoolwide positive behavior interventions and supports as a framework for reducing disciplinary exclusions. *The Journal of Special Education*, 52(3), 142–151.
<https://doi.org/10.1177%2F0022466918767847>
- Gorski, P. (2012). Perceiving the problem of poverty and schooling: Deconstructing the class stereotypes that mis-shape education practice and policy. *Equity & Excellence in Education*, 45(2), 302–319.
<https://doi.org/10.1080/10665684.2012.666934>
- Grant, C. & Osanloo, A. (2014). Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your “house.” *Administrative Issues Journal: Connecting Education, Practice, and Research*, 4(2), 12–26.
- Gunaratana, H. (2002). *Mindfulness in plain English*. Wisdom Publications.
- Herr, K., & Anderson, G. L. (2015). *The action research dissertation: A guide for students and faculty* (2nd ed.). SAGE.
- Immordino-Yang, M. H., Darling-Hammond, L., & Krone, C. (2018). The brain basis for integrated social, emotional and academic development: How emotions and social relationships drive learning. *Aspen Institute National Commission on Social, Emotional, & Academic Development*.
https://assets.aspeninstitute.org/content/uploads/2018/09/Aspen_research_FINAL_web-9.20.pdf

- Immordino-Yang, M. H., Darling-Hammond, L., & Krone, C. R. (2019). Nurturing nature: How brain development is inherently social and emotional, and what this means for education. *Educational Psychologist*, 54(3), 185–204.
<https://doi-org.pallas2.tcl.sc.edu/10.1080/00461520.2019.1633924>
- Jagers, R. J., Rivas-Drake, D., & Williams, B. (2019). Transformative social and emotional learning (SEL): Toward SEL in service of educational equity and excellence. *Educational Psychologist*, 54(3), 162–184.
<https://doi-org.pallas2.tcl.sc.edu/10.1080/00461520.2019.1623032>
- Jha, A. P., Krompinger, J., & Baime, M. J. (2007). Mindfulness training modifies subsystems of attention. *Cognitive, Affective, & Behavioral Neuroscience*, 7(2), 109–119. <https://doi.org/10.3758/cabn.7.2.109>
- Kabat-Zinn, J. (1994). *Wherever you go, there you are*. Hyperion.
- Kallapiran, K., Koo, S., Kirubakaran, R., & Hancock, K. (2015). Review: Effectiveness of mindfulness in improving mental health symptoms of children and adolescents: A meta-analysis. *Child and Adolescent Mental Health*, 20(4), 182–194.
<https://doi.org/10.1111/camh.12113>
- Lee, J., Semple, R.J., Rosa, D., & Miller, L. (2008). Mindfulness-based cognitive therapy for children: Results of a pilot study. *Journal of Cognitive Psychotherapy*, 22(1), 15–28. <https://doi.org/10.1891/0889.8391.22.1.15>
- Machi, L. A., & McEvoy, B. T. (2016). *The literature review: Six steps to success* (3rd ed.). Corwin.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. <https://doi.org/10.1037/h0054346>

- McClelland, M. M., Tominey, S. L., Schmitt, S. A., & Duncan, R. (2017). SEL interventions in early childhood. *The Future of Children*, 27(1), 33–47.
<https://doi.org/10.1353/foc.2017.0002>
- McGeechan, G., Richardson, C., Wilson, L., Allan, K., & Newbury-Birch, D. (2019). Qualitative exploration of a targeted school-based mindfulness course in England. *Child and Adolescent Mental Health*, 24(2), 154–160.
<https://doi.org/10.1111/camh.12288>
- McLeod, S. A. (2014, February 05). Carl Rogers. *Simply Psychology*.
<https://www.simplypsychology.org/carl-rogers.html>
- McLeod, S. A. (2018, August 05). Lev Vygotsky. *Simply Psychology*.
<https://www.simplypsychology.org/vygotsky.html>
- McLeod, S. A. (2020, March 20). Maslow's hierarchy of needs. *Simply Psychology*.
<https://www.simplypsychology.org/maslow.html>
- Menendez, A. L. & Payne, L. D., & Mayton, M. R.. (2008). The implementation of positive behavioral support in an elementary school: Processes, procedures, and outcomes. *The Alberta Journal of Educational Research*, 54(4). 448–462.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.
- Mindful Schools (2019). *What is mindfulness?*
<https://www.mindfulschools.org/what-is-mindfulness/>
- Napoli, M., Krech, P. R., & Holley, L. C. (2005). Mindfulness training for elementary school students: The attention academy. *Journal of Applied School Psychology*, 21(1), 99–125. https://doi.org/10.1300/J370v21n01_05

- Nieminen, S.H. & Sajaniemi, N. (2016). Mindful awareness in early childhood education. *South African Journal of Childhood Education*, 6(1), a399.
<http://dx.doi.org/10.4102/sajce.v6i1.399>
- Osher, D., Kidron, Y., Brackett, M., Dymnicki, A., Jones, S., Weissberg, R. P. (2016). Advancing the science and practice of social and emotional learning: Looking back and moving forward. *Review of Research in Education*, 40(1), 644–681.
<https://doi.org/10.3102%2F0091732X16673595>
- Panorama Education. (n.d.). *A comprehensive guide to MTSS for the 2020–2021 school year: How to support each and every student in a tiered framework*.
<https://www.panoramaed.com/what-is-multi-tiered-system-of-support-mtss-rti>
- Pritchard, I. A. (2002). Travelers and trolls: Practitioner research and institutional review boards. *Educational Researcher*, 31(3), 3–13.
- Rempel, K.D. (2012). Mindfulness for children and youth: A review of the literature with an argument for school-based implementation. *Canadian Journal of Counselling and Psychotherapy*, 46(3), 201–220.
- Rogers, C. (1961). *On becoming a person: A therapist's view of psychotherapy*. Houghton Mifflin.
- Rogers, C. R. (1969). *Freedom to learn: a view of what education might become*. Charles E. Merrill Publishing.
- Schonert-Reichl, K. A. (2019). Advancements in the landscape of social and emotional learning and emerging topics on the horizon. *Educational Psychologist*, 54(3), 222–232. <https://doi-org.pallas2.tcl.sc.edu/10.1080/00461520.2019.1633925>

- Schonert-Reichl, K. A., Oberle, E., Lawlor, M. S., Abbott, D., Thomson, K., Oberlander, T. F., & Diamond, A. (2015). Enhancing cognitive and social-emotional development through a simple-to-administer mindfulness-based school program for elementary school children: A randomized controlled trial. *Developmental Psychology*, 51(1), 52–66. <https://doi.apa.org/doi/10.1037/a0038454>
- Scott, T. M., Gage, N. A., Hirn, R. G., Lingo, A. S., & Burt, J. (2019). An examination of the association between MTSS implementation fidelity measures and student outcomes. *Preventing School Failure*, 63(4), 308–316. <https://doi-org.pallas2.tcl.sc.edu/10.1080/1045988X.2019.1605971>
- Scott, T. M., Park, K. L., Swain-Bradway, J., & Landers, E. (2007). Positive behavior support in the classroom: Facilitating behaviorally inclusive learning environments. *International Journal of Behavioral Consultation and Therapy*, 3(2), 223–235. <https://doi.org/10.1037/h0100800>
- Semple, R., Reid, E., & Miller, L. (2005). Treating anxiety with mindfulness: An open trial of mindfulness training for anxious children. *Journal of Cognitive Psychotherapy*, 19(4), 379–392. <https://doi.org/10.1891/jcop.2005.19.4.379>
- Sherrod, M. D., Getch, Y. Q., & Ziomek-Daigle, J. (2009). The impact of positive behavior support to decrease discipline referrals with elementary students. *Professional School Counseling*. <https://doi.org/10.1177/2156759X0901200614>
- Sibinga, E., Perry-Parrish, C., Chung, S., Johnson, S. B., Smith, M., & Ellen, J. M. (2013). School-based mindfulness instruction for urban male youth: A small randomized controlled trial. *Preventive Medicine*, 57(6), 799–801. <https://doi.org/10.1016/j.ypmed.2013.08.027>

- Siegel, D. J., & Bryson, T. P. (2016). *The whole-brain child: 12 revolutionary strategies to nurture your child's developing mind*. Langara College.
- Sugai, G., Horner, R. H., Dunlap, G., Hieneman, M., Nelson, C. M., Scott, T., Liaupsin, C., Sailor, W., Turnbull, A. P., Turnbull III, H. R., Wickham, D., Wilcox, B., & Ruef, M. (2000). Applying positive behavior support and functional behavioral assessment in schools. *Journal of Positive Behavior Interventions*, 2(3), 131–143.
<https://doi.org/10.1177%2F109830070000200302>
- Sullivan, A., Miller, F., McKeve, N., Muldrew, A., Hansen-Burke, A., & Weeks, M. (2020). Leveraging MTSS to advance, not suppress, COVID-related equity issues. *Communique (National Association of School Psychologists)*, 49(1), 1–26–29.
- Thorius, K. A., & Maxcy, B. D. (2015). Critical practice analysis of special education policy: An RTI example. *Remedial and Special Education*, 36(2), 116–124.
<https://doi.org/10.1177%2F0741932514550812>
- Van Vliet, K. J., Foskett, A. J., Williams, J. L., Singhal, A., Dolcos, F., & Vohra, S. (2017). Impact of a mindfulness-based stress reduction program from the perspective of adolescents with serious mental health concerns. *Child & Adolescent Mental Health*, 22(1), 16–22. <https://doi-org.pallas2.tcl.sc.edu/10.1111/camh.12170>
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological process*. Harvard University Press.
- Wasik, B. (2008). When fewer is more: Small groups in early childhood classrooms. *Early Childhood Education Journal*, 35(6), 515–521.
<https://doi-org.pallas2.tcl.sc.edu/10.1007/s10643-008-0245-4>

- Wheeler, M. S., Arnkoff, D. B. & Glass, C. R. (2017). The neuroscience of mindfulness: How mindfulness alters the brain and facilitates emotion regulation. *Mindfulness*, 8(6), 1471–1487. <https://doi-org.pallas2.tcl.sc.edu/10.1007/s12671-017-0742-x>
- Womack, V. Y., & Sloan, L. R. (2017). The association of mindfulness and racial socialization messages on approach-oriented coping strategies among African Americans. *Journal of Black Studies*, 48, 408–426. <https://doi-org.pallas2.tcl.sc.edu/10.1177%2F0021934717696789>
- Yin, R. K. (2014). *Case study research design and methods (5th ed)*. SAGE.
- Zelazo, P. D., & Lyons, K. E. (2011). Mindfulness training in childhood. *Human Development*, 54(2), 61–65. <https://doi.org/10.1159/000327548>
- Zenner, C., Herrnleben-Kurz, S., & Walach, H. (2014). Mindfulness-based interventions in schools-a systematic review and meta-analysis. *Frontiers in Psychology*, 5, 603–603. <https://doi.org/10.3389/fpsyg.2014.00603>

Appendix A: Pre- and Post-Intervention Teacher Survey

Mindfulness-Related

The student effectively uses strategies to calm himself (i.e., breathing) when he is upset or anxious.

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

The student acts without thinking.

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

The student has difficulty sitting still.

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

The student has a hard time maintaining focus.

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

Demeanor/Engagement

The student has a positive attitude overall at school.

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

The student generally has good attendance.

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

The student is happy.

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

The student gets along well with his peers.

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

The student is an active participant in class.

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

The student is a self-starter.

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

Academic Performance

The student consistently completes his school work to the best of his ability.

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

The student does well on tests.

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

The student makes good course grades (i.e., mostly As and Bs).

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

Self-Awareness

The student seems to understand how his emotions influence his behavior.

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

The student can identify their own strengths and weaknesses.

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

The student is confident.

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

Self-Management

The student is motivated.

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

The student requires instant gratification.

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

The student effectively manages stress.

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

The student willingly works to accomplish goals.

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

Appendix B: Individual, Semi-Structured Student Interview

1. What do you think about school? (Follow-up if the student has difficulty with that question): Do you like or dislike coming to school?
2. In general do you think school work is hard or easy? Why?
3. Overall, how is your behavior at school?
4. What have you learned from practicing mindfulness?
5. How do you feel about mindfulness?
6. Are there things you dislike about mindfulness?
7. What are some things you like about mindfulness?
8. How does mindfulness make you feel?
9. How do you feel after these lessons when you return to class?
10. Have you used mindfulness outside of the mindfulness lessons? Describe that experience

Appendix C: Self-Reflective Journal

Self-Reflective Journal

<p>Date:</p> <p>Lesson Number and Title:</p> <p>Activities:</p> <p>Participants:</p> <p>Research Question:</p>	
Descriptive Field Notes	Reflective Field Notes

Appendix D: Informed Consent



Dear Parent,
Education

Graduate School of

My name is Matt Griffith. I am the school psychologist at Fork Shoals School, and I am also a doctoral candidate in the Graduate School of Education at the University of South Carolina. I am conducting a research study as part of the requirements of my degree in Curriculum and Instruction, and I would like to invite your child to participate.

I hope to explore the effectiveness of providing second grade students with an opportunity to learn and practice mindfulness in a small group setting. Your child was selected as a possible participant in this study because their teacher recommended your child might enjoy and benefit from this opportunity.

Mindfulness is the ability to pay attention to life, in the here and now, with curiosity and kindness. Mindfulness has been shown to help increase attention span and improve self-control in children. It can also reduce stress and build community and empathy.

I will be using a 100% non-religious curriculum developed by Mindful Schools, a non-profit organization who has used this training with over 75,000 students worldwide. Their program has provided many benefits to teachers, students, and their families across the world.

If you decide to allow your child to participate, they will meet with me once a week for 20-30 minutes over an eight-week period in a small group with 1 or 2 other second grade students. I will work with the teacher to make sure these sessions take place during a time of day where students will miss as little instruction as possible. For example, we will avoid pulling them from class during reading and math instruction, but they might miss some related arts or morning work time one day per week.

Another aspect of this study will be feedback from your child's teacher on the impact of this mindfulness group on their behavior, engagement, and academic performance in the classroom. This information will be obtained through a survey and an interview with the teacher, and it will only be used to help assess the effectiveness of this activity.

In the group, the students will experience mindfulness through practice and discussion. For example, we'll practice listening to sound, focusing on breathing, recognizing emotion, developing kindness, and getting along with others. My hope is that this group will benefit your child by building skills that will help them to be more engaged, focused, independent, and confident while at school.

There are no foreseeable risks from participating in the study. Any information that is obtained in connection with this study and that can be identified with your child will remain confidential. Subject identities will be kept confidential by the researcher and any materials with identifying information will be kept in a locked cabinet. No information will be included in any report that may be published that would make it possible to identify your child. The school and individual's identities will remain strictly anonymous and confidential.

Your child's participation is voluntary. There is no penalty for not participating. Your decision whether or not to allow your child to participate will not affect your or your child's relationship Fork Shoals School. If you decide to allow your child to participate, you and/or your child may withdraw from the study at any time without penalty.

If you have any questions about the study, please feel free to contact me, Matt Griffith, at magriffith@greenville.k12.sc.us or by telephone 452-0072. You may also contact my advisor, Dr. Leigh D'Amico at damico@mailbox.sc.edu or by telephone 803-777-8072. If you like, a summary of the results of the study will be sent to you. You will be offered a copy of this form to keep. Your signature indicates that you have read and understand the information provided above, that you willingly agree to allow your child to participate, that you and/or your child may withdraw your consent at any time and discontinue participation without negative consequence, and that you will receive a copy of this form.

If you give permission for your child to participate, please circle YES and sign/date below. If you do not give permission, please circle NO and sign/date below. Thank you.

A. YES. I do wish for my child to participate

B. NO. I do NOT wish for my child to participate.

Parent/Guardian Signature

Date

920 Sumter Street • Columbia, South Carolina 29208 • 803-777-7777 • sc.edu
An Equal Opportunity Institution

DIGITAL DOCUMENT