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“I Can’t Calm Myself”:

Mindfulness in a Special Education Resource Setting

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Abstract

The purpose of this study was to examine how brief mindfulness practices influence students receiving special education in a resource setting that provides one-on-one support outside of the general education classroom. The researcher utilized three to five minutes of breathing exercises, stretches, and discussion every day before beginning instruction. Data was collected through observations, pre- and post-surveys, and post-activity interviews. The constant comparative method was used for analyzing data to find emerging or recurring themes in the data collected. Three major themes emerged from the collected data: social-emotional regulation, making a choice, and the flexibility of mindfulness. Through observations, four out the six participants exhibited self-regulatory abilities. Interviews and surveys revealed that all students developed an ability to use mindful moments for a variety of reasons.

“I Can’t Calm Myself”: Mindfulness in a Special Education Resource Setting

“I just can’t do it!” Lucas (all names are pseudonyms) was screaming at the paper in front of him. Eventually, the pencil was flying across the room, and his chair was flipped. The paper floated to the group as he swept it off the desk, Lucas growing more enraged by the second. As I watched another third-grader attempt to flip a table three times his size, I wondered what must be going on in his overwhelmed brain. He finally gave up, and his body crumpled into a tight ball on the floor.

The next day I asked Lucas about what had happened. He responded with, “I don’t know,” and continued staring at me. We decided to spend that time during resource, the time when Lucas goes to a special education classroom to receive help with academics or functional abilities, talking about our feelings and ways to react when we are frustrated or overwhelmed, what was appropriate school behavior, and some tools to help calm ourselves down. We even made an “If, Then” booklet that stated things like “If...I am feeling frustrated, Then...I can raise my hand” and “If...I am getting overwhelmed, Then...I can put my head down to stop and think.” When we finished the booklet, Lucas was glowing with excitement when he went back to class to put it in his folder. The following days he would greet me by showing me his “If, Then” booklet.

Working with Lucas at that moment, I was amazed at how simply giving him the vocabulary to vocalize what he was feeling helped him. He was excited to finally put a name to the feelings he had inside. I realized that Lucas was not alone in his feelings of frustration. There have been many outbursts from my students both in and out of the resource room. I wondered how many of these outbursts were from lack of emotional awareness and a lack in self-regulatory abilities, such as recognizing when they are overwhelmed, removing themselves from frustrating

situations, or pausing and clearing their heads. Who was supposed to teach these students how to manage their emotions and outbursts? How can we help these students be successful in their academic careers if we are not setting them up for success in their mental health and emotional wellbeing?

Purpose

Today, thirteen percent of children ages eight to twelve have a diagnosable mental health disorder or disability (Meyer & Eklund, 2020). Along with the mental health disorders and disabilities, many students have other health impairments (OHI), emotional behavioral disabilities (EBD), or other learning impairments. With all of these obstacles, students are still expected to manage and understand their emotions, without explicit instruction on how to do so. Special education services are the sole support provided for many of these students in regards to their social-emotional learning (Meyer & Eklund, 2020; Singh et al., 2016). My study was aimed at explicitly teaching students with disabilities mindfulness activities. The research questions were as follows:

1. What happens when mindfulness practices are implemented in a resource setting?
2. How do mindfulness practices influence students' ability to self-regulate?

I conducted my research as a graduate student during the final semester of my clinical teaching year. The study took place at an elementary school located in West Texas. The district's enrolled population was ethnically composed of 44% Hispanic, 37% White, 13% Black or African American, 4% two or more ethnicities, and 2% Asian/ Pacific Islander. The elementary school was a majority White and Hispanic school, and the rest of the student population consisted of African American or Black students, Asian students, and students who were two or more races. Within the school's community, 43.2% qualified as economically disadvantaged.

The students involved in the study all struggled with self-regulation and/or emotional awareness in some capacity.

Literature Review

Mindfulness is defined by Kabat-Zinn (2006) as “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment” (p. 147). Mindfulness is a resource that aids in social emotional learning (SEL). SEL and self-regulation can provide students with a proactive way to manage and understand their emotions (Felver et al., 2016). Mindfulness not only focuses on mindful breaths, but it also includes a mind shift that involves breathing exercises, stretches, and actively discussing emotions and feelings. It engages the whole body to access emotions and physical feelings, as the educator helps provide vocabulary and tools to appropriately express them (Bostic et al., 2015; Norton & Griffith, 2020; Tarrasch, 2018; Vickery & Dorjee, 2016).

Many studies have been conducted about specific interventions that are typically class or campus wide. Mindfulness encompasses many different interventions and activities. For example, Singh et. al (2016) studied the effectiveness of Samatha meditation in schools. Samatha meditation is described as “resting awareness” on a specific object while meditating (Singh et al., 2016, p. 69). It centers on using mindfulness to control focus on the given object of meditation. Mindfulness can also involve stretching or focused breathing exercises. Another study focused on “Mindful Moments”, an intervention that centers on structured breathing and movement exercises (Meyer & Eklund, 2020, p. 994). Hai et al. (2021) studied an elementary focused mindfulness intervention called MindUP. The program addressed different aspects of mindfulness including breathing exercises, positive speaking, vocabulary for emotions and feelings, and practicing gratitude. There are many different ways to implement mindfulness into

the classroom and community. Most studies examine either a small sample size or schoolwide implementation of the mindfulness interventions.

Researchers have found many positive effects of mindfulness in every area of student achievement including academics, social-emotional wellbeing, and behavioral management (Carboni, 2013; Hai et al., 2021; Meyer & Eklund, 2020; Singh et al., 2016; Vickery & Dorjee, 2016). Mindfulness and SEL can also benefit students outside of the education setting (Haines et al., 2017; Vickery & Dorjee, 2016). Through weekly formal observations and survey data, Meyer and Eklund (2020) saw that the tension and conflict in the classroom had decreased as the children were gaining tools to self-regulate and express their emotions. Research shows that school-wide mindfulness practices can help students regain focus and learn how to self-regulate (Bostic et al., 2015; Norton & Griffith, 2020; Tarrasch, 2018).

Another study conducted by Haines et al. (2017) had similar positive findings. The study examined a school-wide mindfulness practice in a socio-economically disadvantaged school. Haines et al. (2017) found that students whose teachers were invested in the intervention saw an increase of self-awareness and self-regulation. Interviews revealed that participants in the study found the mindfulness practices to be beneficial in the students' lives, in and out of school. The results of a baseline study found that students with ADHD had "low percentages of intervals of active engagement in math instruction" (Singh et al., 2016, p. 68). After the implementation of Samatha meditation, Singh et al. (2016) found that there were significant increases in every academic area. One of the most important findings was the academic benefit for students with ADHD. Carboni (2013) and Idler et al. (2017) discovered in separate studies focused on students with ADHD, that mindfulness strategies increased the students' on-task behaviors and benefits in the students' attention capabilities.

The studies currently presented either examine school-wide mindfulness implementation and the positive effects it leaves on a student or focus on small groups. According to Meyer and Eklund (2020), there is a need for more research to be done into mindfulness in school settings. My study focused on a resource setting special education classroom that typically services a maximum of eight students at one time. A resource setting is a smaller setting that can help build students' confidence in their abilities and target specific skills that a general education teacher cannot do in a general education setting. This type of setting provides students the opportunity to try something new, and not fear the outcome. The setting changes the perspectives of the students and could make them more or less receptive to mindfulness activities. My study examines what influence mindfulness has on students when implemented in a resource classroom, rather than school-wide. There is currently limited research in regards to mindfulness in a resource setting. Many students receiving special education services need more help when it comes to self-regulation (Singh et al., 2016; Tarrasch, 2018). However, the studies that do focus on students with disabilities, specialize in one disability or the student is not receiving services. It is important to look at where the students are receiving mindfulness strategies because it may change the students' ability to retain the information.

Methods

The research was conducted through qualitative research methods with quantitative data collected from the surveys. The intervention I implemented consisted of a mindfulness jar, modified 4-7-8 breathing exercises, and simple stretches. The mindfulness jar was a jar filled with water and glitter glue and when shaken, it represented an overwhelmed brain. Students gathered and discussed how they felt when they were overwhelmed and practiced self-regulating strategies. When students first entered the class, they would gather in a circle on the floor around

the mindfulness jar. They would shake the jar and talk about what emotion they felt when they were overwhelmed or their brain felt like the shaken jar. After discussing, we practiced a tension exercise and the modified 4-7-8 breathing exercise. While the jar was being shaken again, students tensed their body as tight as they could make it. When the jar was set down, students relaxed their entire bodies. Then, students inhaled for four seconds, held their breath for seven seconds, and exhaled for eight seconds. I modified the breathing exercise, and I counted for the students at a quicker pace so they were inhaling for about three seconds, holding for about four, and exhaling for about five seconds. They did this breathing exercise until the glitter in the jar settled. The jar gave students time to put words to their feelings and practice calming down their overwhelmed brain. Two teachers and two to four students were interviewed at the end of the study. All students who consented to participate were given a pre and post-survey. Observations of behavior monitored excessive redirection, any noticeable self-regulation, and any other data that affected the research.

Participant Selection

The research was conducted with six second and third-grade students. All students had a disability that qualified them to receive special education in a resource setting. They participated in general education for a majority of their learning time and came to the resource room for anywhere from 30 minutes to two hours a day, based on the needs the student had. Four participants were interviewed total, two teachers and two students. All interviews were conducted following the mindfulness intervention. All interviews were semi-structured to allow for clarification, depth of thought, and limit repetition (Hendricks, 2017; Hubbard & Power, 2003). Interviews were electronically recorded and transcribed. The teacher interviews were 30-60 minutes. Student interviews were approximately 15-20 minutes.

The teacher participants were a special education teacher and a third-grade teacher who also worked with the students interviewed. Students were selected through purposive sampling. Purposive sampling is selecting participants based on the researcher's own judgment of who is capable of providing appropriate and insightful responses to interview questions (Hendricks, 2017). Students were selected based on who provided depth and thought in the survey, actively participated in the mindfulness practices, and could state thoughtful answers in an interview. Both teachers were given a consent form that was signed and returned before the interviews began. Before the research began, students were sent home with a parent letter explaining the action research as well as a parent permission slip and an assent form. All students who participated in this study returned the parent permission form signed and completed an assent form. The second-grade group consisted of one boy and two girls. The third-grade group was constructed of two girls and one boy. There were three students of Hispanic descent and three Caucasian students in the combined groups.

Data Collection

The data collected consisted of observations, pre- and post-surveys, and four participant interviews. Observations focused on the behaviors displayed by the students. Anecdotal notes were taken initially and were transferred to field notes within 24 hours of the observations (Hubbard & Power, 2003). Behaviors noted during the observation included any noticeable self-regulatory behaviors or excessive redirection. Excessive redirection included, but was not limited to, constantly having to remind the student to focus, to listen, or to stay on task. Noticeable self-regulatory behaviors included visible breathing exercises or getting back on task without being told to do so. All students participated in the pre- and post-surveys. The pre- and post-surveys consisted of the same ten pictorial Likert scale questions and three open-ended questions, as seen

in Appendix A. The questions focused on how students feel in and outside of school. The answers to the Likert scale questions were recorded in a Google Form, and the open-ended questions were scanned electronically. The surveys were compared to determine any common themes or discernable differences. The two student interviews were 15 to 20 minutes long and the two teacher interviews were 30 to 45 minutes long. Student interview protocol as seen in Appendix B, consisted of a base of 10 questions. Teacher interview protocol (Appendix C) followed the same format. Both protocols were subject to change based on the survey questions and other questions that arose following participants answers. The data collection period lasted for a total of four weeks.

Data Analysis

All data was analyzed using the constant comparative method which involved constantly looking at current codes and comparing to new codes to see what more could be explored (Hubbard & Power, 2003). The themes that presented themselves from the coded data determined what additional data needed to be collected. Pre- and post-survey data was collected and put into a Google Form. All survey data was analyzed, and compared through the bar graphs created from the information put into the Google Form as seen in Appendix D. Each student's pre- and post-survey data was put into a bar graph and their answers were put on a scale from one to six with "angry" at one and "excited" at six. Qualitative coding of the interview transcripts was used to gain insight into how teachers felt mindfulness practices impacted their students. Qualitative coding involves analyzing and "making meaning from data sources that can be interpreted in a number of ways" (Hendricks, 2017, p. 106).

All qualitative data and the quantitative data used to compare the survey results was analyzed, and 15-20 level 1 codes were created. Level 1 codes were recurring ideas or topics

found throughout 20% of the collected data (Tracy, 2013). These level 1 codes were then used to code the remaining 80% of the data. Three to five level 2 codes were then generated to signify the underlying themes found in the data. Level 2 codes included the underlying themes found throughout the data and other codes. I wrote memos to better synthesize and understand the level 2 codes and findings. I used level 1 codes to create an index to organize and track data that supported level 2 codes. Then, a codebook that includes a full list of codes and definitions was generated and can be found in Appendix E. Student interview transcripts were also coded to see what common themes emerge between what the teachers observed and what the students felt about the mindfulness practices.

Findings

Analysis of qualitative data led to the discovery of three main themes: social-emotional regulation, making a choice, and the flexibility of mindfulness. Quantitative data was used to compare results from pre- and post-surveys and determine any differences caused by mindful practices. Interviews and surveys revealed significant changes in self-regulation abilities among the third-grade population of participants. Observations confirm that both second and third-grade students were able to implement mindful moments for a variety of reasons. Bar graphs were utilized to visually represent the Likert scale questions from the pre and post-surveys. Open-ended survey questions were coded with interview transcripts and observation data.

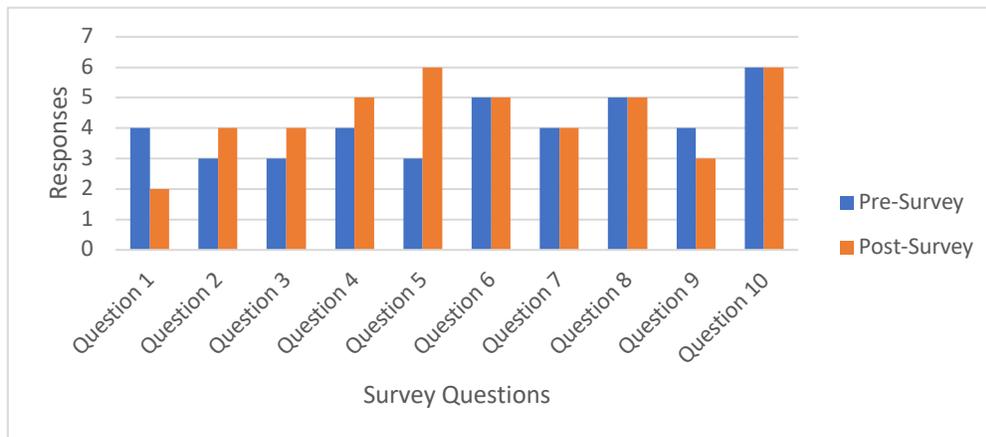
Quantitative Data

The survey results were compared through the use of bar graphs. Each emotion on the Likert scale questions found in Appendix A were given a corresponding number. The answers were placed on a scale of one to six with “anger” at one and “excited” at six, as seen in Figure 1.

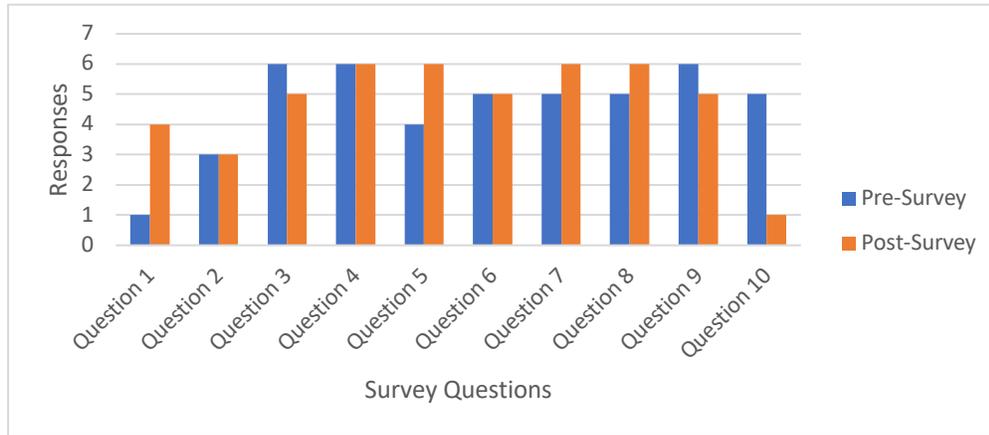
Through the comparison of the pre-survey to the post-survey, I noticed a difference in the students' ability to understand their brain and put vocabulary to what their brains were feeling.

Figure 1

Star's Pre- and Post-Survey Results



Figures 1 and 2 represent the survey data from Star and Roxanne. Question five asked the students how they felt talking about their emotions, and before beginning this activity, the students felt either indifferent or upset. Following the intervention, the students were happy or excited. During the interviews, I used the data provided through the surveys to ask the two students about their understanding of themselves and the development of their self-regulation. The survey data from the other four students can be found in Appendix D. A lot of the Likert scale questions in the survey data did not yield any noticeable results or changes. Many students began with a positive view of breathing exercises, stretching, and brain breaks. There was a significant change in Roxanne's emotions at school, but when asked in the interview why she answered differently she said it was because they were "working" that day and she "[gets] mad." I followed up asking how she felt the day of the interview, and she said "meh" and pointed to the indifferent picture on the survey.

Figure 2*Roxanne's Pre- and Post-Survey Results*

Social-Emotional Regulation

Social Emotional Regulation (SER) was viewed as different abilities to self-regulate or verbalize emotions in an environment out of the students' control. Often my students' emotions were affected by either their own doing or outside factors. In one interview, the special education teacher pointed out that one of the struggles with students is that "they're dealing with stressors", many of which are out of their control. Teaching students self-regulation strategies only benefits the students if they can recognize what is within their control and what is not.

In the pre-survey and in actions presented in the first couple days of observation, students made it clear that emotional regulation was one of their biggest struggles and what ended up getting them in the most trouble. When asked "What does it feel like to be angry?" Quentin said, "Sometimes when I get angry I push myself, and I hold my breath, and I make my face turn red." While Diamond said that "it feels like you're sad... like someone is being mean to you." Following the intervention, the students responded to the same survey question and said, "My brain feels mad." The data collected showed a disconnect between students' emotions and their

ability to verbalize or regulate them. The pre-survey asked the question, “How do you make yourself calm?”, and Jade responded by saying she can’t make herself calm. Her brain, along with the other two second-grade participants, struggled to recognize when the brain needed to calm down. The change in my students varied; some students really latched on and were asking to do “calm downs” throughout class or would feel themselves getting frustrated and would recognize that they needed a breath. Through whole group mindful moments and explicit instruction, some students learned how to regulate their emotions and calm themselves, while others were either unaffected or had other factors that mindfulness had no effect on. Jade’s results from the open-ended questions on the survey demonstrated an understanding of calm that she did not have before. In the pre-survey when asked, “What does it look like to be calm?” Jade responded by saying “my brain feels... nothing.” In the post-survey, Jade said, “It feels like you’re still.” And, she used breathing exercises to make herself calm. Three out of the six student participants responded well and were able to self-regulate. The other half responded to mindful moments and were able to manage their emotions following a mindful moment, but required prompting.

Before the mindful moments, many students struggled explaining what certain emotions felt like or putting words to what was happening in their brains. As Mrs. Olson, the special education teacher, pointed out in her interview, this frustration would often lead to melt downs. Being unable to verbalize what is happening in their brain would often take an already frustrating situation and push it over the edge. During the whole group mindful moments, I offered a place for students to talk about their feelings. I provided students with vocabulary and a visual representation that was developmentally appropriate for their brains to make connections to. Using a jar full of glitter and water, students were able to see what their brains felt like when

experiencing big emotions. I would pair the jar with the vocabulary and then students would talk about how their brain was feeling. When the words failed them, they would ask to use the jar to show me how their brains felt. When asked how a student was feeling, five of the six students were able to communicate what their brains were feeling and what they could do to make their brain feel a different way.

Every student enjoyed doing the breathing exercises and began asking for them by day four of the intervention. Roxanne would often enter the room asking, “Can we do the calm downs?” The post-survey and student interviews provided proof that students enjoyed getting to talk about their emotions. Star stated that she felt “happy...because someone was listening.” When Roxanne took the pre-survey, she stated that she felt indifferent when talking about her emotions and changed her answer to happy on the post-survey. I asked her in her interview about it, and she said she changed her answer because “something changed in [her] head. It’s just [she] never gets to talk about them. And sometimes [she] gets a little quiet.” The students that “bought in” to the mindful moments and shared their emotions, had major differences in their ability to recognize when they were feeling a big emotion and their brain needed to calm down. Not every student enjoyed talking about their emotions in the beginning. Quentin was very reluctant throughout the entire study to share how his brain was feeling and only opened up while taking the post-survey where he said that he liked talking about his emotions.

Making a Choice

One of the biggest findings in the data was the development of students’ ability to self-regulate. The data showed that the students had the ability to use explicitly taught self-regulation strategies on their own to regulate their own emotions. On the first day of the intervention, students required a lot of prompting before they would use the mindful moments on their own.

However, by day two, some students were already beginning to use mindful moments unprompted. While working on a math paper, Quentin was becoming frustrated with his partner, and he pushed his chair away from the table and took an unprompted mindful moment, and then returned to his work. At first, the students would make the moments big and obvious, but as time went on, they became almost automatic for some students.

By day five, four of the six participants were recognizing when their brains felt overwhelmed and needed to be calmed down. Some students would not look overwhelmed but recognized internally that they needed to take a moment to fix their focus, emotion, or anything else their brain was feeling. For example, Star said that she felt nervous before a test and took a moment before beginning the test to take a mindful moment. She did not visibly appear overwhelmed and was not hyperactive, but she believed her brain needed to calm down. When interviewing students, they informed me of how they still use mindful moments both in and out of the resource classroom. Star stated that she used mindful moments at home when she had “a headache or something” and that it helped her.

Mindfulness is about being mindful of yourself and your brain (Kabat-Zinn, 2006). I wanted my students to know that it was their choice to regulate, so I allowed them to refuse prompted mindful moments. A few students would get upset or frustrated, and I would prompt a mindful moment. On the tenth day of observations, Lucas was having tests, relationships with peers, and other outside factors affect his mood, and he reacted in the classroom. He began getting visibly frustrated in class, and I prompted a mindful moment, and he took an exaggerated breath while clenching his fists. He stayed very irritated and refused to do a mindful moment that was prompted. I walked away and saw him take an actual breath and try to calm himself. There was an important distinction made between being asked to calm themselves and wanting to calm

themselves. He recognized that he was angry because someone had told him what to do, but also that he did not like how overwhelmed his brain was feeling and that he did need to calm down. Mindful moments were often refused by students that were off-task and they did not want to refocus on learning, or they wanted to sit in their big emotion and practice self-regulation.

This data demonstrates the importance of explicitly teaching self-regulation strategies and mindfulness is just one tool that can aid our students' metacognition. Students' ability to self-regulate seems to be greatly impacted by the mindfulness activities. Prior to the study, both teachers reported that their students severely lacked self-regulation and recognizing when they needed to refocus or calm down. During the study, students would demonstrate self-regulation strategies for both big emotions and refocusing. During the study, big emotions were characterized as fear, frustration, excitement, anger, and any other emotion that can overwhelm the brain. In the teacher interviews, both general education and special education, stated that they saw tremendous growth in the third-graders. Mrs. Howard said that she saw a big difference in Roxanne and Star's ability to recognize their need to refocus and use the mindful moments independently in class. Mrs. Olson noticed that four out of the six students were able to recognize when their brain was not calm or needed more time to calm down.

The Flexibility of Mindfulness

After learning the mindfulness activities and how to do a mindful moment, the students took mindfulness and made it their own. There were many ways students used mindfulness that I did not plan on or intend to happen. Many students incorporated movement into their breathing by tensing their bodies as they inhaled and relaxing as they exhaled. I decided to add that to the whole group mindful moment and students were given the choice of adding movement or sitting still. Quentin and Jade were constantly trying to move so we modified the mindful moments to

fit their learning needs. We incorporated stretches with the breaths to help get their movements out and prepare them for learning. Every participant responded to the mindful moments with movement with sustained focus after them.

Quentin and Lucas entered the study with prior knowledge of self-regulation strategies, but both required prompting to use them. The other four participants did not have prior knowledge and could self-regulate with mindful moments. Mrs. Olson said that in her previous years she had used mindful moments and sensory movements to center her students before, and Mrs. Howard had utilized calming videos in class. Many of the participants had a previous understanding of mindfulness activities and did not know how to use them for self-regulation. When I would prompt them to “take a breath” or “take a mindful moment”, I would ask how their brain was feeling before and after the breath. They were given a chance to talk about their emotions and feelings and were able to recognize that they could take breaths on their own when they were overwhelmed.

Another way the students were able to make connections was through the use of a mindfulness jar. I filled a jar with water and glitter that represented the brain. When the jar was shaken, it showed how our brains feel when they feel a big emotion or are overwhelmed. When the jar is set down, the glitter settles, and we are able to see clearly. Sometimes, it seemed that the visual representation I had used to make a developmentally appropriate activity became more of a distraction. However, Mrs. Olson stated in her interview that even though it may seem like a distraction from my perspective, we do not know what is going on inside of our students’ heads. Roxanne was the student that seemed to be the most distracted by the glitter.

The students would also use mindful moments as a way to take a break from their work. Some students used it to reset their brains, and others used it to help focus during tests. All third-

graders had multiple tests throughout the ten days of observation and on the day that I interviewed Star. During observations, I watched students get frustrated with a question, pause, and take a deep breath before trying again. When I asked Star about this observation, she said “I couldn’t really get [the answer], so, I took a deep breath and tried it again”. When teaching the whole group mindful moments, I only gave examples of using breaths to calm our big emotions, like anger, sadness, or excitement. The students took the strategies and tools that I taught them, and made them their own.

Resource classrooms are known for their flexibility and inconsistent schedules. The mindful activity had to have movement added because some students needed a different mindful tool to help their brain settle. Some students needed to see what it looked like to be calm. Many students had other tools they used to calm themselves and some even knew of breathing exercises they were taught. When mindfulness was implemented in this resource setting, students were given tools and being taught when to use them. The data in this study demonstrated that some students really latched on to mindfulness as a self-regulation tool. Four out of six participants utilized mindful moments as a way to reset or calm themselves down. One student struggled recognizing what their brain was feeling and needed prompting, but would still be able to calm their brains and refocus following a prompted mindful moment. Another student did not need any help self-regulating or any new tools to help her brain calm down. All six students developed vocabulary for their emotions and understood the purpose of mindful moments.

Implications for Teachers

The purpose of this study was to see what would happen when students are explicitly taught self-regulatory tools, like mindful moments. It also examined how self-regulation was impacted in students in a resource classroom when explicitly taught strategies. Two of the six

participants began the study with prior knowledge of self-regulation strategies but did not understand when to use them on their own. The other four students had not been explicitly taught how to calm their brains or refocus on their own.

Before beginning the mindfulness instruction, I gave all six students a pre-survey to learn more about their ability to communicate their emotions and willingness to take part in the mindfulness activities. Students had a variety of answers to the questions. In the pre-survey data, a lot of students would either answer that they felt indifferent to many activities or give answers they thought I was looking for. The open-ended questions revealed that a majority of my students did not have practical ways to calm themselves, if they had any ways to calm themselves. A common response was to pet an animal or take a nap as a way to calm their brains. The students who did know productive ways to self-regulate did not use those tools that they knew outside of where they were taught them.

After all students were surveyed, I began the mindfulness whole group activities and prompted mindful moments. The whole group activity involved having the students sit in a circle on the floor. I placed tape on the floor to help students know where to sit on the floor. During the first whole group mindful instruction, I explained how the mindfulness jar represents our brains when they feel overwhelmed. Then, I described that our brains can be overwhelmed when we experience big emotions or when there are too many outside factors. Then, each student was given a chance to shake the jar and tell me what big emotion they were feeling that caused their brain to feel shaken. After everyone had shaken it, I set the jar down and asked if anyone could see through the jar when the glitter was moving all around. All six students said no. I informed the students that when the jar is not moving or is “paused”, the glitter starts to settle, and we can see clearly. Then, I introduced the 4-7-8 mindfulness breathing activity while explaining how

breathing can help calm or “pause” our brains so we can see clearly. The first whole group instruction took five minutes to complete. However, following the first instruction, the whole group activity took one to two minutes every day before beginning the lesson, with transition time.

Beginning on day one, I noticed a difference in my students’ ability to focus throughout a lesson and the management of their frustrations. By day five, I had two students that were already using the mindful moments outside of the resource classroom and in their general education class. Not every student was able to use the tools for self-regulation, but that comes with knowing the students and what they are capable of on their own. Providing my students with a visual to explain what their brains were feeling and words to express what they were feeling, seemed to dramatically help my students self-monitor their emotions. Even the students who refused mindful moments when prompted, would still try to do unprompted moments at home. One student said in her interview that she uses mindful moments when she “gets headaches” at home. My students were given tools and examples for how and when to use them, but then took them and used them in other ways to fit their lifestyle. Every student had a positive impact from the mindfulness activities, although they differed from student to student. Some were able to pick up on using the mindful moments for self-regulation, while others still required prompts.

After the observation days, I interviewed two students, a special education teacher who also taught the six participants, and the general education teacher of the third-grade participants. Both teachers claimed to see differences in their students. The special education teacher saw sustained focus in the students and growth in their emotional vocabulary. The general education teacher saw self-regulation in two of the three third-graders during tests and independent work.

Every student claimed to enjoy the mindful moments and looked forward to participating in the whole group's mindful instruction.

The amount of time it took after the initial instruction on mindfulness and the mindful jar, was equivalent to the amount of time it normally took to transition from the general education classroom to the resource room. One difficulty found in resource rooms is a lack of time, but this activity took about one minute every day and, according to the observations and interviews, was helpful in retaining the focus of students and minimizing redirection. This study provided my students with vocabulary for their emotions, tools for self-regulation, and the ability to recognize what they were feeling.

For teachers wanting to implement this intervention into their classrooms, I recommend using a survey to determine what students already know about mindfulness and building mindful activities off of that. This intervention is meant to be flexible because the resource room can change and schedules shift. I noticed that some students really needed to move to help center their brain before learning, so I incorporated movement. The purpose of the mindful moment was to provide students with tools they can use in their current lives. Another thing that helped my students recognize when to use the mindful moments without prompting was when I modeled using the mindful moments. There were times where I would get my words jumbled, and I would pause and take a breath and try again. Every time I asked a student to take a mindful moment because they were getting frustrated, I did it with them. Modeling self-regulation can help reinforce the self-regulation strategies that have been explicitly taught. I noticed that the third-graders were more willing to use the strategies outside of my presence or on their own. The second-graders often needed prompting and struggled recognizing when their brain needs to be

reset or calmed down. I would suggest teaching the strategies and using them as redirection for the younger students and teaching them as self-regulation strategies with the older students.

The research questions of this study were answered thoroughly. I discovered that when mindful moments were used in a resource setting, students were able to utilize non-verbal redirection prompts and recenter their brains. Four students were able to use mindful moments as a way to self-regulate. Two students used mindful moments outside of the classroom to regulate their emotions or focus. However, I would have liked to continue this study with students in older grades and for a longer period of time. This research left me with more questions about how mindfulness can affect a student long-term and how it can be utilized in different ways depending on age level. I noticed that the third-grade students were able to make the connection between their emotions and recognizing when they were overwhelmed easier than the second graders. If I were to continue this research, I would like to focus on a long time period beginning at the beginning of the year with an older group of students. One limitation faced was inconsistency in the schedule. During this study, there were three days where the schedule had to be moved around due to meetings or field trips. Due to the schedule changes, there were some days that students were not pulled and whole group mindful moments did not take place. It is also important to note the biggest limitation in this study are the students. Every student is different, and in a special education resource setting, every student has a different disability. For example, a particular student would self-regulate his or her emotions one day and then scream at me for prompting a mindful moment another day. This study needed to be done over the course of a couple months to truly see the long-term growth and development in the participants.

This study has impacted my life as a teacher and as an individual apart from my role as a teacher. I have found myself taking mindful moments whenever I get frustrated or am

put in stress inducing situations. Having seen the difference made in my students' lives and my own from only ten days of mindfulness intervention, I will be incorporating it into my future teaching. As a resource teacher, I know firsthand how difficult it is to fit all of the necessary instruction into the legal minutes of special education that each individual student requires. However, I have found that by taking the time to teach self-regulation strategies, such as breathing techniques, verbalizing frustration, and movement strategies, I was able to hold their attention longer and accomplish the same amount of learning with less distractions

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Appendix A

Pre- and Post- Survey

1. How do you feel when you do not understand something?

					
Angry	Frustrated	Upset	Indifferent	Happy	Excited

2. How do you feel when you are tested?

					
Angry	Frustrated	Upset	Indifferent	Happy	Excited

3. How do you feel when you are sitting still?

					
Angry	Frustrated	Upset	Indifferent	Happy	Excited

4. How do you feel when you are moving around?

					
Angry	Frustrated	Upset	Indifferent	Happy	Excited

5. How do you feel about talking about your emotions?

					
Angry	Frustrated	Upset	Indifferent	Happy	Excited

6. How do you feel when a someone listens to you?

					
Angry	Frustrated	Upset	Indifferent	Happy	Excited

7. How do you feel about stretching as brain breaks?

					
Angry	Frustrated	Upset	Indifferent	Happy	Excited

8. How do you feel about breathing exercises?

					
Angry	Frustrated	Upset	Indifferent	Happy	Excited

9. What emotion do you feel most at home?

					
Angry	Frustrated	Upset	Indifferent	Happy	Excited

10. What emotion do you feel most at school?

					
Angry	Frustrated	Upset	Indifferent	Happy	Excited

Open-Ended (Draw or Write a Response):

1. What does it feel like to be angry?
2. How do you make yourself calm?
3. What does it look like to be calm?

Appendix B

Student Interview Protocol

1. What do you feel like when you get overwhelmed?
2. How do you make yourself stop feeling that way?
3. Talk to me about what you can do when you are upset.
4. What do you do when you cannot focus?
5. What did you feel when we did the breathing exercises?
6. How did you feel about the stretches?
7. Tell me what calm feels like to you.
8. Tell me about talking about your feelings.
9. Do you use the breathing or stretching in class? Why or why not?
10. Do you have anything else to say about the exercises we did?

Questions may vary and additional questions may be asked depending on the answers of the participants.

Appendix C

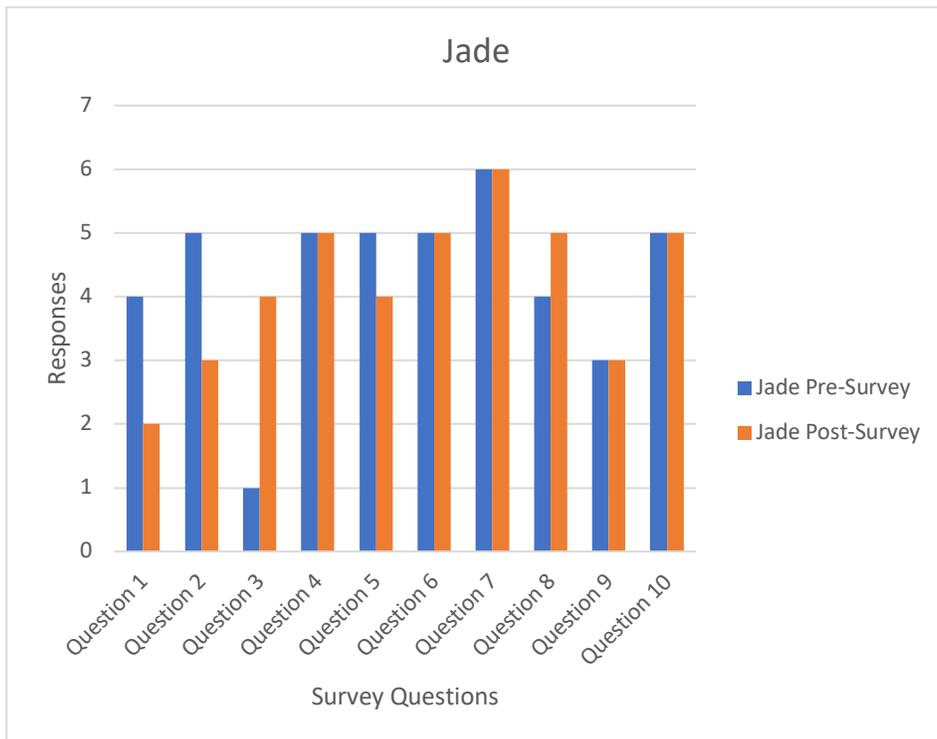
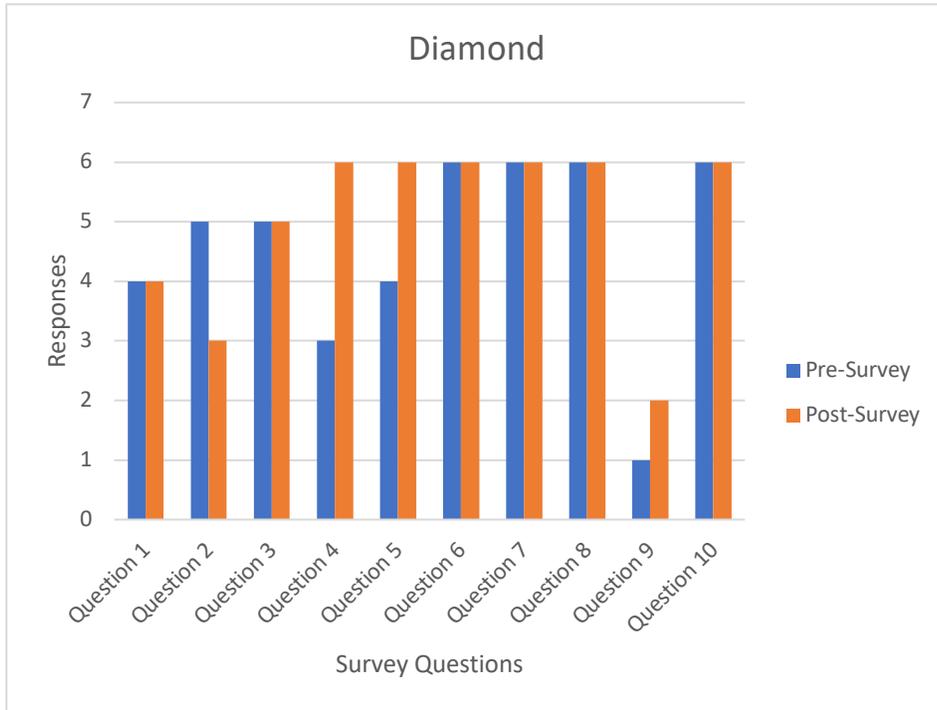
Teacher Interview Protocol

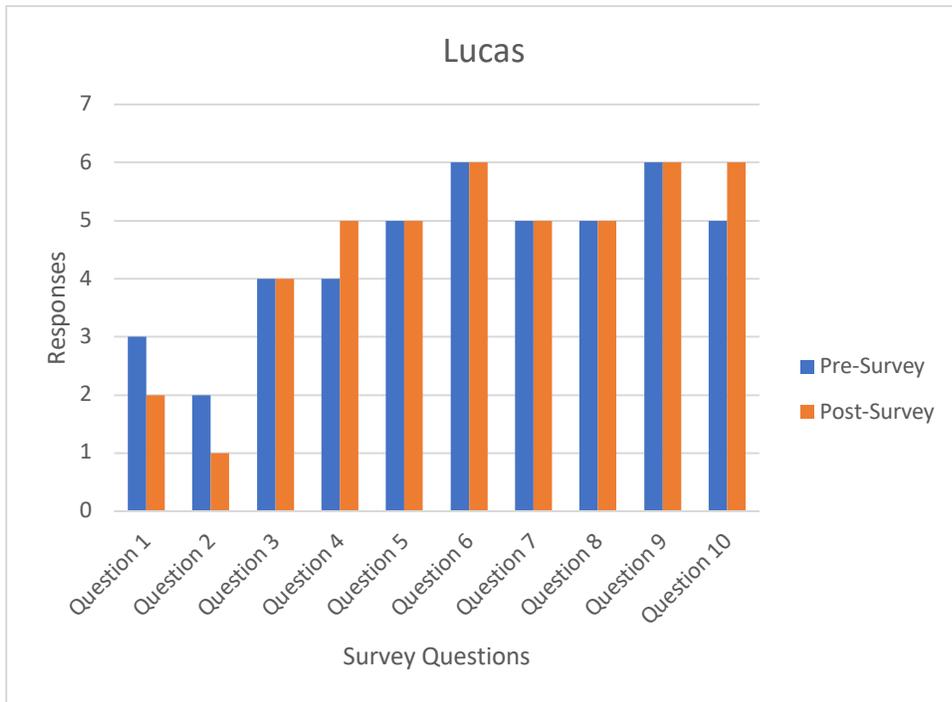
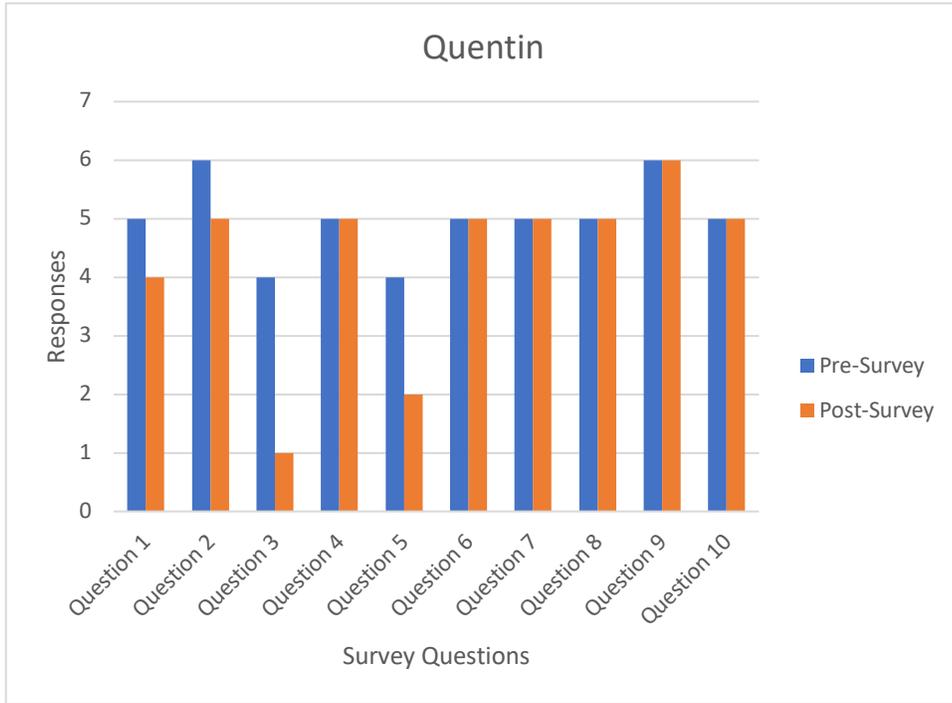
1. What do you know about mindfulness practices in the classroom?
2. What mindfulness practices, if any, do or have you implemented in your class?
3. What have you noticed about your students' ability to communicate their emotions or feelings?
4. Who do you feel has the responsibility of teaching social-emotional learning? Why?
5. Who do you feel has the responsibility to teach self-regulation strategies? Why or why not?
6. What can teachers do to promote self-regulation strategies in the classroom?
7. What self-regulation strategies, if any, have you seen your students utilize before this action research study?
8. What changes, if any, have you noticed about the students who have participated in the mindfulness practices?
9. How do you think self-regulation strategies and mindfulness practices could benefit a student outside of school?
10. What are any other observations that you have noticed in your classroom?

Questions may vary and additional questions may be asked depending on the answers of the participants.

Appendix D

Pre- and Post-Survey Data Graphs





Appendix E

Codebook

Code	Level	Definition	Example
Social-Emotional Regulation	2	Different abilities to self-regulate or verbalize emotions in an environment out of student control	“So I think he has learned regulating skills but he has also learned that there are clear boundaries and I think that helps.”
“They’re dealing with stressors”	1	Stressors outside of student control that affect regulation	“We had another student return to school and Quentin was very distracted by his presence.”
“I can’t make myself calm”	1	Struggle with self-regulating focus or emotions	“If they were frustrated they act out in anger.”
“Visual representation”	1	Making connections between the mindful jar and their emotions or brain	“We shake the globe and my brain feels mad.”
“Can we do the calm downs?”	1	Excitement for the mindfulness activity	“The calming part is my favorite...this is my favorite part.”
“Calm...good”	1	Putting words to positive feelings	“Then informed his classmates that he felt calm and better after breathing.”
“Meh”	1	Neutral or no feelings when asked about their emotions	“My brain feels nothing... my brain feels... I don’t know how to explain it.”
“Frustrated...bad”	1	Putting words to negative emotions	“The changes most have been verbalizing when they’re frustrated.”

Making a Choice	2	Making a choice on how to handle a situation or big emotion	“Roxanne started winning so she got excited again and scooted her chair away from the table and took an unprompted mindful moment.”
Choosing to refuse	1	Refusing to do a mindful moment or regulate	“I prompted her verbally again and she refused.”
“I wasn’t calm yet”	1	Recognizing when the brain is not ready	“Roxanne took a second unprompted moment because she ‘didn’t feel calm yet’ and then refocused on the instructions for the game.”
“I need to fix this”	1	Using self-regulation strategies unprompted	“Without prompting, he scooted his chair back a little bit and took a deep breath...”
“Try to focus”	1	Using mindful moments to self-regulate and redirect focus	“Whenever I am...taking a test. Like our bench test. That’s when I use the calm downs.”
The Flexibility of Mindfulness	2	Different purposes and variations of mindfulness	“[I use mindful moments] to calm my brain...whenever I’m mad, sad, and a little confused.”
Mindful Movements	1	Including movement in mindfulness activities	“When Roxanne inhales she likes to tense her whole body and then completely relax her body when she exhales.”
“Distracted by the glitter”	1	The mindfulness activity created a distraction	“She took three exaggerated and quick breaths, which ended up distracting her from her work.”
Prior knowledge	1	Breathing techniques that students already practice	“Sometimes at home I breathe in.”
Using Other tools	1	Other tools that are used for mindfulness	“Free draw has been really beneficial for my kids.”
“Deep breath and tried again”	1	Unprompted mindful moments to reset and try again	“She took a deep breath and began looking at her computer and trying to read the questions.”
“Focus was sustained”	1	Prompting mindfulness to help refocus	“She took a deep breath and exhaled for the right amount of time and then

			continued answering the question she was asked about the book.”
“Calm my brain”	1	Prompting mindful moments to help calm the mind or body	“Lucas was prompted once to take a mindful moment before he became frustrated and he did. He then calmly waited until I finished helping another student.”